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SMART QUIZ∞

USER MANUAL

PRO VERSION

1 Introduction

This is the user manual for SmartQuiz 7, a professional software suite to create professional, branded, great looking quizzes which are played live with (large) groups of people using wireless keypads, buzzers or mobile devices. The software can be used for various purposes such as:

- Company parties and corporate events
- Pub quizzes
- Personal events like weddings, home parties, Christmas quiz bowls etc.
- Meetings
- Education and training
- Tradeshows
- Fund raising events
- Marketing
- Classroom quizzes
- Virtual meetings

As you will see in this manual, the software is easy to use, has an intuitive user interface and a rich set of features that allows you to run any kind of game show format. While there are many quiz- and game show software packages on the market, SmartQuiz is in many ways superior through unique features such as:

- A user friendly, full featured, graphical quiz design environment. No other software such as Microsoft PowerPoint is required.
- High quality graphics output: most quiz games are built as standard windows applications. Although they can provide some nice graphics, they cannot benefit from advanced graphical effects that are only available for GPU accelerated DirectX applications like SmartQuiz. SmartQuiz supports many different resolutions and screen ratio's so you can present your quizzes professionally on every beamer, TV screen or monitor available.
- Highly customizable: when running a professional quiz show to advertise your product or service you want your graphics to look uniform with your company's house style. SmartQuiz allows you to customize almost every aspect of its presentation through a concept called 'skinning'.
- Advanced game play; SmartQuiz supports many different modes for your questions such as fastest finger, last-man-standing, open questions, audience response questions, wager questions, majority rules questions etc. SmartQuiz also supports the option to split your audience live in competing demographic groups making it even more interesting for your audience.
- Support for a wide range of hardware devices such as different types of keypads and buzzers, mobile devices, scoreboards and RGB LED devices (for example wearable wristbands that give feedback during the quiz) and they are all wireless.
- A unique set of mini games/modules that you can mix with your quiz content to build an entertaining game show night for your audience.
- Support for Trivia-, Number and Emoji Bingo (available as an optional module) using the SmartQuiz Smart Buzzer app

- Free mobile apps for iOS and Android devices allowing more advanced question types with numeric, first letter or full text answers and a web based mobile keypad when installing an app is not possible/not desired.

The software consists of the following parts:

- *SmartQuiz Studio*, the software that helps you design your quizzes in an intuitive user interface
- *SmartQuiz Live*, the software that runs the 'live' game show and connects to the buzzers/keypads
- *SmartQuiz Setup*, the software that is used to configure various options for the game show
- *SmartQuiz Director,* (part of SmartQuiz Live and a mobile app) which is used to control the running quiz show.
- *SmartQuiz Solo,* software to run a standalone quiz show to be used on a trade show booth.
- *SmartQuiz Analyzer,* software to analyze and visualize the useful data collected during a quiz show.
- *Smart Buzzer,* the mobile keypad as an app for Android/iOS or running from the buzzerpad website

2   Installing SmartQuiz

2.1   System requirements

Component	Requirement
Operating system	Windows 8, Windows 10 or Windows 11
Free disk space	~500 Mb
Memory	Minimum of 4Gb, advised is 8Gb
Video card	DirectX 9C compatible video card
Sound card	Any standard sound card will do
CPU	For a good performance when using HD videos, we advise an i5, 2.4 GHz or higher.

To install the software, run the SmartQuiz7.exe installation package. A link to the download section on our website can be found in the e-mail you received with your license key.
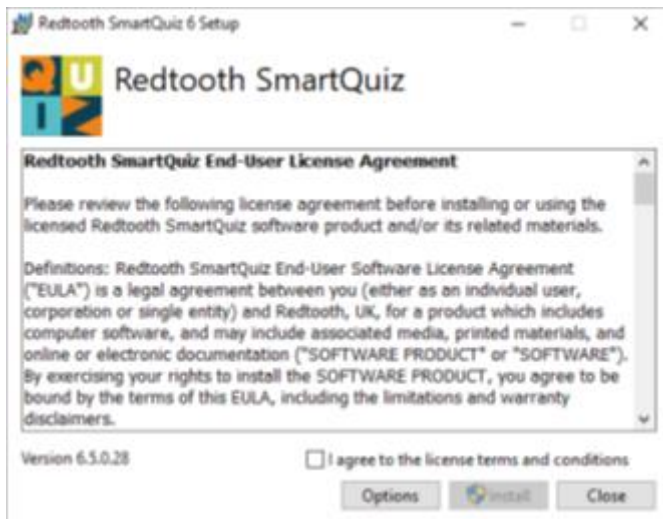
The installation process itself is straightforward. Please thoroughly read the license agreement when you are ready to accept, tick the 'I agree…' checkbox and click 'Install'

2.2   Licensing

The SmartQuiz software suite is protected by a license key. The demo version which can be downloaded from our website has a 2 week, fully functional trial mode. The license key contains information about the number of devices (buzzers/keypads/mobile devices) you can use and the license expiry date.

2.2.1   Activation

The activation dialog appears automatically when starting SmartQuiz Studio if the license has expired or isn't present. Alternatively, you can open the dialog manually from the HOME tab by pressing 'Info' and then 'Activate'.
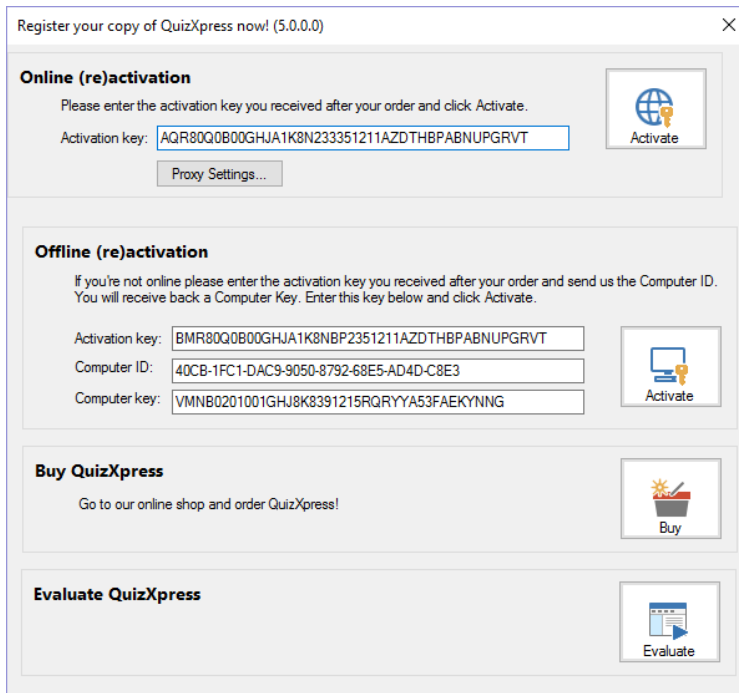
SmartQuiz can be activated both online and offline. Online activation is easy; simply enter the key you received after your purchase in the 'Activation key' textbox and click 'Activate'. If activation is successful, the dialog will show the following contents:
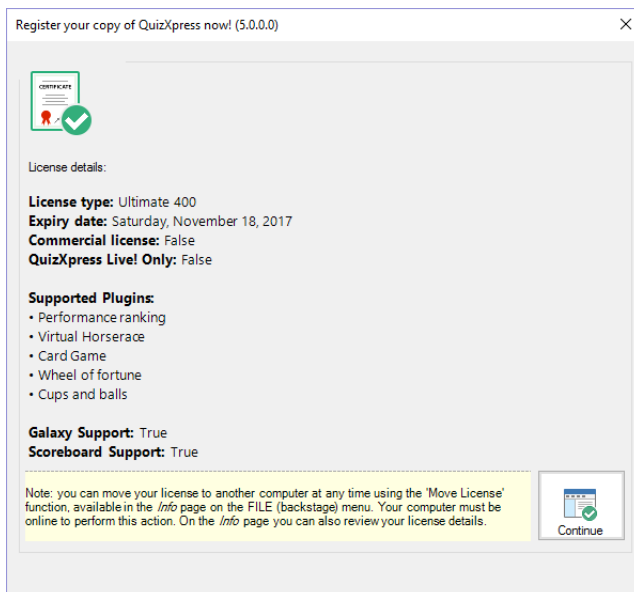
After activation, this dialog shows what is included in your license (the supported mini games and the additional hardware such as the scoreboards and Galaxy RGB devices)

For *offline* activation (in case your PC is not connected to the internet) it is required that you send your 'Computer ID' and 'Computer key' to Game Show Crew, after which you'll receive back an offline activation key by email to be entered in the offline activation textbox.

2.2.2   Deactivating and moving licenses

It is possible to move a license to another computer. To do so first make sure you have a copy of your key. In SmartQuiz Studio, press the F1 key and then click the 'Deactivate/Move' button and confirm the message:
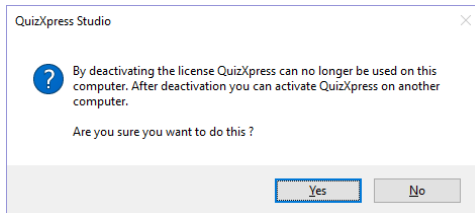
Now, you can go to your other machine and activate SmartQuiz using the same key. Depending on the type of license activation keys may be used on multiple machines.

2.3   Updates and version numbering

To check your version of SmartQuiz you can open the about box in SmartQuiz Studio. This shows information about your currently installed version:

A SmartQuiz version number consists of 4 digits, for example: 7.0.0.40 having a major-, minor-, build- and revision number. The major number changes only for big updates; the minor number indicates different releases within the major version. The build number and revision are used to differentiate different patches (bug fixes). SmartQuiz Studio checks online for updates when it starts. If a newer version is available from our website you will be notified:
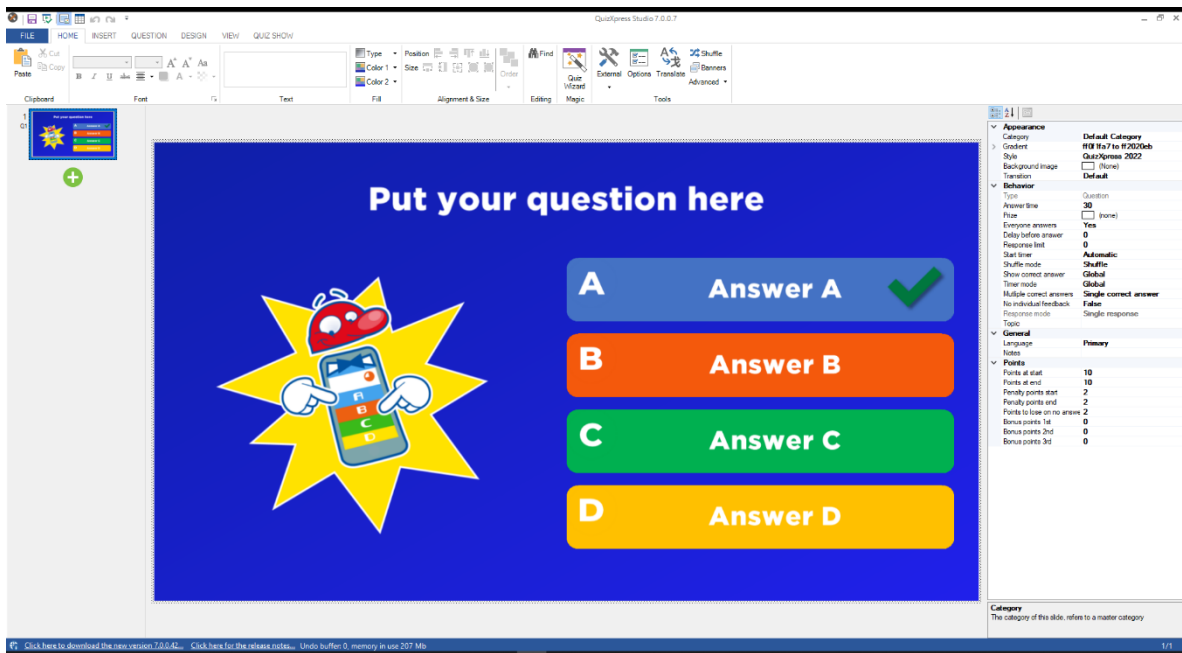
To upgrade your system with a new version simply click the download link in the SmartQuiz Studio lower status bar to download the latest version:
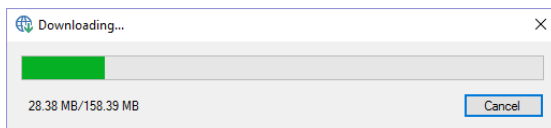
After downloading, the installation program will start. It is not needed to uninstall the currently installed version.

When upgrading, your license key, special settings, quizzes and other customizations are retained as they are stored outside of the SmartQuiz installation folder. You will always be able to open your old quizzes. However, when sharing your quiz with others make sure they are on the same version.

The release notes for SmartQuiz can be found in the file *ReleaseNotes.txt* in the installation folder. You can open this file from within Studio under *FILE->Info->Release Notes* or from the SmartQuiz entry in the Windows Start menu.

3   Designing quiz content with SmartQuiz Studio

3.1   Creating your first quiz

This chapter describes SmartQuiz Studio. With the help of SmartQuiz Studio you design great looking multimedia quizzes in a very intuitive and user-friendly way.

3.2   User interface overview
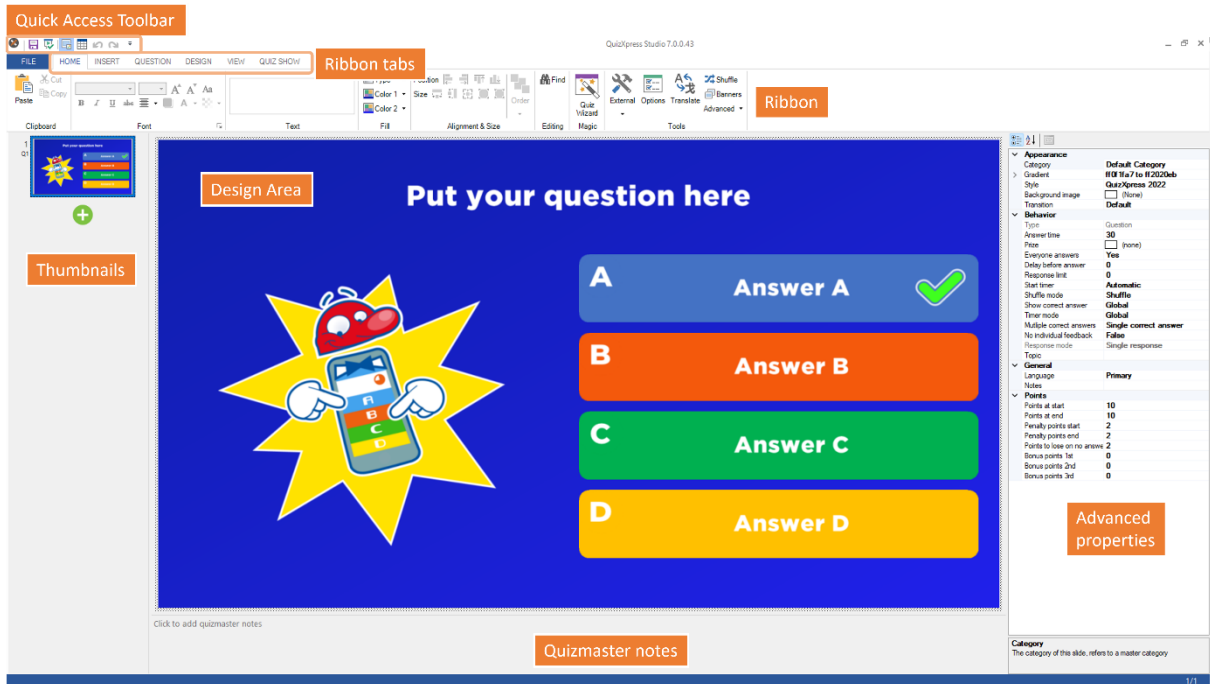
3.2.1   Ribbon

The SmartQuiz Studio user interface is built around the concept of a ribbon. The ribbon was introduced in Microsoft Office and greatly enhances user productivity and discoverability of features. Click here for more general info on the Microsoft ribbon user interface concept.

The SmartQuiz Studio ribbon is divided into several sections (Ribbon Tabs).

FILE	Also referenced as the 'backstage' menu. Access to global and file related functionality.
HOME	General formatting and control elements
INSERT	Add new elements such as sound and text to your quiz slide
QUESTION	Configure the behavior of a question (points, type of question etc.)
DESIGN	Format your slide in different styles and layouts
VIEW	Select what to view in the user interface of SmartQuiz Studio
QUIZ SHOW	Start the quiz show!
PICTURE	Configure pictures (shown when selecting a picture on a slide)
SHAPE	Configure picture- and text shapes (shown when selecting an inserted picture or text on a slide)

SPEECH	Configure speech (shown when selecting a speech element on a slide)
CHART	Configure charts (shown when selecting a chart on a slide)
AUDIO	Configure audio fragment (configured when selecting audio on a slide)
VIDEO	Set the various video properties (shown when selecting a video on a slide)
TRIVIA BOARD	Configure a trivia board slide (contextual tab)
TRIVIA LADDER	Configure a trivia ladder slide (contextual tab)
BINGO	Configure the properties for a Bingo round

Next to the global ribbon tabs that are always visible there are so called 'contextual tabs'. Their visibility depends on the selected item in the editor. For example, when selecting a video item on the slide, the contextual tab for VIDEO appears:
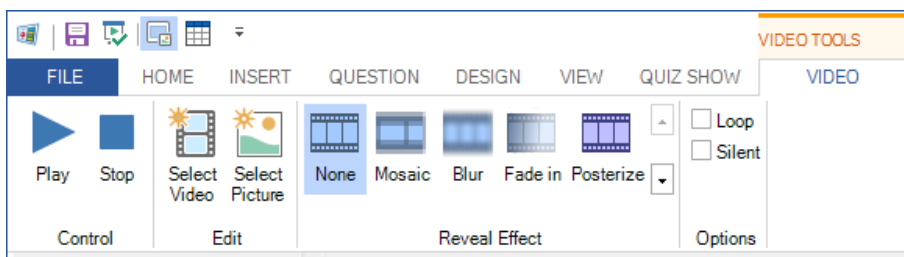
The tab will disappear as soon as something else is selected on the slide.

3.2.2 Backstage Menu
When clicking the FILE tab, or hitting F1, the backstage menu appears.
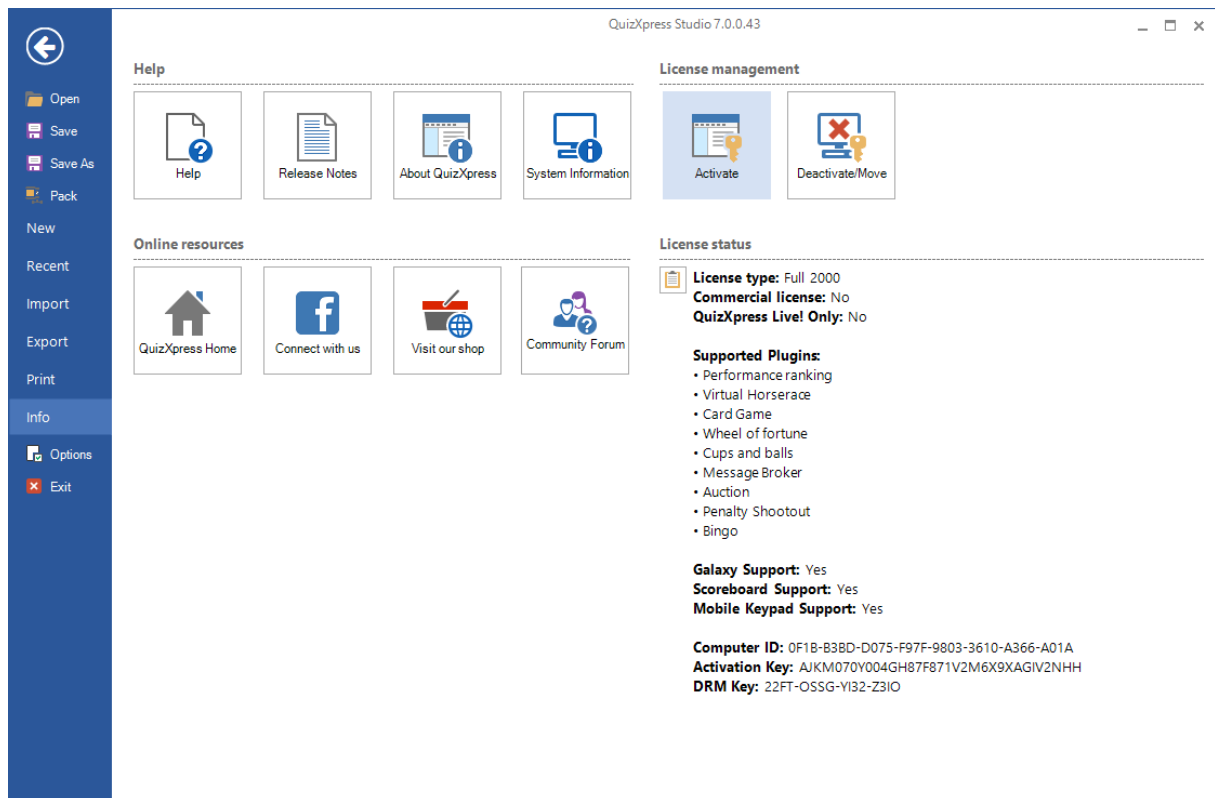
Here you access global application functionality for which the details are available on several other tabs:

New	Create a new quiz and select the aspect ratio of the slides
Recent	Open recent and example files
Import	Import questions from Excel or from another Quiz
Export	Export question to Excel or PDF
Print	Print your quiz slides
Info	Access the Help file, various online resources and manage your license

3.2.3   Design area

The design area contains a visual representation of what we call a 'quiz slide'. It shows the 'quiz slide' exactly as how it will be shown during the game show. A 'quiz slide' consists of several items: a question, multiple choice answers, pictures, shapes and text, a video or a sound item etc. Items can be selected individually or as a group after which they can be modified. Also, the quiz slide as a whole can be selected to edit its properties. To select a quiz slide, click on the slide background. See section 3.2.5.1 for an overview of all properties of a slide.

Slide items can be selected and resized by left clicking one of the resize handles and dragging it to the desirable size. When multiple items are selected by either using the Ctrl key or dragging the selection by the mouse, editing properties shown in the property pane (or by using ribbon controls) implies changing the properties for all selected items in one go. One example where this can be very handy is when you want to set the font for all answers in a question at once. In order to do this, first multiple select all answers and then change the 'font' property in the properties pane. While moving objects

around, they will snap to an invisible grid, to turn off the snapping by holding down the *Ctrl* key while dragging an object.

3.2.3.1 Inserting a slide

In order to insert a new slide, go to the INSERT menu and choose one of the predefined layouts in the 'Quiz Slides' section. Dark blue boxes represent a placeholder for inserting a picture or video.
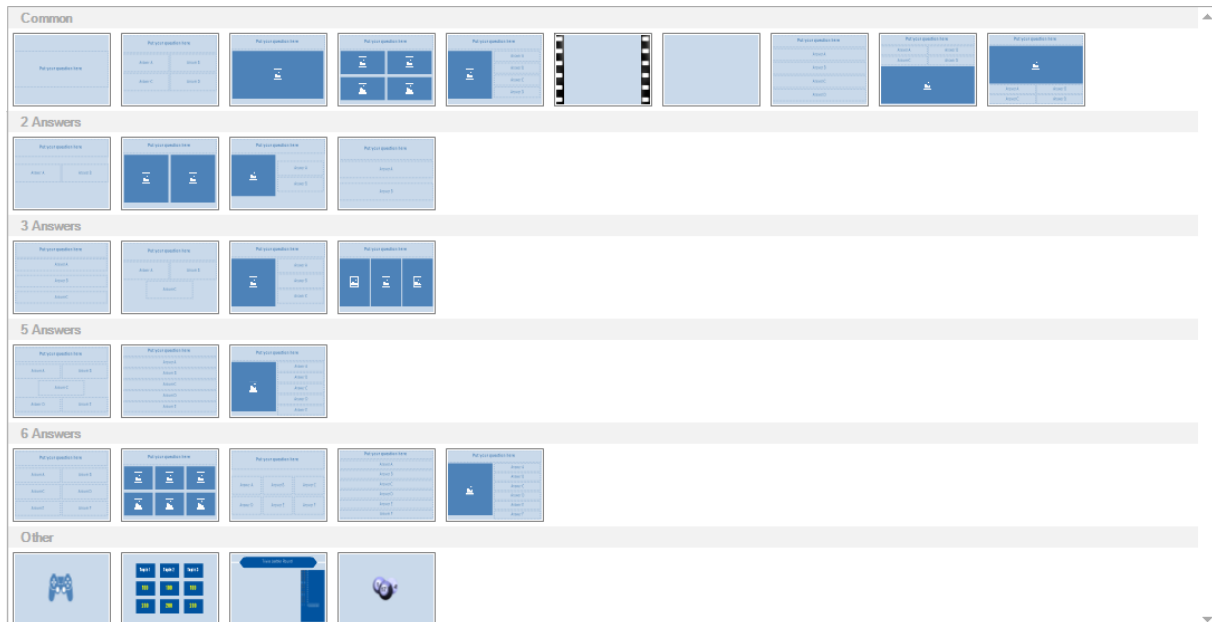
You can also change the layout of an existing slide by going to the DESIGN menu, where you can click on the dropdown arrow in the 'Change Layout' section. The same dropdown list as shown above will be displayed where a new layout can be chosen. Items from the current layout that fit into the new layout will be copied. For example, when you go from a layout with a question, a picture and three answers to a layout with a question, a picture and four answers, the picture, question as well as three answers will be copied to the new layout.

3.2.4 Thumbnails panel

This panel gives you an instant overview of all your questions. You can navigate to a question by clicking on a thumbnail. You can move/.change the position of a question by dragging the thumbnail to another position and dropping it there. The thumbnail panel allows you to select multiple questions by clicking the thumbnail with the *Ctrl* key down, or with the *Ctrl+A* shortcut to select all questions in the quiz. You can also select a range of questions by clicking the first thumbnail in the range followed by the last thumbnail in the range holding down the *Shift* key. When multiple questions are selected, you can change the properties of all questions in one go using the property grid (if you do not see the properties grid on the right hand side of SmartQuiz Studio, click VIEW in the ribbon and then put a check before 'Properties). In this way you can also delete multiple quiz slides at once.

The thumbnail panel has a context menu. Right click the thumbnail panel to invoke this menu:
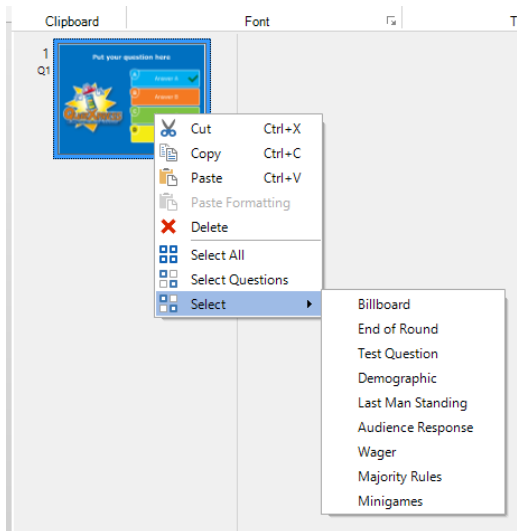
From here you can copy/paste/delete one or more selected questions, select all slides, select all questions (banners are excluded in the selection when using 'Select Questions') or select all slides of a specific type. Note that you can also copy & paste quiz slides between two instances of Studio allowing you to create 'libraries' of questions from which you build your specific quizzes.

In the Options dialog (which you can open from the HOME tab > Options button) you can enable the thumbnail panel to show some extra information for each slide such as the actual question number (as shown in SmartQuiz Live). You can find the option on the 'Other' tab of the options dialog:

3.2.5   Advanced properties grid

The property grid is the place where you can quickly set all the detailed properties of the selected element(s). Each element (such as question, answer, slide, video and picture) has individual properties. It is not absolutely needed to use the property grid as the most important settings can be accessed through the ribbon but for advanced users this may be a quicker way to get things done. (some more advanced/obscure properties can only be accessed from the properties grid). In the following chapters you will find an explanation of the most important properties. You can show the

property grid by going to the VIEW menu and putting a checkmark before 'Properties' (in the 'Views' section).
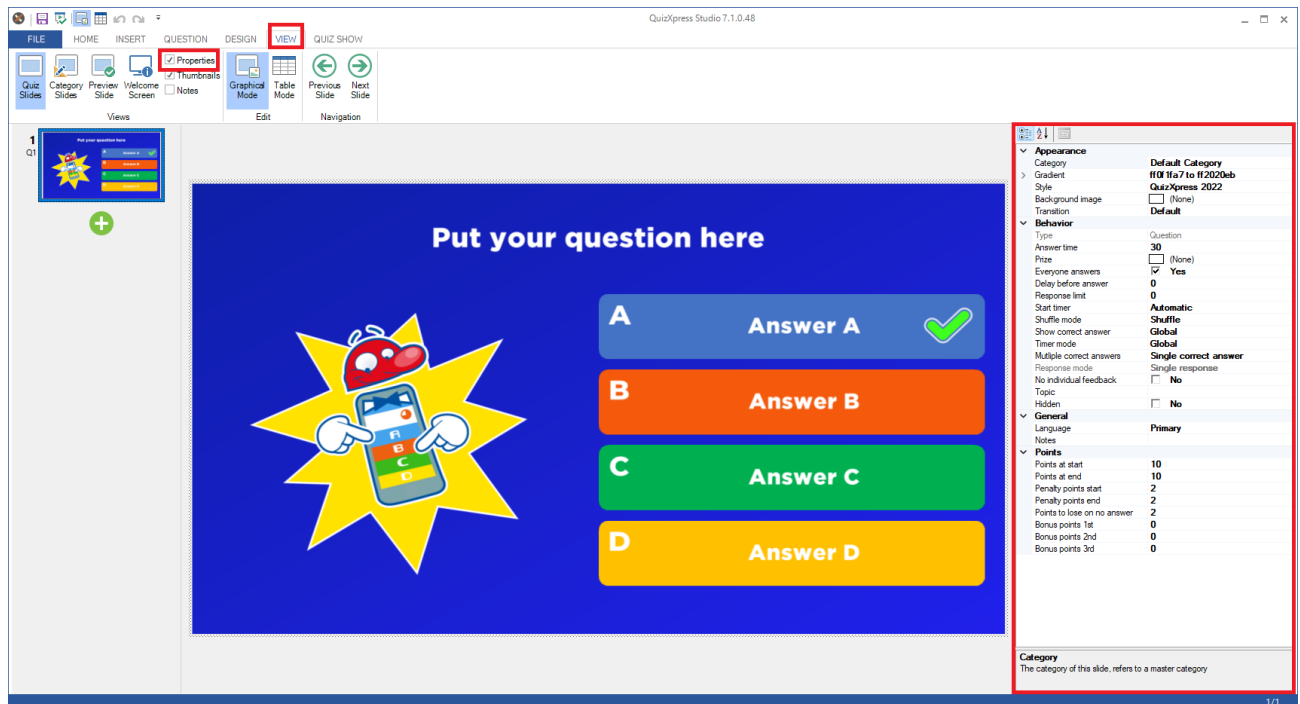
3.2.5.1 Quiz slide properties

These properties are shown by clicking on the background of a question. The properties are split in different groups:

- *Appearance*, defining how the question is rendered
- *Behavior*, defining the behavior of the question during the game show
- *General*, general properties
- *Points,* points assignment section

Property	Description
Answer time	The duration of the countdown in seconds. Specify a value of 0 for a question without time. You can then end the question by pressing the spacebar. Countdown can be paused by pressing 'P' in SmartQuiz Live.
Auto judge	This setting is valid for a question that is fastest finger (Voting = no) and that is multiple choice. In this case, the 'Auto judge' setting indicates whether a question will be automatically judged by SmartQuiz Live when a multiple choice button is pressed on a buzzer/keypad (for non-multiple choice buzzers auto-judge is always automatically set to 'No').
Background image	The background picture of the quiz slide.
Background stretch mode	Indicates how the background picture is stretched on the slide. This can either be 'Fill' to simply fill the entire slide with the picture (aspect ratio is not maintained) or 'Zoom' to keep the correct aspect ratio and possibly loose some parts of the picture
Bonus points	The bonus points for the 1, 2nd and 3rd fastest player to answer correctly

Category	The category for this quiz slide. By selecting a category, you define the graphical formatting. Note: you can define your own categories! For an explanation of categories please refer to section 3.3
Continue after correct answer	When a correct answer is given for a fastest finger question (of type 'default', the answer is given verbally and judged as correct) countdown still continues and other players can press (often used for games during an event happening outside of a quiz).
Correct answer	The correct answer for this slide. Applicable only when the input mode (see below) is 'numeric', 'letter' or 'text'.
Delay before answer	Time in seconds that will lapse before the answers are shown. This gives a quizmaster the possibility to read the question aloud before answers are shown.
Delay between answers[*]	In case both 'Delay before answer' and 'hide and show one by one' have been set, this property appears. It defines a timeframe that will lapse between each answer that will appear.
Demographic group[*]	This property can be set when the **Type** of the slide is set to 'Demographic'. It defines a demographic group. When the quiz is run, people pressing their buzzer when a demographic quiz slide is shown will belong to the group indicated by this property. Please also refer to section 5.4.5.5 for more information about demographic groups.
End of round action[*]	This property can be set when the **Type** of the slide is set to 'End of round'. It's possible values are 'Disable one loser', in which case the participant with the least amount of points is dismissed, and 'Quizmaster selects losers', in which case the quizmaster can select the participants that will be dismissed, one by one.
Evaluation mode	Indicates whether the evaluation of a numeric answer is 'exact match' (answer given needs to match the correct answer of the question exactly' or 'nearest wins' (the player who is closest to the answer wins the indicated points).
Gradient	The gradient fill for the background of the slide. This property only applies if you have no image in the background. A gradient 'from' color and a gradient 'to' color can be selected as well as a gradient type.
Input type	For an open question you can choose between 'default' (fastest finger question) or for a 'number', 'letter' or 'text' answer. The latter three modes apply only when using mobile phones (as keypads and buzzers do not offer numeric or textual input).
Lock-out on wrong answer	Sets the lockout mode for a fastest finger question. Either the player is locked out on a wrong answer or the player can retry.
Multiple correct answers	Indicates if this question has more than one correct answer and if multiple correct answers are in a specific order
Notes	A text (hints) for the quizmaster that will be included in the PDF export
Ordered answer mode	For ordered answers, you can indicate if you want responses to exactly match the order (Exact match) or if a partial correct response also results in points (a percentage of the points, depending on how many of the answers are at the right spot).
Penalty points end	Number of points that are subtracted when a participant answers incorrectly at the end of the countdown (interpolates between start – end)
Penalty points start	Number of points that are subtracted when a participant answers incorrectly at the start of the countdown

Points at end	Number of points that are added when a participant answers correctly at the end of countdown. Must be smaller than or equal to 'points at start time'. Points are interpolated between counter start and end. So when points at end time is smaller than points at start time, the number of points to gain decreases while countdown is running. When the two values are equal the points that can be gained will be the same during countdown.
Points at start	Number of points that are added when a participant answers correctly at the start of countdown.
Points to loose on no answer	The points that are subtracted when no answer is given (only applicable for voting questions)
Response limit	The maximum number of teams for which the system will take responses. For example, if you play with 100 teams, you can set this value to 25 so only the first 25 teams get to answer the question
Response mode	Indicates if this question accepts only one answer per player or multiple (used in combination with 'Multiple correct answers'). When setting this option to 'multiple responses, exact match', the multiple answer response needs to exactly match with the correct answers in order to win points.
Safety net[*]	Used for trivia ladder questions. When in a trivia ladder round and a player answers incorrectly, he or she falls back to the nearest safety net on the trivia ladder.
Show answers action[*]	When 'Delay before answer' has been set, this property appears. By setting it to 'hide and show at once' the answers are shown in one go after the delay time has lapsed. By setting it to 'hide and show one by one' the answers are shown one by one after the delay time has lapsed.
Show correct answer	Mode for showing the correct answer on this slide. Either follow the global setting as indicated in Quiz Setup, never show the correct answer or always show the correct answer
Shuffle mode	Determines what happens when the quiz is shuffled
Start timer	Indicates whether the countdown timer should start automatically when the question appears or by a manual action.
Style	The render style for the question. You can find more about styles in the chapter "Styles"
Text evaluation	Indicates whether the evaluation of a text answer is 'exact match' (answer given needs to match the correct answer of the question exactly' or 'fuzzy match' (an algorithm is used that allows a certain percentage of difference between a given answer and the correct answer. This allows players to make spelling mistakes).
Tolerance	Allowed variation between the correct answer and given answers. Applies to questions with input type 'text' with 'text evaluation' set to 'fuzzy match'.
Topic[*]	The topic of the question. This is used to automatically generate a preceding Trivia Board.
Transition	The transition animation when moving to the next slide
Type	Display only field showing the type of the slide: • *Question*: slide is a normal quiz question. • *Billboard*: slide is display only. • *End of round*: slide indicates the end of a quiz round. Intermediate scores are shown, and the quizmaster has the option to dismiss teams. Also see property 'End of Round'.

	• *Test question*: slide is used to demonstrate the system to the participants. No points are added/subtracted. • *Demographic*: this slide serves to partition all participants into competing groups. Also see property 'Demographic group'. • *Last Man Standing*: slide is a quiz question. Participants answering the question incorrectly are dismissed from the quiz. • *Audience Response*: slide to simply collect a response from the audience without changing any quiz scores. The response data can be displayed in a chart • *Wager*: allows the audience to bet a percentage of their scores on the following question. • *Majority Rules*: a slide where the correct answer depends on what is chosen most by the audience • *Minigame*: a slide that launches the selected minigame
Voting	Indicates whether all participants can answer or if only the participant which is first to buzz can answer.

* visibility of the property depends on other properties

3.2.5.2   Question properties

These properties are shown when clicking on the question box on a slide

Property	Description
Alignment	The text alignment of the question text
Drop shadow	Indicates whether a shadow is imposed under the question text
Gradient	The gradient fill for the background of the question.
Shadow color	Indicates the color of the shadow
Text	The text of the question
Text Color	The color of the question text
Text font	The font used for the question text
Transparency	Transparency of the background of the question

3.2.5.3   Answer properties

These properties are shown when clicking on an answer box on a slide

Property	Description
Alignment	The text alignment of the answer text
Correct answer	Indicates whether the selected answer is the correct answer. Set to 'true' if the selected answer is the correct answer.
Correctness	Applicable for questions with multiple correct answers this value sets the correctness (as a percentage of the total question points) of the answer
Drop shadow	Indicates whether a shadow is imposed under the question text
Gradient	The gradient fill for the background of the question. It depends on the used style if this property is applicable
Shadow color	The color of the drop shadow
Text	The text of the answer
Text color	The color of the answer text
Text font	The font of the answer text
Transparency	Transparency of the background of the answer panel

3.2.5.4 Picture properties

These properties are shown when clicking on a picture box on a slide

Property	Description
Border	Indicates whether a border is drawn around the picture
Border color	The color of the border, when enabled
Border thickness	Thickness in pixels of the border (when enabled)
Corner radius	Corner radius for the border line to create a rounded border
Correct answer	Indicates whether the picture contains the correct answer. Can only be set for pictures if the slide only contains pictures and if the slide is multiple choice.
Drop shadow	Indicates whether a shadow is imposed under the picture
Effect	Sets an effect on the picture. See section 3.7.1.2 for a more detailed explanation about effects.
Hidden	Hide the picture during the quiz
Image	A thumbnail of the image. Click the browse (…) button of this property to browse for a picture.
Inflate	Determines if the picture should fill the entire area by zooming in
Label	A textual description for the picture to (be used when the picture cannot be shown)
Mobile device image	An alternative version of the image to be used on mobile devices
Stretch	Stretch the image in both directions to fill the area (may distort the image)

3.2.5.5 Sound properties

These properties are shown when clicking on a sound item on a slide

Property	Description
Duration	The duration of the sound. Initially the full duration is shown.
Intro pause	The time to wait before the sound starts. This gives the quizmaster the possibility to first read the question.
Pitch	The pitch at start of the countdown
Remove vocals	Effect to remove vocals (may yield mixed results)
Repeat	Indicates whether the sound should repeat itself.
Replay	Replays the sound after the correct answer has been revealed in the question.
Replay delay	Shown when replay is enabled. Shows the number of seconds after which the repeat begins
Replay start	Sets the time where the sound fragment will start playing
Replay end	Sets the time where the sound fragment will stop playing
Sound Storage Type	Indicates if the sound data is stored embedded in the quiz file or on the local disk (linked)
Speed percentage	The speed of the sound when it starts playing.
Start at	The position in the sound file from which the sound will be started.
Stop at	The time to stop the sound

Property	Description
Target Pitch	The pitch at the end of the countdown (pitch will interpolate from start to end)
Target speed percentage	The speed of the sound when it ends playing. Note: by playing with the 'speed percentage' and 'target speed percentage' it is possible to play sounds 'from slow to normal' or 'from fast to normal'. Setting both percentages to 100% just plays the sound fragment from start to end at normal speed.
Volume	The volume at which to play the music

3.2.5.6 Video properties

These properties are shown when clicking on an video on a slide

Property	Description
Aspect Ratio	(read only) aspect ratio
Codec	(read only) video decoder being used
Duration	(read only) length of the video
Effect	Optional effect on the video
End	Time to end the video
Intro Pause	Delay between showing the slide and starting the video
Linked File	Filename of the external video file if linked
Loop	Repeat the video after it stopped
Silent	Suppress the sound in the video
Start	Time to start the video
Video Height	(read only) height of the video
Video storage type	Indicates whether the video fragment is embedded or linked. Embedding a video fragment into a quiz means the video fragment is incorporated into the quiz file. Linking a video fragment means a reference is made from the quiz file to a video on the file system. In general, linking videos is recommended. *Note: when linking videos, be sure to not remove the video files from your file system. When moving the quiz to a different computer, the videos must be copied into the same folder as the quiz file.*
Video Width	(read only) width of the video

3.2.5.7 Shape properties

These properties are shown when clicking on a picture shape or text shape on a slide.

Property	Description
Alignment	The text alignment of the text shape
Background transparency	Applicable for text shapes. Sets the transparency of the color used for the background (the Gradient property).
Border color	The border color of a text shape
Border width	The width of the border of a text shape
Corner radius	The radius of the border of a textshape. Allows you to make rounded corners.
Drop shadow	Indicates whether to use a drop shadow for a text shape
Gradient	The gradient fill for the background of text shape. A gradient 'from' color and a gradient 'to' color can be selected as well as a gradient type.

Property	Description
Picture	Applicable for picture shapes. A thumbnail of the image. Click the browse (…) button to browse for a picture.
Rotation Angle	The rotation angle of the picture or text
Shadow color	Shadow color of the drop shadow for a text shape
Stretch	Applicable for picture shapes. Stretches the picture to cover the full area of the surrounding selectionbox
Text	The text of the text shape
Text color	The color of the text of a text shape
Text font	The font used for the text shape
Transparancy	Set the transparency of the picture or text
Visibility	Indicates whether a shape (being either a picture or text) is always visible, becomes visible when an answer is revealed, is hidden when an answer is revealed or is timed (appears at a certain point in time during countdown)

3.2.5.8   Speech properties

These properties are shown when clicking on a speech item on a slide.

Property	Description
PreRoll	Indicates the number of seconds to wait before the speech starts
Rate	The speed at which the text of the speech item is read
Text	The text to be read
Voice	The voice to use (choose one from the installed voices in Windows)
Volume	The volume of the spoken text

3.2.5.9   Chart properties

These properties are shown when clicking on a chart on a slide

Property	Description
Alignment	Aligment of the title of the chart
Area background	Set the background color of the chart data area
Axis color	The color used for the axis
Axis label autosize	Automatically set the size of the labels on the axis. If not set, you can explicitly choose a font and size for the labels
Axis label color	The color used for the labels on the axis
Chart background	Set the background color of the area outside of the chart data
Chart type	The type of chart, choose between Bar, Column, Doughnut or Pie
Dropshadow offset	Show a dropshadow for the chart data area
Grid color	The color used for the grid in the chart data area
Label color	Color of the labels shown for each element in the chart
Label display mode	For the labels, show absolute values, percentages or both
Label font	Font of the labels
Label style	Indicates where to position the labels
Mode	Indicates the type of data that is shown in the chart : response (percentage of each answer given) or right/wrong (percentage of players that were right/wrong)
Show 3D	Show a 3D representation of the chart
Show legend	Show a legend for the chart data (percentage of responses for each answer)

Title	Title of the chart
Title color	Color of the title of the chart
Title font	Font of the title of the chart
Visibility	Indicates whether the chart is always visible (with live updates during countdown) or only after the question closes

3.2.5.10 Wordgame properties

These properties are shown when clicking on a wordgame on a slide

Property	Description
Alignment	Aligment of the text
Background fill	The gradient fill for the background of the word game. A gradient 'from' color and a gradient 'to' color can be selected as well as a gradient type.
Center index	For a word wheel game, indicates the letter which appears in the center
Drop shadow	Indicates whether to use a dropshadow for the letters in the wordgame
End reveal at	Percentage of the countdown time when the reveal ends
Font	The font used for the text
Interval	For unscramble and reveal word games, control the time between the steps in the game: linear, slowing down or slowing down a lot
Layout	For reveal or unscramble word games : dynamic letter grid or fixed letter grid with 52 cells.
Letter background fill	The gradient fill for the background of the letter boxes in the word game. A gradient 'from' color and a gradient 'to' color can be selected as well as a gradient type.
Letter corner radius	Radius for the corners of the wordgame
Letter spacing	Space between the letters in the word game
Padding	Padding around the letters of the grid
Reverse	For a word wheel game, reverse the direction of the letters
Shadow color	Color of the dropshadow for the letters
Spin	Spin the wordwheel around for an extra challenge
Start angle	For a word wheel game, the start angle where the first letter of the word appears
Start reveal at	Percentage of the countdown time when the reveal starts
Text	The text of the wordgame
Text color	The text color of the text
Text transparency	The text transparency of the text

3.2.5.11 Trivia Board properties

These properties are shown when a trivia board is selected.

Property	Description
Background color (Topic Tiles)	Set the background color of the topic tiles
Background color (Question Tiles)	Set the background color of the question tiles
Font (Topic Tiles)	Set the font of the topic tiles

Font (Question Tiles)	Set the font of the question tiles
Randomize	During a quiz show the option to choose a random question or topic (when topics only)
Text color (Question Tiles)	Set the text color of the question tiles
Text color (Topic Tiles)	Set the text color of the topic tiles
Topics only	Only show topics on the board

3.2.5.12   Trivia Ladder properties

These properties are shown when a Trivia Ladder slide is selected.

Property	Description
Background color	Set the background color of the trivia ladder
Background image	Set the background image of the ladder
Background stretch mode	Stretch mode of the background image
Border color	Set the color of the trivia ladder border
Display mode	Where to show the ladder on the screen: slide into the right of the screen, slide into the center of the screen, show full screen, show always (on the right-hand side of the screen).
Keypads color	Set the color of the keypads
Safety net color	Set the color of the safety net steps
Separator color	Set the color of the separators
Show border	Show the border of the trivia ladder
Step color	Set the color of the steps
Wrong answer action	Indicates what to do when a player answers incorrectly: go one step down, stay on the same step, restart on the ladder or fall back to the nearest safety net

3.2.5.13   Bingo properties

When configuring your Bingo game, the following properties are available:

Property	Description
Auto advance after claim	When a claim is handled on screen and that option is enabled to game will continue automatically after the claim. If not the game waits for the host to press next.
Blanks per row	The number of blank cells per row on the bingo card. This can be used to speed up the game
Center Image	The center (bonus) image to appear on the mobile Bingo card
Claims mode	Indicates if only the first player to claim bingo is handled or all players
Countdown time (sec)	The countdown time when handling a bingo claim onscreen.
Enable Virtual Caller	Enable the Windows voice synthesizer to call out the balls/colors for a regular Bingo game
False Bingo handling	How are false bingo's handled (in front of audience or silent)
False Bingo limit	How many times can a player claim a bingo before they are excluded
False Bingo mode	What happens when a player claims a false Bingo

First Pattern…Fifth Pattern	The patterns to play for (up to 5 patterns can be played in one round)
Game Type	Trivia Bingo, Number (traditional) Bingo or Emoji Bingo game
Pattern penalty points	The points to loose for a false bingo (per pattern)
Pattern Points	The points to win for a valid bingo (per pattern)
Randomize questions	When playing Trivia Bingo, this flag indicates that the questions are played in random order
Say Colors	Say the column colors with the numbers (for example 'Blue 4'

3.2.6   The Quiz Wizard

To help you create new content, Studio has a Quiz Wizard. To start it, on the HOME tab of the ribbon, click the 'Quiz Wizard' button in the 'Magic' section. The Quiz Wizard can help you creating single slides or entire rounds. It guides you through a series of steps after which it will create the requested content. All you have to do afterwards is fill in the actual questions/answers on the created quiz slides. For example to create a new Trivia Board, the Wizard shows the following configuration screen:

Here you specify how the Trivia Board grid will look and how many questions per points/category there will be.

Another example of using the wizard is the ability to generate an entire Disco Bingo round from a folder of mp3 files. It will read the artist/song mp3 tags (when present in the mp3 files) to automatically generate the correct answers to appear on the bingo cards.

3.2.7   Quizmaster Notes

Notes can be entered in the Notes textbox. If the Notes section is not shown, you can show it by going to the VIEW menu. In the VIEW menu, put a checkmark before 'Notes'.

Notes can be used by the quizmaster to provide the audience with some information regarding the question or answers. They can be part of the PDF export of a quiz. They are also shown in SmartQuiz Director and on the Director app.

3.3   Using categories

Categories allow you to make groups of questions look the same way. For example, within one quiz, you could have questions about science, music, movies etc. To make all questions about science look the same, you can make a category called 'Science'. For this category you can then set all sorts of properties like the background image, the font, the colors etc. When creating a new question about science you can than apply the 'Science' category after which the whole question will be formatted according to the "Science" template. All categories are stored within your current quiz file. If you frequently use the same categories it is advised to create an empty quiz file to be used as your starting point for all your quizzes. Categories also play an important role when importing questions directly from Excel. Because advanced formatting information cannot be stored in Excel, instead, each question in Excel can refer to an existing category from which the formatting info will be applied to the newly created slide. To create a new category, first switch to 'Category' view:
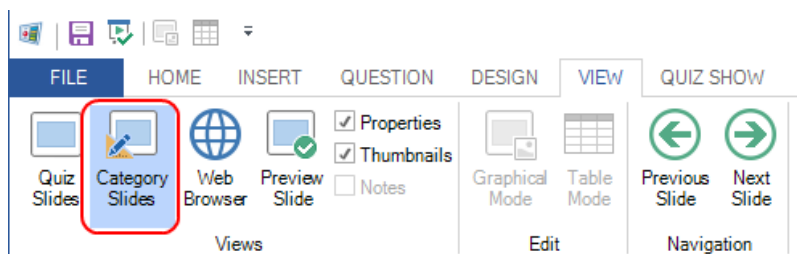
Then activate the INSERT ribbon tab and click any of the templates and enter a name for your category:
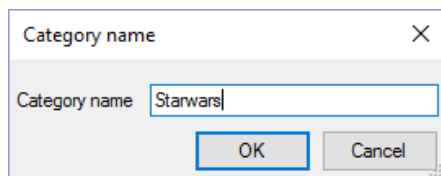

Now you can set the properties of the category like the background to use. To apply a category, switch back to normal quiz slides view, select one or more slides in the thumbnail panel on the left, activate the DESIGN tab and pick the category from the Categories gallery:
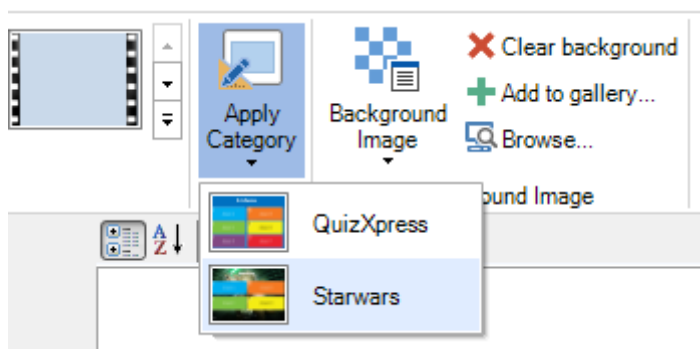
Now the selected slide(s) will be formatted like the category slide.

3.4 Supported slide/game formats

The system supports different game formats. The formats are dictated by the 'Question Type' (which can be found on the QUESTION tab) that is chosen.
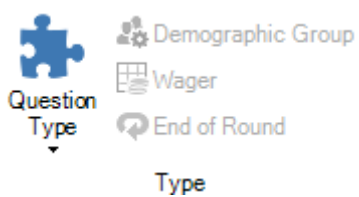
For each option, please also refer to section 5.4.5 and further which explains more about how each setting manifests itself in SmartQuiz Live!, the quiz player.

3.4.1 Slide type 'Question'

This type indicates a regular quiz question. The following variations are possible:

- *Everyone Answers (also referred to as voting):* allows every player to answer a question
- *Lock-out (also referred to as fastest finger)*: the player that hits a buzzer first gets to answer a question
- *Multiple-choice question*: question with multiple answers that the players can choose. Answers given are automatically judged by the system (that is, if 'Judge question' is set to 'Automatically'). You can create a multiple-choice question by going to the DESIGN tab and changing the layout to a layout with multiple answers.
- *Open question (no multiple-choice options)*: question that will be answered verbally by a player\team after which it is judged by the quizmaster (using his or her presenter remote, the keyboard or SmartQuiz Director). You can create an open question by going to the DESIGN menu and changing the layout to a layout with no answers. In the 'input mode' section, select 'default' as the input mode.
- Extended input types which involve questions with numeric, full text or first letter responses. These questions can be answered with the SmartQuiz Smart Buzzer app or by using the buzzerpad website. You can create an open question with a number/letter or text answer by selecting 'number', 'letter' or 'text' as the input mode.

In the points section you can indicate the amount of points to be won for a correct answer, the amount of points lost for an incorrect answer and the amount of points lost when no answer is given, You can also choose for decreasing points as the clock counts down during a question. In order to do this, enter the amount of points 'At start' and 'At end'. You can do the same for penalty points (*Wrong answer* and *No answer*).
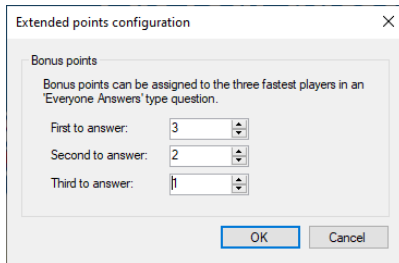

With these options you can award players giving an answer quickly with more points. At the same time, wrong answers can be penalized more at the beginning of a question to prevent people guessing/gambling immediately after countdown started.
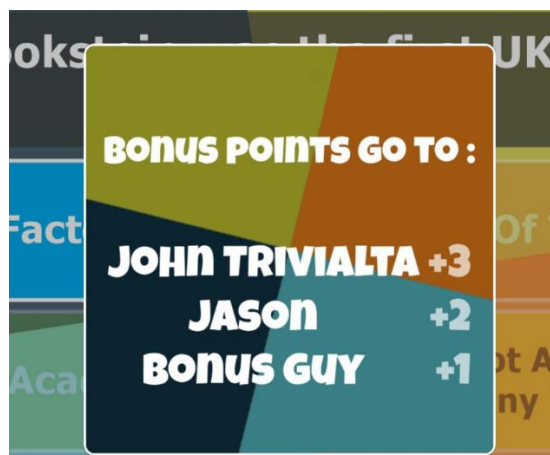
For a multiple-choice question you can set speed bonus points for the top three fastest players to answer the question correctly. This results in an 'everyone can answer' question, with a 'fastest finger' element. To access the bonus points setting, click the 'Speed Bonus' button in the Points section, after which the following form opens:

Assign a value greater than zero for each entry (if you only want to award the fastest, only fill in points for the first to answer) . During the quiz, an animated bonus-points indicator will appear on screen after the question is over to highlight the player(s) that won the bonus-points.

The jingle of the number one bonus point winner will also be played (for more information about jingles please refer to section 4.4)
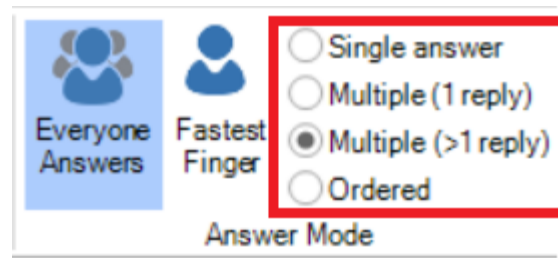

3.4.1.1 *Multiple choice questions*

When creating a multiple-choice question, you can indicate in SmartQuiz Studio which one of the answers is the correct one. If you do this, SmartQuiz can judge given answers by teams for correctness when playing a quiz. You can indicate which answer is the correct one by first selecting one of the answers with the mouse and subsequently putting a checkmark before 'Correct Answer' in the Properties Pane. You can also use the context menu by first selecting the answer, then right click followed by 'Set correct answer'. Next to this you can set correct answers for multiple choice questions in 'Table Mode' representation of the questions (click the VIEW tab and then 'Table Mode'). In the last column of the grid you can indicate the correct answer for (single answer) multiple-choice questions.

3.4.1.2 *Multiple correct answers*
SmartQuiz supports having multiple correct answers. The following options are available:

Single

This is the default mode, where there is one single correct answer for a multiple choice question.
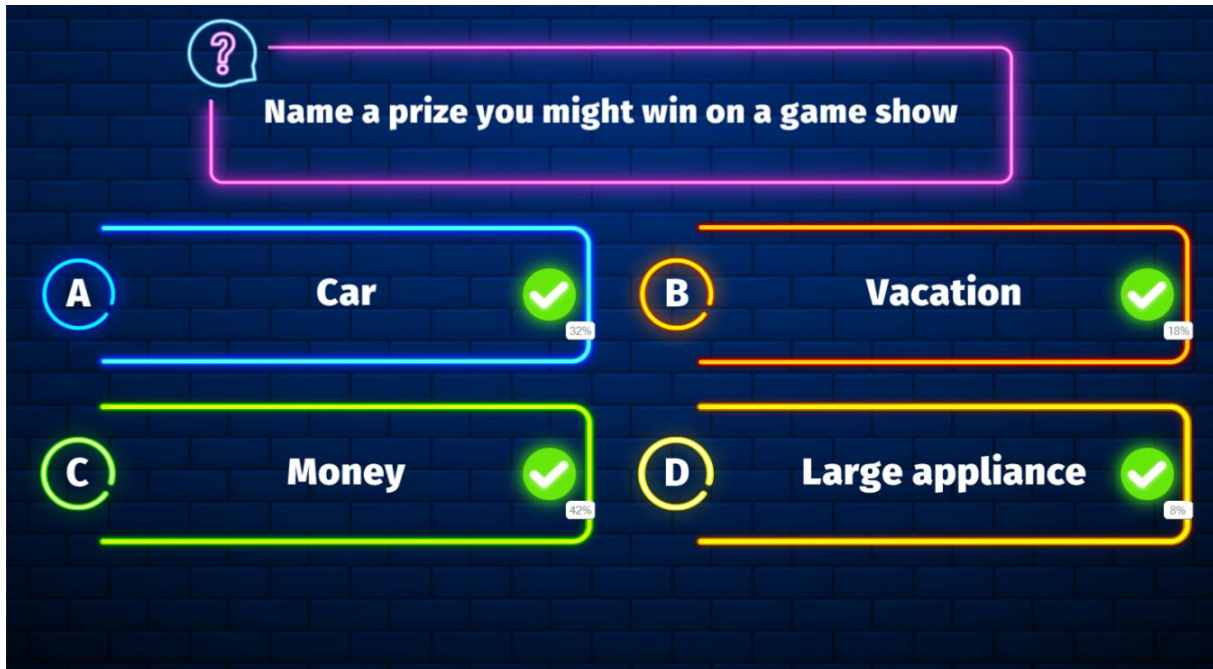
Multiple (1 reply)

In this mode the question can have multiple correct answers but the players can only choose one of these answers. For each answer you can set a different correctness if applicable. You can use this to create questions where players can gain more points if they are 'closer' to the correct answer as illustrated in the below question (2000 is the exact answer):
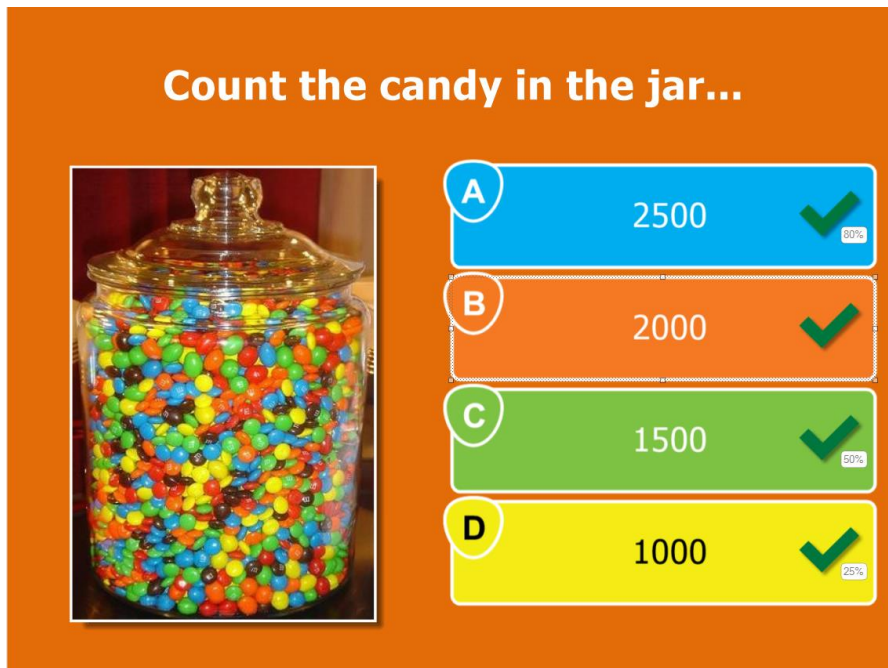
Setting the 'correctness' of an answer can be done by right clicking the answer and selecting 'Set Correctness' from the context menu. The following dialog helps you setting the correctness value:
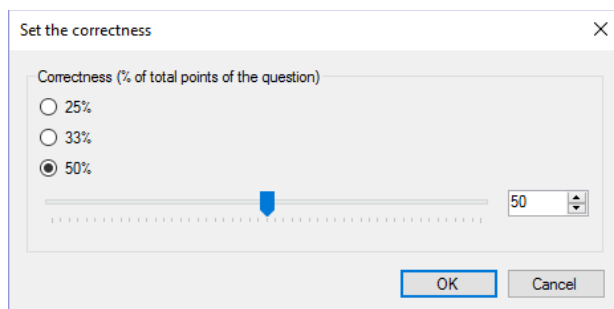
You can also use this to create 'Family Feud' style questions like the below. By giving the answers the correctness of the family feud answer percentages, choosing a more popular answer will award a player with more points. If you set the points for the question to 100, the amount of points that can be won by a player for giving a certain answer is the corresponding percentage.

Multiple (>1 reply)

In this mode the question can also have multiple correct answers each with a different 'correctness' but now the players can select more than one answer. So, for example when answer A and C are both set to correct (each with 50% correctness), players can earn 100% of the points by responding to the question with *both* A and C. If they would respond with A and B, they would only gain 50% of the points.

If players should respond with all correct answers in order to win points, select the question and in the properties pane set the 'response mode' to 'multiple responses, exact match'.

Ordered

In this mode, a player has to put the answers in the correct order. You can make questions such as the one shown below (correct response would be C->A->D->B).

If you want the players to give the exact order to win points, select the question and in the properties pane set the 'ordered answer mode' to 'exact match' (which is the default). If giving a partial correct order should also lead to winning points, set the 'ordered answer mode' to 'partial match'. In this case, the percentage of answers given at the right spot will result in the same percentage of the points that can be won for the question. For example, if the correct order is ABCD and a player answers ACBD, this will result in 50% of the points that can be won for the question.
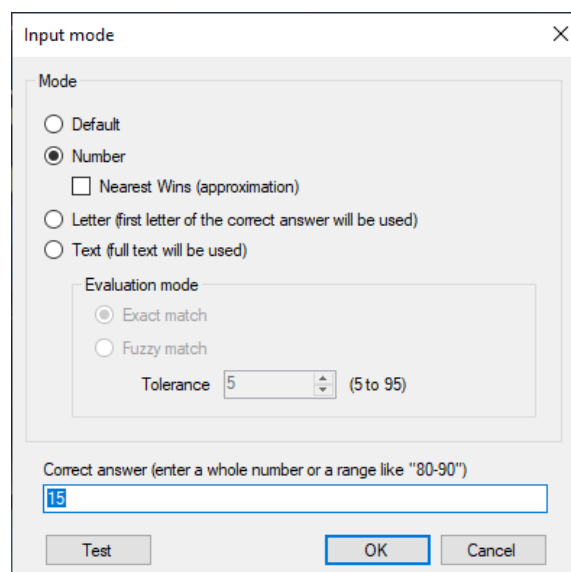
To change the order, right click one of the ordered answers and click 'Set Order':
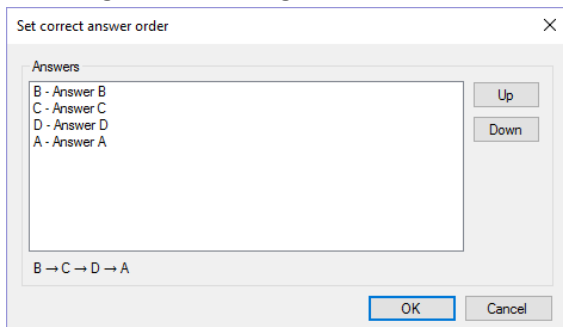

3.4.1.3   Extended input types

In SmartQuiz version 6.5 we introduced three new input types that can be used with the Smart Buzzer app or buzzerpad website being: numeric, full-text and first-letter. You can use these input types in combination with an open question. The options are as follows:

Choosing *Default* for an open question results in a regular fastest finger question which can be played in case you use buzzers or keypads. When using the smart buzzer app or buzzerpad website, a buzzer will be shown on screen. The person who presses first locks out the buzzers of all other players and responds verbally to the quizmaster with the answer.
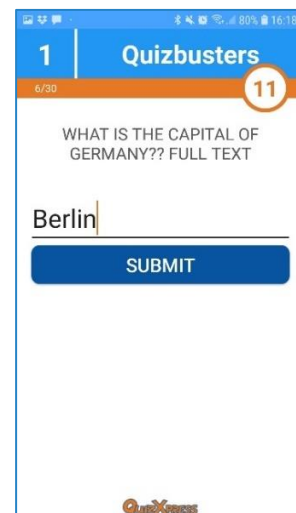
For the *Number* input type, the Smart Buzzer app or buzzerpad website presents a screen to the players where they can enter a numeric value. For the *Letter* type an A-Z grid is presented for them to pick one letter from. The Text type allows players to enter a full text (not case sensitive; capitals do not matter).
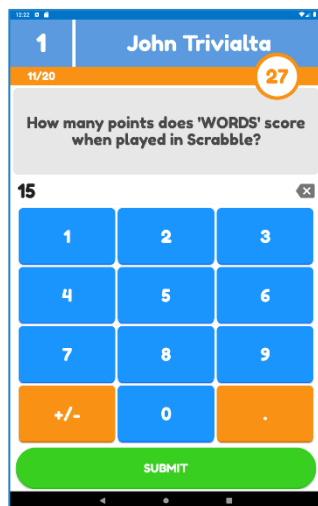
| Numeric entry | First letter | Full text |

For numeric questions you can also specify a range like "80-90". This means all answers between (inclusive) 80 and 90 are judged as correct. Or, you can turn the question into an approximation question (e.g. "how many marbles are there in the jar") where only the player with the answer closest to the correct answer gets points. In this case, put a tick before 'Nearest wins'. When there are multiple correct answers, the player that gave the answer quickest wins the points.

For full text questions you can indicate if you want an exact match with the answers given or you can use fuzzy matching and set a tolerance to allow for small spelling errors. If you want to allow multiple answers, you can enter multiple texts in the 'correct answer' field separated by a semicolon (for example Belgium;Belgique;Belgie). Use the Test option to validate if the tolerance for 'fuzzy match' text answers is working correctly.

3.4.2   Slide type 'Billboard'

A 'Billboard' quiz slide is a quiz slide with no interaction from the players. It is just a static display typically used for announcements or explanations. You can design a billboard quiz slide just like you design a normal question, making use of texts, colors, pictures, sounds and videos.

Useful applications of a billboard are:

- Announcements (rounds/finishing of rounds/intermediate score announcements)
- Further explanation of the answer of a question
- Marketing information or sales messages

- Show a preview of a multiple-choice question to come so the audience can prepare
- Show a video or image before a question that the audience needs to watch carefully

3.4.3   Slide type 'End of round'

Within SmartQuiz you can indicate that a quiz slide marks the 'end of a round'. You do this by setting a quiz slides 'Type' to 'End of Round' in SmartQuiz Studio.

When an end of round slide is shown during a quiz show, no interaction with the participants takes place. For example, you can use it to show a text 'End of Round 3'. Again, you can design the quiz slide anyway you want, containing video, sound and pictures.

Also, you can choose to show the intermediate or round score automatically. In this case, a slide with type 'End of Round' is in fact a 'Billboard' slide that also automatically shows the intermediate or round scores.

When selecting 'End of Round' for the question type, the 'End of round action' dialog box is shown with different options to execute when that slide appears
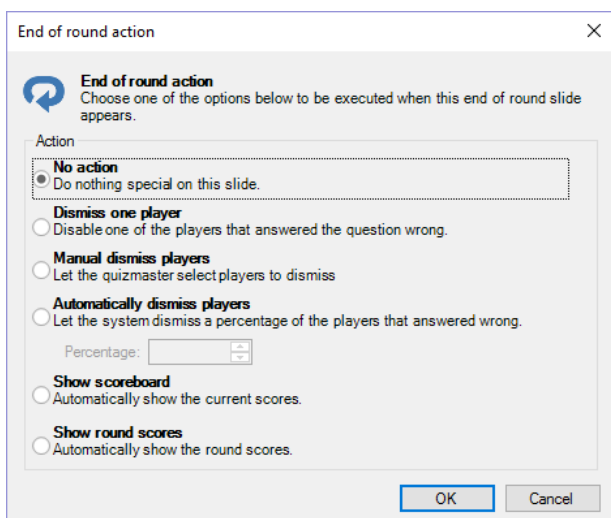
Here you can set various automatic actions to occur when the end of round slide appears such as dismissing a subset of the players, showing the overall leaderboard or the winners for this round. You can always change these options later by clicking the 'End of Round' button next to the 'Question Type' button:
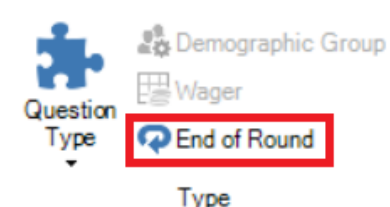

Please also refer to section 5.4.5.3 for more information about End of Round slides

3.4.4   Slide type 'Demographic groups'

SmartQuiz offers various ways to group players so they can compete each other in teams (for example: boys versus girls) . The 'demographic groups' slide type enables you to group players 'on the fly' when running a quiz.

When you choose this question type, a window pops up where you can enter the name of the group\team. When the slide is shown during a quiz, keypads that are pressed while the demographic slide is shown, are registered to that specific group.
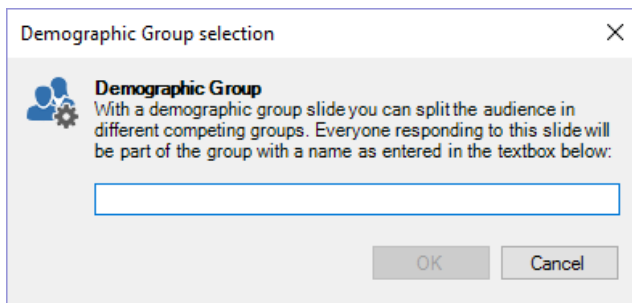
On the slide, we recommend to show a text asking the members of the specific group to press their buzzer or keypad ('all boys, please press your keypad').

You can also divide players in groups before a quiz in SmartQuiz Setup. For this, please refer to the section SmartQuiz Setup: Grouping keypads.

When playing with mobile phones (using the Smart Buzzer app or buzzerpad website), you can also play in groups. For this, please refer to sections Playing in groups and Making money by selling tickets.

3.4.5   Slide type 'Last man standing'

With 'Last man standing' questions, everyone gets to answer, but players with a wrong answer are immediately excluded from subsequent questions until there is one winner left. When only one player is left, the quiz advances to the first end of round slide it encounters or to the end of the quiz. Slides of type 'End of Round' mark the end of a Last Man Standing round. All players join in again on the slide following the 'End of Round' slide. If there is no 'End of Round' slide, the quiz jumps to the final score screen when there is only one player left.

Note: when all players are wrong with a Last man standing question, all players remain in the game.
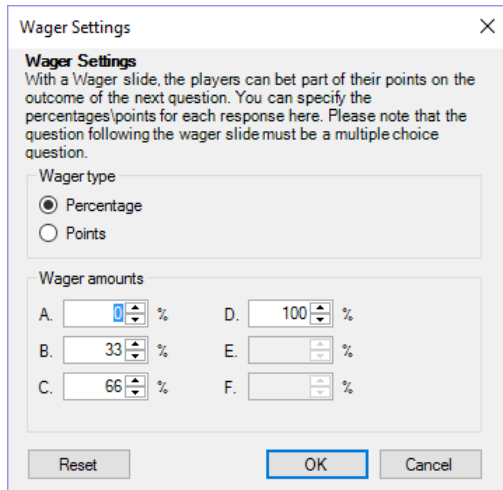
3.4.6   Slide type 'Audience Response'

This is a type of question that can be used to poll the opinions in the audience. The answers given to an audience response type question are registered but have no impact on the scores. After an audience response question, you can show a chart with the 'C' key to display the distribution of the answers given. Alternatively, you can also insert a Chart on the slide which shows the number of responses for each answer 'real time' during countdown or alternatively, at the end of countdown.

3.4.7   Slide type 'Wager'

With Wager questions players can bet (a percentage of their) points on the question that will follow the wager slide. When the type of a question is set to 'Wager', the window below is shown. During a

quiz, players wager with (a percentage of) points based on how much they think to know about a subject. On the slide itself, you can change the text or design to refer to the subject of the question that will follow (for example: 'The next question is about sports, how many points would you like to wager?').

You can always change these options by pressing the 'Wager' button next to the 'Question Type' button (or by using the SmartQuiz property grid).

3.4.8   Slide type 'Majority Rules'

For this type of question, the correct answer depends on what the majority of the audience has chosen. So, only if a player has chosen the same answer as the majority of the audience, points are won. If multiple answers have the same number of votes, all the answers are considered correct. When the question is over, SmartQuiz shows the correct (most chosen) answer(s) on the slide.

An example of a 'majority rules' question is:

If you choose what most of the audience chose, you will win the questions points. Majority rules questions can be seen as a variant of 'family feud', where an instant audience poll takes place and you have to guess what the audiences most popular answer is.

3.4.9 Slide type 'Minigame'

SmartQuiz offers a variety of mini games. Minigames will spice up your game show or trivia night with offering something different than trivia. Points can be won or lost with the games.

Minigames can either be started manually (on demand) from within SmartQuiz Director (the quizmaster control panel, more about that later) or by inserting a slide of type 'Minigame' in the quiz file. To insert a minigame in your quiz, select the 'minigame' slide layout from the layout gallery on the INSERT ribbon tab:
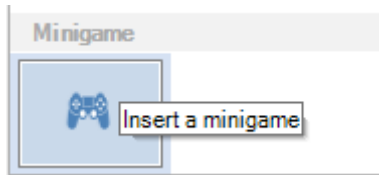
The next step is to pick the game from the list of available games:
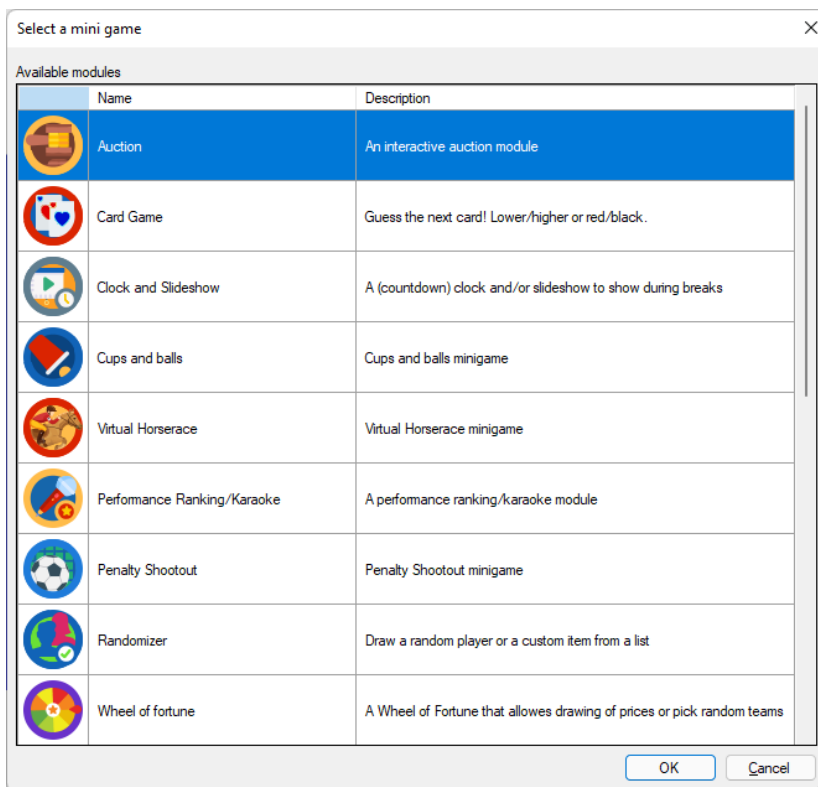
A new slide is inserted that will launch the minigame in SmartQuiz Live! when the quiz gets to that slide. Each minigame slide can have its own unique configuration and branding. To configure a minigame, right click the slide and click 'Configure...' or click 'Configure' on the QUESTION ribbon:
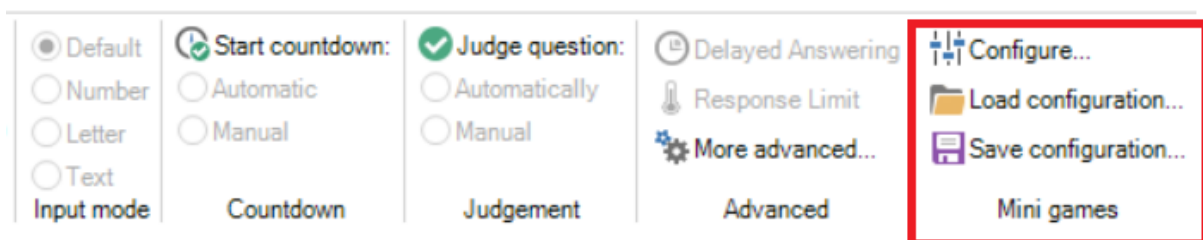
This will bring up the configuration dialog for that minigame. You can also load and save minigame configurations to reuse them across quizzes. For the configuration options of the different mini games please refer to section 5.7.5.1

To test your minigame you can either run your full quiz, or you can use the preview function in Studio by pressing F5 (or right click on the mini game and choose 'Preview'). This will launch the minigame in a separate window. Use the spacebar to navigate through the different screens.

3.4.10   Slide type 'Trivia Board round'

A Trivia Board round enables you to create a Jeopardy® style question board with topics and questions of varying difficulty/points.

Just like regular quiz slides, a trivia board can be fully styled (please refer to section Trivia Board properties for more details on the options).

During the quiz show, the questions on the board can be chosen (by keyboard, using the mouse or quizmaster remote) or randomly picked in which case a random selector jumps over the screen and chooses one of the tiles.

3.4.10.1   How to create a Trivia Board?

To create a trivia board, start by inserting a trivia board slide into the quiz (go to the INSERT menu, click on the dropdown list in the Quiz Slides section and choose the Trivia Board layout). The trivia board will be generated automatically by the questions that follow it.

To categorize the questions into topics and points (or topics only), make sure to set the following properties of the questions following the trivia board:

- The topic
- The points

You can enter both on the QUESTION tab while the question is selected:
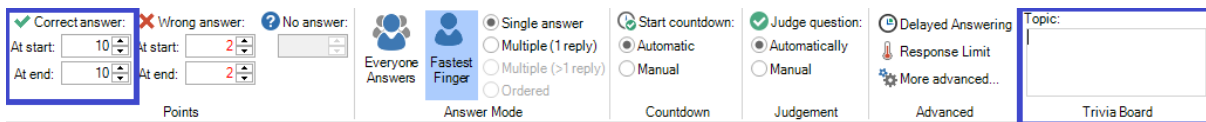
Alternatively, you can also enter the properties on the properties pane (if this is not visible, please show it first by selecting the VIEW tab and setting a checkmark before 'Properties').

A Trivia Board can be mixed with other SmartQuiz game formats. To create a Trivia Board (round), SmartQuiz needs to know where a Trivia Board round ends. A Trivia Board round ends at one of the following slide types:

- an 'End of round' slide (please also check 3.4.3)
- another Trivia Board slide
- a Trivia Ladder slide
- the end of the quiz (last round or a Trivia Board only game)

During the quiz show, all slides from a Trivia Board round are processed and grouped per topic. Within a topic, questions are grouped by the number of points. In this way, behind every points tile on the board there can be multiple questions. Once the questions behind a certain tile on the board are exhausted, the tile is greyed out and can no longer be chosen.

Questions that have no points (For example Audience response, Demographic, Wager) are ignored when creating the Trivia Board.

Alternatively, the Quiz Wizard can help you create a complete Trivia Board round with a few clicks! Start the wizard (HOME tab followed by 'Quiz Wizard') and select 'create a new round' followed by 'a Trivia Board round'). Now, fill in the topics, points and other preferences.
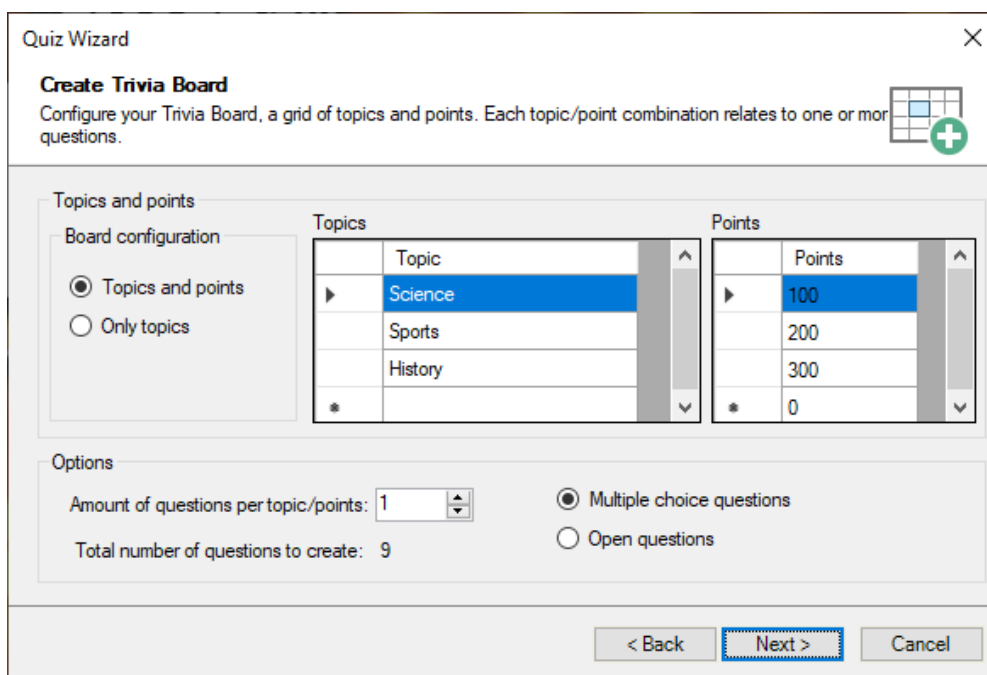
Choose question time, points and style used on the next pages and press 'Finish' to create the board, questions and closing end of round slide for you. Of course you will still need to fill in the actual questions but the correct topic/points will already be set for you.

3.4.10.2 Preview a Trivia Board

The Trivia Board in SmartQuiz Studio as shown on the Trivia Board slide is only used for design purposes. By setting the styling options of the Trivia Board as well as the background you can determine the looks of the board.
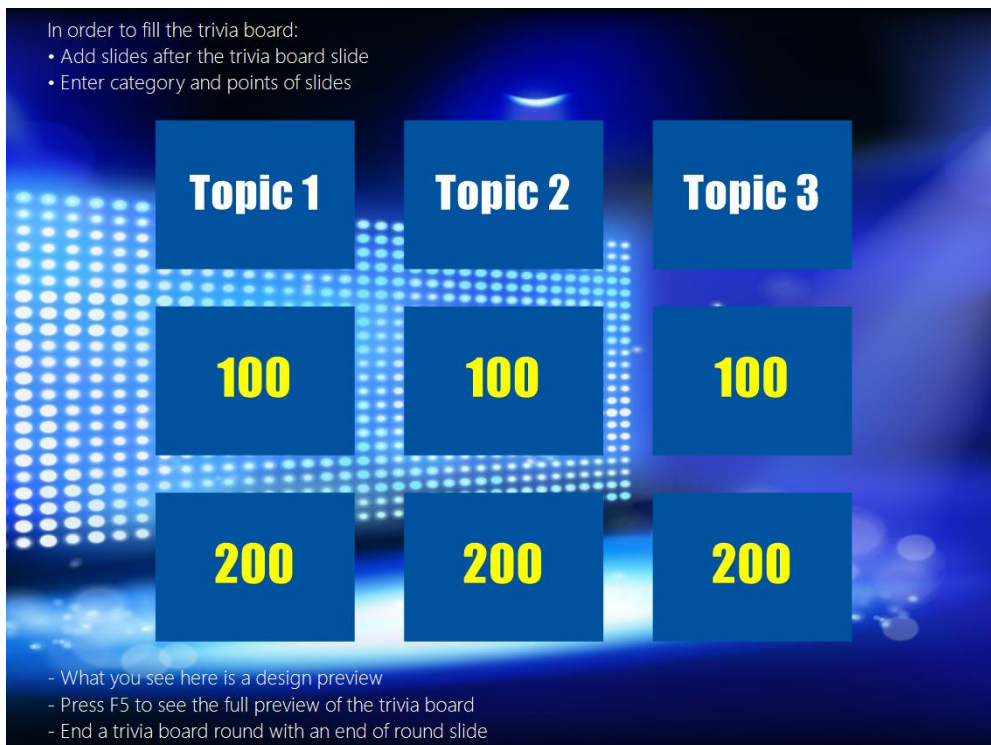
When you want to have a preview of the board like it will be shown during the game show, press F5 and the board will be automatically generated from the questions present in the Trivia Board round.

3.4.11 Slide type 'Trivia Ladder round'

A Trivia Ladder round enables you to create a 'Who wants to be a millionaire®' style round where (a) player(s) try to move up a ladder by answering questions correctly.
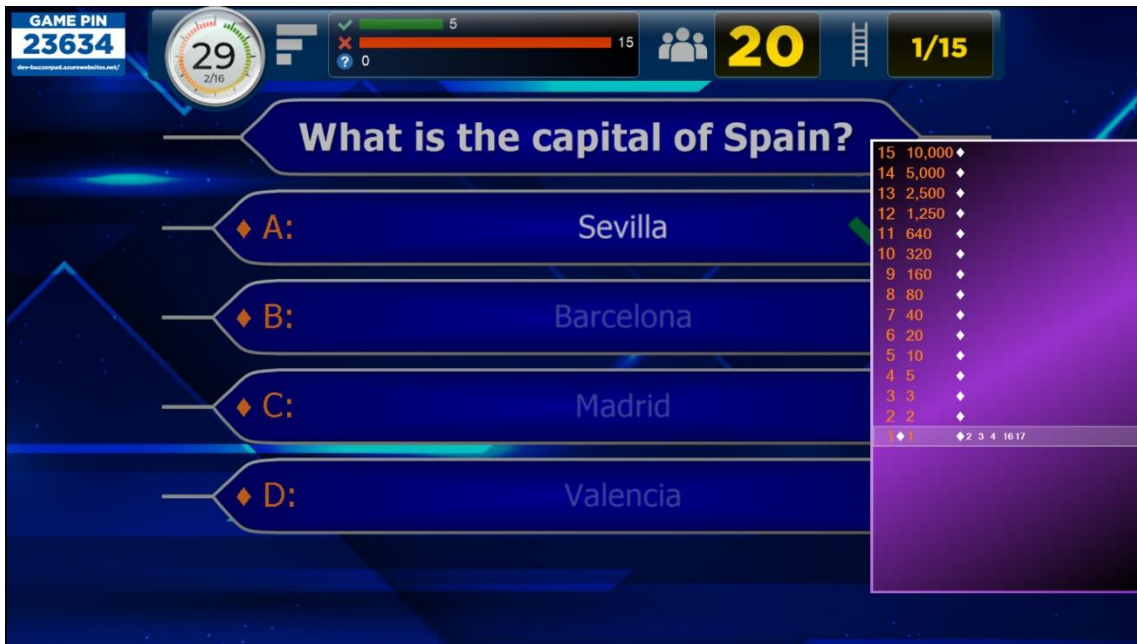
Just like regular quiz slides, a Trivia Ladder can be fully styled (please refer to section 3.2.5.12 for more details on all of the options).

3.4.11.1 How to create a Trivia Ladder?

In order to create a trivia ladder, start by inserting a Trivia Ladder slide into the quiz (go to the INSERT menu, click on the dropdown list in the Quiz Slides section and choose the Trivia Ladder layout). The Trivia Ladder will be generated automatically by the questions that follow it.

Note: Contrary to all other slide types, the Trivia Ladder slide is not shown by itself during the quiz show. Its purpose is only to create the ladder which will be shown on each slide of the Trivia Ladder round during the quiz

In order to fill the Ladder, create as many questions as you would like to be steps on the ladder *after* the Trivia Ladder slide. Below you can see one step of the ladder.

<div align="center">**Ladder Step**</div>

The question numbers are shown on the left-hand side of the ladder. The points, displayed on the right of the question number, are defined by the points that the respective questions in the Trivia Ladder round have. It is also possible to add prizes to the ladder instead of points. On the right-hand side of each step the keypads that are on the step are displayed.

The leftmost separator (diamond) indicates if the question on the step has been played.

Only at the end, when the last ladder question has been finished, each player (keypad) receives the points of the step that he or she is on.

The safety net steps on the ladder are typically colored differently (white in the picture below for example) to indicate which steps players fall back to when they answer incorrectly (in case the *wrong answer action* of the ladder is set to 'Fall to safety net').

Just like the Trivia Board, a Trivia Ladder can be mixed with other SmartQuiz game formats. To create a Trivia Ladder (round), SmartQuiz needs to know where a Trivia Ladder round ends. A Trivia Ladder round ends at one of the following slide types:

- an 'End of round' slide (please also check 3.4.3)
- another Trivia Ladder slide
- a Trivia Board slide
- the end of the quiz (last round or a Trivia Ladder only game)

Questions that have no points (For example Audience response, Demographic, Wager) are ignored when creating the Trivia Ladder.

Alternatively, the Quiz Wizard can help you create a complete Trivia Ladder round with a few clicks! Start the wizard (HOME tab followed by 'Quiz Wizard') and select 'create a new round' followed by 'a Trivia Ladder round'). Now, fill in the points and indicate where the safety nets are.

Choose question time, points and style used on the next pages and press 'Finish' to create the ladder, questions and closing end of round slide for you. Of course you will still need to fill in the actual questions but the points, safety nets and ladder framework will already be set for you.

3.4.11.2 Position on the Trivia Ladder

When a player answers a question correctly in a Trivia Ladder round, he or she advances one step on the ladder. When a question is answered incorrectly, the following can happen based on the 'Wrong answer action':

- Same step – player stays on the same step of the ladder
- One step down – player goes down one step on the ladder
- Fall to safety net – player falls back to the first safety net encountered
- Back to bottom – player falls off the ladder and must restart

3.4.11.3 Preview a Trivia Ladder

The Trivia Ladder in SmartQuiz Studio as shown on the Trivia Ladder slide is only used for design purposes. By setting the styling options of the Trivia Ladder you can determine the looks of the ladder (please refer to section 3.2.5.12 for more details on the options).

When you want to preview the ladder like it will be shown during the game show, press F5 (or right click on the ladder and press 'Preview') and the ladder will be automatically generated from the questions present in the Trivia Ladder round.

3.4.12 Slide type 'Bingo round'

This slide type starts a regular Number Bing, Emoji Bingo, Music Bingo or Trivia Bingo game. This type of game can currently only be played when the audience is using the Smart Buzzer app for mobile devices.
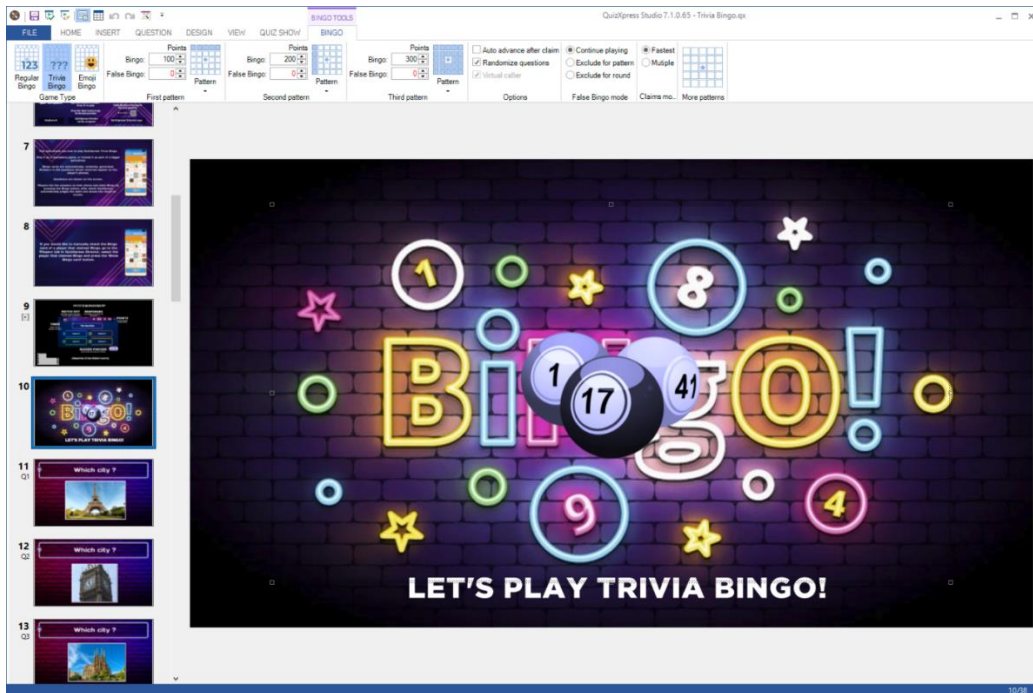
By selecting the Bingo balls element on the slide, the Bingo contextual tab appears in the ribbon and you can configure the various aspects of your new bingo game as described in section Bingo properties.

SmartQuiz supports the following Bingo games:

EMOJI BINGO

NUMBER BINGO

MUSIC BINGO

TRIVIA BINGO

3.4.12.1   Creating a Bingo game

You can create a new bingo round either by using the Quiz Wizard, or by manually inserting a bingo slide from the Quiz Slides picker on the INSERT tab of the ribbon.


For a traditional numeric bingo- or an emoji bingo game you only need to create that single slide. Just click on the Bingo balls and then select 'Regular Bingo' or 'Emoji Bingo'.
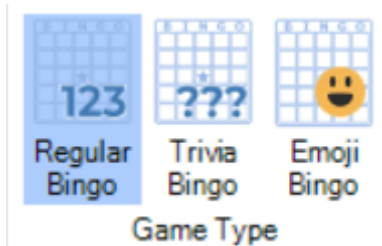

For a Trivia Bingo round however, you will also have to create the questions for which the answer (which can be a text or a picture) will appear on the bingo card cells. The questions need to be inserted after the Bingo slide and you have to terminate the round with an *end-of-round* slide. As each card has 24 cells to fill, you need at least 24 questions. Creating more questions will result in more randomness of the cards. For example, when you only have 24 questions each card will have 'Coverall' at the last question and everyone will have bingo. If you create more questions, like regular bingo, not all answers are on the cards.

The type of questions supported in a Trivia Bingo round are number, text, letter and open questions with a single picture (this will result in a picture bingo cell).

To create text cells on your bingo card use the 'open question' slide template:
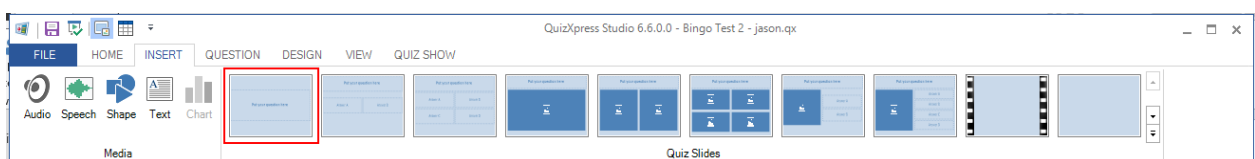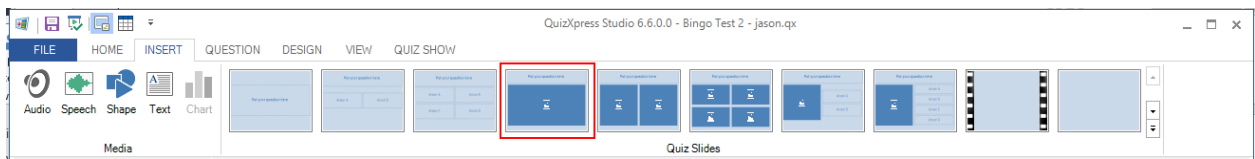

And set the Input mode to Number, Letter or Text:
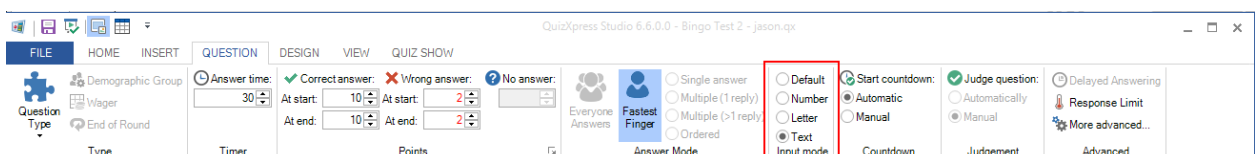
This will result in a bingo cell with the correct answer as set for the question. Using 'Number' or 'Text' does not make much difference but when using the type 'Letter', only the first letter will appear on the bingo card.

To create a *picture* bingo card cell, choose the following layout:

Select the picture element and check the 'Hidden' flag in the 'Adjust' section of the ribbon
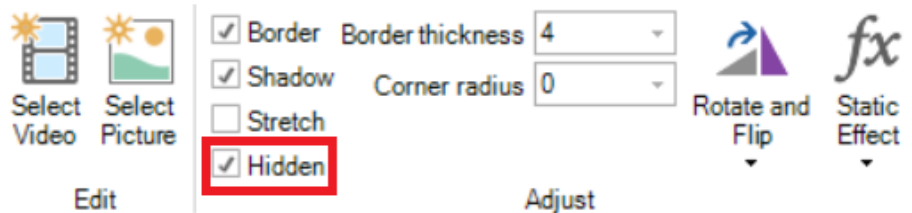
This will make the picture hidden when presenting the quiz to the audience and it will appear on the Bingo card as a picture cell (you can choose to also show the picture on the big screen during a quiz but this will make the answer very easy to find on the Bingo card!).
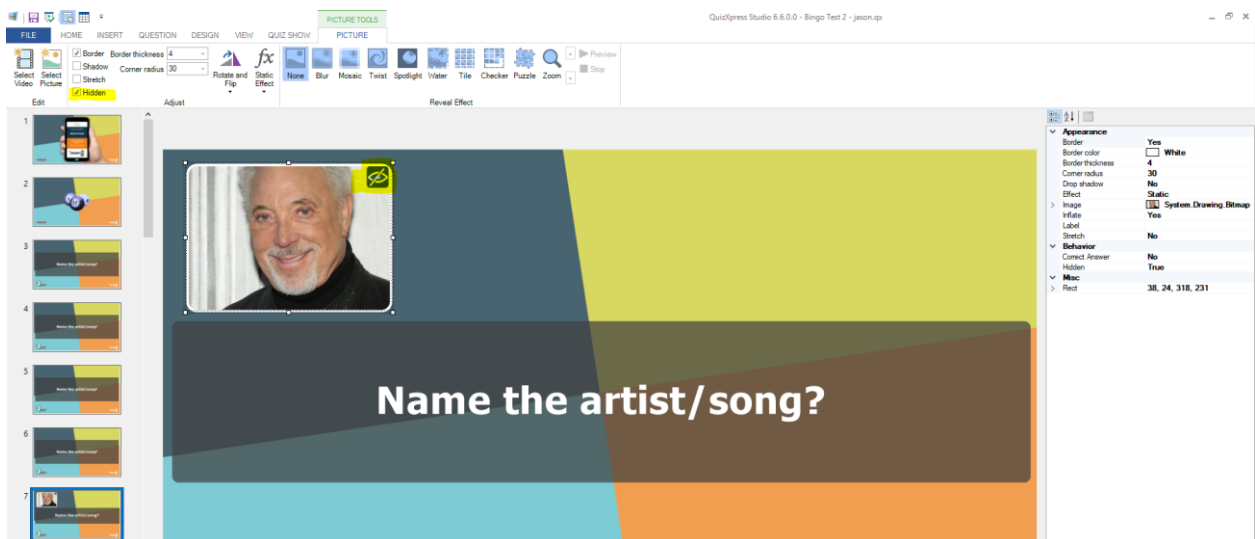
The Quiz Wizard also helps in quickly creating a trivia or music Bingo round. Just start the wizard (HOME tab, Quiz Wizard button) and press 'create a new round' followed by 'A Bingo round'. You can now choose from the four types of Bingo and indicate your preferences.

When you are done creating your questions you can preview a (random) card by right clicking the bingo slide and selecting Preview (or press F5).

Below you find an example of a Trivia Bingo card preview:

When running your quiz, as soon as your Bingo slide is presented, the system creates a set of random cards and distributes them among your players automatically.

For Trivia Bingo there is an option (on the BNGO tab of the ribbon) to randomize the slides in the Bingo round so they appear in a different order every time you play the quiz:
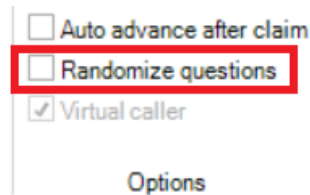
It is possible to customize the picture that is shown in the center of the Bingo cards on the mobile app and use your own image. For this, select the Bingo element on the Bingo slide, open the advanced properties pane (VIEW tab, put a check before 'Properties'), click the 'Center image' property and click the three dots property to select an image file:
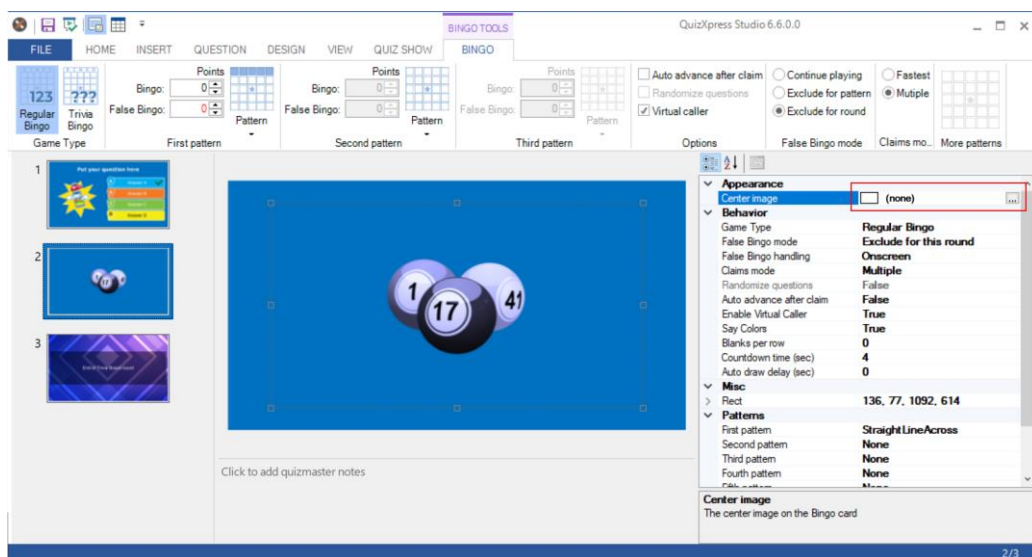
Use your own center image to promote your brand with players!

3.4.12.1.1 Bingo patterns
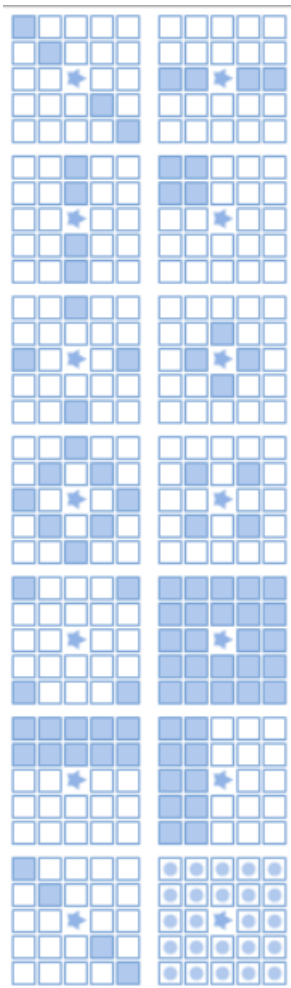
You can define up to five subsequent patterns that will lead to Bingo. You can select three patterns by clicking the "Pattern" buttons in the First pattern, Second pattern and Third pattern section on the BINGO tab in the ribbon. If you want to define a fourth and fifth pattern, this can be done in the Properties pane.

A selection can be made from 13 predefined patterns. There is also the possibility to define custom patterns.

When opening the patterns, an animation is shown for patterns if applicable (for example, the horizontal line pattern is valid for each horizontal line).

When playing a Bingo game, in both the quiz player as well as the mobile phone an animation will be displayed showing the current pattern giving Bingo.

With version 7.1 comes the possibility to create your own bingo patterns. To do so pick the custom pattern from the ribbon (last entry in the pattern picker), after which you will see the pattern editor:
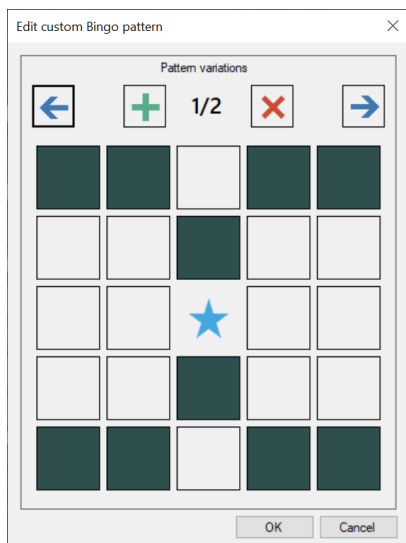
Pattern variation 1
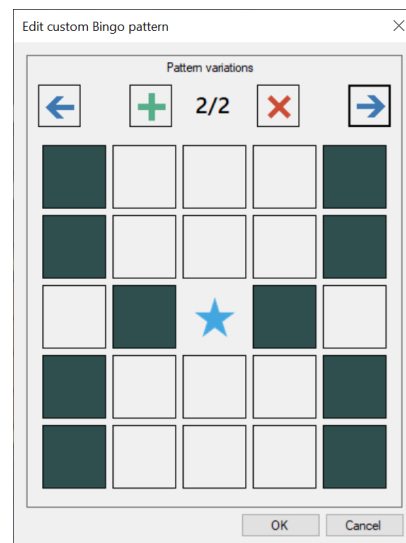
Pattern variation 2

By clicking on the cells you create the pattern. A pattern can have multiple variations that all make for a valid bingo (analogous to a horizontal line Bingo for example, where each horizontal line results in a Bingo). In the quiz player as well as on the mobile app the variations will be shown to the players in an animation.

3.4.12.1.2 Blanks per row:

To speed up a Bingo round you can opt to introduce blank cells on the cards. To enabled blanks, open the properties view in Studio (VIEW->Properties on the ribbon), select the Bingo slide and lookup the property named Blanks per row:
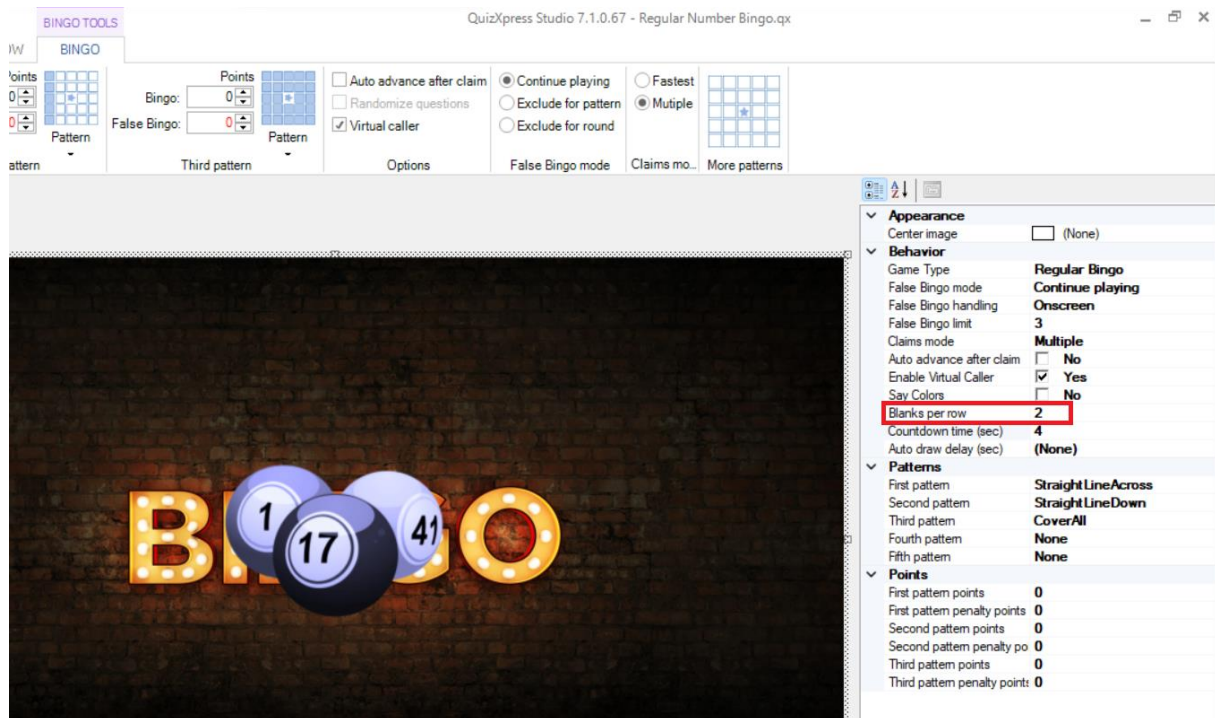
This value indicates the amount of blanks cells per row on your card. It can be a value between 0 and 4. When specifying a value of 2, the Bingo card on the mobile device will look like:

The empty cells act as wildcards when evaluating a Bingo claim. So in the example card on the left, by just marking 30, 50 and 67, the player could claim a Bingo for a horizontal line. When playing with blanks one should consider what patterns to play for. E.g. playing for a vertical line might not be such a good idea as there could be columns with only 1 cell to mark. Also more complex patterns like diamond shape might never be achievable with certain cards.

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3.4.12.1.3 Advanced Options

Auto advance after claim – when this option is enabled, the game will move on automatically after a Bingo claim. When not enabled, the game waits for the host to advance.

Virtual caller – when enabled the played numbers will be spoken by the computer (by the default Windows voice synthesizer)

Using a custom Bingo caller voice

When enabling the Virtual Caller option, by default the Windows voice synthesizer is used to speak the numbers. You can however create your own voice files for example with the help of a local celebrity. To do so, create a subfolder in the SmartQuiz application data folder (in Windows explorer, enter *%appdata%\SmartQuiz* in the navigation bar) named 'bingo'. In this folder, create the mp3 files for each number to speak (e.g. 1.mp3, 2.mp3, 3.mp3 etc.) and optionally a file named 'welcome.mp3' that will be played when the Bingo game starts. The system will play these files when a new ball is drawn.

3.4.12.1.4 False Bingo mode
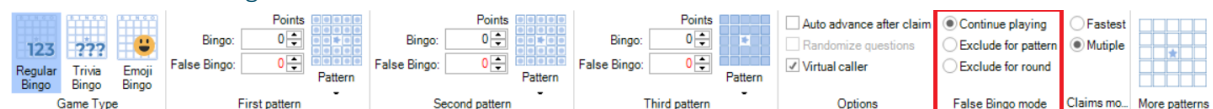
You can indicate what needs to happen when a false Bingo claim is made. The options are:

- Continue playing – the player that made a false claim can claim another bingo for the same pattern
- Exclude for patterns - the player that made a false claim can no longer claim bingo for the same pattern. The player must wait until someone else has a valid bingo and the system switches to the next pattern.
- Exclude for round - the player that made a false claim can no longer claim bingo for the remainder of the round (which can be a full game if there is only one Bingo round)

In the properties pane two additional settings for false Bingo claims are available:

False Bingo limit – set a limit to the number of false Bingo claims for a player. After the limit has been reached, the player is locked out of the game

False Bingo handling – determines how false Bingo claims are handled, OnScreen or Silent. In silent mode, only Bingo claims that will result in a valid Bingo are shown in the quiz player.

3.4.12.1.5 Claim handling:
There are two options for handling a Bingo claim:
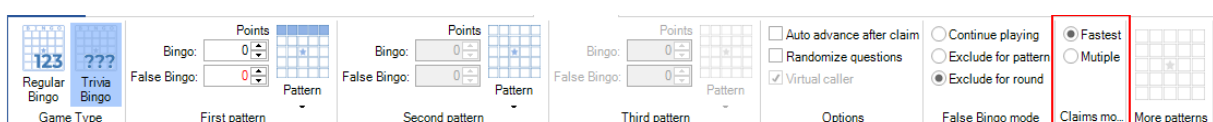
Fastest: only the first player to claim a Bingo will be handled, other people pressing Bingo too will be blocked. When it is a valid Bingo the next pattern will be played. All players are now playing for the new pattern.

Multiple: all the claims made in a few seconds after the first player claimed Bingo are handled. If there was one valid Bingo claim the pattern switches to the next pattern after all claims are handled.

3.4.12.1.6 Constraints when saving a quiz

There are some constraints when creating a Bingo round. For example, it is important that there are no duplicate cells on the card. The system has a built-in rules checker that checks the quiz before saving:
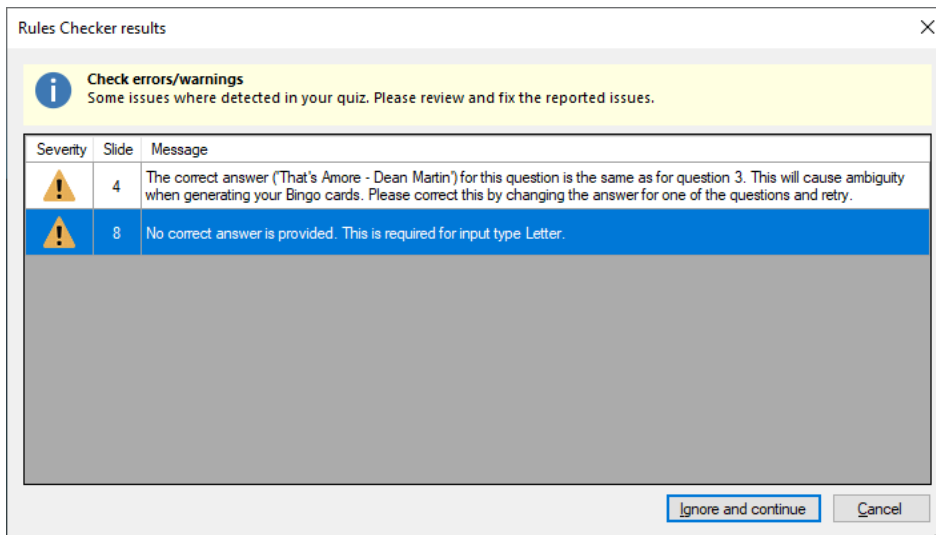
It does this automatically for text questions. For picture cells you will have to do this yourself; make sure not to include two questions with the same picture.

3.4.12.2 Playing a Bingo game

The quiz player takes care for registering the Bingo cards for all players and listens to Bingo claims coming for the players. Below you can find examples of the different bingo games.

3.4.12.2.1 Types of Bingo games

Number Bingo

The screen will show the last 9 balls that have been played along with their color (indicating the section on the Bingo card) as well as the latest ball that has been drawn. It shows how many balls are left to be drawn as well as the current pattern leading to a Bingo.

Emoji Bingo

Emoji Bingo is basically the same as Number bingo, only instead of 75 numbers, the 75 most commonly used Emojis are used.
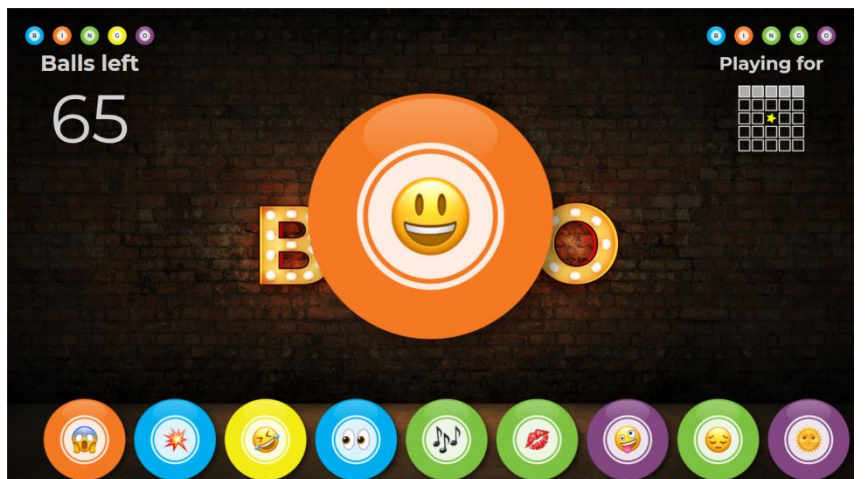
Trivia Bingo

When playing Trivia Bingo, the questions are shown on the big screen along with the current pattern and the countdown clock. The answer, being a text or a picture, has to be found on the card (if there are more questions than numbers on the card, it can be that the answer is *not* on a card).
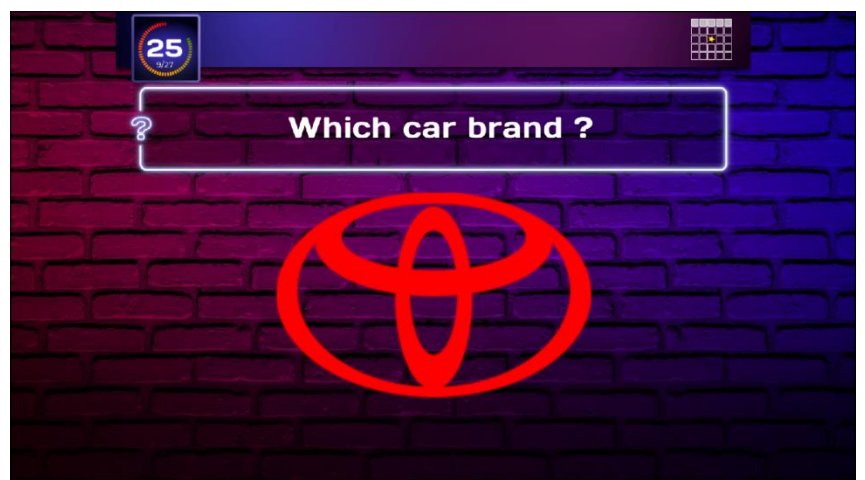
Music Bingo

Music (or even video) Bingo is basically the same as Trivia Bingo. Questions with music fragments are shown on screen, with the answers (being text or pictures) are on the Bingo card.

The quiz wizard contains specific support for Music Bingo. It allows you to select a folder with mp3 files, from which the Bingo round is automatically constructed.
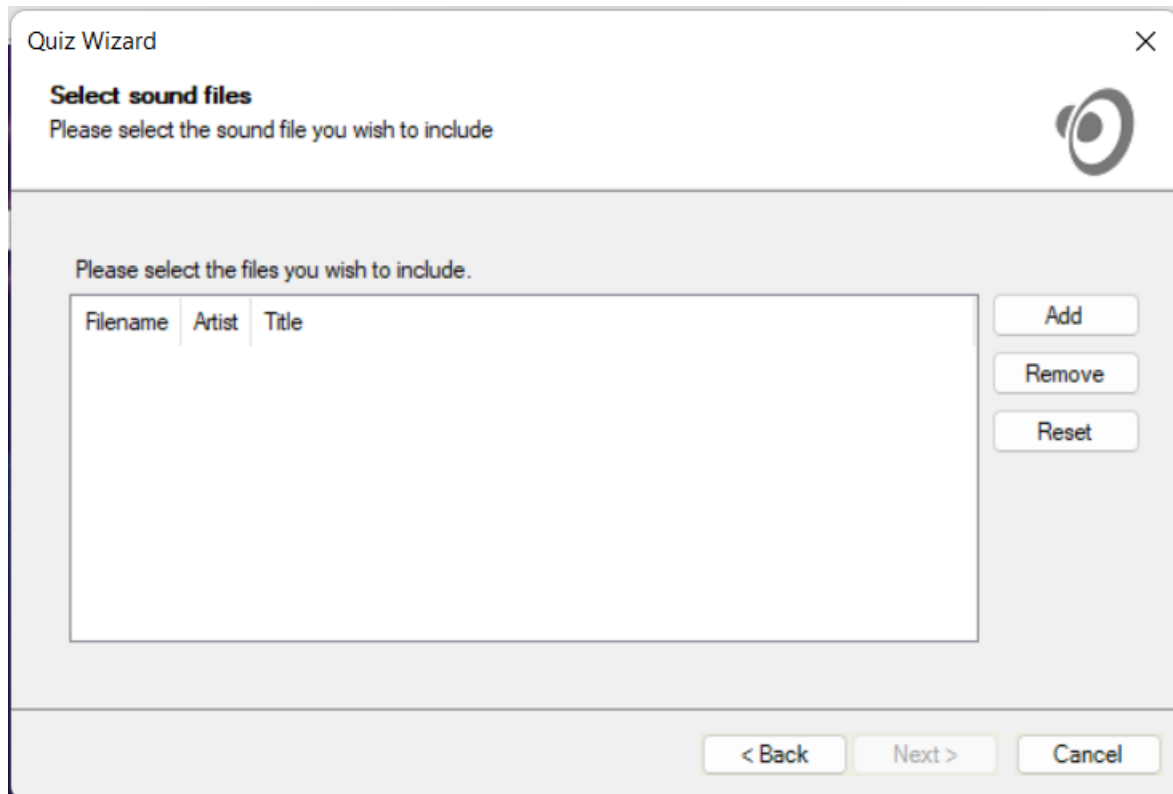
3.4.12.2.2 Claiming Bingo

When a player has marked enough cells to complete a pattern, he or she makes a claim by hitting the Bingo button on the mobile app. This results in the player's name showing on screen and a 3 second countdown while the system validates the claim. There is no need for manual checking.

After validation a thumbs-up or thumbs-down is shown on the big screen as well as on the mobile.

On a valid Bingo, the player wins points (if configured) and the system switches to the next pattern.

When there is no next pattern to be played, the round ends and the quiz continues at the end-of-round slide (when there is only one round and no end of round slide, the quiz shows the final score screen).

Handling multiple claims looks like:

When a player disconnects from your quiz or loses connection to the session, the Bingo card and marked cells are not lost. When joining the game again, the card will be presented like it was when disconnecting. Also, should the quiz player crash, you can restart the quiz, recover from the stored snapshot and continue the Bingo round.

3.4.12.2.3 Live card view

In SmartQuiz Director, on the teams tab, there is an option to view the current Bingo card of the selected player. The card also shows which cells have been played already, marked in green.

In order to show the card of a player, select the player and press the 'Show bingo card' button. So, in case of a dispute, you can always double check.
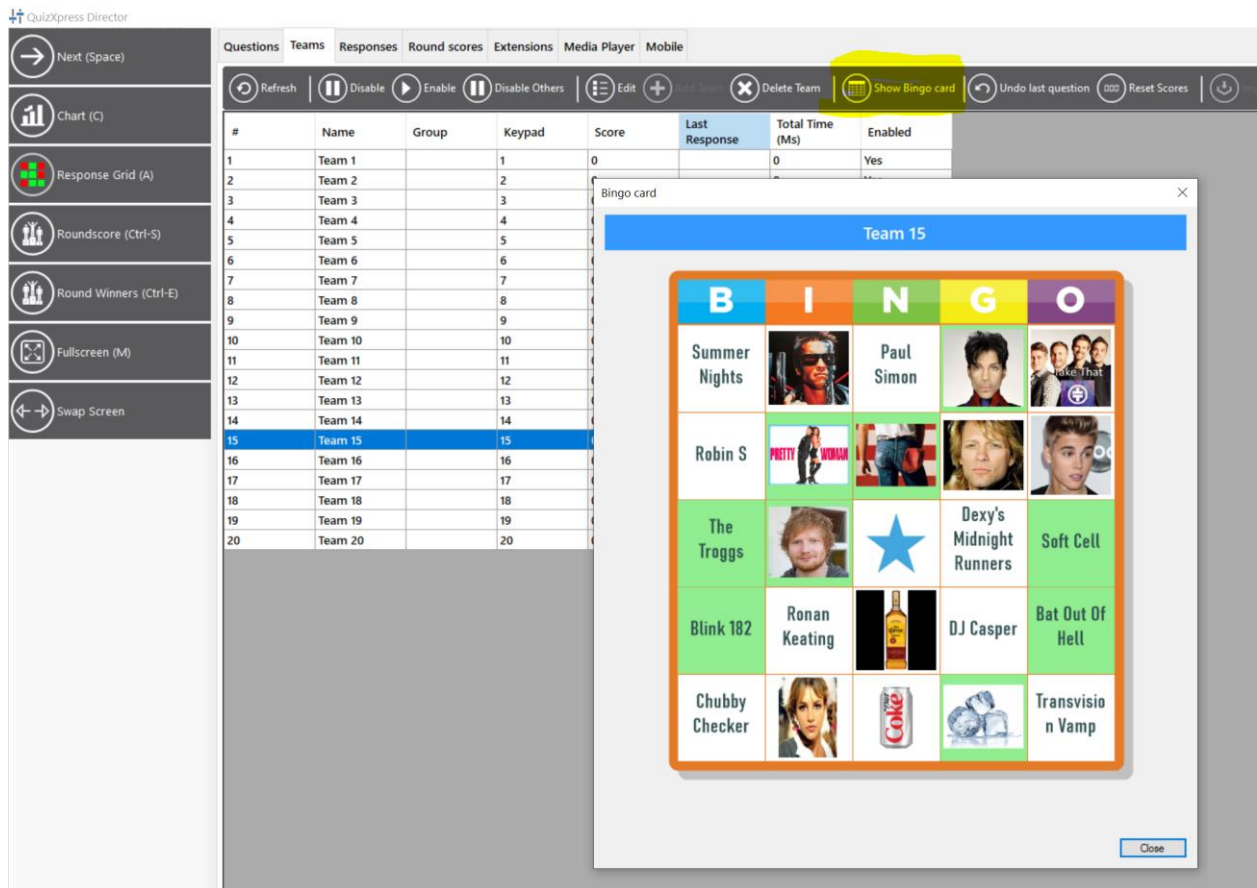
3.4.12.2.4 Change Bingo patterns during a Bingo session

In SmartQuiz Director, it is now possible to change the patterns of a Bingo round along with some of the other Bingo settings during a quiz (before the round is started). In order to do so, double click the Bingo slide on the questions tab to open the settings for a Bingo round.
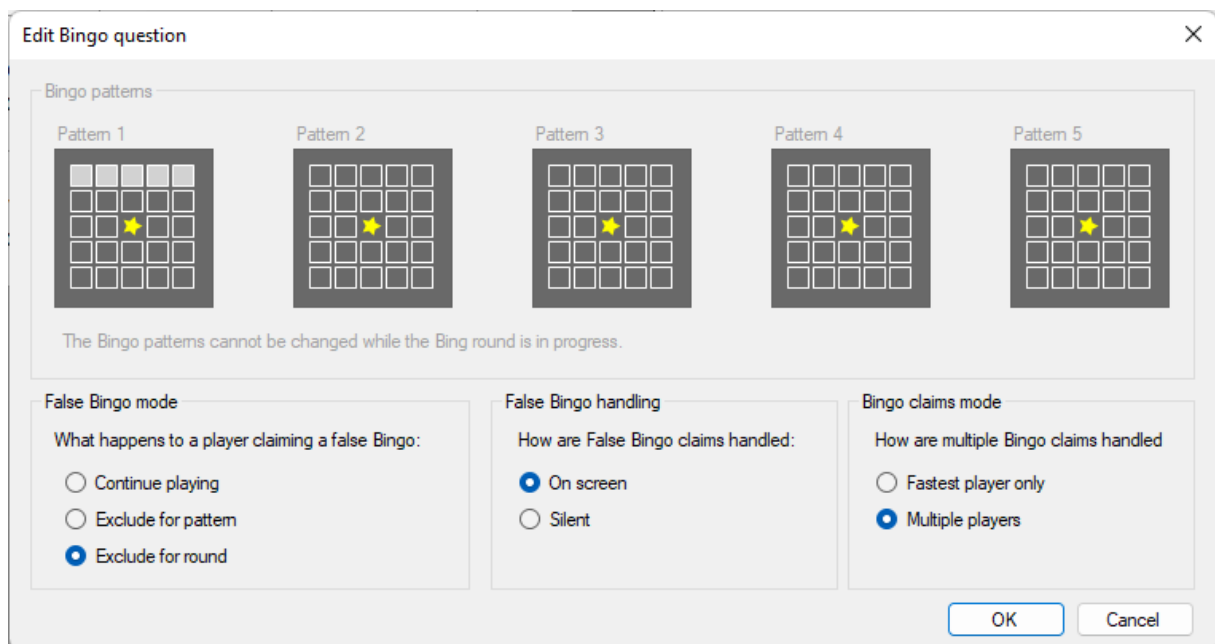
3.5   Dual language quizzes

You can create quizzes for a dual bilingual audience. In order to support this, SmartQuiz Studio supports entering questions and answers in a Primary as well as a Secondary language.

In order to enter the content for two languages, select a slide and make sure the Properties window is shown. Now set the *Language* property to Primary or Secondary.
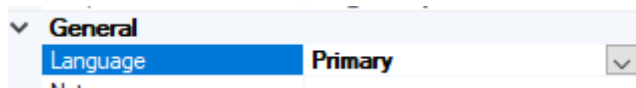
After setting the language to Secondary, a tab will be shown next to the slide allowing you to also switch between Primary and Secondary language by clicking the respective tabs.

Once you enter text in the secondary language, this will be stored in the quiz. Switching back and forth between Primary and Secondary will show you both languages.

Translations can be done manually or automatically by using the Google Translate API. You can also use this functionality to automatically translate a quiz in place into another language (in which case the quiz will not be bilingual but will just be the same quiz in another language). In order to do so, click the Translate button on the HOME ribbon tab.
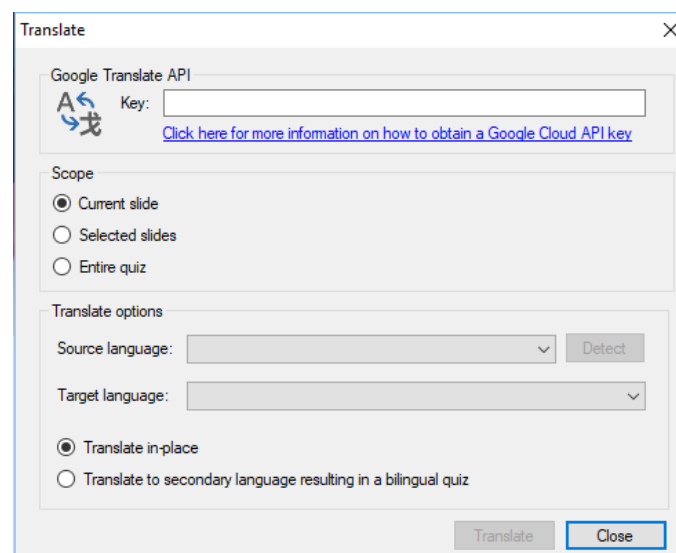
In SmartQuiz Live! the slides of both languages will be presented on screen at the same time, the Primary language on the left and the Secondary language on the right.

3.6   Import and export of questions

In SmartQuiz Studio, you can import from and export to different sources. In order to do this, click on the FILE ribbon tab and then click on Import or Export to see the options.

3.6.1   Import of Excel format

SmartQuiz Studio allows questions to be imported from Microsoft Excel. You may find it more convenient to enter your questions in Excel (although SmartQuiz Studio also has a tabular view to enter questions quickly) or you may have a database of questions that can be exported to Excel.

SmartQuiz Studio supports the Office 2007 native .xlsx file format and CSV (comma separated text file) format. The .xlsx format is the preferred format as it has less issues with localization, special characters etc.

To define your questions in Excel, open the preinstalled template *quiztemplate.xlsx* (you can find this file in the SmartQuiz installation folder). You can also open the template from the backstage menu, on the 'Import' section. You will see the layout as shown below:
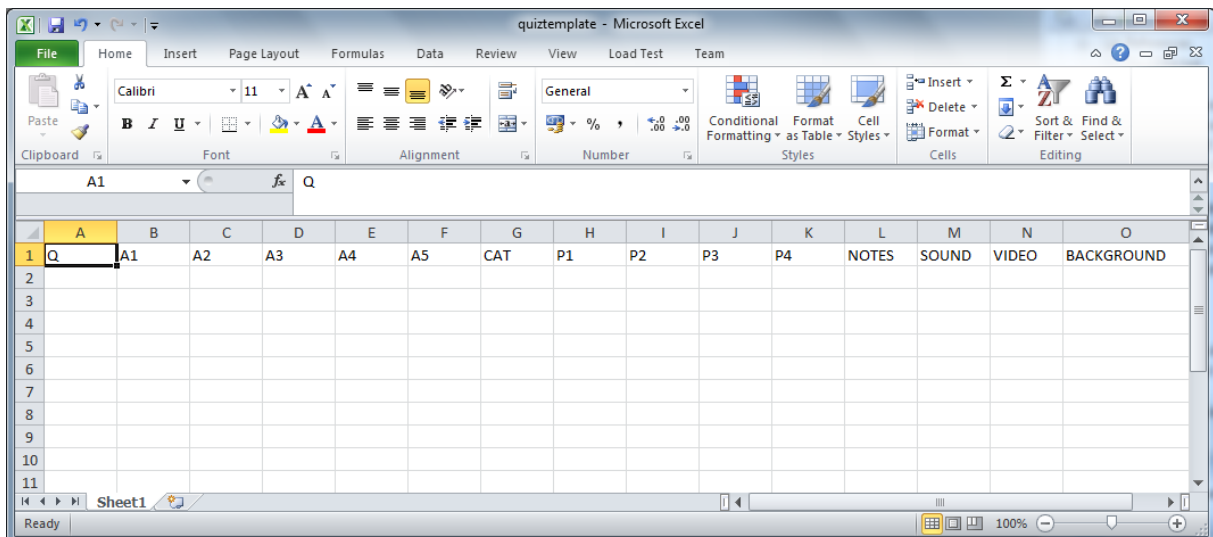
The first row is mandatory and must follow the heading names as below:

Column	Description
Q	Column to contain the question text. If you want to import a primary and secondary language separate the text in both languages between || .
A1-A7	Columns to contain the answers for multiple-choice. The correct answer must be in the A1 column, the system will shuffle the answers for you. You can leave all A* columns empty for an open question, fill in only A1 and A2 for a two-answer multiple choice question etc. You can also explicitly mark the correct answer for multiple choice answers by placing the answer between brackets ('[' and ']'). The system will not shuffle the answers in this case. If you want to import a primary and secondary language separate the text in both languages between ||.
CAT	An optional category name. Imported questions will automatically be formatted according to this category. If you want to use your own category you must create that category in the quiz before importing.
P1-P4	Optional filename of a picture file. This can be an absolute (full) path to the file or a single filename if the picture file is in this same directory as the imported XLSX file. Supported file formats are *jpg, png, bmp, wmf, emf* and *gif*
NOTES	The optional quizmaster notes to add to the question
SOUND	An optional path to a sound file to add to the question
VIDEO	An optional path to a video file (WMV, AVI etc) to add to the question (cannot be used in combination with P1-P4). Leave all other fields empty to get a full screen video slide
BACKGROUND	An optional path to a background image for the slide (png, jpg, bmp etc.)

Save the file in Excel and select "FILE->Import->Import from Excel" in SmartQuiz Studio. This will bring up a file browser for you to select the Excel file to import.

Based on what columns you enter, SmartQuiz will automatically select a matching slide layout. So, for example to get a multiple-choice question with 3 answers and a video, fill in the columns Q, A1, A2, A3 and VIDEO. To get an open question with a sound fragment, a picture, and a background image, fill in the columns Q, P1, SOUND and BACKGROUND.

By default all slides are created as quiz questions. You can however specify the type of the slide you want to create by prefixing the text in the Q column with one of the following identifiers:

Prefix	Description
{Q}	Create a normal question. Note that you can use the following extra qualifiers to specify how the question is created: **EA** – Everyone Answers, **FF** – Fastest Finger, **CA** – Countdown Automatically, **CM** – Countdown Manual. For example **{Q, EA, CM}** creates a question where everyone can answer (voting) with a manual start of the countdown timer.
{T}	Create a test question
{W}	Create a wager slide (you must also specify two or more percentages in the answers such as '20%')
{B}	Create a (static) billboard slide
{A}	Create an audience response slide
{D}	Create a demographic slide
{L}	Create a last-man-standing slide
{E}	Create an End-of-Round slide
{M}	Create a Majority Rules slide
{J}	Create a Trivia Board slide
{TL}	Create a Trivia Ladder slide

So for example the text "{A}Do you like this quiz night?" imports an Audience Response slide with the text: "Do you like this quiz night?"

Sound and video, inserted in your slide by using the SOUND and VIDEO columns, are normally embedded, meaning that the entire contents of the sound/video file are stored inside the quiz file. This may result in large quiz files. To prevent this, you can prefix the values in these columns with '{L}' to indicate you want to link the media files. For example, you can use: "{L} C:\Users\Public\Videos\Sample Videos\Wildlife.wmv"

You can also add rounds to your quiz by adding multiple worksheets to the Excel workbook. In this case, for each worksheet, a quiz slide of type 'billboard' will be inserted into the quiz, containing the name of the worksheet. So, assume you have two worksheets, 'Round 1' and 'Round 2' with each worksheet containing ten questions. When importing the Excel file into SmartQuiz Studio, you will get a quiz containing: a billboard with the text 'Round 1', followed by ten questions, followed by a billboard with the text 'Round 2', again followed by 10 questions.

3.6.2   Import from PowerPoint

SmartQuiz Studio also allows questions to be imported from PowerPoint. In this case, the PowerPoint slides will be imported as pictures and are put on Billboard slides. If you want to turn slides into questions some post processing needs to be done. First set the slide type to 'Question' and then, if there are multiple choice answers involved, change the slide layout to include the same number of answers, set the slide style to 'Just Text' and remove the question and answer texts in SmartQuiz Studio.

3.6.3   Import from SmartQuiz

If you want to append questions from an existing SmartQuiz quiz to a quiz you are creating, click the *Import from SmartQuiz* button and select a SmartQuiz file. Alternatively, you could also open two SmartQuiz Studios and copy paste slides between them.

3.6.4 Export to PDF

SmartQuiz Studio allows you to export your questions in PDF format. This PDF file can be printed or can be sent to your customers to give them a preview of the quiz. Also, your quizmaster may be interested to receive a printout prior to the game show. The PDF export is available from "FILE->Export->Export to PDF". *(Note: this option only available in the Ultimate edition).* The PDF export offers the following options:
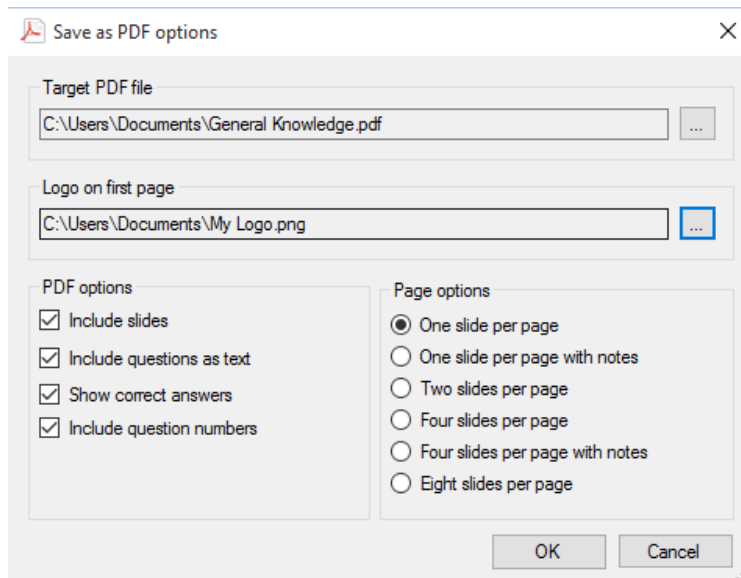
Field	Description
Target PDF File	The PDF output file. Use the […] button to browse to a folder/file
Logo on first page	The logo that will be displayed on the first page of the PDF
Include slides	Toggle to include images of the slides
Include questions as text	Include a textual overview of the questions and answers
Show correct answers	Include the correct answers in the output.
Include question numbers	Include the question numbers in the PDF export
Page options	Allows you to combine multiple slides on one page

Note: to be able to read PDF documents on your computer you need the Adobe PDF reader available for download at http://get.adobe.com/nl/reader/

3.6.5 Export to HTML

You can export a quiz to HTML to run it on a website. Please note that this functionality is very basic. Amongst others, audio, video and picture effects are not supported and although a score is shown there is no final score announcement.

3.7 Adding multimedia content

Multimedia and interactive content makes your game show more entertaining. SmartQuiz supports the use of pictures, sound, video, shapes and charts. This chapter discusses how to work with this multimedia and interactive content.
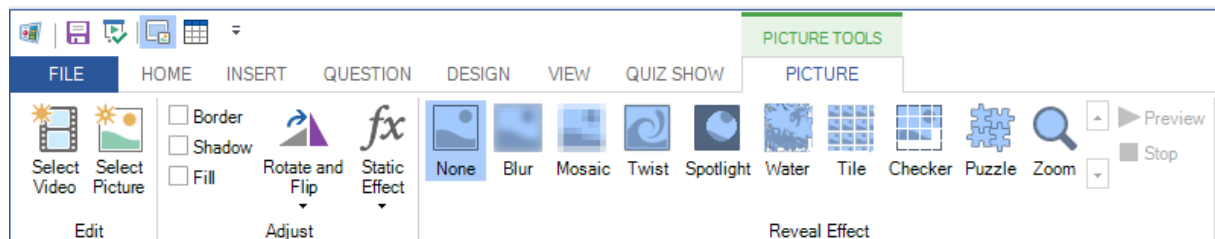
3.7.1 Pictures

3.7.1.1 Inserting a picture

There are several slide formats that contain placeholders for a picture:

To fill the place holder with a 'real' picture click on the placeholder to select it after which the 'PICTURE' contextual ribbon tab will appear:

Here you can click 'Select Picture' to open a file browser for you to select any of the supported image file formats from disk. After that you can set the picture's properties and apply effects/static transformations. You can also drag/drop pictures (and videos) directly from the Windows Explorer onto a picture placeholder (or on the slide background to set background image).

Pictures can also have a textual representation in the form of a label. You can set the label by right clicking the picture and selecting "Set Label" from the menu. One example of where this label is being used is when a picture question is presented on the Smart Buzzer app. When running in server mode, the text label will be sent to the app instead of the actual picture.

3.7.1.2 Applying effects

One of the properties of a picture within a question is 'Effect'. When a value is chosen for this property in the property grid, the chosen effect will be applied to the picture during the time of the question. When starting the question, the effect will be applied fully. So, in this case it is very difficult to see what is shown in the picture. As the time of the question reaches towards 0, the picture will
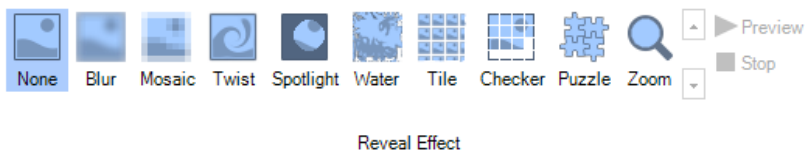
slowly return to its original state. Effects can be previewed by selecting the picture and subsequently clicking 'Preview'.

See the following picture sequence for an example:

Different stages of a 'Twist' effect.

Please find below the effects that are available.

3.7.2 Shapes

You can add arbitrary shapes/images to your slide. Shapes can be used for various purposes. For example:

- You could insert a large arrow to point out something on a picture you are questioning your audience about. By setting the Visibility option to 'Visible after answers' the shape will only become visible once the countdown of the question has ended.
- You could hide a part of a picture on a slide by overlapping it with a shape. By setting the Visibility option to 'Hide after answers' the shape will be hidden once countdown completed, revealing what's behind it.

To insert a shape, use the command *Insert->Shape* on the task pane (this command becomes visible after having selected the slide background). You are then prompted to select a shape file. By default, the file browser filers for *.emf* or *.wmf* files. These file types contain a 'vector' format (as opposed to bitmap formats) that look good even after scaling the shape. Shapes can also take all supported image formats (png, jpg, bmp etc.) as source. You can select these other formats in the file browser. Please note that image files do not scale well, and the result may look pixilated when enlarged.

The shape element has the following properties:

Property	Description
Picture	The source picture for the shape. You can use the … button to select another source
Rotation Angle	The angle by which the shapes is optionally rotated
Transparency	Transparency of the shape
Visibility	Visibility condition. Can be set to 'Always visible', 'Visible after answers' (hide shape until

|	
	question is over) or 'Hide after answers' (show shape until the question is over).

To delete a shape, select it and press the delete key. SmartQuiz ships with some default example shapes. Shapes can be created by yourself for example with Microsoft PowerPoint by saving a PowerPoint shape as a picture (right click the shape, select 'Save as picture', select *wmf* or *emf* as file format).

3.7.2.1   Text shapes

You can add text items to your quiz slides and their visibility can be controlled just like picture shapes. An example application of a text item is to show the correct answer on an open question (after the question was answered and judged) or to give hints during the question. By using the properties grid you can set some of the more advanced properties like the color of the text background panel, the corner radius etc. to create nice looking visuals (note that these properties are not available in the ribbon). Text shapes have the following additional properties:

Property	Description
Background transparency	Transparency of the background panel. By default the background is fully transparent.
Border color	Color of the border around the panel
Border width	Width of the line around the panel
Corner radius	Radius of the background panel corners
Gradient	Gradient fill of the background
Alignment	Text alignment (left, center, right)
Drop shadow	Drop shadow for the text
Shadow color	Drop shadow color
Text	The text itself
Text color	Color of the text
Font	Font used to draw the text

With these properties you're able to create text panels such as:

64
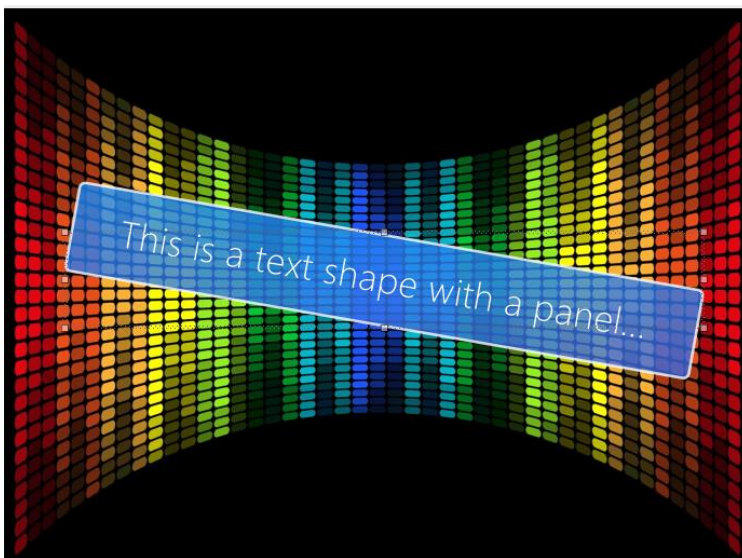
3.7.2.2   Timed shapes

You can also show and hide shape- and text items over time by setting the timed shape properties on the SHAPE TOOLS contextual ribbon tab. This allows you for example to create a 'hint' that appears after a certain time while countdown proceeds, like the following example demonstrates:
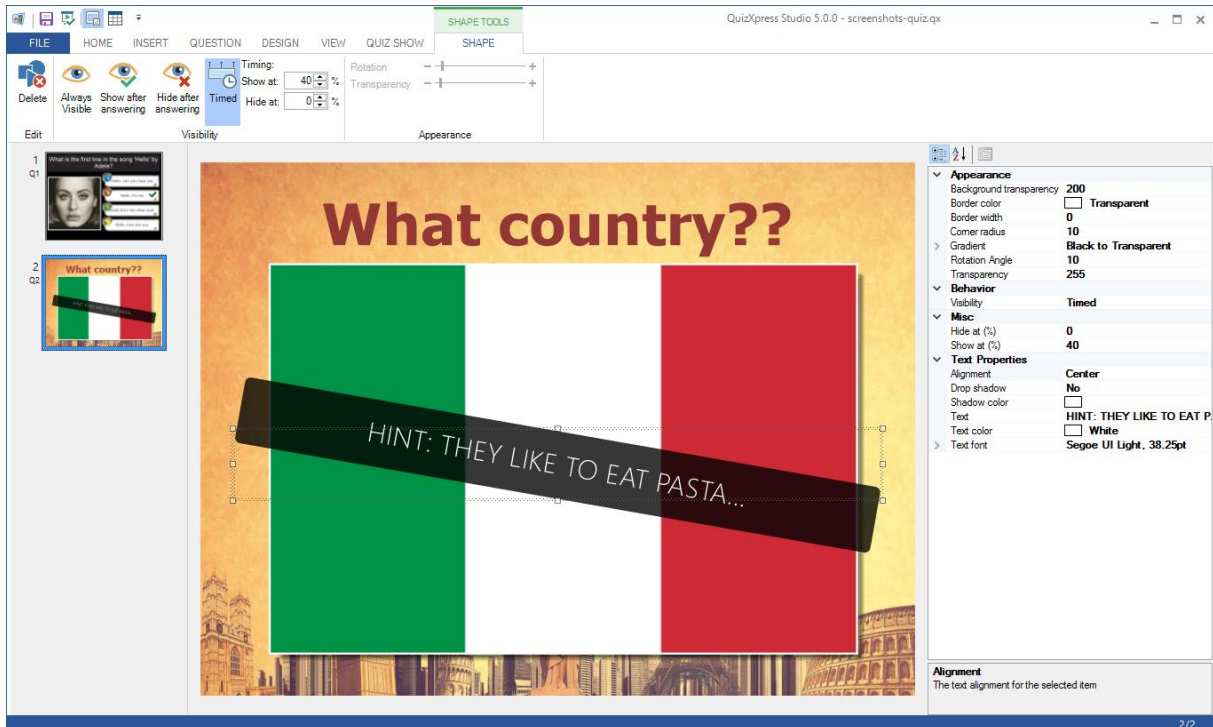
In this example, the text item with panel appears after 40% of the countdown time is over.

When you leave the 'Hide at:' percentage at 0%, this means the hint will be shown until the end of countdown.

Alternatively, you can for example remove elements over time that occlude parts of a photo.

3.7.3   Speech

You can add computer speech to your quiz slides. SmartQuiz uses the Window speech synthesizer to read aloud pieces of text that you can specify. For example, you can create a question where a song-text is read aloud, and the audience must guess the artist or the song.

To insert a speech item, select the INSERT ribbon tab and click the 'Speech' button
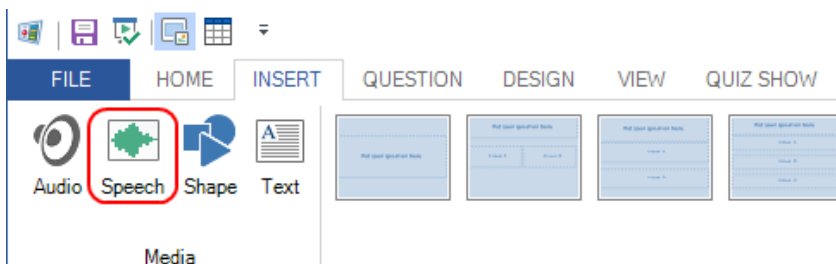
Next, you will be able to enter the text to speak:

After the speech item has been created you can change it using the controls in the contextual ribbon tab.

3.7.4 Sound

Sound fragments can be used for questions such as "Who wrote this song?", "What bird is singing here?", "What is this noise?" etc. To make things interesting, it is possible to alternate the speed of the sound played over time by setting the 'Speed from' (speed p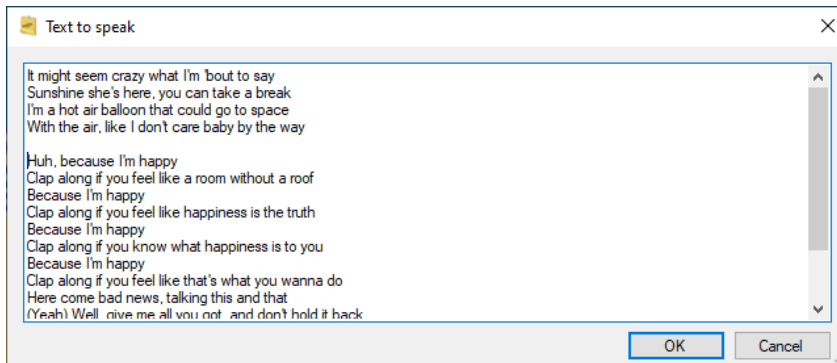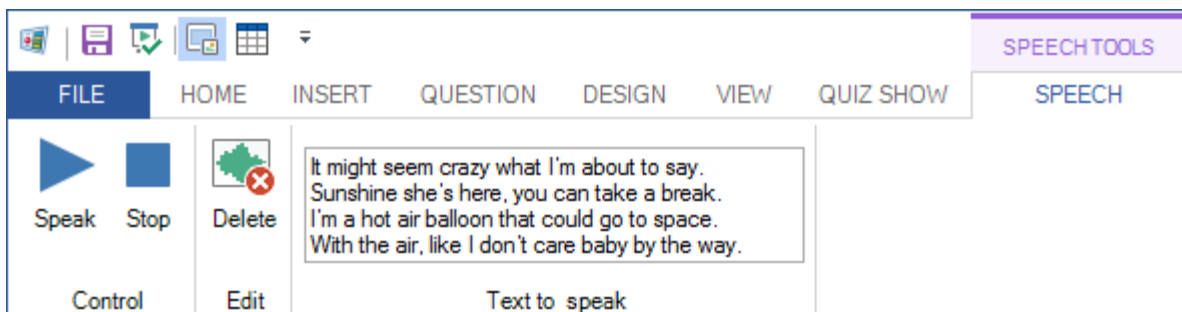ercentage when the sound start playing) property and the 'Speed to' (speed of playback at the end of the sound fragment) property. Likewise you can alternate the pitch of the sound.

3.7.4.1 Inserting a sound file

To add a sound fragment to a quiz slide, select the INSERT ribbon tab and click the 'Audio' button, then select an mp3 or wav file and select whether to link or embed the file:
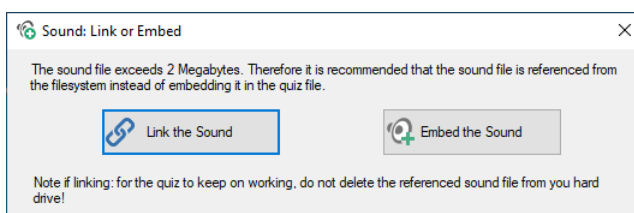
Linking results in smaller, better manageable quiz files but you'll have to make sure all external files remain accessible, either on the original path, or in the folder where the quiz file is stored (or as an alternative you can keep the files external and pack your quiz before distributing it)

Once the file is inserted, the AUDIO contextual ribbon tab becomes visible to configure the various options.
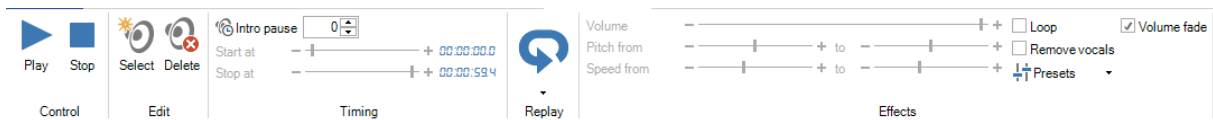
3.7.4.2   Replay

Often there is the need to replay (part of) the music after the question has finished (synchronized with revealing the correct answer on the slide). This can be done by enabling the audio replay functionality:
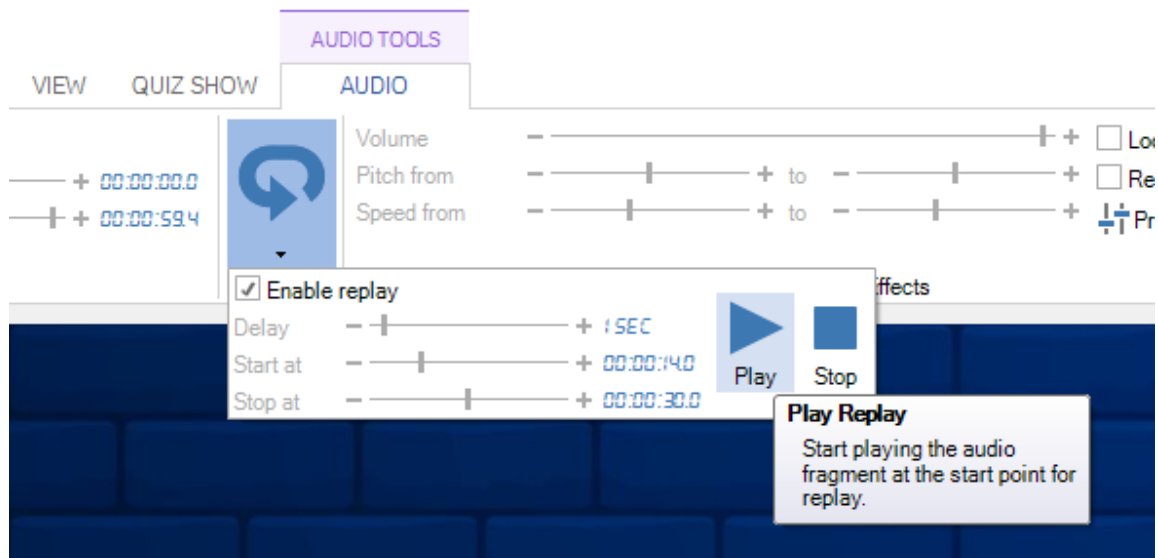
You can set an initial delay, the start time and the end time.

3.7.4.3   Applying sound effects

There are various effects possible when playing sounds:

- Increase sound speed. This is accomplished by giving the sounds properties 'speed percentage' and 'target speed percentage' the same value in the Property Editor. This value must be bigger than 100 to speed up the sound. To show the properties of a sound, left click the sound icon in the design area.
- Slowdown sound speed. This is accomplished by giving both the properties mentioned above a value smaller than 100. Again, give both properties the same value. You will read why below.
- Slow speed to normal speed. To accomplish this, enter a value smaller than 100 for the 'speed percentage' property of the sound. This makes sure the sound starts playing slowed down. Leave the property 'target speed percentage' unchanged. Its default value is 100, meaning normal speed. The result of this is that Quiz Show will play the sound slowly initially but as time progresses it will reach the target speed of 100 (which is the normal speed).
- Fast speed to normal speed. To accomplish this, select a value bigger than 100 for the 'speed percentage' property. Leave the 'target speed percentage' property unchanged.

It is possible to listen to these sound effects during creation of the question that contains the sound. To listen to the sound and its effects, click the 'Play' button in the ribbon or select 'Play' from the sound's context menu.

If you do not want the sound to start immediately when the question starts, use the 'Intro Pause' property of the sound to delay the playing of the sound (this gives participants the opportunity to first read the question, or gives the quizmaster the opportunity to first read the question aloud).

Note: other sounds, such as the buzzer sounds, the background music, the countdown music etc. can be configured in Quiz Setup
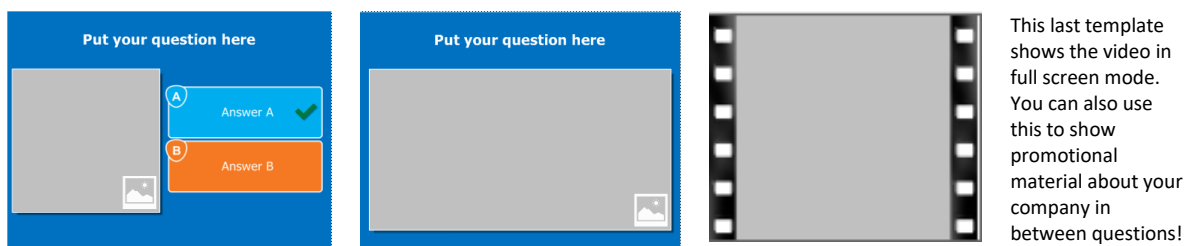
3.7.5   Video

SmartQuiz also supports the use of video fragments. Video fragments can be used in questions but for example also to communicate a marketing message to your audience. There is a special "full screen video" slide format that will play the selected video in full screen during the game show.

SmartQuiz supports various file formats but to successfully playback video files the correct video CODEC (a Windows component used to stream a particular video format) needs to be installed on your system. The SmartQuiz installer adds the LAV Codec pack to your system. The latest version of that CODEC pack can be found here: https://github.com/Nevcairiel/LAVFilters/releases

3.7.5.1   Inserting a video

To add a video to a question, first create a new question with a template that has one picture/video placeholder.

This last template shows the video in full screen mode. You can also use this to show promotional material about your company in between questions!

Then right click on the picture box placeholder and click 'Select Video' from the context menu. This will open a file dialog to select a video fragment *(*.avi, *.wmv, *.mov, *.mp4, *.mpg, *.mpeg, *.flv, *.3gp, *.webm)*.

Just like audio, a video can be linked or embedded. Embedding a video fragment into a quiz means the video fragment is incorporated into the quiz file. Linking a video fragment means a reference is made from the quiz file to a video on the file system. In general, *linking* videos is recommended while still editing the quiz. When you are done editing you can use the 'Pack' function to combine all externally linked files into one big quiz file (max 2gb). With this combined file it is easy to move your quiz to another computer without having to worry about the external assets.

Note: when linking videos, be sure to not remove the videos from your file system. When copying the quiz to a different computer, the videos must be copied into the same folder as the quiz file for SmartQuiz to be able to locate them.

Embedded video content cannot be larger than 30 Mb. In general, try to keep your videos as small as possible. So when your question is only thirty seconds long it has not much use to insert a four minute video. In that case use a video editing tool to trim the video.

3.7.5.2   Editing video properties

When selecting a video, the contextual ribbon tab for video becomes visible:
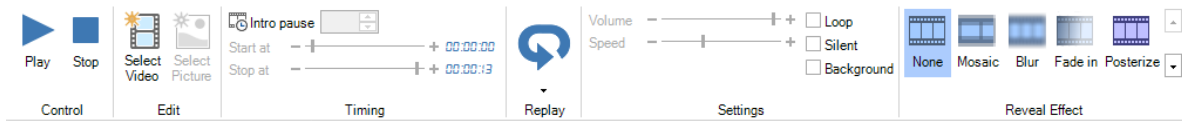
From here you can preview the video, set the start- and end markers, set the volume and change the playbacks speed. (Note that changing the playback speed may not work for all video types and depends on the CODECs being used). You can also configure an effect that will change over time. For example, you can use the Mosaic effect to show the video fully pixelated at the beginning of the video and gradually reveal the details while asking your audience a question about the video with decreasing points. You can also play the video in silent mode and loop the fragment until the question ends. With 'Select Picture' you can change the slide element back to a static picture.

Tick the 'Background' box when you want your video to appear in the background of the slide. In the screenshot below we are using a background video with an overlay shape to create an old school TV effect (the video is set to background and a shape is inserted with a transparent screen.
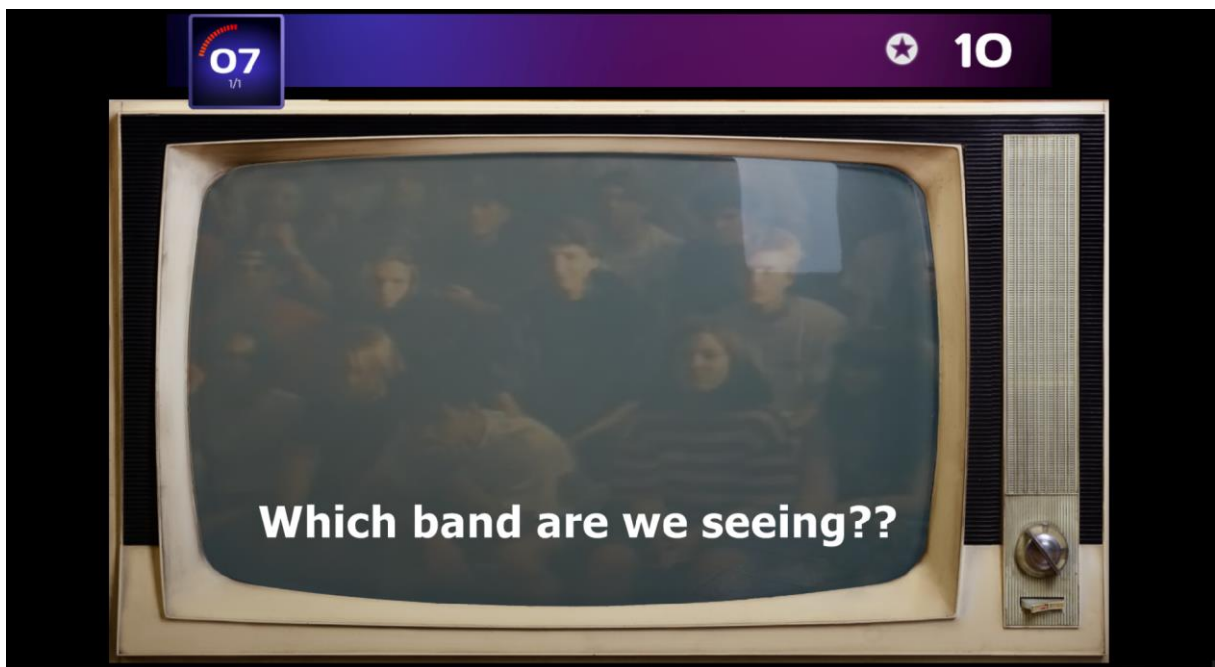

With *Replay* you can enable replaying part of the video after the question has finished (when the correct answer is revealed)

3.7.6   Real-time chart

You can insert a real-time response chart into a slide. While the clock is counting down the chart will show a live representation of all the answers given by the audience.

There are two ways to add a chart to a slide:

1) Choose a site with a picture\video placeholder. Right click on the placeholder and choose Select Chart
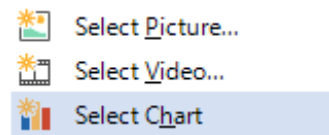
2) Select the INSERT ribbon tab and click the 'Chart' button
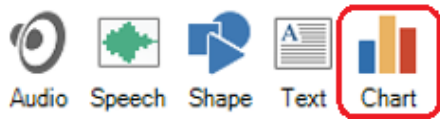
After the chart has been inserted, the CHART contextual ribbon tab becomes visible to configure the various options.
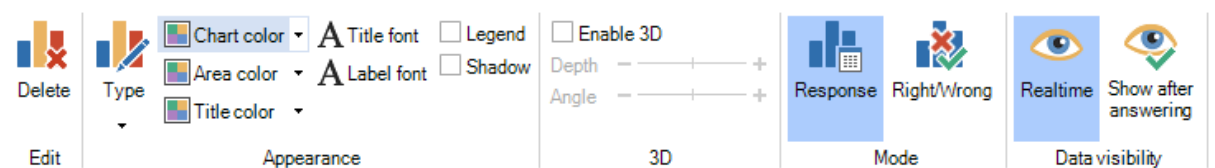
The tab has the following options:

- Delete: delete the chart from the Slide
- Type: choose one of the following chart types: Bart, Column, Pie, Donut
- Set colors: Chart color (outside section of the chart), Area color (inside section of the chart), Title color (color of the title text above the chart)
- Font buttons: set the title and label font
- Legend: show a legend next to the chart
- Shadow: add a drop shadow to the chart
- Enable 3D: make the chart 3D. Optionally you can set the depth and the angle of the 3d chart
- Mode: choose whether you want to see the response distribution in the chart or whether you want to see the correct\incorrect\not answered distribution
- Data visibility: indicate whether you want to see the results real-time or if the results should be shown after all players have answered

In the properties pane you can configure a couple of other aspects of the chart like (amongst others) the title text and alignment, setting the label color (a label holds the number of responses for a segment) and setting the axis color.
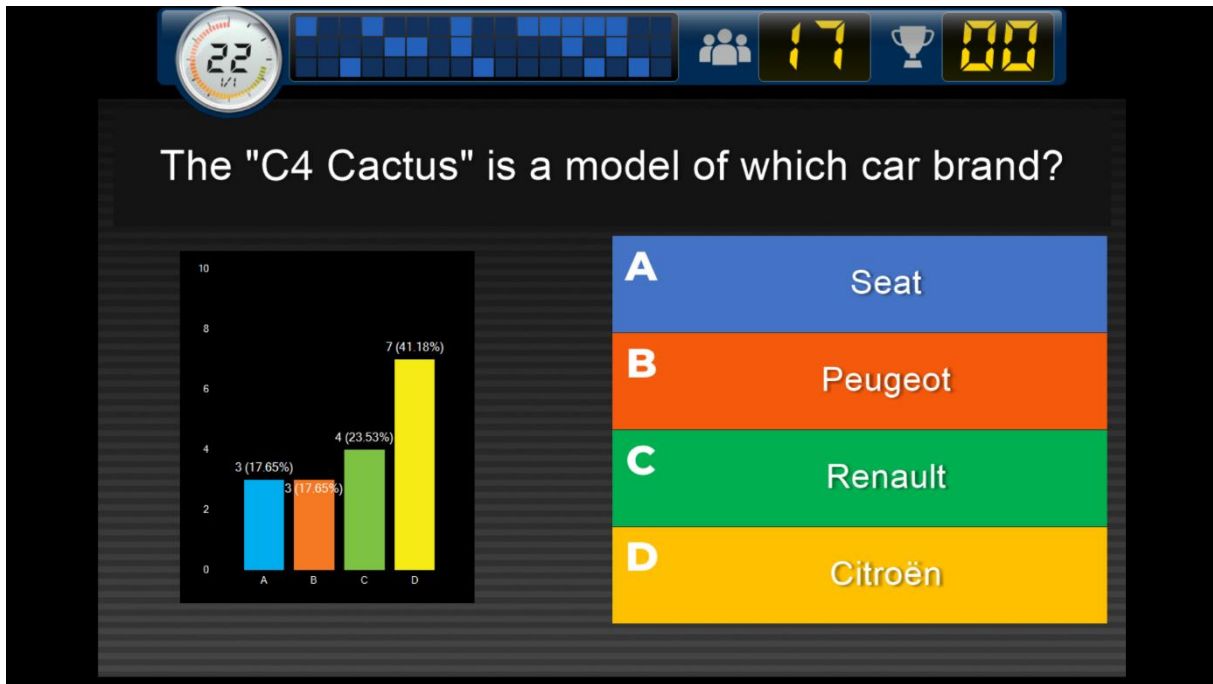
3.7.7 Word Game

A Word Game element is a graphical element for creating questions around words and sentences.

When inserting a Word Game, the following form appears:

Here you enter the text to be displayed, you select the type of game and any related options.

There are four different games:

Word Reveal (showing here in fixed 52 letter grid format). The letters will appear over time starting with an empty grid	
Word Scramble (anagram). The word/sentence will unscramble over time	
Letter Grid. The words are hidden in a random letter grid. When the question is over the words will highlight.	
Word Wheel. The word will be presented as a (optionally spinning) wheel. One letter will be randomly removed and placed in the center.	

Both Word Reveal and Word Scramble can be visually presented as a regular multiline grid or on a fixed 52 cell letter board. Note that for these two elements it's up to you to split the sentence in multiple lines by inserting newlines into the text.

Another thing you can configure for these two games is the reveal/unscramble timing. By default each step takes the same amount of time. This means that for the reveal game, the letters appear at a fixed interval. This might be okay for a single word but when using a longer sentence you may want to use another scheme. For example you may choose to show more letters in the beginning and then slow down.

Once the element is inserted onto your slide, you can configure it further using the Word Game ribbon or advance properties grid.
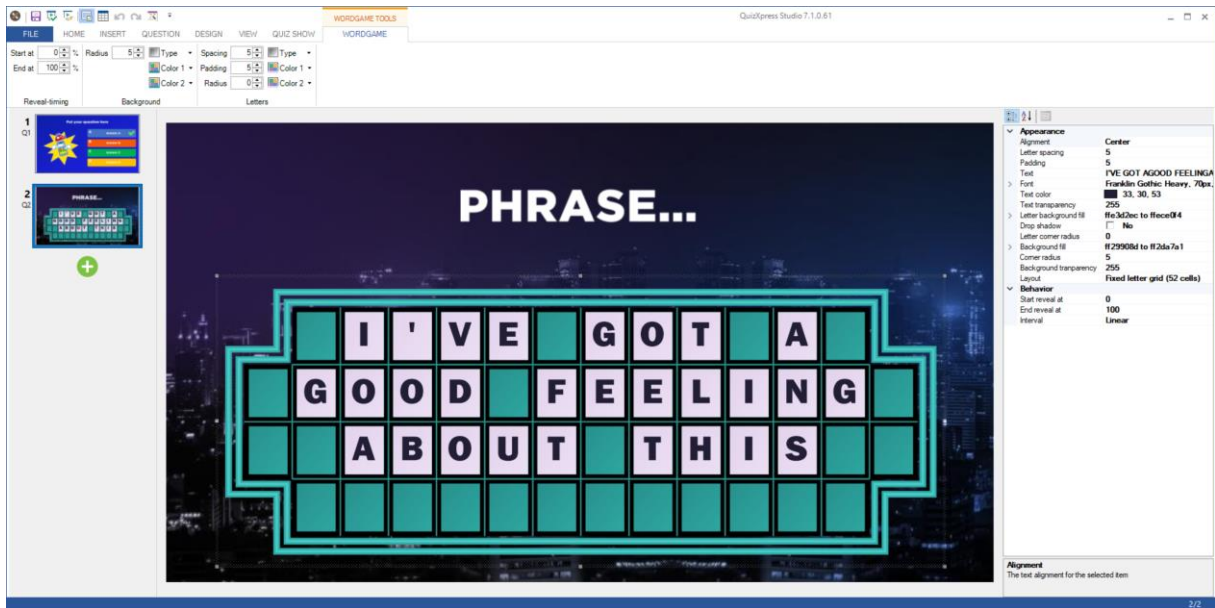
You can use this element for different type of questions. For example, a fastest finger question where the player to buzz-in needs to know the correct phrase based on the given letters so far. Or, you could use a full text question where all players type in the correct answer (mobile keypad only) etc. Combining this with diminishing points gives faster players more points. The color, font, letter size, padding etc. can all be edited in the ribbon or the shown grid (right side).

3.8   Styles

A quiz slide can be assigned various styles. A selection of the styles that are available:

Neon Street

Neon Tubes

Sports

Paper Sheets

Black-Color

Formula 1

TV Show

Millionaire

Film

Math

History

Music Speaker

Geo

Tech

SmartQuiz (default)
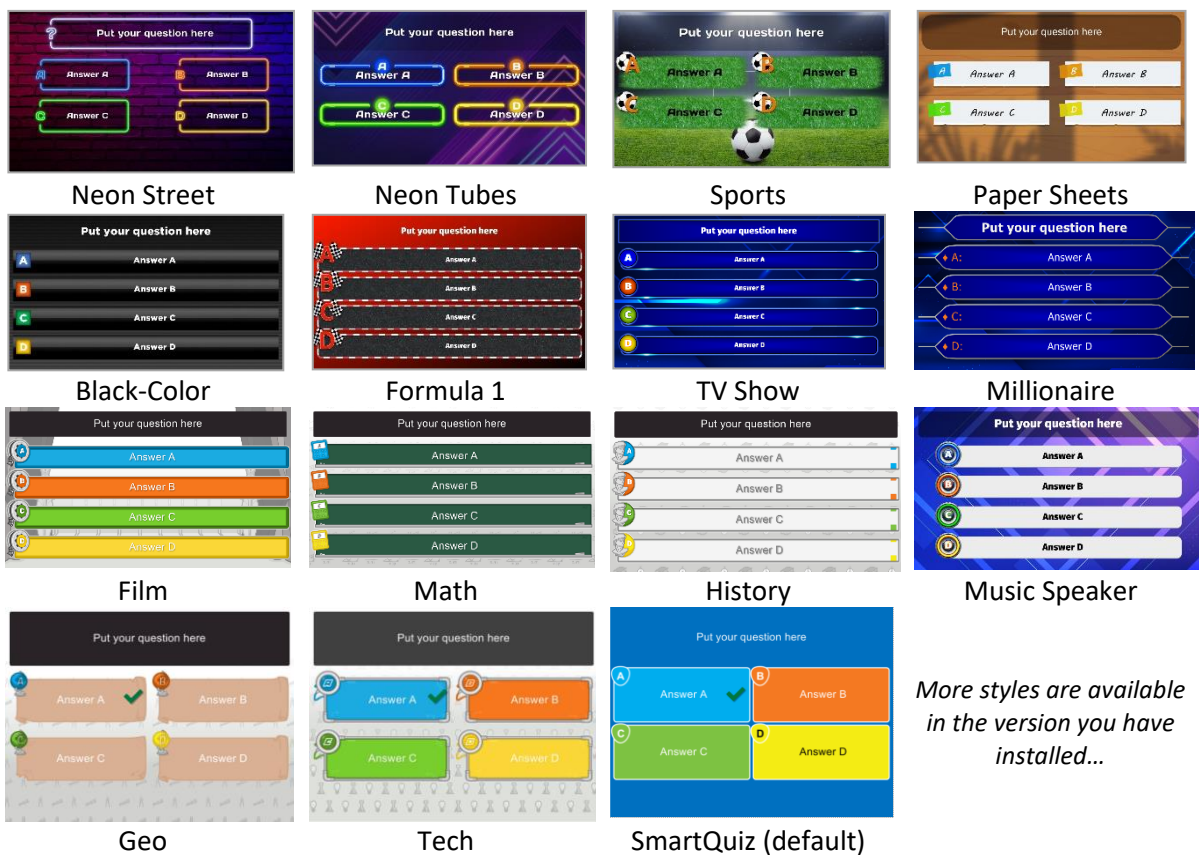
More styles are available in the version you have installed…

Note: the 'Just Text' style can be used to 'overlay' the text on a custom background picture for you to provide for example when you want to use a layout designed in PowerPoint.

You can change the slide style by clicking a style in the style gallery on the DESIGN ribbon tab or by selecting the style of your choice in the property grid (property name: Style). The changes will immediately be visible.

New, custom styles, can be designed in an advanced tool named Style Maker. You find this tool in the Windows Start menu under SmartQuiz. The style system is based on what's known as 9-patch images. In this system, a base image is split into 9 sections (corners and middle parts) and 8 repeatable blocks that 'glue' these sections together when the panel is stretched. See below for an example:
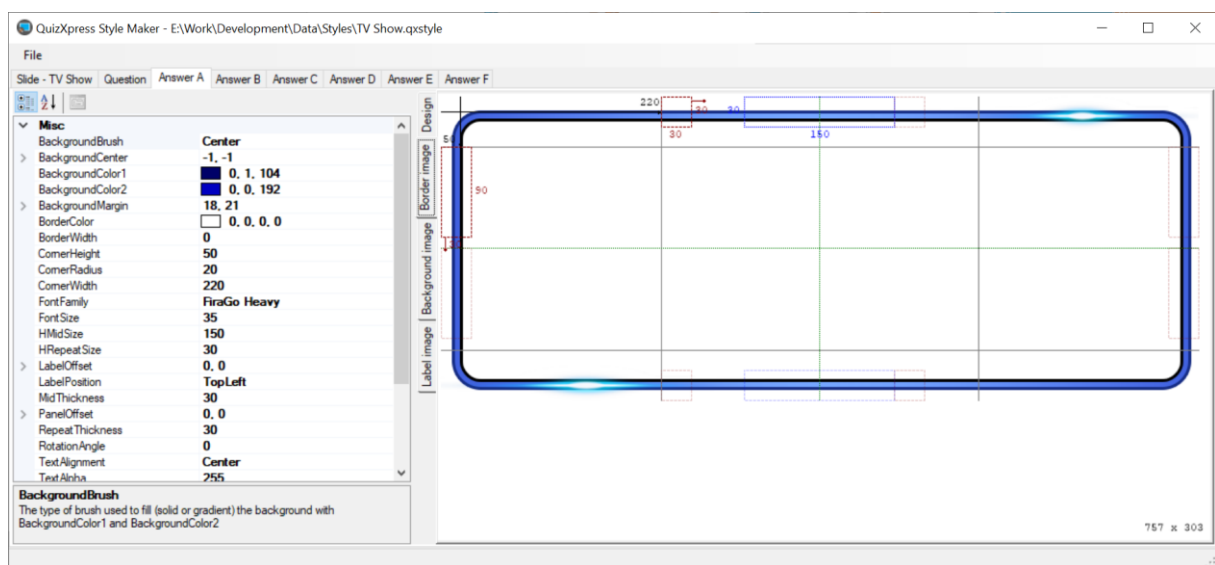
3.9   Advanced slide properties

On this dialog you can configure a few more advanced properties for the current question:
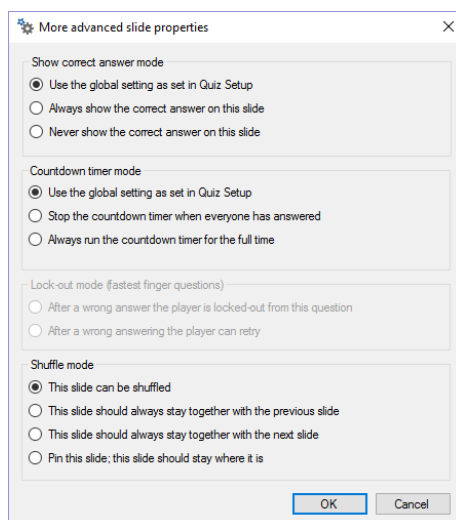
Show correct answer mode

Setting that indicates if the correct answer should be shown after the question is over. By default, the setting as defined in SmartQuiz Setup is used.

Countdown timer mode

Setting to indicate how the countdown timer should behave for this question. By default, the setting as defined in SmartQuiz Setup is used.

Lock-out mode for fastest finger question

Normally a player that gives a wrong answer is excluded from the question. With this setting you can change this behavior so that players can retry with a different answer. Only available if the slide is a fastest finger slide.

Shuffle mode

SmartQuiz allows shuffling of the questions in a quiz when a quiz is played in SmartQuiz Live! As you might want to keep slides in place (for example Billboards announcing rounds) or keep them coupled with a previous or next slide (for example when information on a slide applies to a next or previous slide, or for wagers), this setting offers support for just that. The setting indicates what should happen with the slide when SmartQuiz Live selects a shuffled subset from a collection of questions in the quiz file (to be configured in Quiz Setup; here you can choose to randomize (a percentage of) questions). This setting is useful when you want to run the same quiz multiple times (for example when you are on a trade show).

Note: these options can be accessed from the property grid (for slide level) as well.

3.10 Other functionality

3.10.1 Undo/redo
You can undo the last action with Ctrl+Z and redo the last undone action with Ctrl-Y or by clicking the undo/redo commands in the quick access toolbar that you find in the top-left are of the Studio window. Note that undo/redo is not available for every command. Things like ticking a check box in the ribbon can easily be undone manually by unticking the same box.

3.10.2 Text casing
By pressing Shift – F3 the casing of the selected text (question or answer) can be toggled between ALL UPPERCASE, all lowercase and Sentence case).

3.10.3 Find text in questions and answers
You can find text in questions or answers by pressing Ctrl-F (or the Find button on the HOME tab).
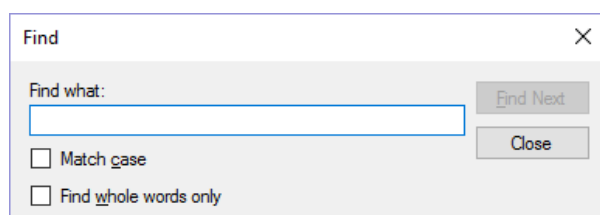
By entering a text and pressing 'Find Next' you will go through the found items.

3.10.4   HOME -> Banners

Sometimes you would like each question to have a preceding slide showing the question number and the question text of the question that will follow. This can be accomplished in SmartQuiz Studio by using the 'Generate Question Banners' command which can be found under the 'Edit' menu. The 'Generate Question Banners' command automatically generates a quiz slide of type 'Billboard' before each quiz slide of type 'Question'. Each generated billboard slide contains the following text: Question <question number of the following question> : <question text of the following question>.

3.10.5   HOME -> Shuffle

The 'Shuffle' command, available on the HOME tab, randomly shuffles all the quiz slides. This process considers what the individual shuffle mode settings for each slide is. So, if a slide was configured to stay with the next slide, this will be considered during the shuffle process.

3.10.6   HOME -> Options

The SmartQuiz Studio options dialog can be found under Tools->Options. The dialog has three pages:
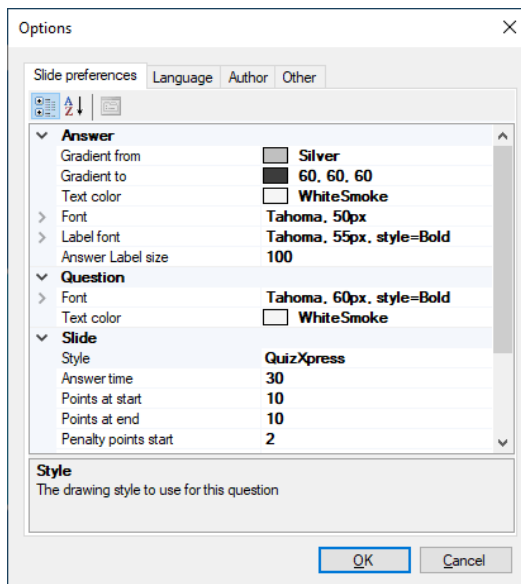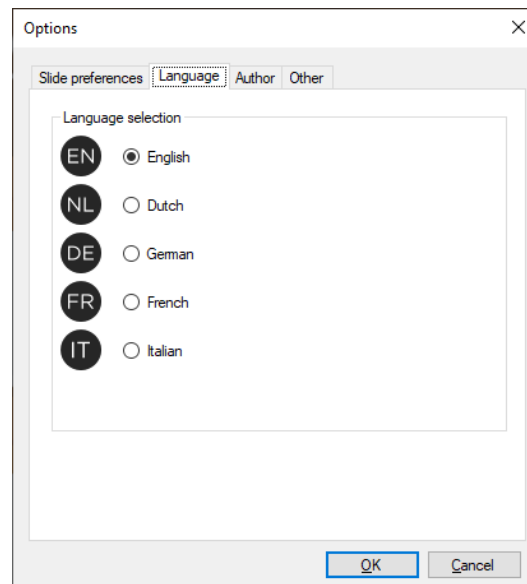
Slide preferences	Language selection
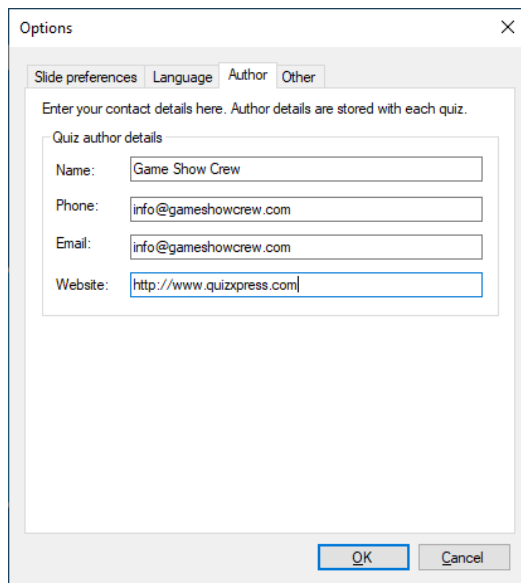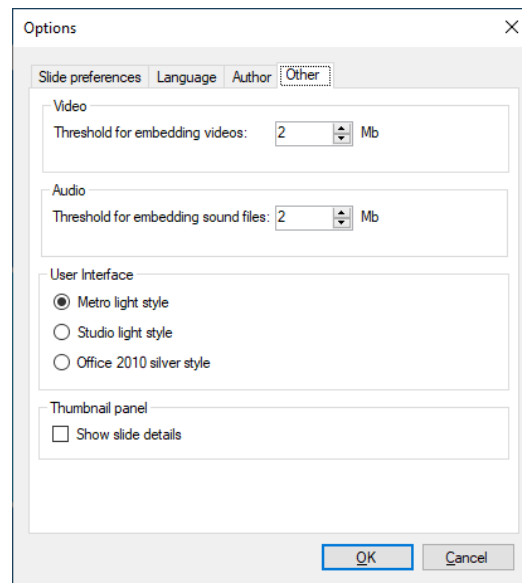
| Quiz author details | Other settings |

Slide preferences tab:

This page allows you to set various properties that are used as default for every new slide you create. For example, setting 'Answer time' to 40 seconds here will make sure that the answer time on every new slide will be set to 40 seconds. Note: the changes made here only apply to new slides, not to existing slides!

Language tab:

This tab allows you to set the user interface language for SmartQuiz Studio and all other SmartQuiz tools (stored in the SmartQuiz settings file).

Author tab:

Here you can set the details about yourself that will be embedded in the quiz as the original quiz author

Other tab:

Here you can set the thresholds for embedding/linking audio and video content and you can switch between three different user interface styles and set an option for the thumbnail panel to show some additional info like the question number as shown in SmartQuiz Live.

3.10.7   FILE -> Options dialog

The entry to this dialog can be found in the backstage FILE menu:
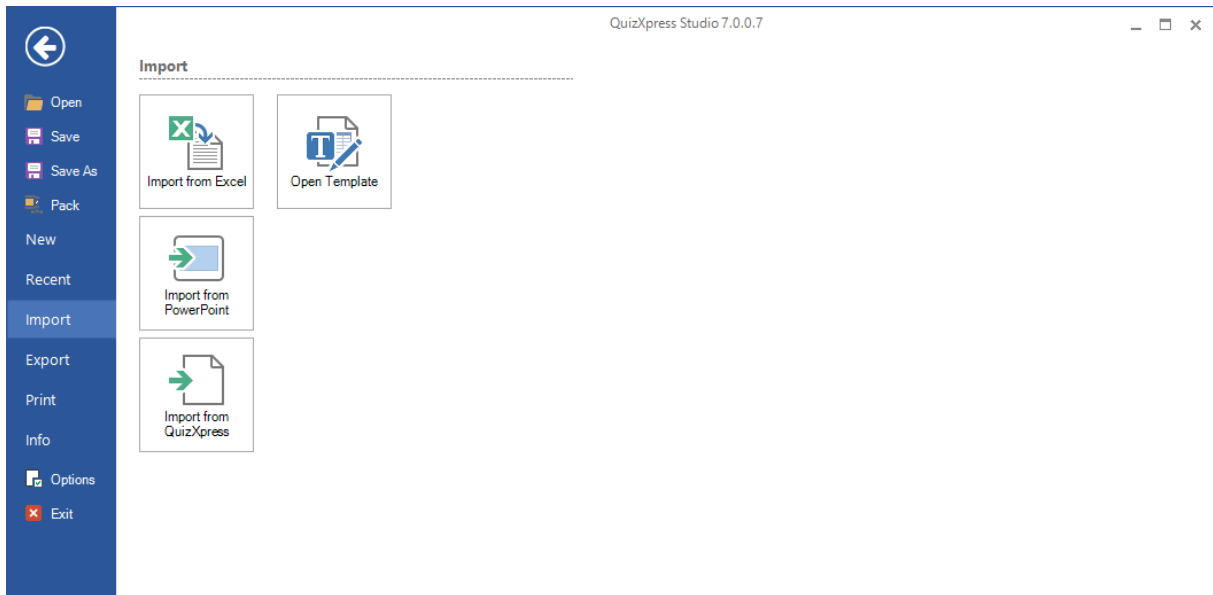
On the 'Target device' tab of this dialog allows you to set the target screen ratio and image quality of your quiz. The *ratio* option is used to configure the width/height ratio of your slides to match the device you are going to present your quiz on:

| 4:3 | 16:9 | 16:10 |
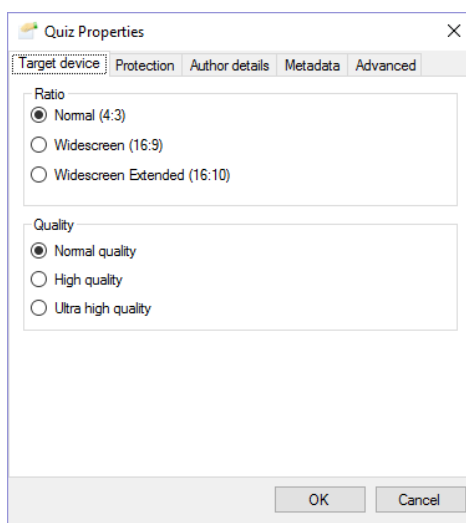
So for example if you intend to run your quiz on a Widescreen TV set use the default 16:9 ratio. For an older beamer you can use the 4:3 ratio. You can change the ratio after having created your quiz and the system will resize all your slides automatically.

The *Quality* option controls the image resolution used by SmartQuiz internally when rendering a slide in Quiz Show (the physical number of pixels used for the slide image). You can set this to 'High quality' or 'Ultra high quality' if you are presenting your quiz of a high resolution device (like a full HD LCD screen) and you have a powerful video card/PC with enough memory.
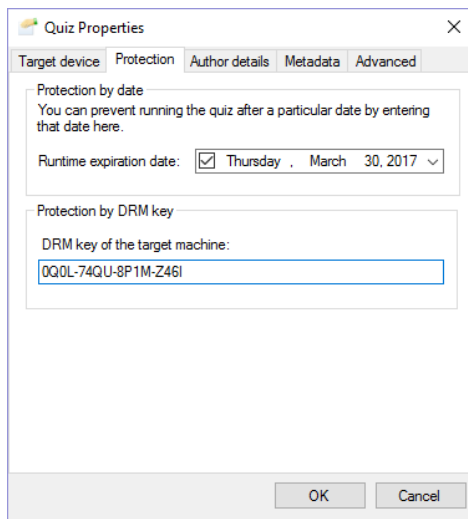
On the 'Protection' tab, an expiration date for the quiz can be set. After this date, the quiz can no longer be played by SmartQuiz Live

You can also protect your quiz with the DRM (Digital Rights Management) key of your target customer. When doing so, the quiz content cannot be copied/run on another machine. The DRM key of your customer can be obtained from the 'Info' tab in the backstage menu on the PC of your customer (in the License Info section).

The 'Quiz Author' details section shows the history of the quiz file. It shows who originally created the quiz and who modified it last. These details are used for example when a quiz file expired, and your end user is presented with contact details to obtain a recent update. Your own quiz author details can be entered in the 'Options' dialog (available on the HOME ribbon).

And finally, the 'Advanced' tab allows you to set advanced properties for the quiz. 'QX3 compatible video rendering' indicates that the system will use the video system that was present in QX3. The reason you may want to use this is that it possibly performs better on low end systems like Netbooks. The drawback is that it will only support the AVI format and you cannot use video effects. This setting applies to the whole quiz so be careful not to use any other video formats in your quiz (if so, a warning will be generated when starting SmartQuiz Live). *You will rarely need to enable this function.*

3.10.8 Packing a quiz
When you create large quizzes with lots of multimedia content such as video and audio fragments, the quiz file can easily become quite large and tedious to work with during the edit phase and can lead to exhausting the PC's internal memory. To deal with this, SmartQuiz historically supports keeping the media files externally. This is okay during the development phase, however, when the quiz file needs to be moved to another pc or distributed to your someone else, you must make sure to include all externally linked files which if not done correctly can lead to problems. The 'Pack' function makes live a bit easier by packing all linked media files together with the quiz slides in one big file. This file can then be loaded into SmartQuiz Live like a normal quiz file (which it is) and can conveniently be distributed as a single unit. Meanwhile you can efficiently develop your quiz with all media files externally linked keeping your save- and load times as low as possible.

To pack a quiz hit F1 to go to the backstage menu and click 'Pack'. SmartQuiz Studio will now ask you to specify a filename and will create the packed quiz file. Note that although the 'packed' file is a regular SmartQuiz file, it is not intended to be edited in Studio as this can lead to the aforementioned problems.

3.10.9 Fixing broken links
When you link audio- and video content the quiz will only contain a path to the external file. When you move the external file SmartQuiz will not be able to locate it again and this will result in broken

links. After loading a quiz, Studio runs a background task to check if all referenced media files are still present. When it detects at least one broken link, it will present a form with all the missing links:
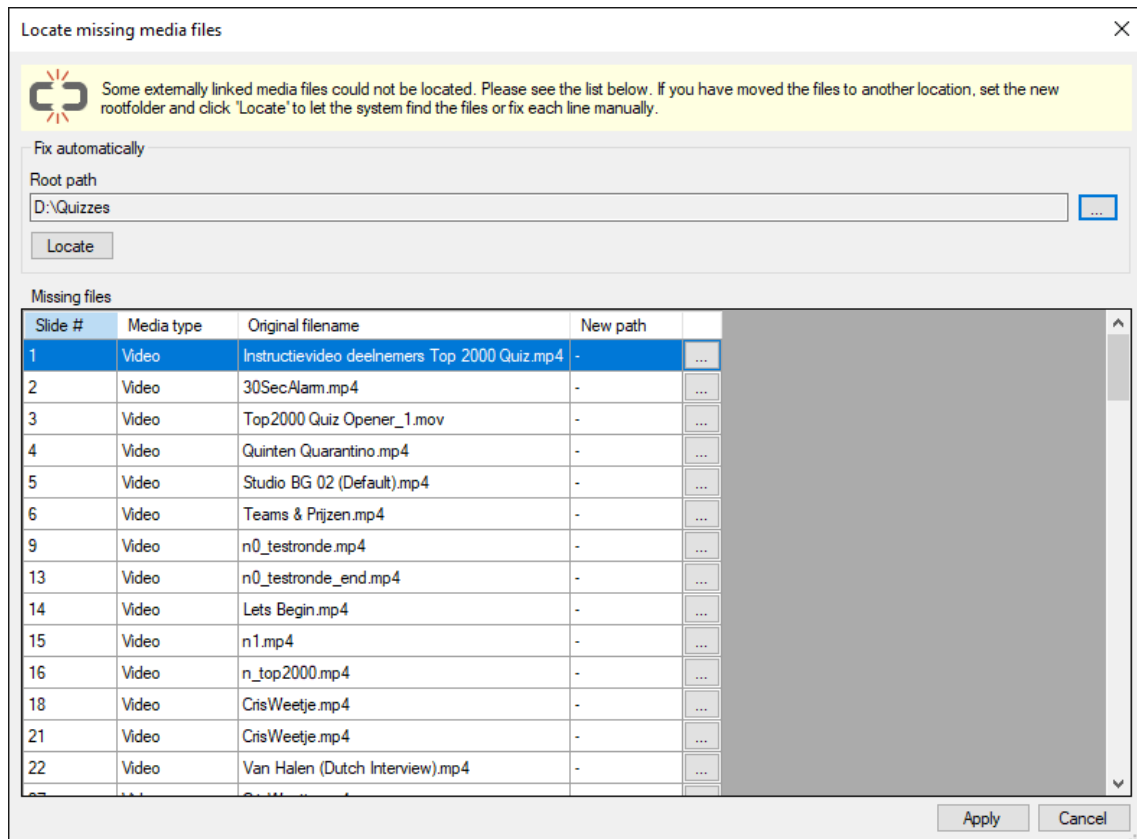
In this form you will be able to quickly solve the problem (of course the linked files must still be available somewhere on the computer). When all files are still available under a root folder you can let the system search the files for you with the Locate button. If the files are scattered around the disc you will have to locate them manually per entry in the list. When all paths have been corrected, you can click Apply to make the actual changes on the slides.

3.11 Testing your quiz

When you are done designing the quiz content, you can start testing it. To launch the quiz player from within Studio, activate the QUIZ SHOW ribbon tab:
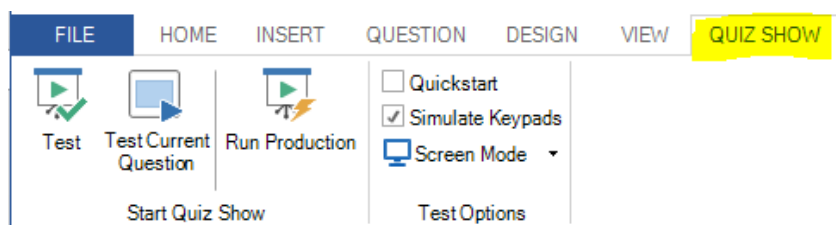
As you can see there are three options here to start the quiz player:

Test: run the entire quiz in test mode using the options as set in the section *Test Options*

Test Current Question: start the quiz in test mode beginning at the current question

Run Production: start the quiz in production mode. In this mode the *Test Options* will be ignored and the screen settings etc. will be used as configured globally in Quiz Setup. Always use this mode when running your quiz for a live audience.

When running in test mode you can win time by skipping the welcome screen and countdown video by ticking the *Quickstart* checkbox. And if you do not want to operate the quiz yourself you can use *Simulate Keypads* to run the entire quiz automatically as if there was an audience and a quiz master. All you have to do is lean back and check that every quiz slide behaves and looks the way you intended.

Note: never run your production quiz show using any of the test modes. Only in production mode will the quiz player use a special recovery function to restore your quiz to the point where it last was when something bad happened like a computer- or program crash.

4   Setting up the game show with SmartQuiz Setup

The previous chapter described how to design a quiz in SmartQuiz Studio. The next step is to 'run' the quiz in SmartQuiz Live. Before you can do this however, there are some aspects of the game show that you may want to change. Some examples of this are: the type of hardware you are using, the team names, the buzzer sounds, the welcome screen captions, the slideshow pictures etc.

The Quiz Setup program can be found in the Windows 'Start' menu or in the 'External Tools' menu of Studio (HOME ribbon).

Quiz Setup allows you to manage multiple settings files. In the list view on the left of the user interface you can see the available configuration files. The one in **bold** is the active file meaning that these settings will be used when running a production quiz. You can change the active file by right clicking it and selection 'Activate' from the context menu. To load a file for editing, double-click it or select 'Load' from the context menu.
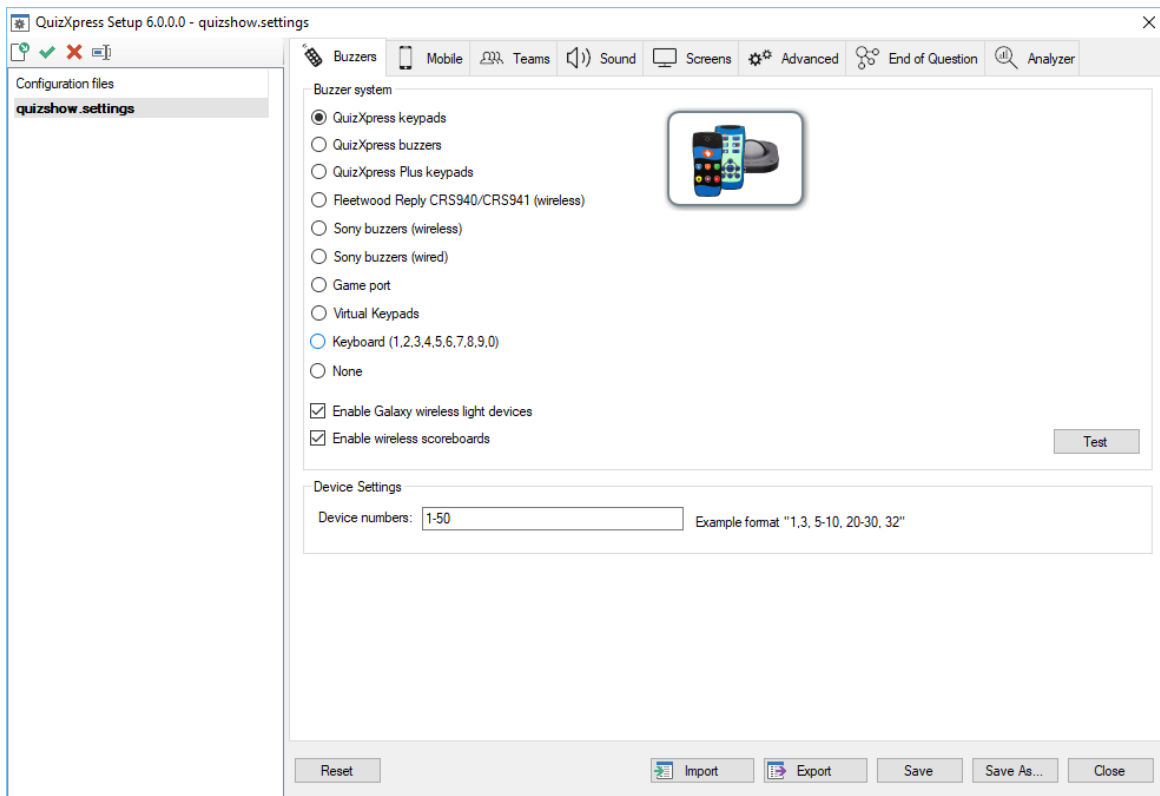
By clicking 'Reset', the system reverts to the default configuration. Note that you'll always have to select a buzzer system before you can use any functionality.

By clicking the 'Save' button the current settings file is saved to disk.

By clicking the 'Save As…' button, the current settings file can be saved using a different name.

The Import and Export buttons enable you to export (save) the currently loaded settings to a file. This file can then be imported in SmartQuiz Setup on another computer enabling easy and fail-safe transfer of settings. Please note that any folders referenced in the settings file need to be present on

the computer which imports the settings (otherwise warnings will be shown when starting a quiz show with the imported settings).

There are several tab pages on which the various settings can be changed. In the following chapters you can find a description of each page and its settings.

4.1 Configuring your hardware – the 'Buzzers' tab page

SmartQuiz is designed to operate with different types of input devices. Please find below a description of the devices that can be configured on the 'Buzzers' tab page in Quiz Setup.

Starting from SmartQuiz 6 it is also possible to use mobile devices with SmartQuiz. Mobile devices can be used as an extension of your existing buzzer or keypad system. You can read more about Mobile keypad support in section 4.2.

When starting Quiz Setup the first time after installation of SmartQuiz, "None" is chosen as the buzzer system. Before running a quiz in SmartQuiz Live, a buzzer system must be chosen in Quiz Setup. This is also indicated by the help quote that is shown when first starting up Quiz Setup as indicated below.
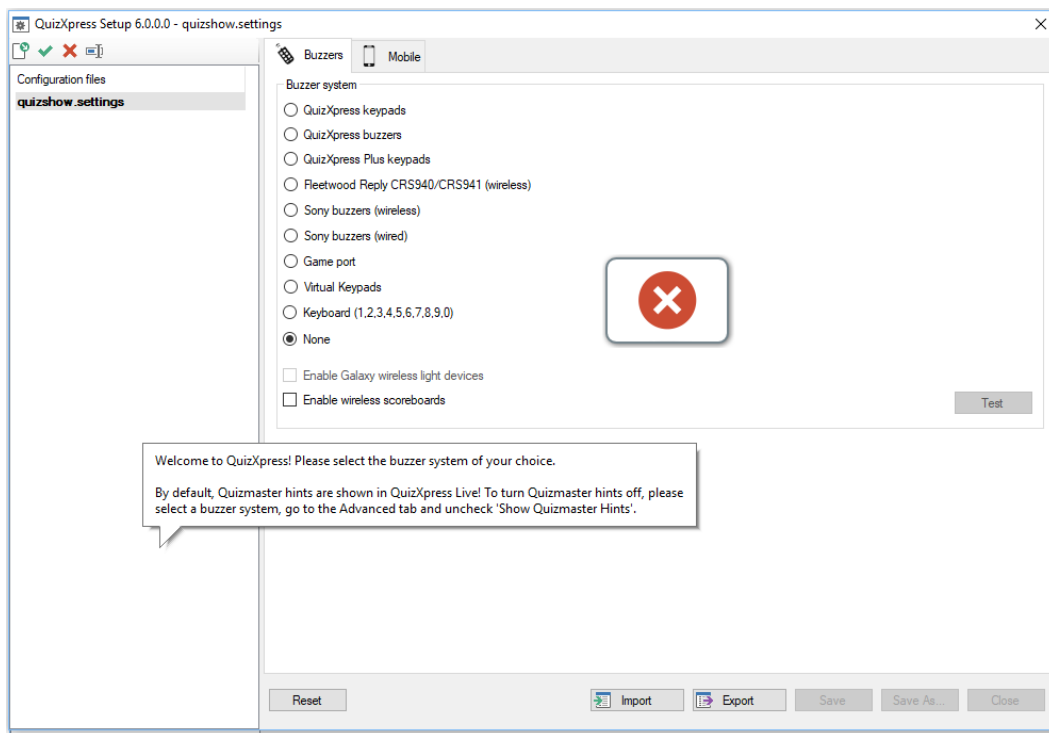
The help quote also states that by default 'Quizmaster hints' are shown when running a Quiz show in SmartQuiz Live. This is a learning function and should be turned off when running a production show.

Note: After selecting your hardware configuration, you can click the 'Test' button to test the connectivity of the connected devices. If the connection succeeds, a green checkmark is shown for each device that connected successfully.

4.1.1 Multiple choice buzzer systems

SmartQuiz supports a couple of multiple-choice buzzers systems, which are listed in this section. Please note that the availability of multiple-choice buttons enables two features in SmartQuiz:

- The option to let people answer a multiple-choice question (voting or audience response)
- The option to let SmartQuiz automatically judge multiple choice answers given in case of a 'fastest finger' question (first to buzz in answers). Please note that this choice is optional. It is also possible to let the Quizmaster judge multiple choice answers given. This can be indicated in Quiz Studio by setting the 'auto judge' flag of a Quiz slide.

4.1.1.1 SmartQuiz basic keypads

The keypads of this system have six multiple choice buttons and one fastest finger button. The base station is connected to the PC by a USB cable and has a range of 100 meters\350 feet and can read up to 100 keypads per second. SmartQuiz can be played with up to 400 keypads at once.

The SmartQuiz keypad system comes with a Quizmaster remote which can be used by the quizmaster to operate the quiz.

Each SmartQuiz keypad has a preprogrammed unique id. When using SmartQuiz keypads, please input the ids of the devices used for the quiz into the 'Keypads:' entry field in Quiz Setup. For example, if you are using keypad 1 to 10, enter the range "1-10". If you are using keypad 1, 2, 3, 4, 6 enter the text "1,2,3,4,6".

Please refer to Appendix A for more information about the installation of the SmartQuiz keypad system.

Note: When playing the Quiz, not all keypads indicated in Quiz Setup have to be used. Before starting the quiz, a keypad sign on screen is shown. Participating players make themselves known by pressing a key on their keypad during this sign on screen.

4.1.1.2 SmartQuiz buzzers

With the SmartQuiz Buzzers you get a combination of a big button slammer and a 4-button multiple choice input device. The button has a light that flashed when the buzzer is the first being hit.

4.1.1.3 SmartQuiz Plus keypads

The SmartQuiz Plus keypad system is similar to the basic SmartQuiz keypads but has an extended range, is four times faster and can handle up to 2000 keypads on one receiver. With the Plus system you have a range of about 350 meters due to the 4 antennas on the receiver and a polling speed of 400 keypads per second (the basic system does 100 keypads per second)

4.1.1.4 Fleetwood Reply systems buzzers

Fleetwood Reply systems delivers a variety of portable interactive audience response and electronic voting tools commonly used in meeting, training, decision making, and research applications.

SmartQuiz operates with Reply® Mini Model CRS5000- and Reply Worldwide wireless keypads, together with a CRS940/CRS941 base station. The base station is connected to the PC by a USB cable. SmartQuiz can be played with up to 250 keypads at once.

Each Reply Systems' buzzer has a preprogrammed unique id (as opposed to Sony Buzzers). When using Reply System buzzers, please add the ids of the buzzers used for the quiz to the 'Keypads:' entry field. For example, if you are using keypad 1 to 10, enter the range "1-10". If you are using keypad 1,2,4,6 enter the text "1,2,4,6". Also set the channel of the base station by selecting the correct channel from the 'Channel' dropdown list.

Please refer to Appendix B for more information about the installation of the Reply system.

Note: When playing the Quiz, not all buzzers indicated in Quiz Setup have to be used. Before starting the quiz, a buzzer sign on screen is shown. Participating players make themselves known by pressing a key on their buzzer during this sign on screen.

4.1.1.5 Virtual Keypads

SmartQuiz comes with a virtual, software-based keypad that you can run on the same machine or on other machines in the network. It connects to SmartQuiz Live through a TCP/IP connection. Each virtual keypad has a keypad id that you can change instantly

Note: when you start Live with Virtual Keypads configured, Windows may ask you for a confirmation to open a port on the local firewall.

With the Virtual Keypad it is very easy to test your quiz, even if you do not have any real hardware.

4.1.1.6 Sony Buzz^{TM} buzzers

SmartQuiz also works with Sony Buzz^{TM} buzzers. The system works with both the wired and wireless versions of these buzzers.

Please note that the wireless version of these buzzers is designed to operate within a distance of approximately 10 meters (26 feet) maximum. SmartQuiz Home edition works with a maximum of 12 wireless Sony Buzz units. The SmartQuiz Pro edition has no limit although in practice no more than 16 have been used due to practical limitations (one receiver per 4 buzzers, distance limitation).

One USB receiver is used for 4 wireless Sony buzzers so please keep in mind to have enough USB ports available. Also, because of the reach of the buzzers is limited, please be sure to distribute the receivers strategically inside the quiz arena if possible. *This type of device is no longer manufactured and only available on the secondhand market.*

4.1.1.7 SmartQuiz Luminous and Sparkle

SmartQuiz Luminous lighted stage tables

SmartQuiz Sparkle buzzer poles

The Luminous and Sparkle work just like the SmartQuiz Buzzers so that is the kind of device to select in Quiz Setup. Note that the Sparkle buzzer pole does not have multiple choice buttons so you can use them with *open questions* or with multiple choice questions set to 'manual judgment' (here the player tells the quizmaster verbally which of the multiple choice answers is right; the quizmaster judges the multiple choice answer given). The stage table synchronizes its lights automatically with the paired buzzer.

4.1.2   Single button buzzer systems

Next to supporting buzzers with multiple choice buttons, SmartQuiz also supports buzzers containing a single button (sometimes also referred to as 'slammers'). With these buttons the focus really lies on the fastest finger aspect of the game: the one who slams first answers. In this case the quizmaster always judges the answer (automatic judgment is not possible as no multiple-choice buttons are present).

4.1.2.1   *SmartQuiz buzzer cubes*
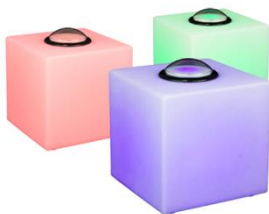
The buzzer cubes are rechargeable devices with a strong RGB LED and a single button. With this type of buzzer, you can only run fastest finger type questions as there are no multiple-choice buttons. Very well suited for final games. To use this type of buzzers simply select 'SmartQuiz Buzzers' as device type.

The cubes have three different colors. The following table lists the colors of the buzzers and the meaning of the colors

Color	Meaning
Green	Ready, buzzer can be pressed
Red	Out of the game\question
Blue (flashing)	First person that buzzed in
Green (flashing)	Correct answer was given
Red (flashing)	Incorrect answer was given

4.1.2.2   *Game Port*

SmartQuiz also supports standard game port devices (joysticks or other controllers). Each button on a standard game port controller can act as a buzzer. This interface is particularly useful when building custom interactive setups to be used for example in a museum. Contact us for more details or support.

Next to using the buzzer systems described above, it is also possible to use the keyboard for buzzing in. The keys 1,2,3,4,5,6,7,8,9,0 correspond to 10 buzzers that can play along. When no buzzers are available, using the keyboard is a good alternative. You can also use this option for other buzzer devices that send keystrokes to the application.

4.1.3 SmartQuiz wireless Galaxy RGB devices

The Galaxy RGB devices (rechargeable wristbands or table bulbs named Spheres) are fully integrated with SmartQuiz and enhance the overall experience of the game show. When enabled, SmartQuiz provides feedback to the players such as whether their response was received by the system, whether their last answer was correct or incorrect, if they are still in the game with last-man-standing etc. To enable Galaxy support, connect the additional Galaxy receiver to a USB port on your PC and check the 'Enable Galaxy devices' checkbox in Quiz Setup.

The galaxy devices contain RGB LED lights meaning they can have any color. Please find below an overview of the colors used during a quiz show.

Event during quiz show	Color
SmartQuiz start screen	Random colors are shown
Sign on screen – not signed in yet	Blue
Sign on screen – signed in	Green
Question – clock starts countdown	Blue
Question – vote received	Purple
Question – answer incorrect	Red
Question – answer correct	Green
Last man standing – out of the game	Red, remains red until last man standing round is over
Final score screen	Winner: gold: 2nd place: silver: 3rd place: bronze

4.1.4   SmartQuiz wireless scoreboards

With the wireless scoreboards, players get immediate feedback on their current score. The scoreboard can display values ranging from -99 to 999. To enable the scoreboards, connect the scoreboard receiver to a USB port of your PC and tick the 'Enable wireless scoreboard' checkbox on Quiz Setup.

4.2   Setting up mobile keypad support

SmartQuiz supports using mobile phones and tablets as input devices. Players can connect using a standard web browser or they can use our Smart Buzzer app for Android and iOS. You must own a license that supports mobile keypads before you can activate this feature.
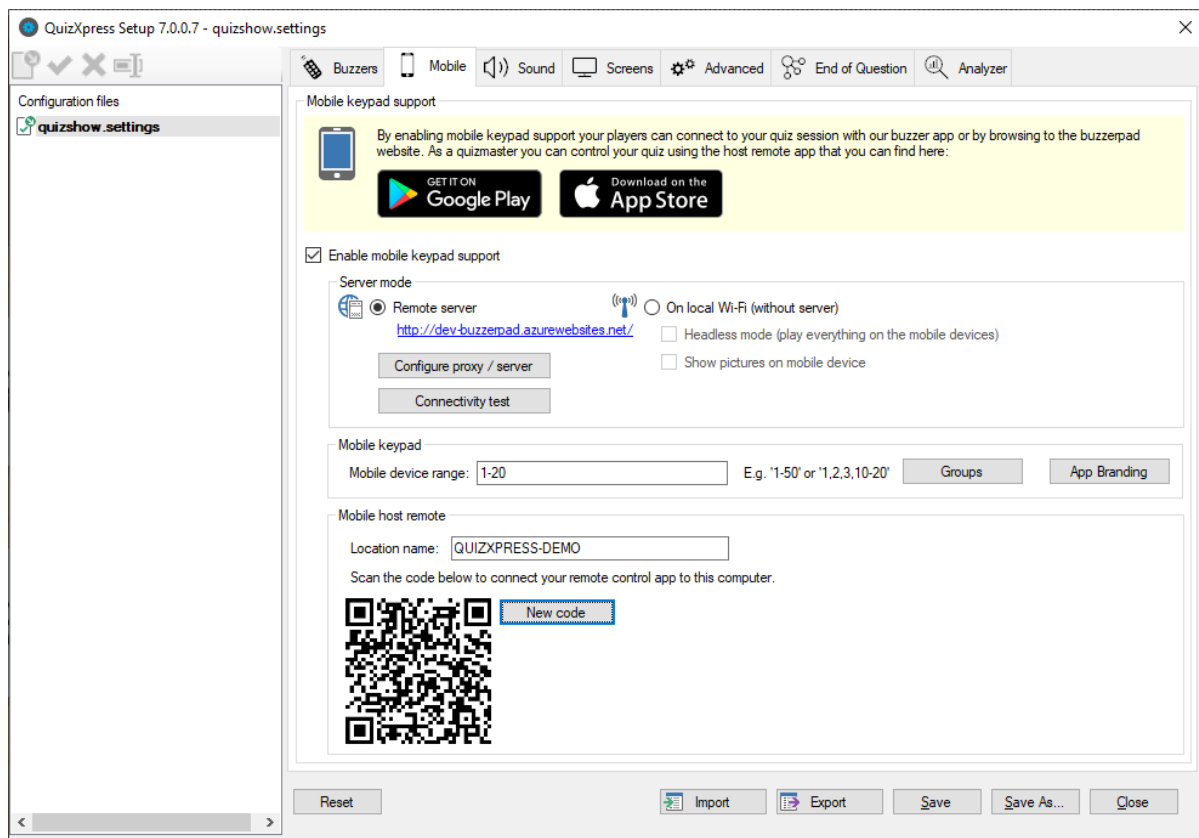
In order to enable mobile keypad support, first set a tick in the *Enable mobile keypad support* checkbox. You see three sections to be configured:

4.2.1   Server mode

There are two ways you can run the system with mobile keypads:

1) Using one of our cloud servers (internet required for you and your players who can participate from all over the world)

2) Using a local Wi-Fi router connected to your laptop (no internet required but all players must be in one physical location to connect to your router)

When using local Wi-Fi there are two additional options:

- Play in 'Headless' mode – Use this when no external\projector screen is available and you want players to play on their mobile only. Please note that in this case using mini games as well as video questions is not supported. When playing in headless mode the Director screen will be shown on the laptop with an integrated quiz player (please refer to section 5.7 for more information about Director).
- Show pictures on mobile device – Indicates whether pictures are also sent to the phones.

When using *Remote server* mode, you can select the server that is used to host your quiz session by clicking the *Configure proxy / server* button. The default server is www.buzzerpad.com. This server is situated in the South-Central US. If you are based in Europe you may want to switch to www.buzzerpad.eu for lower latency.

4.2.2 Mobile keypad section

Here you configure the range of the keypads that can connect to your quiz. By default, when you enable mobile keypad support, the 'Mobile device range' field is filled with id 1 to the maximum number of players that is allowed by your license.

If you have an existing kit of buzzers or keypads, you can extend this with players playing on mobile keypads. In this case, when enabling mobile keypad support, a 'Mobile device range' starting with the highest keypad or buzzer id as defined on the Buzzers tab appears. The maximum number in this case is the number as allowed by your license.

Example: on the buzzers tab, you indicate that you are playing with SmartQuiz keypads number 1-20. On the mobile tab, you enable Mobile keypad support. When you have an Ultimate 50 license (which allows you to play with 50 players maximum) the 'Mobile device range' field will be filled with 21-50.

4.2.2.1 Playing in groups

When you want your audience to compete in groups while using mobile devices, you have to predefine a list of groups. When a player connects to your quiz, the player is prompted on his device to select the group to play for.

By clicking the 'Groups' button a form appears where you can configure the groups and group behavior:
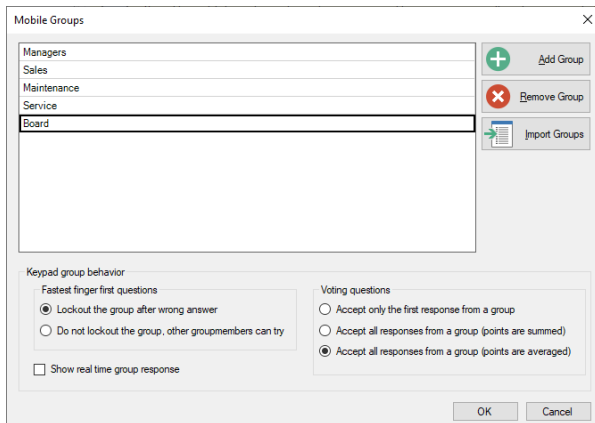
In the lower section you define the behavior for fastest finger and voting questions.

4.2.2.2 Branding the mobile app

When playing with the SmartQuiz Smart Buzzer app you can setup your own branding with the Branding Designer and change the colors, logo and welcome image for the app:
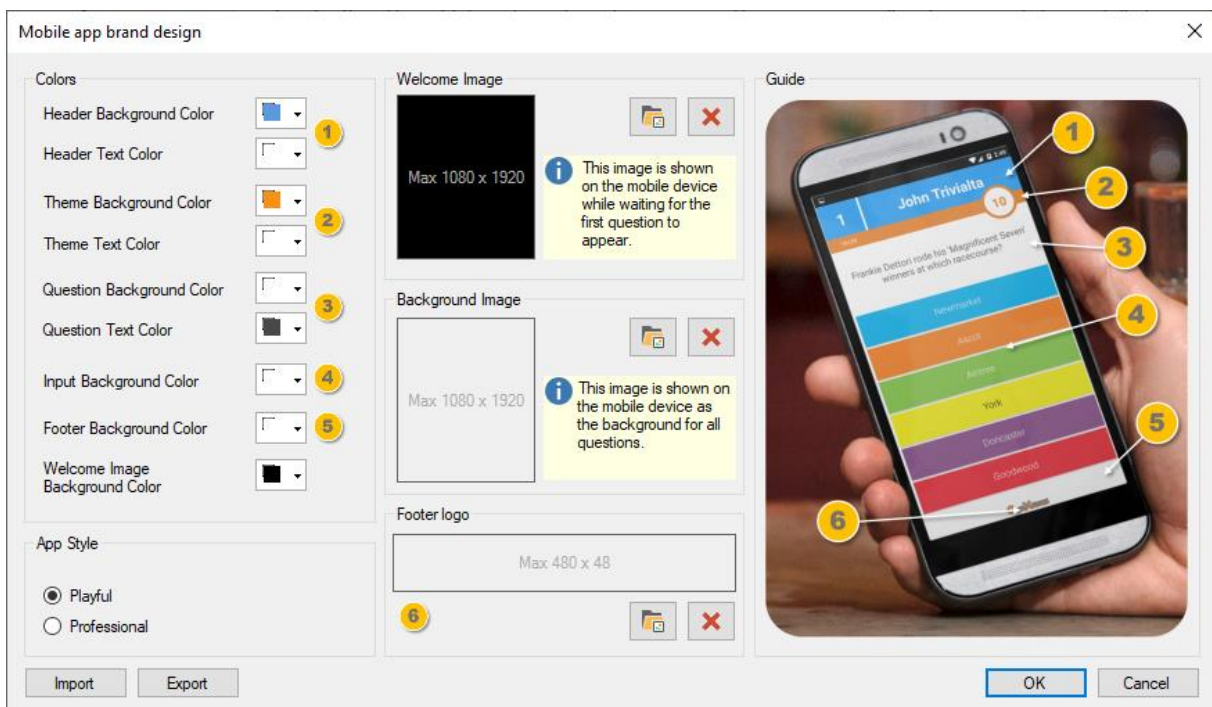
Playing with predefined groups

Mobile host remote section

In this section the QR code used to connect the remote-control app with your computer is presented.

The app to control the running quiz is available for Android and iOS. You can find them here:

Mobile Director for Android	https://play.google.com/store/apps/details?id=com.gameshowcrew.SmartQuizdirector
Mobile Director for iOS	https://apps.apple.com/us/app/SmartQuiz-director/id1493187163

In the Mobile remote app, you can have multiple computers registered which you can control. These computers are displayed by their 'Location name'. The 'Location name' can be filled in in the Mobile remote section. The default name is the name of the computer.

In order to connect the Mobile presenter remote with the computer, open the Virtual remote app and click on the 'plus button'. A QR code scanner will be opened on your mobile. Now scan the QR code shown in the Mobile remote section and the name entered in the 'Location name' field will be added to the list of computers in the Mobile remote app.

Important: Please note that the app has a server setting that must correspond to the server you have selected in Quiz Setup. Also, if you use Wi-Fi, you must switch the app's setting to 'Wi-Fi'
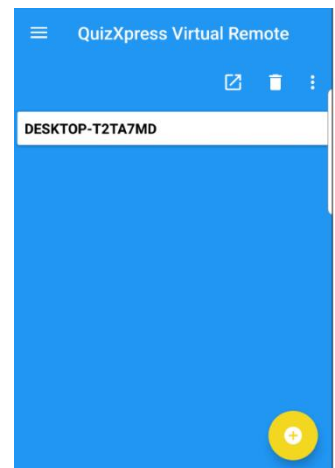
4.3   Setting up teams – the 'Teams' tab page

There are two different 'flavors' of the Teams tab page, one when Sony buzzers are selected on the 'Buzzers' tab and one when Fleetwood Reply or SmartQuiz buzzers (numbered devices) are selected.

4.3.1   'Teams' tab page – Sony Buzzers

The teams tab page that is used when Sony Buzzers are selected can be found below. Functionality includes:

- Adding and removing teams
- Indication whether a team plays along in the quiz.
- Assign avatars to teams. At the bottom of the team settings page you can indicate in which folder the avatars used are present.

At the top of the page you can see how many buzzer sets are necessary given the number of teams in the list playing along.

Another feature is the ability to use anonymous teams. In this case, the list of teams\avatars will be ignored. The sign-in process will resemble that of Fleetwood Reply buzzers. This is typically used when large amounts of Sony Buzzers are used. In this case the normal sign-in procedure for Sony Buzzers, which associates each buzzer with a team one at a time would take too long.
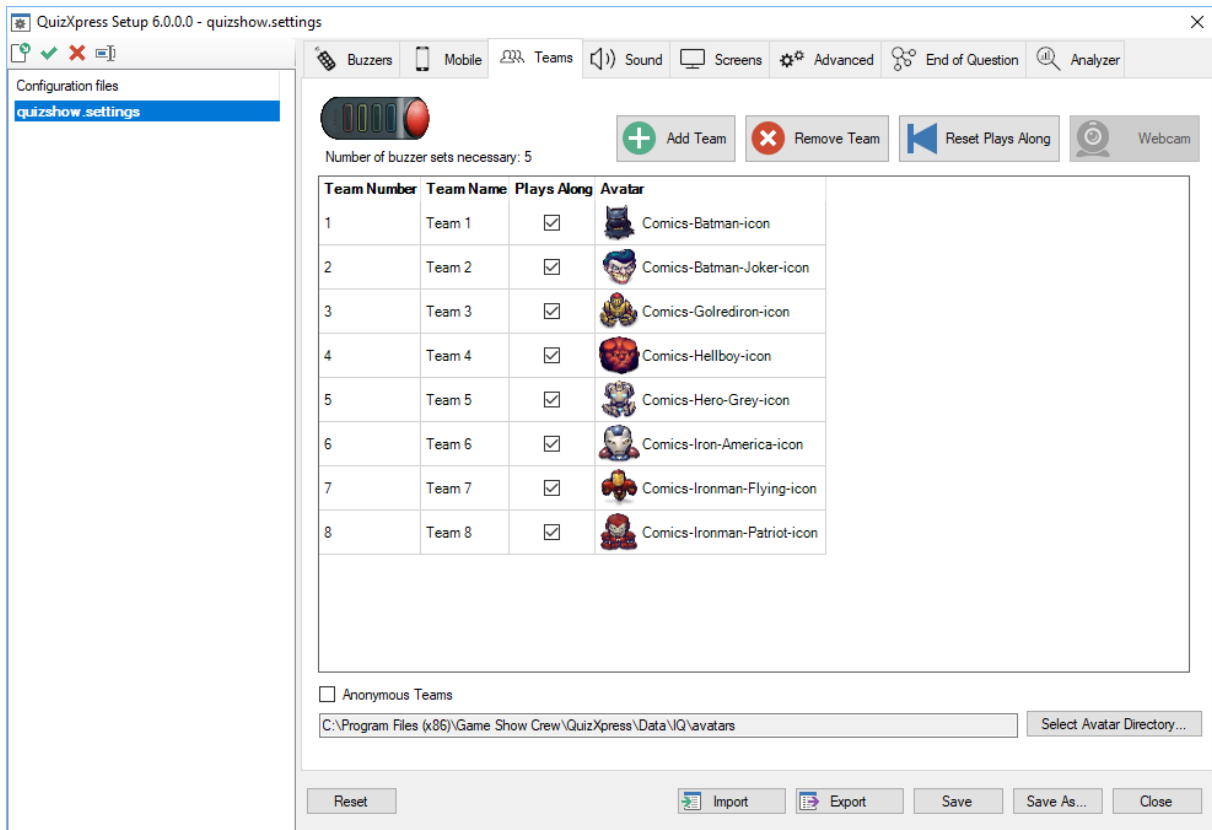
4.3.2 'Teams' tab page – SmartQuiz keypads

On the Teams tab you can define the team\player names and define groups. This tab isn't available when Mobile only is used. When mobile is used in combination with keypads or buzzers, the page is shown though.

The (number of) teams when choosing all buzzers types except the Sony buzzers, is derived from the 'Keypads' string as entered on the 'Buzzers' tab. For example, when the string 1-50 is used, the 'Teams' tab will show a list of keypad 1 to 50 and the default team names *Team 1 … Team 50*. The names of the teams can be changed in the second column of the list.

As explained before, if you would like to change the number of teams, please modify the 'Keypads' string on the 'Buzzers' tab.

Note: it's possible to use avatars in combination with Reply/SmartQuiz buzzers. To do so, create images (.jpg or .gif) in the default avatar folder (`c:\program files\game show crew\SmartQuiz\Data\IQ\Avatars`) with the names of the teams. For example: for Team A, create an image "Team A.jpg"

As can be seen in the picture below, various other commands are available:

- Generate Names: this enables you to quickly generate team names using a certain pattern, followed by an index. For example, you could quickly generate names like team 1…team 50, player 1…player 50, participant 1…participant 50
- Import: import the list team names from Excel or a text file. For Excel just put the names in the first column of the first sheet, for a text file put all names on a new line.

- Save to PDF: in order to have an overview of the teams assigned to each keypad, the list can be exported to PDF by pressing the 'Save to PDF' button
- Groups: it is possible to divide teams into groups. You can read more about this in the following section.
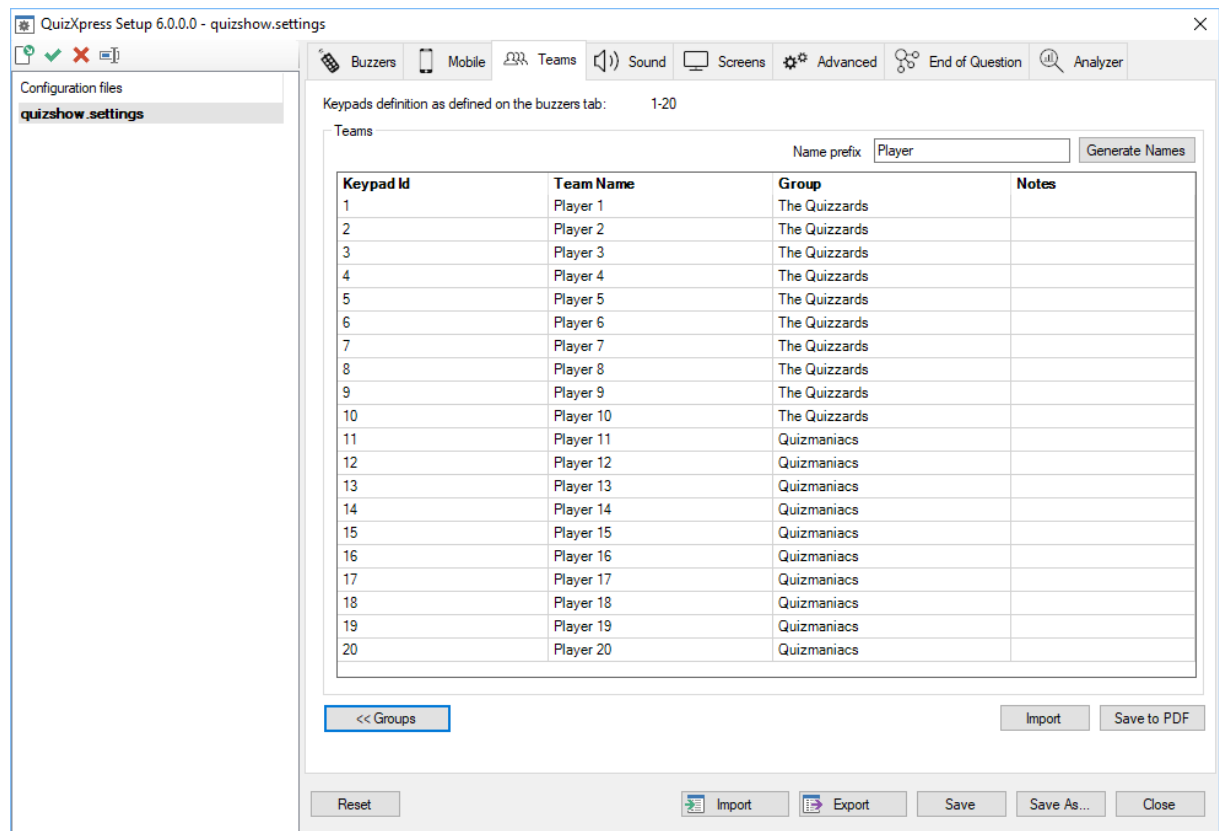
4.3.2.1   Grouping keypads

It is possible to divide teams into groups in Quiz Setup (alternatively, it is also possible to divide teams into groups while running a Quiz. Please refer to the section 5.4.5.5 on demographic quiz slides for more information about this.

When clicking the 'Groups' button, a list is shown that enables you to enter group names and their accompanying set of keypads. Please see a picture of this below:
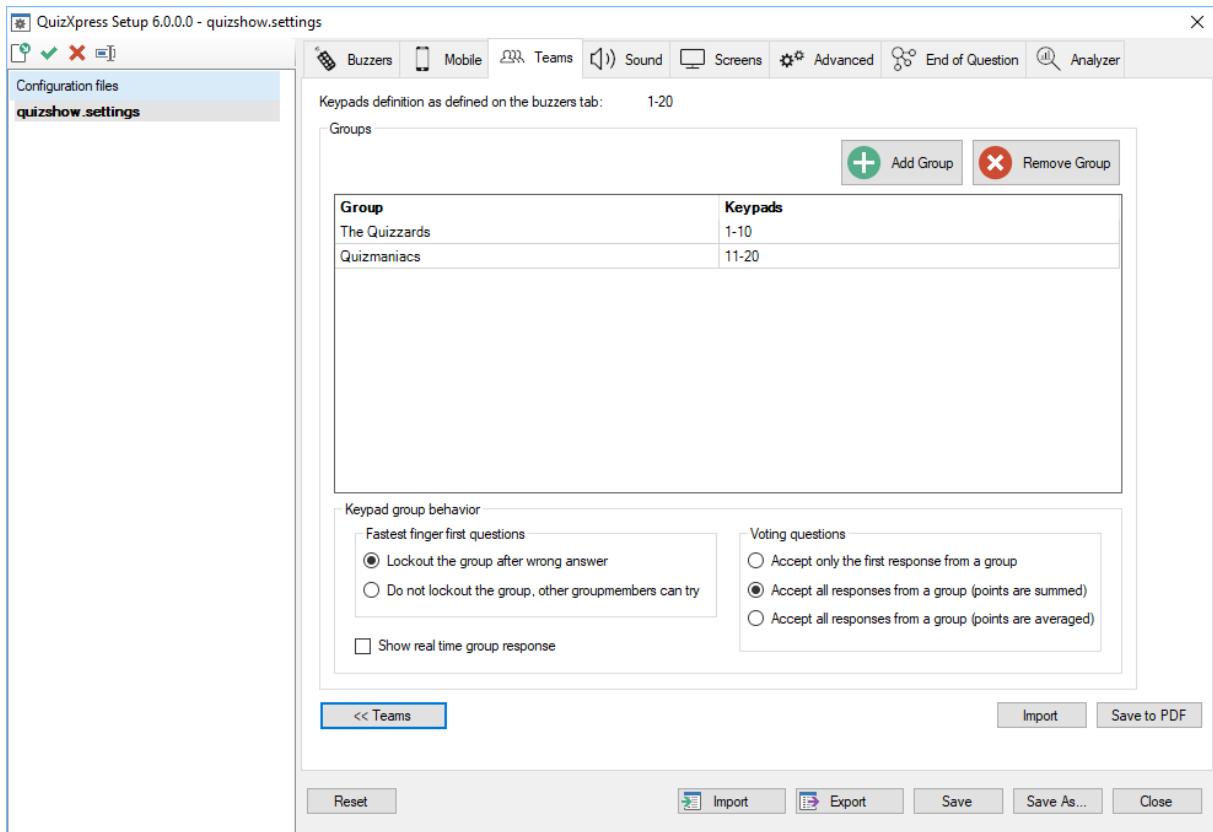
By pressing the 'Add button', a window appears allowing you to enter both the Group name and the accompanying keypads (by entering a keypad string). It is also possible to remove the groups.

When entering the keypad range for a group (for example "1, 2, 3, 10-20"), a check will be done if the keypad range falls within the keypad range as defined on the 'Buzzers' tab. If this is not the case, an error message will be given.

The other settings you can change here are how groups should behave for fastest finger- and voting questions.

The options for fastest finger questions are:

Lockout	With this option enabled, only the first player in a group to respond can answer the question. If the answer provided is wrong, the whole group is locked out.
No lockout	If the first person in the groups answers wrong, another person in the group can still try.

The options for voting questions are:

| Accept only the first response	Only the first answer received from the group will count and add points to the group score
Sum points	All responses are accepted, and the points are summed
Average points	All responses are accepted, and the points are averaged

4.3.2.1.1   Show real time group responses during the quiz

When you enable the setting 'Show real time group responses', during the quiz show the responses of each group will be displayed on screen in real time.

While the clock counts down, for each group you will see the number of players part of the group (as well as the number of players that have answered so far. For example, in the above image, the group HR has 15 players of which 3 have answered so far.

At the end of countdown, the number of persons that gave a correct answer, the number of persons that gave an incorrect answer as well as the percentage of correct answers are displayed per group.
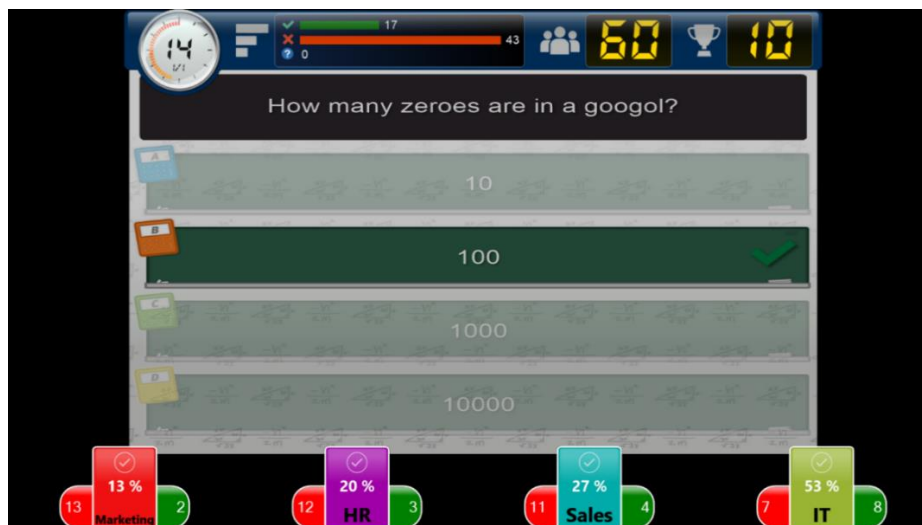
4.3.2.2   Assigning Galaxy devices and scoreboards to participants

When your SmartQuiz license includes support for Galaxy devices or scoreboards, you see the following options on the buzzer tab of SmartQuiz Setup

When you enable Galaxy or scoreboards support, extra columns will appear in the list on the teams tab.

Keypads definition as defined on the Buzzers tab :   1-20

Each galaxy device or scoreboard has an ID. In this list you can indicate for each player which galaxy device ID and/or scoreboard ID is used.

4.4   Configuring sounds – the 'Sounds' tab page

On the sound settings page you can enter various settings applicable to the sounds played during a quiz. On the left-hand side in the group box 'Category' you first choose a category of sounds which you want to change. Next, the 'sounds-list' on the right-hand side will be filled with the sounds from the category chosen.

When selecting the category 'buzzer sounds', in the list you can assign a sound to the buzzer of a specific team. You can also add your own sounds and assign these to the players/teams. This does not apply when using Mobile phones though. For this the 'jingles' mechanism applies, which will be explained shortly.

When you select the category 'Right Answer', the list on the right-hand side will be filled with sounds that are *randomly* played during the quiz when a team gives a right answer. You can include/exclude a sound by setting/removing a checkmark after it. The same counts for the 'Incorrect Answer' sounds.

When installing SmartQuiz, a set of default sounds is installed for you to choose from.
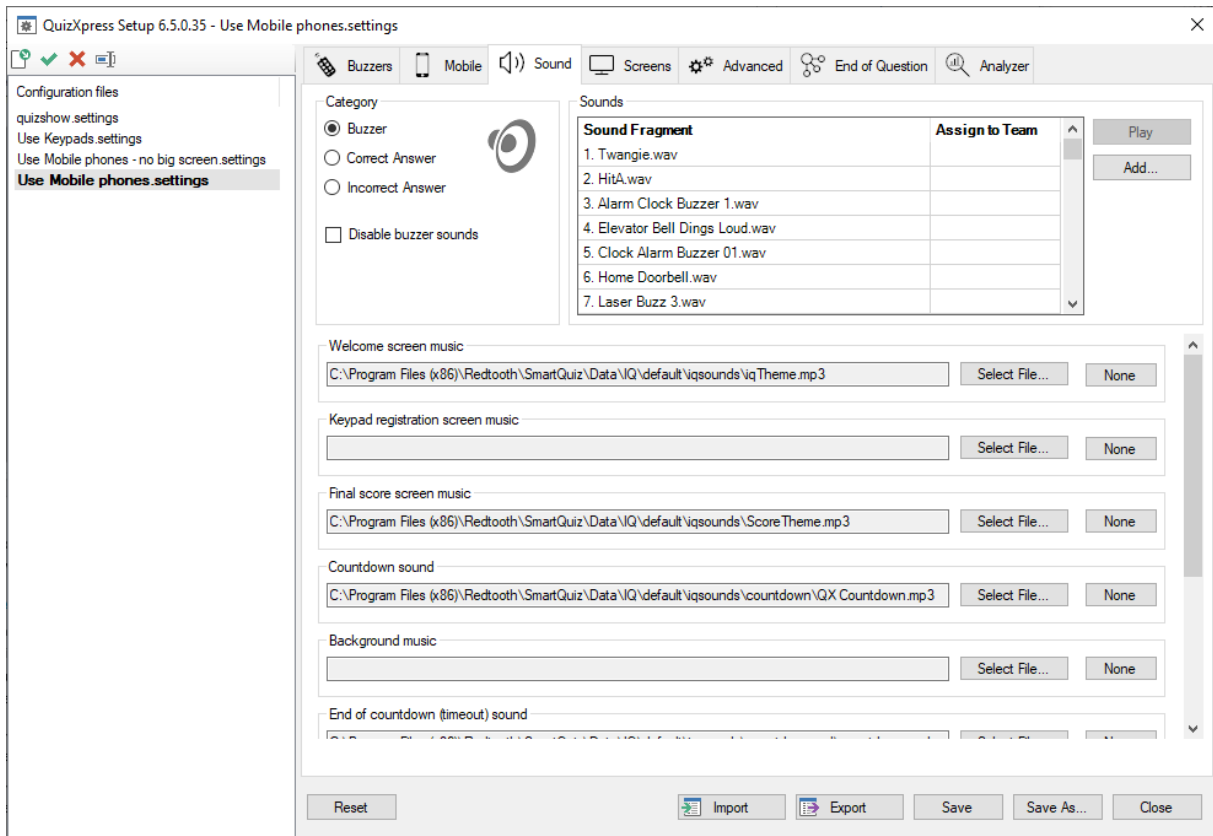
The following sounds/music can be set:

- *Welcome screen music* - the music played when the quiz starts

- *Keypad registration screen music* – the music played when the keypad registration screen is shown (this screen is not shown by default when mobile phones are used)

- *Final score screen music* - the music played when the final scores are shown

- *Countdown sound* – the sound played during countdown

- *Background music* – the music to fill all otherwise silent moments
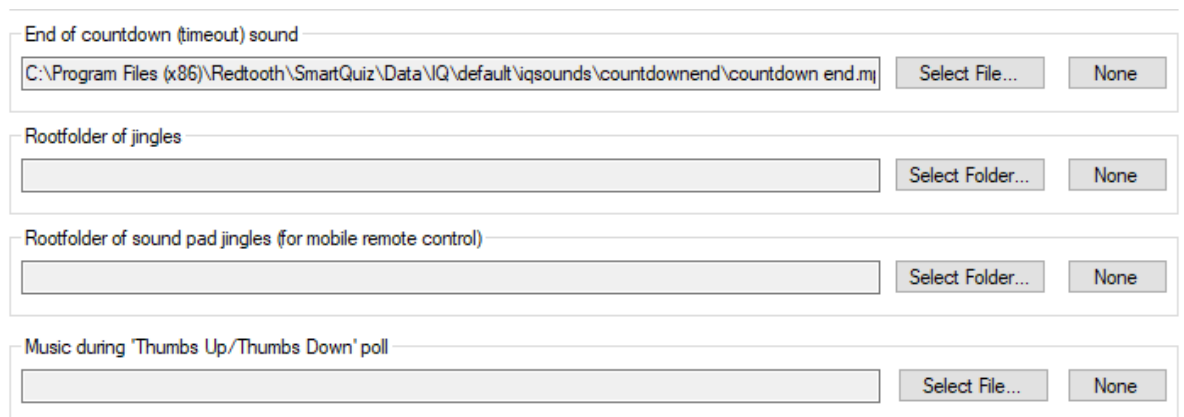
- *End of countdown music* – the sound played when countdown finishes

- *Root folder of jingles* – points to a folder containing sound bits that can be selected by players once they connect to the quiz, resulting in each player having its own 'jingle'. Jingles are used for:

    o Bonus points - the sound of the player who was first to give the correct answer is played when the bonus points screen is shown

   o Fastest finger – The sound of the player who pressed first is played, along with the player's name appearing onscreen in the quiz player.

    o Intermediate score overviews – The sound of the player who is ranked first is played when showing the leaderboard.

- *Root folder of sound pad jingles (for mobile remote control)* – point to a folder containing music or sound effects which will be showed on the 'Soundboard' tab in the SmartQuiz Director app. This allows for the host to play music or sound fragments at any preferred moment

- *Music during "Thumbs Up/Thumbs Down' poll* – After a player answered first to a fastest finger question, the host can ask the other players whether they agree or disagree with the answer given, giving them a chance to also win (or lose) 50% of the question points. The sound that is chosen is played while the "Thumbs Up/ Thumbs Down' poll is running. A poll can be started from the SmartQuiz Director app or from Director on the computer.

For more information about the SmartQuiz Director app please refer to section 0 .

Each of these sounds can be 'cleared' by pressing the 'None' button. In this case no sound will be played.

4.5   Customizing the look – the 'Screens' tab page

The 'Screens' tab page contains various settings used to customize the welcome screen. It also contains settings related to the various display resolutions\modes of SmartQuiz Live
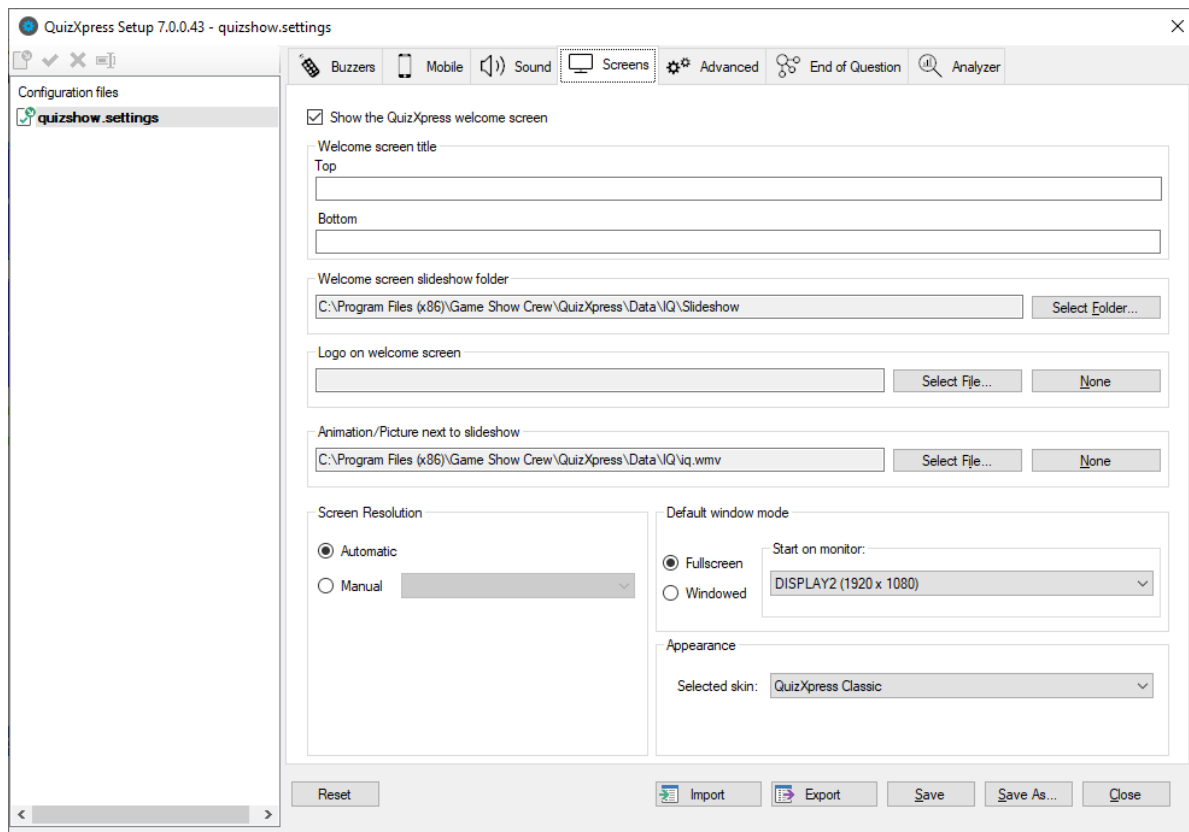
The following settings apply to the welcome screen:

- Welcome screen title, Top and Bottom: text to be displayed on top of the screen and at the bottom of the screen.
- Welcome screen slideshow folder: folder containing the pictures that will be shown in the slideshow played on the welcome screen. When installing SmartQuiz a default set of pictures for the slideshow is installed.
- Logo on welcome screen: logo that is shown on top of the screen. This logo is shown next to the welcome screen 'Top text' (optional; pressing 'Clear' shows no logo).
- Animation (movie)/picture shown next to the slideshow (optional; pressing 'Clear' shows no movie/picture next to the slideshow).

Please refer to section 5.4.1 to see the settings for the welcome screen in action.

The 'Screen Resolution' section allows you to specify the resolution at which the system starts. Normally you can set it to Automatic but in specific cases you may want to set the resolution manually.

In the 'Default window mode' section you specify how and where the program starts. It can start in full screen mode or windowed mode (note: you can always toggle this with the M key or by clicking the button in the top right corner of the quiz player form). You can also specify the monitor on which to start.

The quiz player comes with multiple 'skins' (appearances or themes). Each theme has its own colors, music images etc. to match your show.

'Dark Theme' welcome screen

'TV Show' welcome screen

4.6   Other settings – the 'Advanced' tab page

The advanced tab page contains several advanced settings:
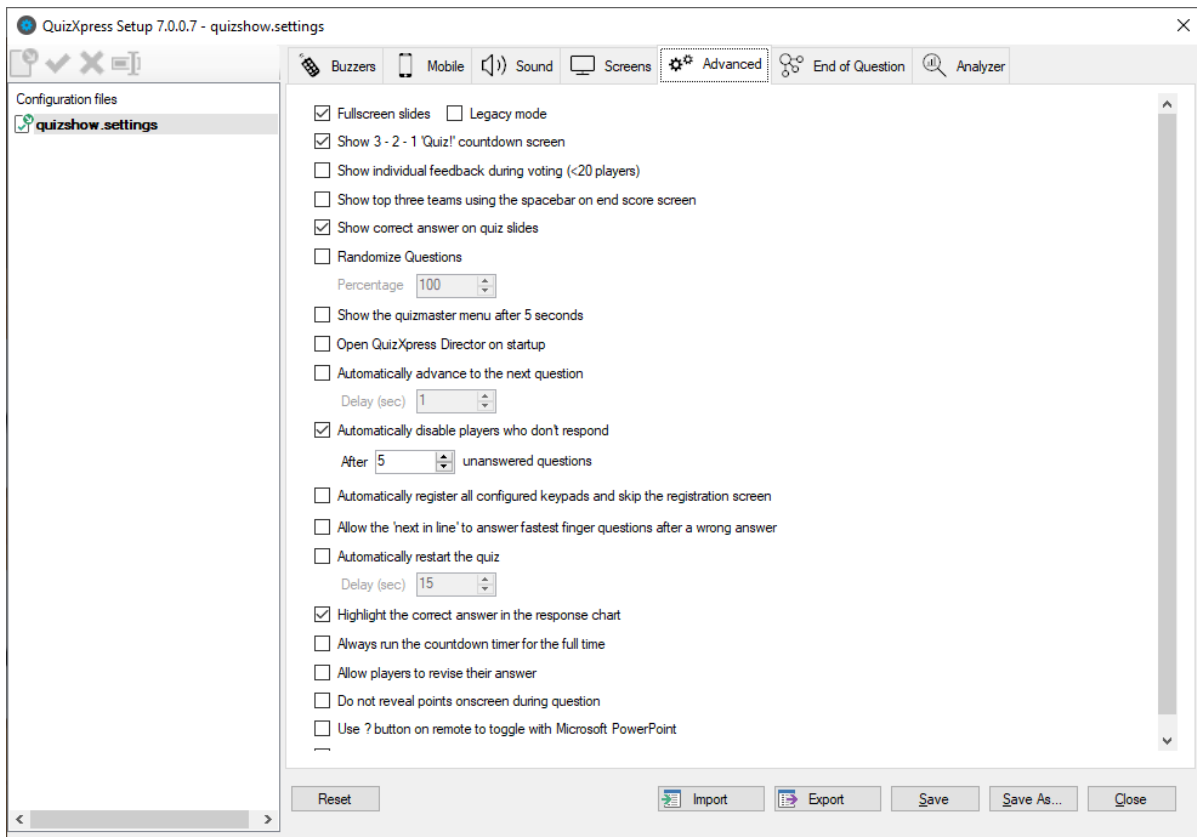
☑ **Full screen slides**

This option indicates to show each slide in full screen mode. By default, slides 'float' on the screen, with margins on all sides.

By clicking the full screen option, slides will be shown full screen. The background will be extended to fit the whole desktop and the slide item (question, answers) sizes will also be slightly increased.

Note: When you click the Full screen slides option, a second option 'Legacy mode' appears. This is to support the old Full screen setting which worked slightly different. Previously the full screen slide

option caused the clock bar to overlap the question text. In order to fix this, items on slides (the question text as well as the answers) had to be moved down in order to accommodate full screen display. If you have quizzes with the layout accommodating the old Full screen option, please put a check in the 'Legacy mode' box.

☑ Show 3-2-1 Quiz countdown screen

Indicates whether a countdown animation is shown before the quiz start

☑ Show individual feedback during voting (<20 players)

When this option is checked, each individual vote will be shown for questions where voting is set to 'True'. If this option is not checked, only a counter will be shown with the total number of votes received. For an example see the pictures as shown at the end of 5.4.5. This only applies when there are less than 20 players.

☑ Show top three teams using space on end score screen:

When set, the final score screen does not show the top 3 players automatically but waits for the spacebar to be pressed. Pressing the spacebar multiple times subsequently shows the 3rd, 2nd and 1st place. After this a full ranking is shown.

☑ Use remote control

Indicates if a remote quizmaster control is used (for the SmartQuiz buzzer system this option is always enabled as this system includes a special remote control).

☑ Show correct answer

If checked (default), the correct answer (indicated by a green checkmark) is shown when a multiple-choice question is evaluated. If not checked, the correct answer is not shown. This enables you to tell the audience yourself what the correct answer is. Alternatively, you could use a shape to override the default behavior of showing the correct answer and indicate the correct answer yourself (for example by showing a big red arrow pointing out the right answer).

☑ Randomize Questions

When checked, questions from a quiz will be shown in random order. When rounds are present, the questions within each round will be shuffled. By providing a percentage, you can tell SmartQuiz to only show part of the questions (in random order). The way slides are shuffled is controlled by the 'Shuffle mode' option that you can set per slide.

☑ Show Quizmaster Hints

When running a quiz show in SmartQuiz Live, multiple commands are available at different stages. Think of showing charts, advancing to the next slide, show score overviews or judge questions. All these commands have shortcut keys on the keyboard (or they can be operated by a Quizmaster remote).

In order to guide beginning users, Quizmaster hints can be shown during a quiz, showing all available commands once applicable. Once the quizmaster is confident in operating the system, he or she could switch this setting off (in Quiz Setup) so that the audience does not see the hints anymore. By default, quizmaster hints are <u>enabled</u>.

☑ **Enable SmartQuiz Director**

When this option is checked, Director will open immediately when QX Live starts. If this flag is not set, you can still open Director at any time with the 'D' key *(Note: this option only available in the Ultimate edition).*

☑ **Automatically advance to the next question**

With this option you can make Live go to the next question without interference. So, if you have a batch of multiple-choice questions to run against your audience without being present this is the option to use. You can also set the time in-between the questions.

☑ **Automatically disable players that don't respond**

When this is enabled, the system will automatically disable players when they have not been answering for a certain amount of questions (meaning they have probably left the quiz).

☑ **Automatically register all keypads**

Normally the audience must sign in at beginning of a session. This way the system knows which keypads are participating and can thus end a question when all responses have been received. If this registration process is inconvenient, you can set this flag and the system will skip the registration screen and sign in all configured keypads. So, for example when you have set the device configuration to "1-100", keypads 1-100 will all be registered

☑ **Allow the next in line to answer**

When enabled, the system will sequentially allow all players that responded to an open question (within 2 seconds from the first response) to provide an answer until a correct answer has been given. If not enabled, only the first player will get to answer, after which the system will open the floor again to all players (except the ones who already gave a wrong answer).

☑ **Automatically restart the quiz**

This option lets the quiz automatically restart once it is on the final score screen after a certain number of seconds. This enables you to create a standalone quiz that does not need any attendance by a quizmaster.

☑ **Highlight the correct answer in the response chart**

When you do not want the correct answer to be highlighted in the chart with responses, switch off this setting. This can be used for example when you want to first check with the audience how many responses there were to each answer without highlighting the correct one.

☑ **Always run the countdown timer for the full time**

When you want to let the clock run for the full specified time, regardless if everyone already answered, tick this option (when the option is off, the clock stops as soon as everybody answered). If you prefer a consistent countdown time, put a checkmark before this option.

☑ **Allow players to revise their answer**

When you tick this option, players can revise their answer as long as the countdown clock is running.

☑ **Do not reveal points onscreen during question**

By default, the system shows the points gained or lost for fastest finger questions. To build more suspense you can set this flag so the points for a player are not known until the leaderboard is shown.

☑ **Use '?' button on remote to toggle with Microsoft PowerPoint**

For user that wish to mix SmartQuiz with PowerPoint presentations this feature allows you to flip between the PowerPoint screen and SmartQuiz using the '?' button on the presenter remote control.

☑ **Remove top panel when answering to avoid overlapping**

In certain situations (open question, voting with individual feedback) the slide moves up when a player buzzes, causing the slide to overlap with the top panel. This setting causes the top panel to disappear temporarily to avoid the overlapping.

## 4.7   End of Question actions

On this tab you can define the actions that are executed (and in which order) when a question finished (all responses have been received/a correct answer has been given on an open question)
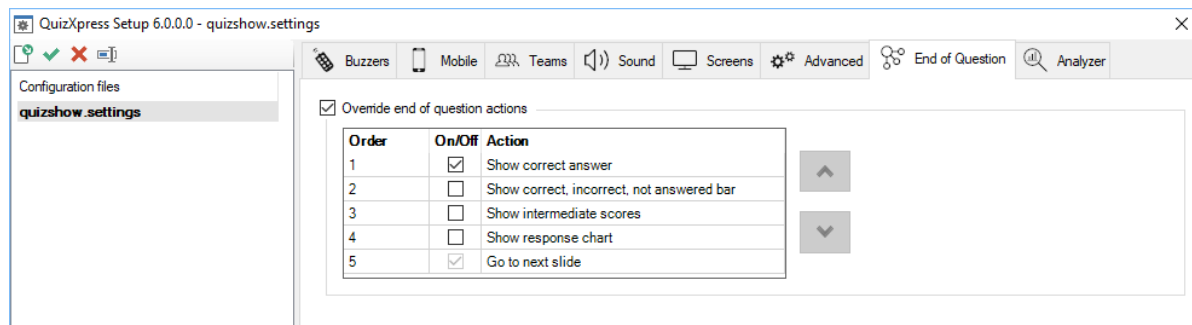
Normally, if the actions are not overridden, a standard sequence of actions is executed sequentially such as highlighting the correct answer, show statistics in the info panel etc. When overriding the standard actions, the configured actions are executed one by one in the set order whenever you press the OK button on the quizmaster remote control or when you press the spacebar in Live or click the 'Next' button in Director.

The following actions are available for you to configure:

Show correct answer
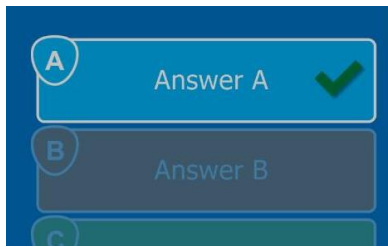
This action highlights the correct answer on the slide and shows an indicator, usually a checkmark but this could be different if you use another style for your slide. You can skip this action if you want to show the correct answer otherwise (for example with a shape or a text element on the slide).

Show correct, incorrect, not answered bar

Shows the response chart in the top info bar.

Show intermediate scores

Opens the leaderboard (top 20 overview, normally opened with 'S' key)

Show response chart

Shows the response bar chart screen

Go to next slide

Advance to the next slide, this action is always on and is always executed last

4.8   Testing your buzzer setup with SmartQuiz Buzzer Test

You can use the Buzzer Test application, which you can find in the Windows Start Menu under SmartQuiz, to test if the buzzers are connected and configured correctly. This application displays a grid of indicators. When a buzzer event is received, it displays information about the button pressed. This application is also useful when testing the range of the buzzers in a large room.

B	2	3	A	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176
177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208
209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256

To exit the Buzzer Test application, press the *Escape* key or use the standard Windows *Alt+F4* key combination. Buzzer Test is also available under the *Tools* menu in SmartQuiz Studio. During startup of Buzzer Test, the background is dark gray while connecting to the buzzer hardware, when the connection is successful, the background turns white, if there is a problem with the hardware, the background turns to red.

5   Running the show with SmartQuiz Live

In order to run a show with SmartQuiz, you can use physical devices like the SmartQuiz keypads or buzzers, or use mobile phones to let players play through local WiFi or through the internet. If you play through the internet with players being at remote locations, you can stream the quiz through a streaming service (like for example YouTube or Zoom). You can read more about streaming quizzes in the SmartQuiz Online Streaming guide which is available on our website.

It is also possible to use a hybrid solution with keypads\buzzers as well as the SmartQuiz Smart buzzer app.

5.1   Using physical devices

A full blown SmartQuiz system setup with hardware might look as follows:

In this setup all SmartQuiz supported hardware elements are used; keypads/buzzers, Galaxy wristbands and scoreboards. As you can see, a separate receiver is used for each type of device.

Before describing the software in full detail, let us first look at the buzzer types supported and how to use them.

5.1.1   Using the SmartQuiz keypads, buzzers and buzzer poles

Both SmartQuiz keypad types, the regular and the plus keypad, have six buttons and a fastest finger button. When a question is presented, pressing one of the buttons lights up the red transmission indicator light at the top right hand side of the keypad, meaning it is sending its choice to the wireless receiver attached to the computer which is running SmartQuiz Live While the red light on the keypad keeps lightning up, the keypad tries to send the choice made to the receiver. When the top left hand green light flashes, the

signal was successfully processed. If the transmission was unsuccessful, the red LED flashes a few times.

The SmartQuiz keypads are paired with a single receiver and each receiver has a unique serial number (so if you want to order a backup receiver, make sure to provide the serial number). SmartQuiz comes with a handy tool to *pair* a keypad to the connected receiver and to assign a number to the keypad. The *SmartQuiz Device Programmer* tool can be found in the SmartQuiz entry in the Windows Start menu, or under the *Tools* menu in SmartQuiz Studio.
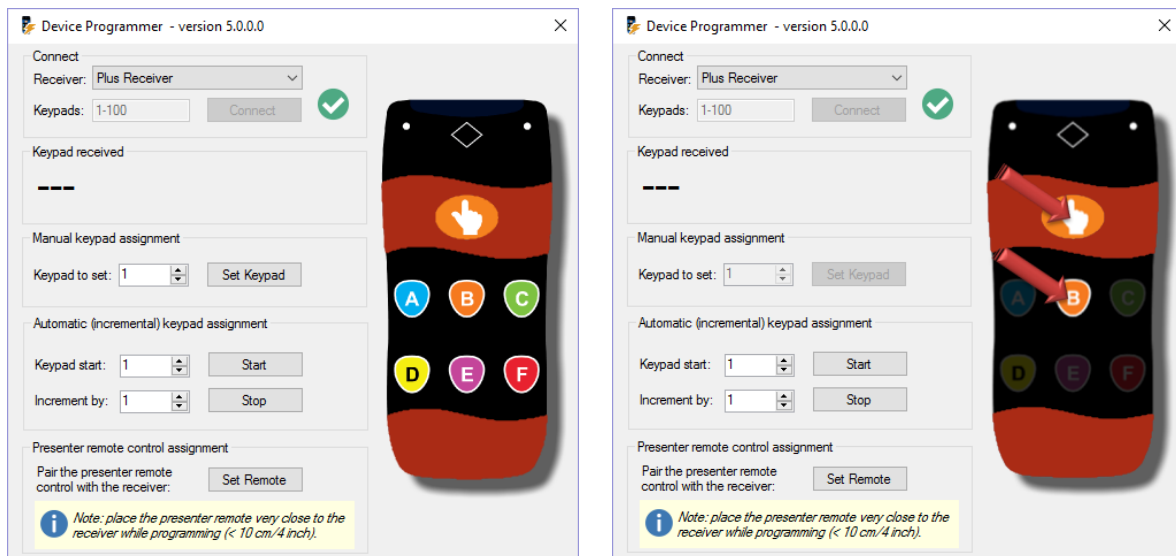
This tool allows you to program the number (id) of a single keypad or semi-automatic for whole set of keypads (you still must press the 'hand' and 'B' button on each keypad). To program a single keypad, set the required number in the 'Keypad to set' field, click on 'Set' and with 4 seconds, press both the 'hand' and 'B' buttons on the keypad (see picture on the right).

Keypads have a unique association with the receiver and first need to be paired with their receiver. When setting the id of the keypad, the keypad is also immediately paired with the connected receiver. To pair the SmartQuiz remote control, just press the 'Set' button on the programmer tool and press the *Power* and *Up* buttons on the remote at the same time.

In order to program the SmartQuiz buzzers, you must remove a battery from the buzzer, click the 'Set Buzzer' button on the programmer tool and then place back the battery while holding down the big button:
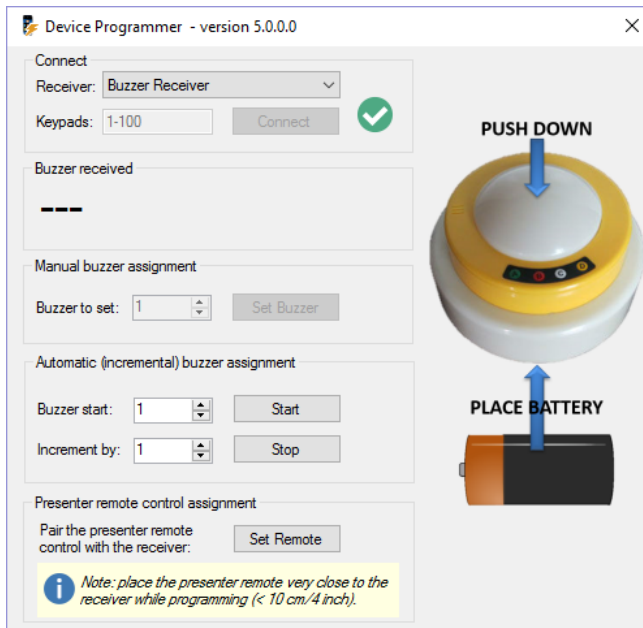
As a more convenient alternative you can also press the "B" multiple choice button together with the big button (with a newer revision of the buzzers).

The Sparkle buzzer poles as well as Luminous buzzer table can also be programmed. They use the same receiver as the SmartQuiz buzzers.

In order to program the Sparkle buzzer poles:

- Switch off the buzzer.
- Press the 'Set Buzzer button' in the SmartQuiz Device Programmer.
- Now press the buzzer button on the Sparkle and turn the Sparkle on again.
- It will now flash, indicating it is programmed to the ID indicated in the programmer application.

In order to program the Luminous quiz tables:

- Switch off the Luminous.
- Press the 'Set Buzzer button' in the SmartQuiz Device Programmer.
- Now press the small black button next to the On\Off button on the Luminous and turn the Luminous on again.
- It will now flash, indicating it is programmed to the ID indicated in the programmer tool.

5.1.2 Using the Fleetwood Reply Systems keypads

Fleetwood Reply Mini keypads have five buttons. When a question is shown, pressing one of the buttons lights up the transmission indicator light at the top of the keypad, meaning it is sending its choice to the wireless receiver attached to the computer which is running Quiz Show. When the light on the keypad turns red, this means that the response has not been received by the wireless receiver. In this case, the participant should retry to submit his or her answer. When the light becomes green, the signal is successfully processed.

5.1.3 Using the Sony Buzzers

Sony Buzz^{TM} Buzzers come in two flavors: wired and wireless. They have four colored buttons, representing multiple choice answers A (blue), B (orange), C (green) and D (yellow), and one big red button. The red button can light up.

Within Quiz Show, the multiple-choice answers have the same color as the four colored multiple-choice buttons on the buzzer.

Once a question is shown within SmartQuiz Live, the red buttons of all buzzers (except for the buzzers of players who were already dismissed from the game) light up, meaning the buzzers are awaiting input.

When a question is multiple choice (either fastest finger or voting; see chapter 5), a player needs to press one of the multiple-choice buttons to answer the question. When a question is 'open' (which implies it is always fastest finger), the red button needs to be pressed to answer.

When a question is 'fastest finger' and a player was the fastest one to press, the red light starts blinking. When the question was an 'open question', the player can tell his or her answer to the quizmaster who will judge the answer. If the question was a multiple-choice question, the player already gave his choice by pressing one of the four multiple choice buttons. In this case Quiz Show will automatically judge the answer and add/subtract points.

If the answer was wrong, countdown continues. The player who answered incorrectly cannot participate anymore in the answering of the current question. As a result, his or her buzzer will not light up until the next question is shown.

5.2 Using mobile keypads

In this chapter we will describe how to run your quiz with mobile keypads. This functionality was introduced with SmartQuiz 6 and greatly enhanced in SmartQuiz 6.5 with the new Smart Buzzer app and the possibility to run on mobile phones without requiring an internet connection using a standard Wi-Fi router.

5.2.1 Overview

In version 6 of SmartQuiz we introduced the use of mobile keypads as input device. In this first version the players navigate to a website (buzzerpad.com) to participate in a quiz running on a local computer using a PIN code to connect. The buzzerpad.com website is basically a one to one replacement of the physical keypad with 6 multiple choice buttons and a fastest finger button.

With version 6.5 we have extended the system with a more advanced solution that does not necessarily require an internet connection and offers an improved end user experience. In this new solution, the players download the SmartQuiz Smart Buzzer app that connects to a running SmartQuiz quiz on a local Wi-Fi router (no internet required) or via our game server using a PIN code. The simpler, web-based solution is also still supported for scenarios where you do not want your audience to download an app.

With this addition, SmartQuiz now supports:

	Scenario	Internet required	Wi-Fi router required	Mobile device required	Installation of mobile app required
1	Wireless RF-based keypads	No	No	No	No
2	Mobile devices on buzzerpad.com through web browser	Yes	No	Yes	No
3	Mobile device with Smart Buzzer app on local Wi-Fi	No	Yes	Yes	Yes
4	Mobile device with Smart Buzzer app on buzzerpad.com using PIN	Yes	No	Yes	Yes

All scenarios have different pros and cons and what is best to use depends on your specific needs.

Scenario	Pros	Cons
1 Wireless RF keypads	No external dependencies on the internet, Wi-Fi or mobile devices. Simple to use for players.	No extended input capabilities (only ABCDEF and fastest finger). Logistics of providing players with keypads and recollecting afterwards.
2 Browser on buzzerpad.com	No need to ask the players to install an app. For large groups of players (up to 2000). Simple to use for players	No extended input capabilities. Player experience is limited.
3 App on local Wi-Fi	Fast low latency communication. Ability to present pictures on mobile device. Support for headless mode (no central screen). Support for extended input types.	With basic infrastructure (standard Wi-Fi router) only small groups of about 50 players are supported.
4 App with full internet	Support for large groups Extended input capabilities No local Wi-Fi setup needed	More latency, no pictures on device due to bandwidth limitations

The Smart Buzzer app has some great features:

- Questions are fully presented on the mobile device including pictures and effects when using local Wi-Fi mode.
- Includes a branding designer to customize the mobile app with logos and colors
- Support for 'headless mode' to present a quiz without a central screen
- Various new types of questions:
    - Numeric questions for example to ask for the result of a formula, or a historic year
    - Full-text questions
    - First letter questions (A-Z)
- Customizable bonus points for top 3 teams that are the fastest to answer correct
- Enhanced experience for ordered questions and questions with multiple correct answers. Users can now first order the answers on their device and then send the result to SmartQuiz in one go.

- User selectable team jingles. If you configured to use Jingles by setting the Jingles folder in the settings (please refer to section 4.4), players will be shown a list of all available sound fragments. Each player can choose a jingle that will be used during the game in the following situations:

    - Bonus points - the sound of the player who was first to give the correct answer is played when the bonus points screen is shown

    - Fastest finger – The sound of the player who pressed first is played, along with the player name appearing onscreen in the quiz player.

    - Intermediate score overviews – The sound of the player who is ranked first is played when showing the leaderboard.

- Enhanced remote control functionality including a new question details view, a sound pad for the presenter to play customizable sound fragments

Some examples of supported scenarios are:

- A DJ presenting a quiz in a local pub that has no 4G coverage. The visitors download the app once and connect to a local Wi-Fi router to play along. The pub has no TV set so the host uses headless mode. The DJ has branded the app to match his own company style using the SmartQuiz branding designer.
- A large event company presenting a quiz for a big group. The company does not want the audience to install an app, so they use buzzerpad.com and a PIN code to have people participate. The quiz is presented on a huge screen showing videos, sound and pictures
- An event company streaming a quiz over the internet to thousands of players using a PIN code on server mode. The company sold tickets to the players beforehand. The tickets are validated when the player connect to the game.

As discussed before, there are several different possibilities with the system addressing different scenarios.

Server mode

When using the system in server mode, you need a <u>reliable internet connection</u> with decent speed. The data traffic is not very high for SmartQuiz compared to for example a video stream, but an unreliable connection or severe speed drops will have major impact on the system and the overall experience. Of course, when streaming your quiz to the internet at the same time there may be additional requirements for the video stream. It is always advisable to connect your computer to your router using a cable for a more constant and reliable connection. There are two ways your audience can participate in your quiz; using the buzzerpad.com website or by using the Smart Buzzer app. See the next chapters for details. In chapter 4.2 you can read all about how to configure the system for server mode in Quiz Setup.

Stand-alone Wi-Fi mode

In a standalone Wi-Fi setup, you connect your laptop to your router using a network cable. The router acts as a local Wi-Fi access point for the mobile devices of your players, your device running the remote-control app and your laptop. See below for a picture of such a setup:

The laptop will get an IP address from the local router and does not need any internet connection. A standard (decent) router will support up to ~50 players. Special routers can probably handle more connections. Please consult a local network/router expert to find out how to support more than 50 players. The phones/tablets must connect to the same router and when launching the Smart Buzzer app, the JOIN WI-FI GAME will be enabled when the device finds the running quiz.

Note that there are various virus scanner packages that have very strict firewalls integrated and these firewalls need special setup to allow network traffic for SmartQuiz. To add and exception for

SmartQuiz, allow all traffic for the program *qxserver.exe*, found in the SmartQuiz installation folder. This is not needed for the standard Windows firewall.

5.2.3   Using the web based mobile keypad

The web-based keypad can be used for situations where you do have internet available and you do not want your players to download the Smart Buzzer app first. Players can simply join the quiz with a standard web browser taking the following steps:

- Navigate to the server you have configured in Quiz Setup, for example www.buzzerpad.com
- Enter the 5-digit PIN that is shown on screen in SmartQuiz Live!
- Enter a unique name
- Press GO

Same screens from the website:
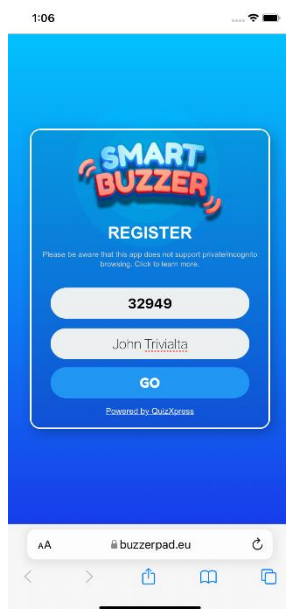
| Buzzerpad login screen | Web keypad | Numeric question |
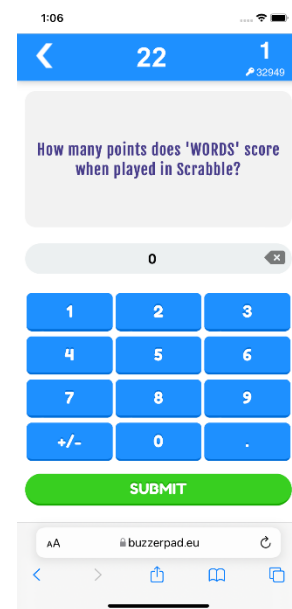
On the top right side of the keypad, the ID of the keypad is shown. Below the ID the PIN code of the quiz is shown.

Currently two servers are available: one in Western Europe (buzzerpad.eu) and one in Central US (buzzerpad.com). It is advised to use the server nearest to your location/time zone for speed and server maintenance windows. You can configure the server to use in Quiz Setup.

Note: we offer a service to host the app on your private custom domain with your own company's branding. Please contact us for details.

5.2.4   Using the SmartQuiz mobile apps

SmartQuiz Mobile has two apps, both available for Android and iOS.

SmartQuiz Smart Buzzer

This is the app used by the players of the quiz. Before launching your first quiz, please instruct your players to download the free SmartQuiz Smart buzzer app from your favourite App Store. Just search for *SmartQuiz Smart Buzzer*, install and they are good to go.

SmartQuiz Director app

For the host\presenter of the quiz, we have a separate app available called *SmartQuiz Director*. This app allows the host to control the quiz (show next question, reveal answer, show intermediate scores or charts), manage teams (change scores or team names), start mini games, play sounds through a soundboard and do many other things!

The following sections will describe the apps in more detail.

5.2.4.1   SmartQuiz Smart Buzzer app

When starting the app, players see the option to join a game by local Wi-Fi or by pin.

When running the game with a Wi-Fi router connected to the computer, the 'JOIN WI-FI GAME' button lights up. Pressing the button will connect the mobile to the game.

When playing without a Wi-Fi router and hence connecting remotely/through the internet, the quiz player will show a pin code onscreen. The players can enter this pin code by pressing 'JOIN GAME VIA PIN' which takes them to the next screen where they can enter the PIN followed by clicking 'LOGIN WITH PIN'.

Once logged in, the welcome screen as configured in the Branding section of the settings is displayed (please refer to section 4.2).
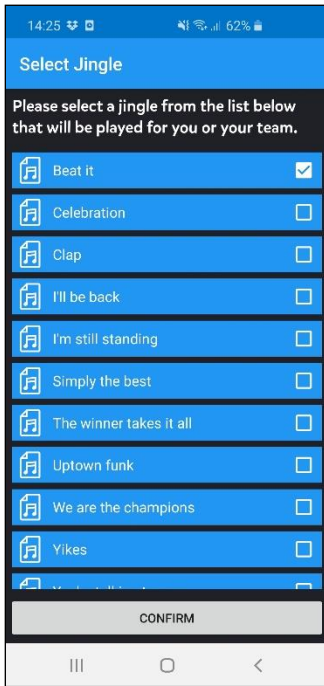
If you configured to use Jingles by setting the Jingles folder in the settings players will be shown a list of all available sound fragments. Each player can choose a jingle that will be used during the game in the following situations:

• Bonus points - the sound of the player who was first to give the correct answer is played when the bonus points screen is shown

• Fastest finger – The sound of the player who pressed first is played, along with the player name appearing onscreen in the quiz player.

• Intermediate score overviews – The sound of the player who is ranked first is played when showing the leaderboard.

On the left you see an example of a 'first letter' type question.

You see several elements onscreen:
• On the top left you see the number that has been assigned to your mobile buzzer.
• The top right displays your player name
• The orange bar contains:
   • The index of the current question (in this case first question out of 21)
   • A trophy with the number of points that can be won. If points go down over time, this will be reflected here. This is an approximate
   • A clock counting down, displaying the number of seconds left. The last 5 seconds the clock will blink to show time is running out
• The letter grid used to answer the question

As a quiz master you can always trigger the jingle selection manually for a specific device on the Mobile tab in Director.

SmartQuiz Smart Buzzer supports a range of different question types:

Fastest finger
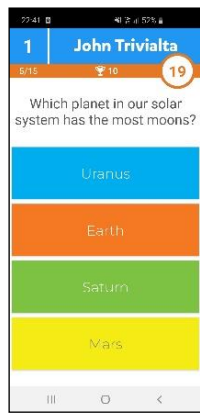
Multiple Choice regular/ordered/ multiple answer/eliminator
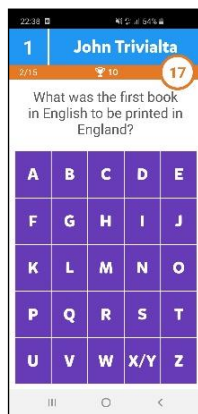
First Letter
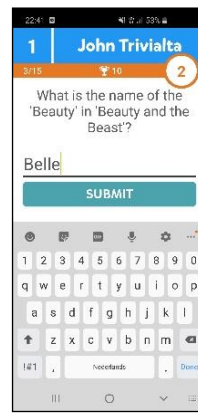
Full tekst
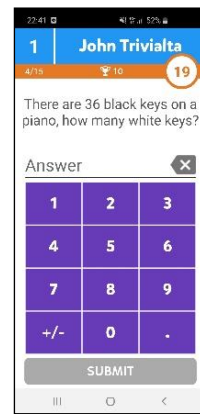
Numeric
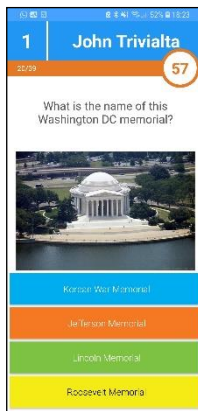
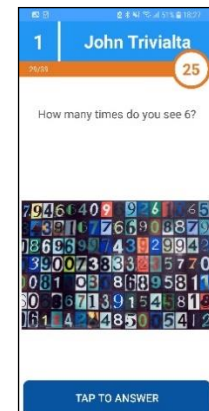*Multiple Choice with picture*

Multiple Choice with picture effect

Fastest finger with picture
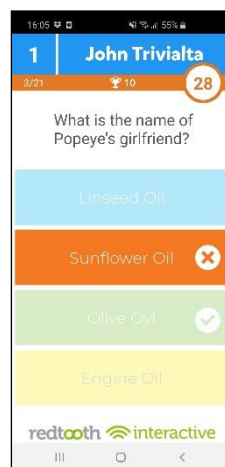

Multiple Choice pictures regular/ordered/ multiple answer

Numeric/First letter with picture

The Smart buzzer gives feedback each question on whether you were right or wrong and whether you received any bonus points:

Correct answer

Incorrect answer

Incorrect answer letter

Bonus points animation
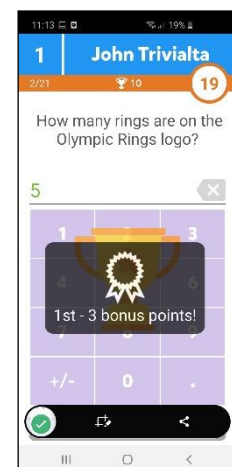
Bonus points won

Scores are shown on the phone too. The final scores are shown in two or three steps: first an announcement, then your top 3 ranking (if you're in the top 3) and finally your individual score and rank.

| Intermediate scores | Announcing the final scores | Individual final score top 3 | Individual score, rank and top 3 |
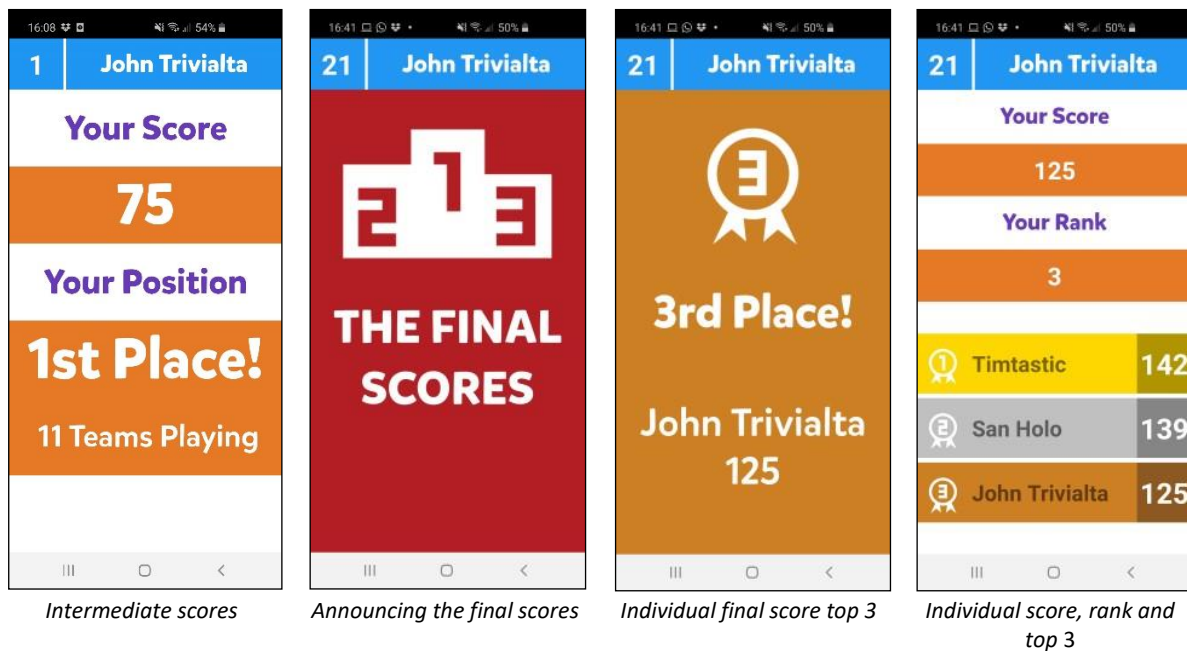
Using the app is mandatory if you intend to run over standalone Wi-Fi or if you intend to use any of the extended question types such as first letter, numeric etc. The app has some advanced features like the ability to run get-the-picture effects on the device, play animations, show intermediate scores etc. For bandwidth reasons pictures are only send to the app when running over local, standalone Wi-Fi. When using server mode with a PIN code, a textual representation is sent to the app for the pictures and effects are not shown on the device.

5.2.4.2 Promotions

The Smart Buzzer app supports displaying 'promotional' images during the quiz or during a break. The images can be sent from the SmartQuiz Director *Media Player* screen. Your image first needs to be added to the list of available media. To present the image on the Smart Buzzer app, select the image from the list and click *Show on Mobile* from the toolbar.
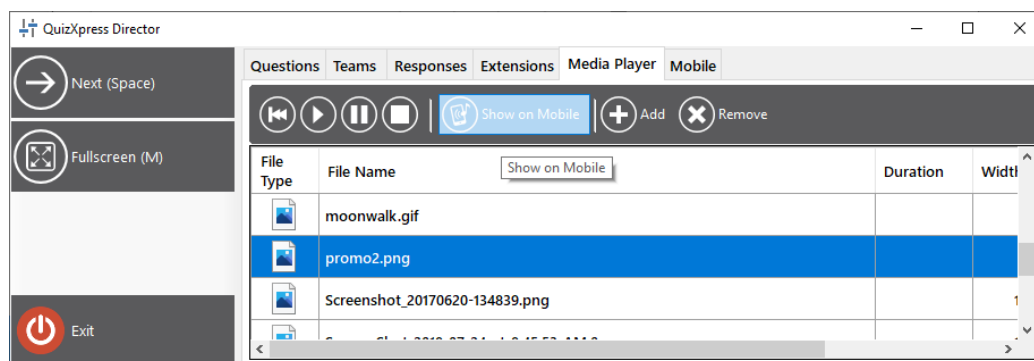
5.2.4.3   Thumbs Up/Thumbs Down

With this game mode, players can earn extra points by giving their vote about the correctness of a verbally given answer for an open question by another player. This is applicable for situations where direct interaction with the players is possible (so not for a streaming setup). It works as follows:

- A fastest finger question is presented to the players. Buzzers appear on all the Smart Buzzer apps
- One player thinks to know the answer and hits the buzzer, all others are locked out
- On the Director screen or app, a right/wrong judgment popup appears with *Thumbs Down/Poll/Thumbs Up* buttons
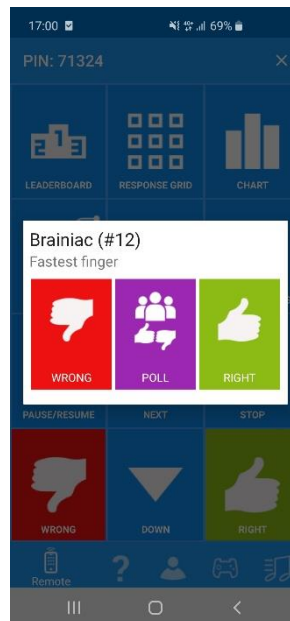
- The quizmaster engages with the player to hear the verbal answer and can now either judge the answer right or wrong, or poll the rest of the players to see whether *they* think the given answer was right or wrong, by tapping the *Poll* button on the Director app.
- On the other player devices, a Thumbs Up/Thumbs Down poll popup appears for 10 seconds and the players can give their vote (or abstain in which there is no risk to lose points).

- The quizmaster now judges the question that was given by the fastest finger player by tapping the 'Right' or 'Wrong' button on the Director app. As a result the fastest presser wins or loses points (depending on the settings of the question). The other players win or lose 50% of the question points depending on whether they were correct in their judgment of the answer given by the fastest presser.

This new mode keeps all players engaged in a fastest finger round as not only the single fastest player can win points but there is a chance to win points for everyone participating.

5.2.4.4 Remote control app

To control the quiz from your tablet or phone, you can use the SmartQuiz Director remote control app for iOS and Android. After installation and start-up of the app, you will see the following screen:
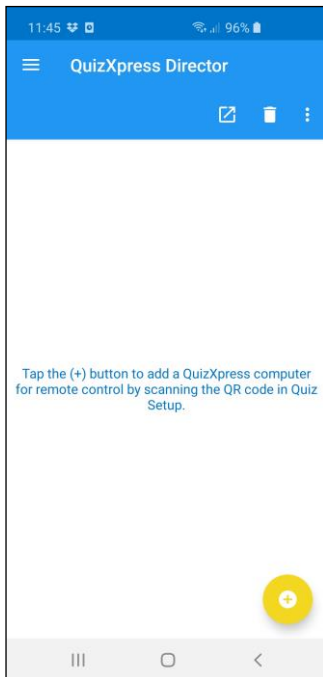
You can register the computer that you want to control by the SmartQuiz Director remote by pressing the yellow 'plus' button in the lower right hand side of your mobile screen.
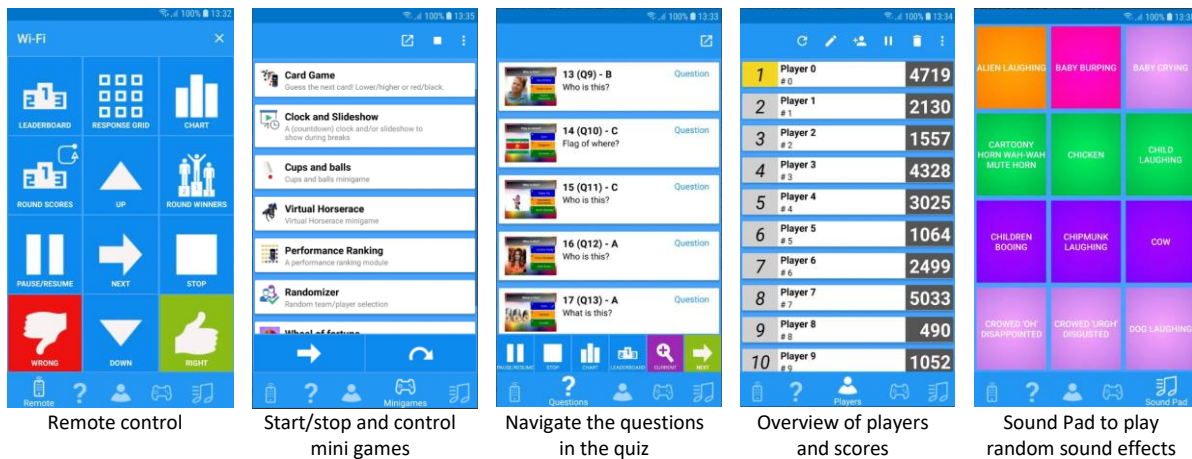
Once you press the button, a QR code scanner will be show. The QR code that you need to scan is displayed on the Mobile tab in SmartQuiz Setup (please refer to section 4.2). Scan the code displayed here and the computer name will be shown in the SmartQuiz Director app. You only have to follow this procedure once to register your computer in the app.

After starting a quiz, select the computer that you want to control in the list and click on ⬀ now the mobile remote app will be connected to the quiz session.

Note: Please make sure that the server selected in the SmartQuiz Director app is the same as the server selected in SmartQuiz Setup. Click the menu ☰ button on the top left of the app. Click 'Settings' and check the 'Mobile server to connect to' setting. This setting should match the setting as set in SmartQuiz Setup (please refer to section 4.2 about information how to set the server (or local Wi-Fi) used by the quiz player).

Mobile server to connect to	Settings server
Central US	www.buzzerpad.com
Western Europe	www.buzzerpad.eu
Local WiFi	Local Wi-Fi

After connecting to the running quiz, you will see the SmartQuiz Director app which has 5 tabs:

| Remote control | Start/stop and control mini games | Navigate the questions in the quiz | Overview of players and scores | Sound Pad to play random sound effects |

The remote-control tab allows you to control the quiz. The following buttons are available:

- Leaderboard – shows the current ranking. The top 22 is shown initially. Pressing the Up and Down buttons scrolls through the scores
- Response Grid – shows a grid indicating for each player if the player was right/wrong or did not answer for the current multiple choice question
- Chart – shows a chart with the number of votes for each answer
- Round Scores – shows the scores for the current round
- Round Winners – shows the winner for each round
- Pause/Resume – pauses / resumes countdown
- Stop – ends the current question when the clock is paused
- Up/Down – scrolls the ranking up / down when there are more than 22 players
- Next – go to the next slide/ to the next step of a mini game / go to next step of end of question actions (for end of question actions please refer to section 4.7)
- Right/Wrong – judge the answer that was verbally given to a fastest finger question.

1. The mini games tab allows you to start mini games on the fly. Select a mini game and press the ⬀ button. Advance through the mini game by clicking the arrow key.
2. The questions tab shows all questions, correct answers, notes and a thumbnail of the slides. On the bottom toolbar the following buttons are available:
   - **Pause** button - pause and resume countdown
   - **Stop** button - ends a question when the timer is paused.
   - **Chart** button – shows a response chart for the current question
   - **Leaderboard** button – shows the current intermediate scores
   - **Current/List** toggle button – toggles between the details of the current question/list of all questions
   - **Next** (arrow) button - advance to the next slide

Slides that have been visited are colored yellow, the current question is colored in green.

After each 'everyone answers' question the remote control app will show the number of players that answered correctly (in green), the number of players that answered incorrectly (in red) and the number of players that did not respond at all (in blue).
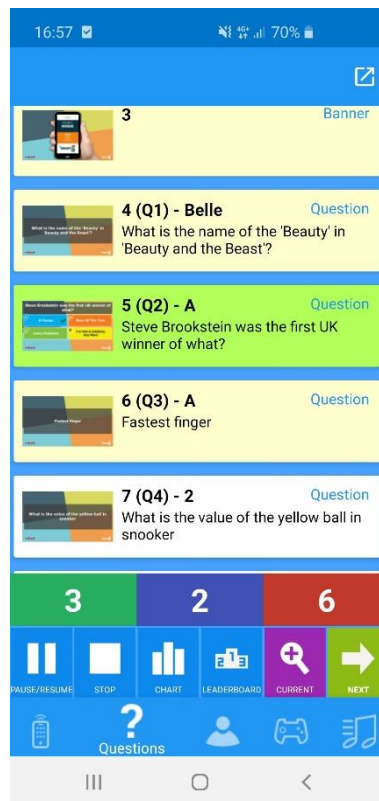
3. The players tab shows all players and their scores. The following buttons are available at the top:
    - Refresh the page
    - Edit a player - change name, score, keypad number (in case of a physical keypad)
    - Add a player - name, score, keypad number (in case of a physical keypad)
    - Disable a player
    - Delete a player
4. The Sound Pad tab allows you to play up to 12 different sound effects in the quiz player. The sound effects are loaded from a user defined folder that you can configure in SmartQuiz Setup (please refer to section 4.4 for more information).

5.2.5   Making money by selling tickets

You can use electronic tickets with the Smart Buzzer app and the buzzerpad website to generate revenue when hosting (online) quizzes. Selling the digital tickets to your audience is however your own concern. There are several CMS web shop plugins that allow you to sell tickets on your web shop or you can use online ticket platforms such as https://www.tickettailor.com/. For SmartQuiz, all you need is a simple plain text file with all the ticket codes (one ticket per line, case insensitive). This text file should be named *tickets.txt* and must be stored in the same folder as your quiz. When you launch your quiz, the tickets will be sent to the server and when a player connects to your quiz, he/she is prompted for a ticket code that must match a line in *tickets.txt*. Each ticket can only be used once at a time so people cannot share tickets. You can refresh the tickets even while the quiz is

running. For this open the Director screen on your PC, activate the Mobile tab and locate the 'Refresh Tickets' button. Make sure you have saved a new version of *tickets.txt* and click the button to upload the latest updates,

5.3   Testing with Virtual Keypads

The Virtual Keypad is useful to test your quiz without any external dependencies. It is a software keypad that runs on the same machine as your quiz. You can launch a new Virtual Keypad (VK) either from the External Tools dropdown in Studio or from the Windows Start menu, in the SmartQuiz section. Once a virtual keypad instance is running it will start trying to connect to SmartQuiz Live. Until it has not succeeded, the keypad buttons are grayed out.

| Connecting | Connected | Virtual Keypad Context menu |
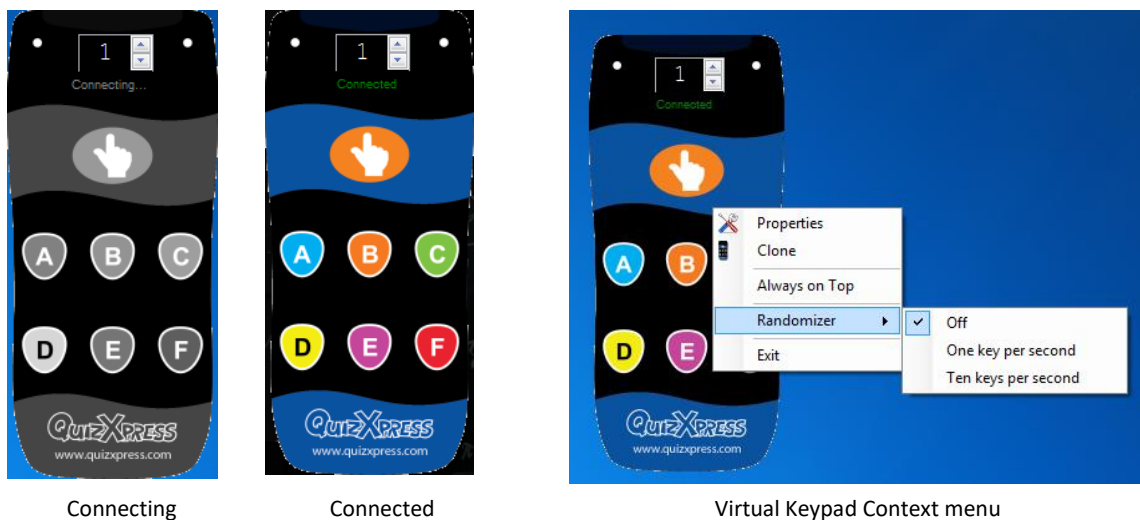
Once connected you can change the keypad number on the fly with the spinner. To access the context menu, right click the keypad screen. The context menu offers the following commands:

Menu	Description
Properties	Opens the Properties dialog where you can see the server IP address and port being used
Clone	Clone a new instance. The keypad ID will increment
Always on Top	Ensures that the keypad is in front of all other applications
Randomizer	Enable/disable a mode where the keypad sends random input for easy testing
Exit	Close the Virtual Keypad

## 5.4   Starting a quiz

There are three ways to run your quiz:

1) Start your quiz from within SmartQuiz Studio (ribbon QUIZ SHOW -> Run Production)
2) Start SmartQuiz Live by right-clicking the quiz file in Windows Explorer (files with the extension *.qx*) and selecting 'Play' from the menu.
3) Click on the SmartQuiz Live icon in the start menu, after which you will be asked to select a quiz file to load.

Within SmartQuiz Live there are several screens that are described in the following chapters.

5.4.1   The launch checker

Before your show starts, SmartQuiz Live checks against several conditions such as whether the external videos in the quiz are still available, if various directories are accessible, if all custom sound files can be found etc. This prevents surprises during the quiz.

When issues are found, the following window appears (actual warning messages may differ):
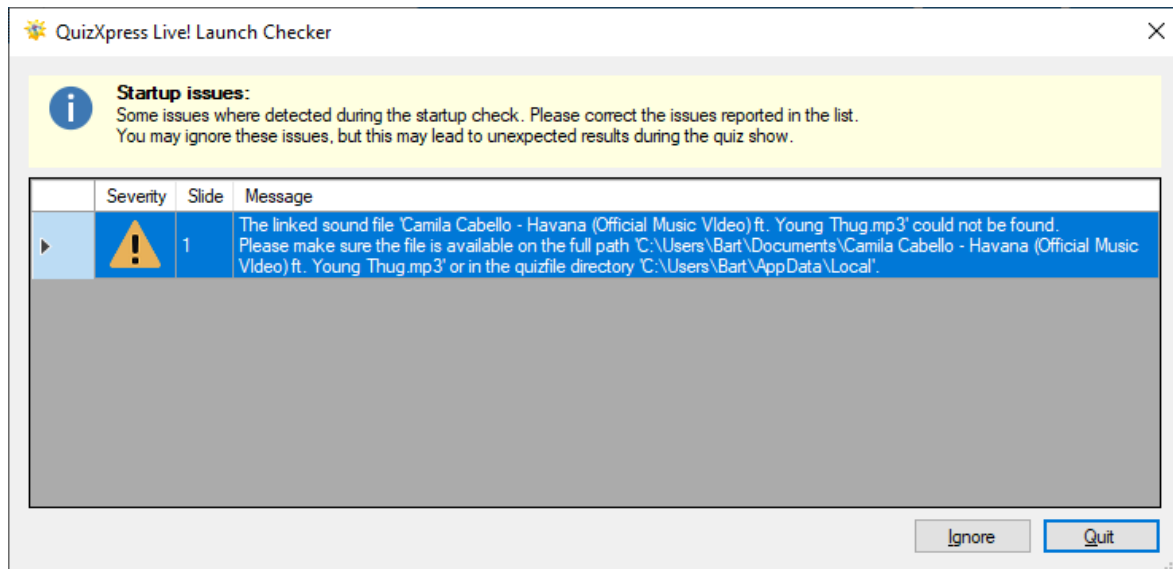
It is up to you to decide whether you want to continue to run the quiz (by clicking 'Ignore') or to stop and fix the issues (by clicking 'Quit'). Continue to run the show while there are warnings or errors may result in problems or unexpected behavior during the quiz show.

5.4.2   The 'Welcome' screen

When the application starts, the first screen you will see is the welcome screen. Below you can see a screenshot of the welcome screen. Various elements on the welcome screen can be customized by using Quiz Setup. The elements which can be customized are visually marked in the screenshot.

1. A header text

2. A logo shown next to the header text

3. The introduction movie/picture shown.

4. The pictures shown in the slideshow

5. A footer text (not if you set a footer text, the text will be show on a blue strip)

To advance to the next screen (buzzer registration screen) press the button at the bottom right of the screen or press the spacebar on the keyboard.

Note: If you see a blinking buzzer/keypad icon at the right bottom of the screen, this means the system did not find the wireless receiver. In this case check if the hardware is connected properly and the buzzer configuration is set correctly in Quiz Setup.

5.4.3   The keypad/buzzer registration screen

The purpose of the registration screen is to find out which buzzers/keypads are participating in the quiz event. By explicitly registering this, the software knows how many devices are present. There are three different 'flavors' of buzzer assignment screens:

- Sony Buzzer Assignment screen

- Buzzer Assignment screen for less than 100 participants

- Buzzer Assignment screen for more than 100 teams

5.4.3.1   *Sony Buzzer Assignment Screen*

When using Sony buzzers, names can be entered in the Quiz Setup program for each participant/ team. As a Sony buzzer does not have an explicit identifier, it is not possible to link a team name to a specific buzzer when defining the team names in Quiz Setup. The Buzzer Assignment screen does exactly this. It shows the team names one by one. When a team sees its name appearing on front of

the 'Buzzer Assignment Carrousel' the buzzer should be pressed in order to register for participation in the quiz. Below you can see a screenshot of the Sony Buzzer Assignment screen.

At the bottom you see two buttons: the left one (the round arrow) resets the data so that the buzzer assignment starts over again. The rightmost button is the 'start' button, which starts the quiz.

5.4.3.2   Buzzer Assignment Screen, less than 100 participants

Each Reply/SmartQuiz keypad has a unique identifier, which is also used in the SmartQuiz Live software to identify a participant (for example, buzzer with id 1: Team 1). When less than 100 buzzers take part in the quiz (which is identified by looking at the setting 'Keypads' which has been entered in Quiz Setup), a grid is shown with all buzzer identifiers.

When a keypad key is pressed, it is registered as active in the SmartQuiz Live system. A tick mark appears in the grid at the number corresponding with the id of the buzzer pressed.

Please note that, strictly seen it would not be required for the buzzers to explicitly sign in. However, the SmartQuiz Live software needs to know exactly how many teams are participating in order to know when all teams have answered a question and the countdown can stop.

The button displayed at the bottom of the screen is the 'start' button, which starts the quiz. Below you can see two screenshots, one showing the screen before anyone has signed in, and one showing the state of the screen once everybody has signed in.
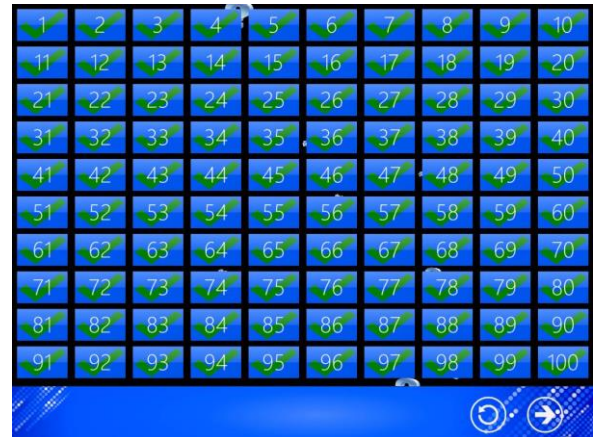
Note: for 'testing' purposes it is possible to assign all 100 buzzers in one go by pressing F1 or all configured buzzers (in Quiz Setup) with F2.

5.4.3.3 Buzzer Assignment Screen, more than 100 participants

When exceeding the number of 100 buzzers, using a grid would become increasingly difficult to read. This is why SmartQuiz Live uses another Buzzer Assignment Screen when more than 100 buzzers are used. Please see below for a screenshot of the screen.

The button displayed at the bottom of the screen is the 'start' button, which starts the quiz.

Note: no buzzer assignment screen is shown when using Keyboard or Game port type buzzers, as these systems have a fixed assignment.

5.4.4   The countdown screen

After the keypad registration screen, a countdown video is shown to build some suspense. If you do not want to see this video before the quiz starts, please uncheck the 'Show 3-2-1 Quiz countdown screen' on the 'Screens' page of Quiz Setup. You can end the screen by pressing the spacebar during the video.

5.4.5   The quiz screen: voting (everybody answers)

After the countdown video (which can be turned off and/or replaced with your own video in Quiz Setup) the quiz screen appears. As you can see from the screenshot below there are some areas that need specific attention, which are all part of what we call the 'Information Panel':

1. The countdown timer. This timer counts down from the time indicated when creating the quiz in SmartQuiz Live until zero. Below the time you can see an indication of the position of the question in the quiz in the format <question number/total number of questions>

2. The teams (participants) that pressed their keypad. This indicator has three stages; first it shows a grid of squares that indicate from which keypad a response was received to give an overall indication. When there are only a few keypads left, it shows the individual numbers of the keypad. If there are even fewer keypads left it shows the names of the players as set in Quiz Setup. This helps the quizmaster identifying those last players to give their response.

3. The total number of players that already provided an answer

4. The number of points to be gained by answering the question correctly. Note that points may decrease over time depending on the settings for the slide as set in Studio.
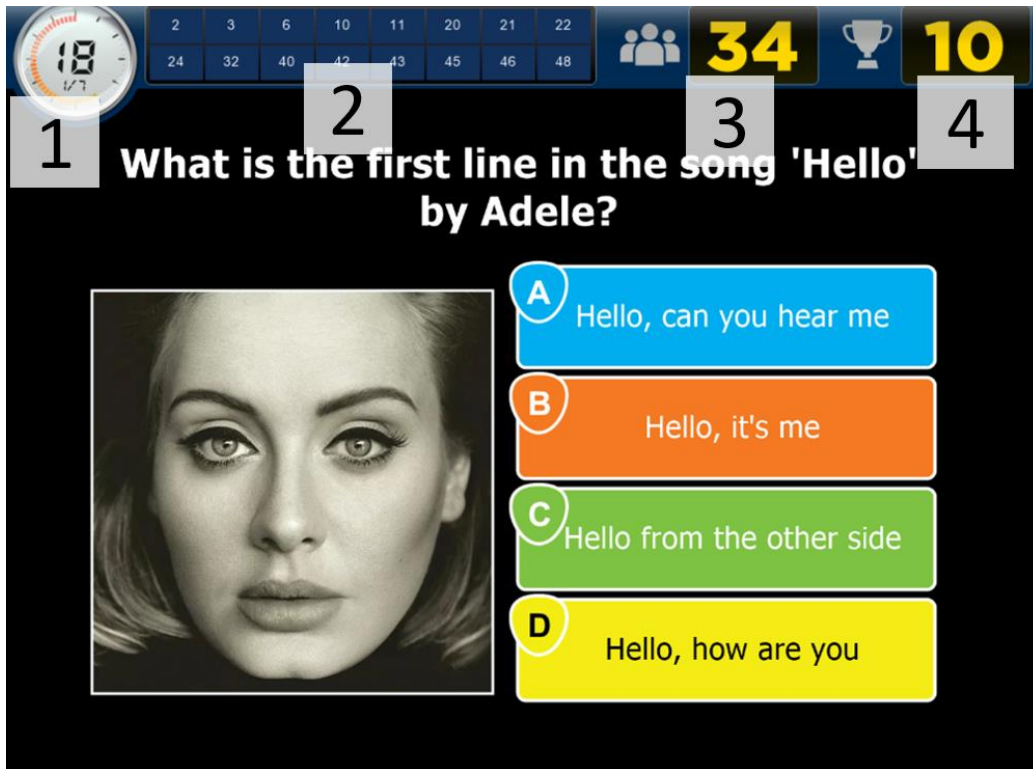
When every team has given their choice, the system judges all answers and adds or subtracts points to the scores. Also, at the top of the quiz screen, a chart is shown, showing:

- Number of teams that answered correctly

- Number of teams that answered incorrectly

- Number of teams that did not answer at all
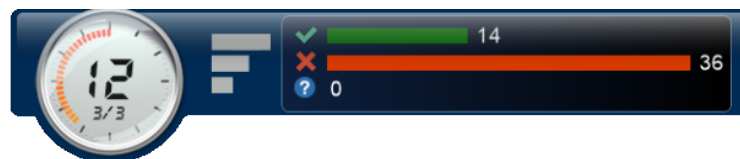
When you use Sony Buzzers, SmartQuiz Live processes a voting quiz slide slightly different. Instead of having a counter on top of the screen that counts the number of teams that answered so far, for each team that answers, a shutter pops up with its team name and avatar. After everyone has pressed (or countdown has reached zero), SmartQuiz Live shows all answers chosen, judges all answers, and shows the total scores of all teams. A visual representation of this sequence is displayed below.

1 Teams choose an answer

2 All teams voted, answers are shown

3 Answers are judged
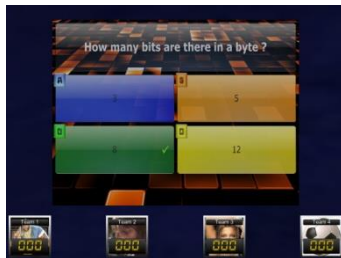
4 Current scores are shown

5 Points gained/lost are shown
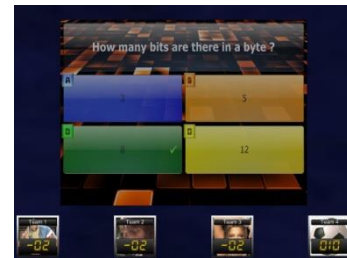
6 New score is shown

Voting is one of the possible modes for a quiz slide. There are other possible variations, which will be described below.

5.4.5.1 Fastest Finger/ Lock-out

In the previous section we discussed the screen for a 'voting' question, which means that everyone can answer the question. With a fastest finger question, only the first one to press his or her buzzer can answer the question. If he or she answers the question incorrectly, points will be deducted from the participant's score after which the countdown continues. Subsequently, the other players get a chance to press their buzzer (the player who answered incorrectly can no longer answer the current question).

On the next page you see a picture of a typical fastest finger screen. The most important difference in comparison with a voting screen is that in this screen there is a big bar at the bottom with the team name from the team (or person) that first pressed their buzzer. This bar also shows the answer that was given, the team's avatar, as well as the points gained/lost. In this case team 17 gave the right answer, by which they earn 10 points. The big green checkmark indicates the question was answered correctly. In this example, the correct answer was set to Answer-'D' in SmartQuiz Studio, and the 'autojudge' (judge question automatically in the menu ribbon bar) option of the Quiz slide was set to true. In this case, SmartQuiz automatically judges the answer when a multiple-choice button is pressed on a buzzer. When a buzzer does not have a multiple-choice button (for example the Sparkle poles), the 'auto judge' option automatically does not apply. In that case the team\player needs to answer verbally after which the quizmaster should judge the answer by using his remote, the keyboard of the computer or SmartQuiz Director. You can read more about quizmaster commands in section 5.5.

The fact that 'team 17' pressed first can be verified by looking at the 'Information Panel' at the top of the screen. This panel shows the time of each team that buzzed in different boxes. Each box contains the name of a team that pressed their buzzer together with the timestamp at which they pressed, ordered from left to right, starting with the fastest team.
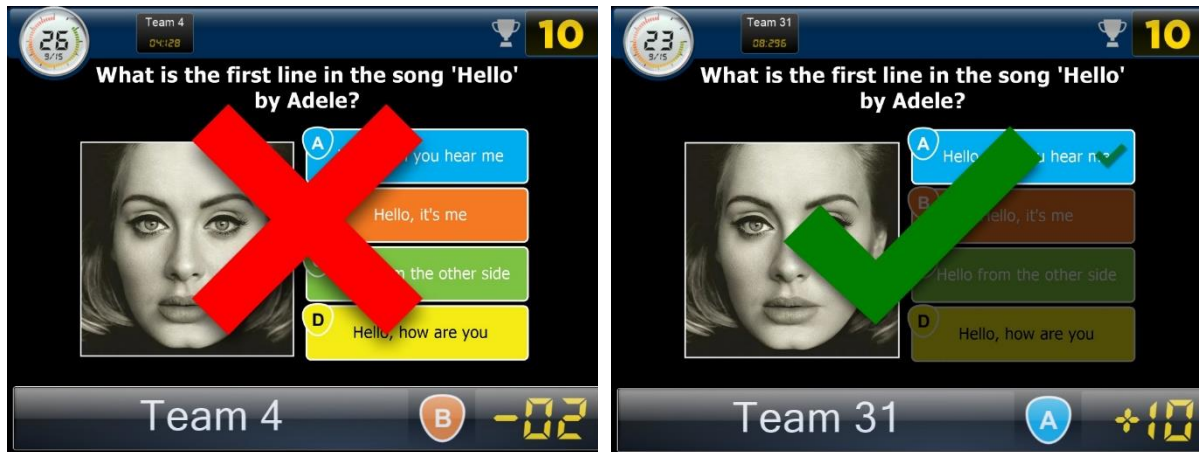
Note that the Information Panel at the top shows the number of points to be gained (which can diminish over time as explained earlier). Also, there is no indicator of the number of teams that answered, as this is not applicable for a fastest finger question.

Note: When you use the SmartQuiz buzzers (which have both ABCD multiple choice buttons as well as a big buzzer button) for multiple choice questions, please note these two different options:

- *When 'auto judge' is 'true' in the properties window (Menu ribbon bar equivalent: Judge question is set to 'Automatically' in the menu ribbon bar), participants need to use the ABCD buttons on the buzzer. SmartQuiz now automatically judges the answer given.*

- *When 'auto judge' is 'false' in the properties window (Menu ribbon bar equivalent: 'Judge question' is set to 'Manual'), participants need to use the big buzzer button to buzz in. The player who pressed fastest now verbally gives the answer and the quizmaster judges the answer.*

5.4.5.2 Billboard

A Billboard quiz slide is a quiz slide with which no interaction from players is possible. It is just a static display. You can design a billboard quiz slide just like you design a normal question, making use of texts, colors, pictures, sounds and videos.

Useful applications of a billboard are:

- Round indication
- Show the question (as a preview) before a voting quiz slide
- Show marketing information in the form of pictures, sounds or videos

5.4.5.3 End of Round

Within SmartQuiz you can indicate that a quiz slide marks the 'end of a round'. You do this by setting a quiz slides type to 'End of Round' in SmartQuiz Studio.

When an end of round slide is shown during a quiz show, no interaction with the participants takes place. For example, you can use it to show a text 'End of Round 3'. Again, you can design the quiz slide anyway you want, containing video, sound and pictures.

When setting a slide to 'end of round', there is another option, called **'end of round action'**, that can be set. It has two possible values:

- Disable one player: this automatically dismisses the player with the least amount of points. If there are multiple players at the bottom of the intermediate score list with the same amount of points, the quizmaster gets to select the player which will be dismissed. This can be done by using the arrow keys of the keyboard or the quizmaster remote control. The selected player/team is highlighted with a blinking red light. Pressing space on the keyboard or pressing the bottom button on the quizmaster's remote dismisses the selected player. Which player will be dismissed in case there are multiple team with the same score is without the scope of SmartQuiz Live: a quizmaster could for example ask an estimation question; the player whose answer is furthest away from the correct one can be dismissed.

- Manual dismiss players: the quizmaster can select any number of players that will be dismissed. He/she does this 1 by 1, again by selecting them with the keyboard or the quizmaster remote. An example of an 'end of round, quizmaster selects losers' quiz slide is shown above. The 'play' button at the bottom of the screen is used to indicate the quizmaster has finished dismissing players. After pressing this (select it by using the keyboard and press space), the quiz will continue. The button with the rotating arrow is used to undo the dismissal process when the quizmaster dismisses someone by mistake. After it has been pressed, the quizmaster can restart dismissing users.
- Automatically dismiss players: there is no visual feedback to the audience for this option where the system will automatically disable a certain number of players (as configured for the slide in Studio)

Show scoreboard/Show round scores; the system will show the leaderboard either for the entire quiz or for the current round. A round is defined as the set of slides between:

- The first slide in quiz and the first *End of Round* slide (round 1)
- Two *End of Round* slides
- The slide following the last *End of Round* slide and the last slide of the quiz

Below you can find an example of a quiz with three rounds.
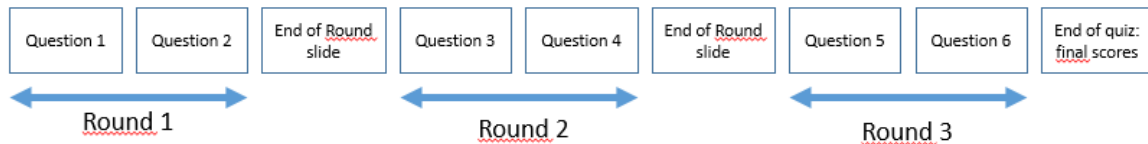
An 'End of Round' slide can also be used for 'Last man standing' rounds. When questions of type 'Last man standing' are used, players that are wrong are dismissed from the quiz, they can no longer play along. When an 'End of Round' slide is shown, all players that are out of the game because of 'Last man standing' questions can again play along.

Note: Players\Teams can also be activated\deactivated from SmartQuiz Director. In SmartQuiz Director, you can also add new players during a quiz or modify the points of a team. See section 5.7for more information about SmartQuiz Director.

5.4.5.4   Test Question
A 'Test Question' quiz slide behaves just like a normal quiz slide, except that no points are added/subtracted when the question has been answered. It can be used to demonstrate the workings of the system and is often used as the first question in a quiz to get the players acquainted with the system.

5.4.5.5   Demographic
The quiz slide type 'Demographic' enables you to divide all players into different groups competing against each other (examples of these kinds of quizzes include 'battle of the sexes', 'marketing versus finance', etcetera).

In order to use this functionality, set the type of a quiz slide to 'Demographic' in SmartQuiz Studio. Now an entry field appears in the property grid called 'Demographic group'. Here you can enter a demographic group name (e.g. 'Males'). For the quiz slide layout, you must select a layout which contains a question and no answers. Enter a question text that indicates to the players of the quiz that a certain group of people must press their buzzer to become member of a specific group (e.g.: 'Please press your buzzer if you are a male').

Note: Alternatively, you can divide the audience in groups before a quiz starts in SmartQuiz Setup. Here you can define which keypads belong to which group. For more information please refer to section 4.3.2.1

5.4.5.6   Last Man Standing
A quiz slide of type 'Last Man Standing' dismisses player(s) that answer a question incorrectly from the quiz round. If the dismissal results in 1 remaining player, this player is the winner of that round and the quiz advances to the first end-of-round slide it encounters, or to the end of the quiz. If all remaining players answer a question incorrectly however, none is dismissed.

5.4.5.7   Audience response questions
This is a type of question that can be used to collect some arbitrary data/statistics from your audience. The answers given to an audience response type question are recorded but have no impact

on the scores. After an audience response question, you can show a chart with the 'C' key to display the distribution of the answers given.
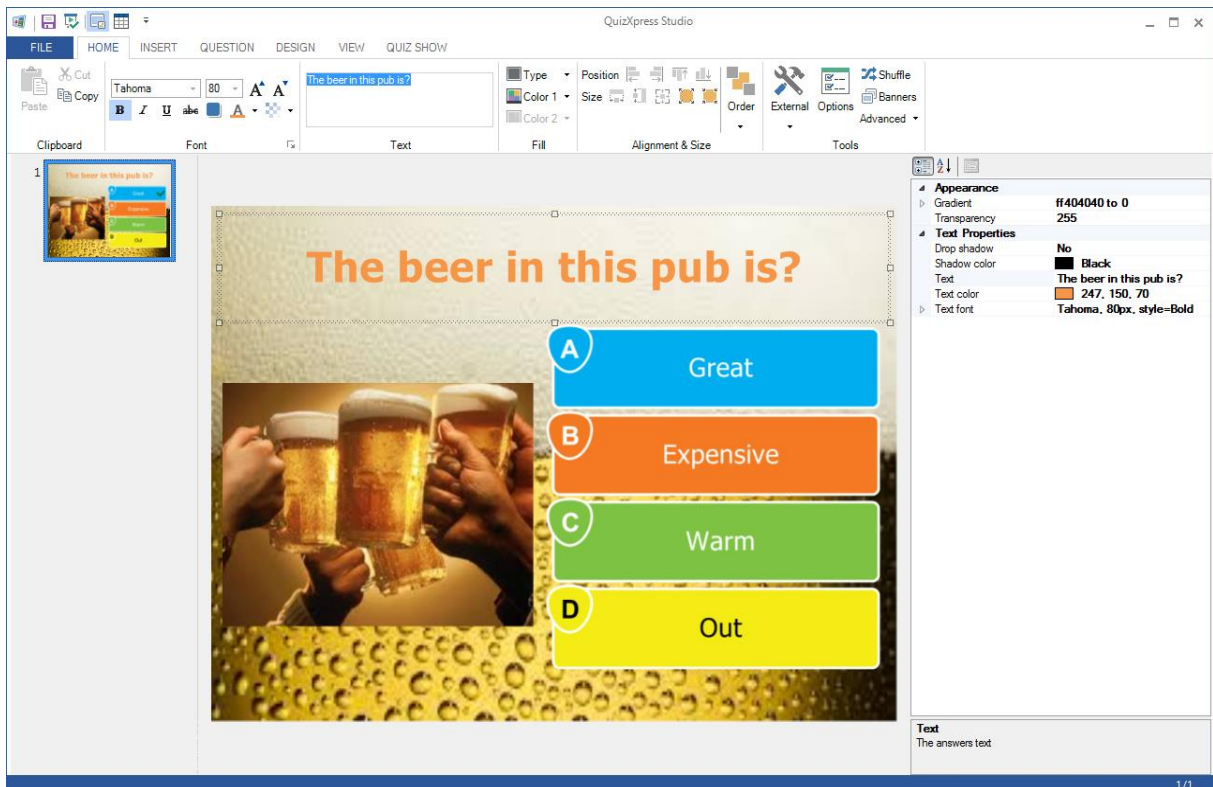
5.4.5.8   Wager question

Wager questions can be used to have the audience place a bet on the outcome of the next question. They allow you to create 'Jeopardy style questions' where people gamble with points based on how much they think to know about a subject.

When setting a quiz slide to type wager. It looks as follows in SmartQuiz Studio:
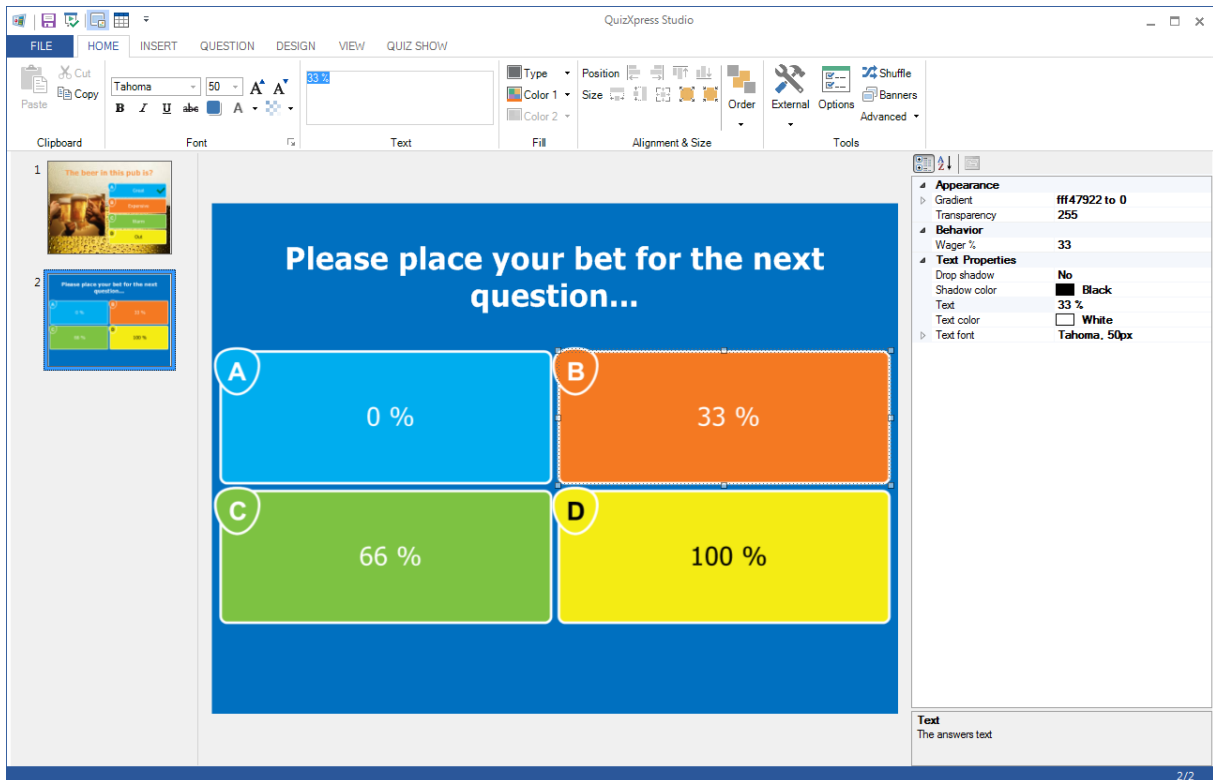
The question text is by default changed to "Please place you bet for the next question…" but you can change the text later to whatever you like. The answers on this type of question are used to set the percentage of the score the player can win/loose on the next question. For example, when the player answers 'C' to this question it means she bets 66 % of her score on the next question. If she answers the next question correctly, her score is increased with 66%. Off course if you use a slide layout with 5 answers, the percentages are distributed across 5 options (0%, 25%, 50%, 75%, and 100%). You can also set the percentage manually by clicking on any of the answers and changing the 'Wager %' property.

Wagers can also be used with an amount of points instead of a percentage.

5.4.6   The leaderboard

When a question is finished, either because someone answered correctly (fastest finger), all persons gave their answers (voting), or the countdown counter reached zero (time out), the leaderboard score screen can be shown by pressing the 'S' key. Initially the leaderboard shows the top 20 teams (needless to say that if there are fewer teams/players, fewer panels are shown) however you can scroll up and down using the arrow keys on the keyboard, or the up/down buttons on the quizmaster remote control.

You can also open this screen with Shift-S in which case the leaderboard initially shows the lowest ranks building more suspense. When rounds are present in a quiz (end of round slides are present),

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pressing Ctrl-S shows the scores of the players in the current round. Shift-Ctrl-S shows the round scores in reverse order (lowest to highest). Pressing Ctrl-E shows the winner of each round.

Pressing 'S' again hides the leader board.

5.4.6.1   Score control screens

The main leader board can only be used to display information, not *change* anything. In some scenario's it is needed to update scores as well. An example of this is when the audience is challenged with a test outside of SmartQuiz. After the challenge is completed it would be nice if the scores could be registered in SmartQuiz. For that purpose, four extra screens are available, accessible through the 'E', 'R', 'T' and 'W' key. These keys basically all trigger the same screen however the layout differs per key. *(Note: a more convenient way to update the scores is by using the teams tab in SmartQuiz Director)*

The score control screens (except the 'W' screen also show more information than just the scores.

The different screen layouts are:

Score screen 'T'

This screen shows the last response, the time at which the response was received, the total score and the points for the last question.

Score screen 'R'

This screen shows the last response, the time at which the response was received and the points for the last question.

Score screen 'E'

This screen shows only the score for each team.

Score screen 'W'

This screen shows the score for up to 50 teams at once (note: scores cannot be modified here).

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To scroll through the list of teams you can:

- Use the mouse scroll wheel
- Use the up/down arrow keys
- Use the page up/page down keys

The toolbar on top of the screen allows you to make changes for the selected team. The following functions are available:

|	
	Disable (pause) the team/player. When a player is disabled, she can no longer answer to questions
	Resume participation of the player/team
	Decrease score with one point
	Increase score with one point
	Reset all scores to 0
	Toggle auto scrolling in the score list (this can be used if you have a break in your quiz show and want to continuously display the scores of all players)
	Close the screen and confirm changes (like pressing the 'Enter' key). If you made changes to the scores, these will be applied.
	Close the screen and discard changes (like pressing the 'Escape' key).

Note: a more convenient way to change points and enable/disable teams is by using SmartQuiz Director or in the Director mobile app.

5.4.7 Round winners screen

When rounds are present in a quiz (end of round slides are present) pressing Ctrl-E shows the winning player of each round.

5.4.8 Chart screen

After a question has ended, a chart can be shown of the answers chosen by pressing 'C'. This shows a chart which shows per answer the number of people that chose that answer.
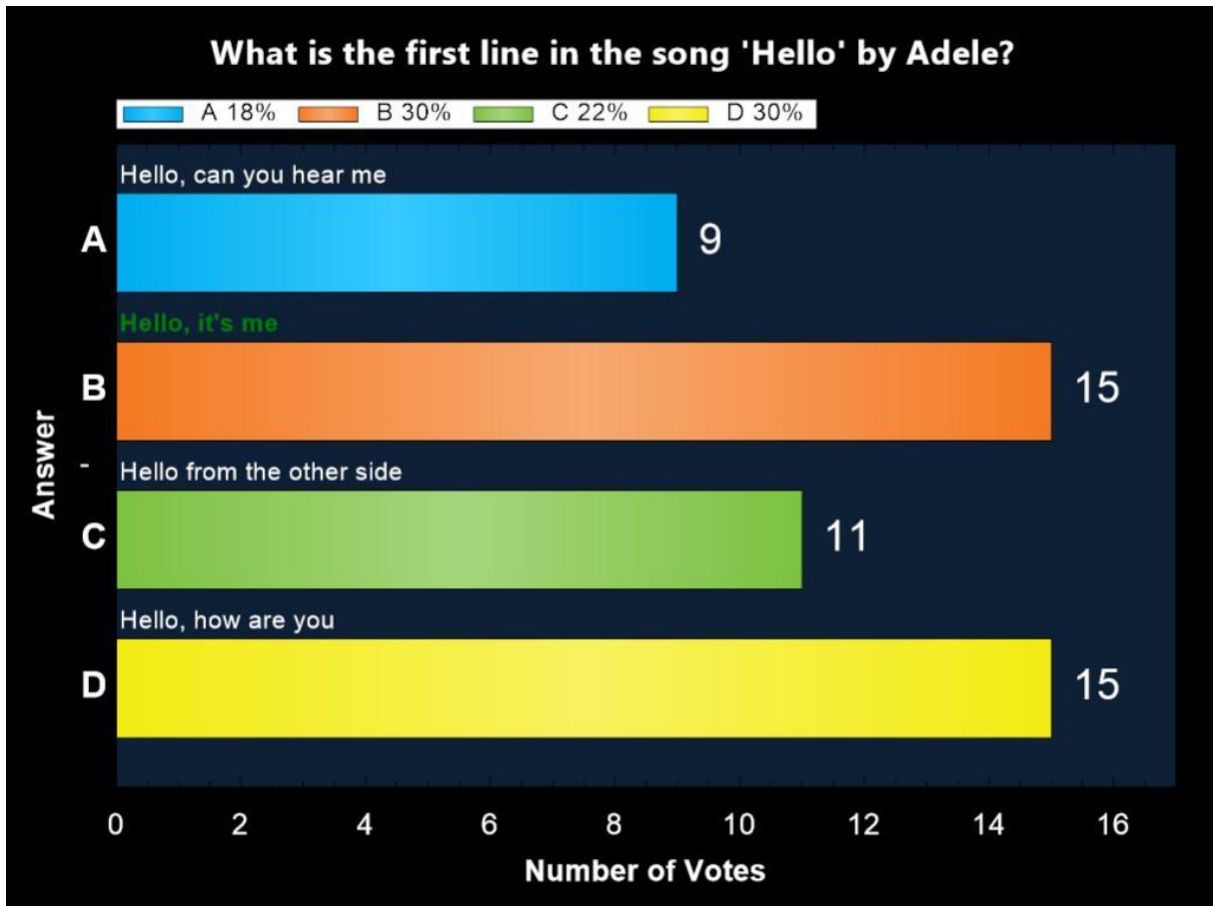
In case the audience is split in groups, you can press 'G' to show a chart displaying the current question's group scores. Note that the appearance of the chart can be fully customized using with skinning.

5.4.9   The final score screen

When the last quiz slide is over, it is time to announce the final results! A ruffle is played, and the top three teams are shown one by one.
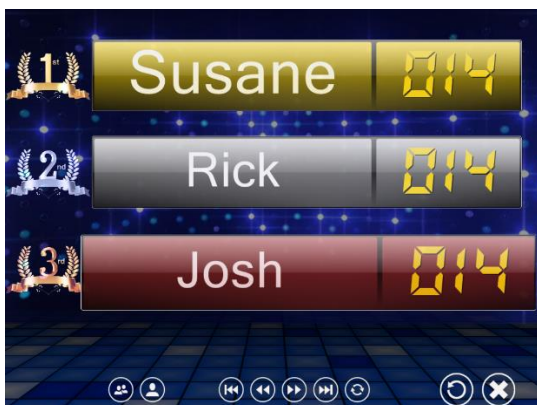
At the bottom of the screen you can see a couple of buttons that allow you to navigate through the score list. You can either jump one screen ahead/backwards or immediately jump to the first/last screen. The rightmost button of the five <u>small</u> buttons (the rotating arrow) lets the list scroll automatically every few seconds. With the rightmost button (the 'cross') you can close SmartQuiz Live

In case the quiz contains multiple 'Demographic' groups of people (see section 5.4.5.5). The final score screen looks slightly different.

By default, group scores are shown. You can toggle between group scores and individual scores by pressing the two leftmost buttons on the bottom. Press the button with 'two heads' to show group scores. Press the button with 'one head' to show individual scores.

5.5 Controlling the quiz

At different stages of a quiz, the quizmaster needs to/can perform various actions. Some examples of these are:

- Show a chart
- Show a score overview/scroll through the scores
- Advance to the next question
- Judge given questions (correct/incorrect)

These instructions to SmartQuiz Live can be performed in a couple of ways. The keyboard can be used or a wireless remote control such as a PowerPoint wireless presenter or the SmartQuiz quizmaster remote.

As a learning function, quizmaster hints can be shown after each question to be configured in Quiz Setup. You can read more about quizmaster hints in section 5.5.4.

5.5.1 Using the keyboard

SmartQuiz Live can be operated by the keyboard. The following keyboard commands can be used:

Function	Key
Next Question/Screen	Space
Buzzer Assignment Screen: Automatic Buzzer sign-in for all buzzers; Reply/SmartQuiz buzzers only. **On the quiz screen F1 shows the quizmaster help menu (only when the countdown is idle) .**	F1
Buzzer Assignment Screen: Automatic Buzzer sign in for all buzzers defined in the keypad string in Quiz Setup; Reply/ SmartQuiz buzzers only	F2
Buzzer Assignment Screen: Reset ; Sony buzzers only	Escape
Judge given answer open question : correct	Y/J
Judge given answer open question : incorrect	N

|	
Show leaderboard	S or Shift+S (for reversed ranking order), use arrow keys or PageUp/PageDown to scroll
Show round scores	Ctrl-S or Shift-Ctrl-S (for reversed order), use arrow keys or PageUp/PageDown to scroll
Show round winners	Ctrl-E
Show chart of answers	C (press again to dismiss the chart)
Show demographic group score chart	G (press again to dismiss the chart)
Show right/wrong grid for everyone-answers multiple choice questions	A or F6
Select participant to be dismissed in end of round screen	Arrow up-down keys
Confirm participant to be dismissed in end of round screen	Space
Cancel participant to be dismissed in end of round screen (no one will be dismissed)	Escape
Close SmartQuiz Live (note: no confirmation will be asked!)	Alt – F4
Pause the countdown	P (when paused, you can skip the question by advancing to the next question with the spacebar)
Show score control screens	E or F7, R or F8, T, W ('Escape' to cancel changes, 'Enter' to commit changes) use '+' and '-'to increase/decrease scores for the selected team. Press the 'Control' key with '+' key or '-' key to increase/decrease by 10 points or 'Alt' to increase/decrease by 100 points. Press the Pause screen when a team is selected in order to dismiss the team from playing along.
Toggle full screen exclusive-/windowed mode	F
Toggle maximized/normal when in windowed mode	M
Reset and reconnect the buzzer system. Use this function after accidentally having unplugged the buzzer system or in case of a general hardware malfunction	F12

5.5.2   Using you mobile phone or tablet

When you own a license for using the mobile apps with SmartQuiz, you can use the Mobile Director app to control the quiz from your smartphone or tablet. See chapter 5.2.4.4 for more details.

5.5.3   Using the remote control device

The SmartQuiz hardware system includes a special wireless quizmaster remote. Using this remote, the most important commands can be controlled.

The following picture shows the commands available from the SmartQuiz remote control:
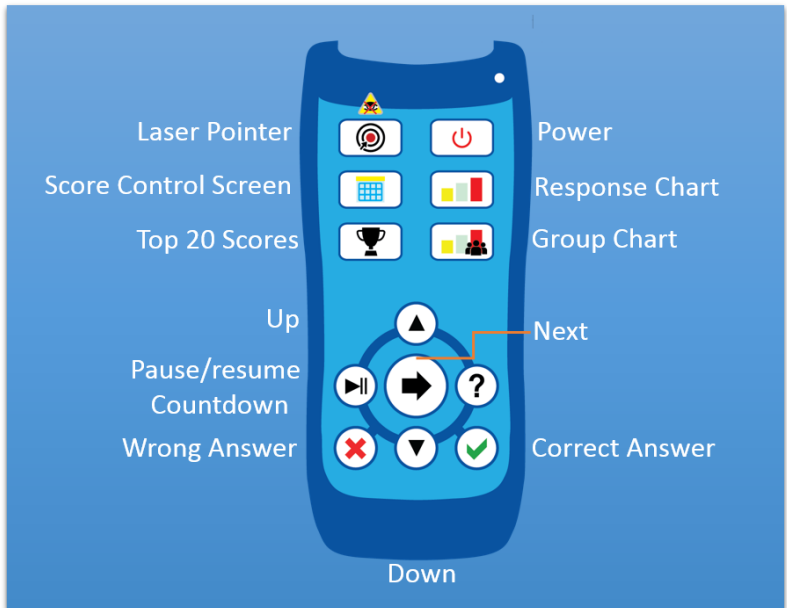
Note that the range of the remote control is not the same as for the keypads and is limited to about 10 meters.

Alternatively, if you are not using SmartQuiz hardware but for example the Sony buzzers, you can also use a generic PowerPoint presenter such as a Labtec® 2.4 GHz wireless notebook presenter, a Logitech R400 or a similar device with the following functions:
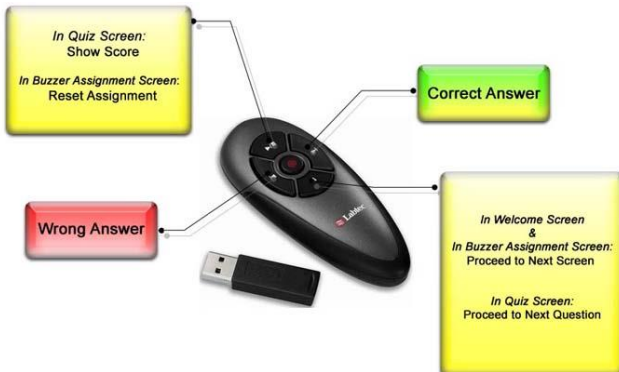

5.5.4   Quizmaster help menu

When running a quiz show in SmartQuiz Live, multiple commands are available at different stages. Think of: showing charts, advancing to the next slide, show score overviews or judge questions. As seen in the previous sections, all these commands have shortcut keys on the keyboard or (some of them) can be operated by a Quizmaster remote.

In order to guide beginning users, Quizmaster hints can be shown during a quiz showing all available commands once applicable. Once the quizmaster is confident in operating the system, he or she could switch this setting off so that the audience does not see the hints anymore.

By default, quizmaster hints are switched 'on' in the 'Advanced' tab in the Quiz Setup application.

Please see below two examples of the Quizmaster hints as shown in SmartQuiz Liv during a quiz.
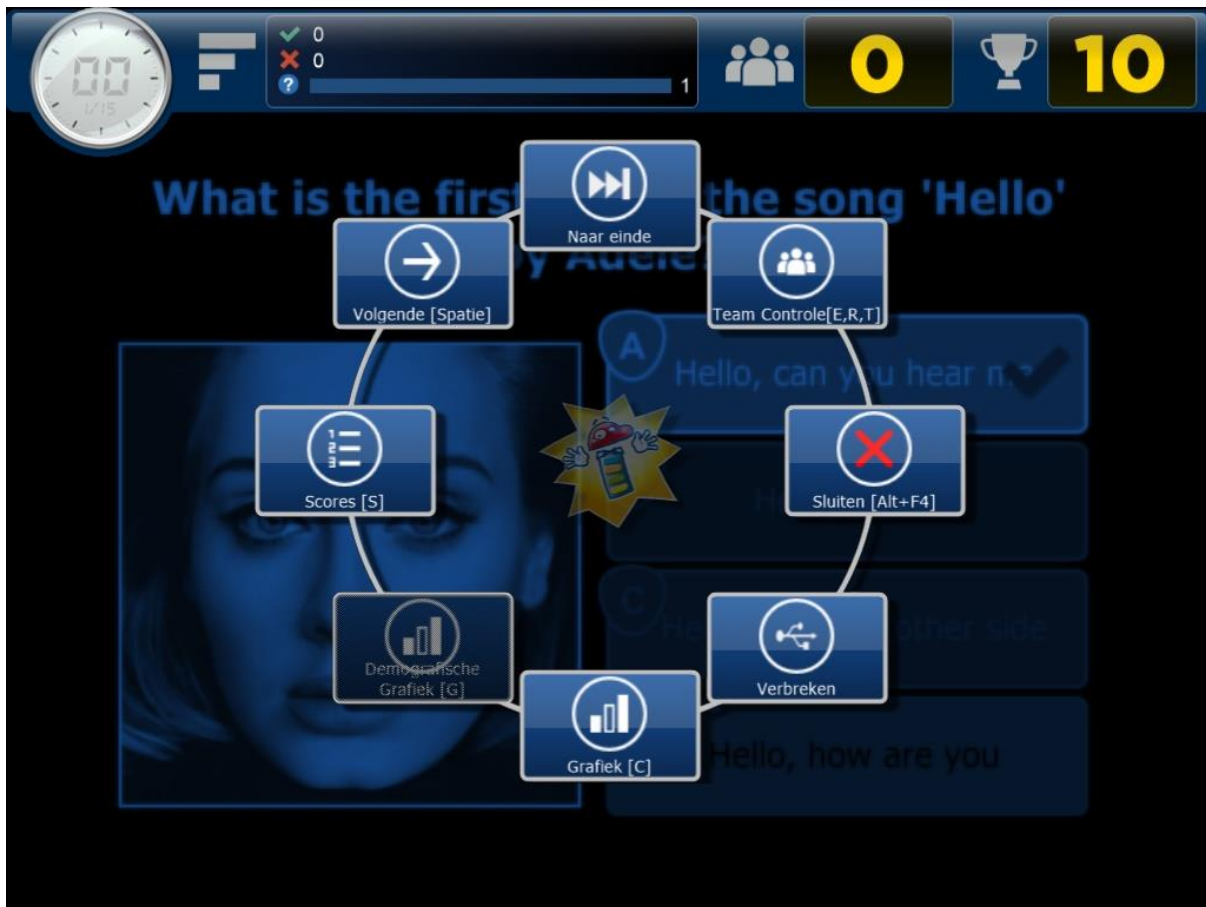
In the above Quizmaster hints screen, which is shown for example when a question has ended, we see the following buttons with the different commands and optional 'shortcut keys':

- **Advance [Space]**: go to the next slide
- **Skip to End:** go to the end of the quiz (the final score screen)
- **Team Control [E, R, T]**: Show the team score overviews. In these overviews, team points can be modified, and teams can be dismissed.
- **Exit [Alt-F4]**: Exits SmartQuiz Live
- **Disconnect/Reconnect Base**: Disconnect/reconnect the wireless base station (receiver)
- **Chart[C]**: Show a chart of all answers given (disabled here as the question was a fastest finger question)
- **Demographic Chart [G]**: Show answer percentages for all groups (applicable only if demographic groups are present)
- **Scores [S]**: shows the intermediate score screen (top 20)

Note: When SmartQuiz is 'idle' (Paused, End of Question or Waiting for Countdown), the Quizmaster Hints menu can always be shown by pressing 'F1'.

When a fastest finger question is answered (either an open question or a multiple-choice question with the auto-judge option set to false), the quizmaster needs to judge an answer given. When Quizmaster hints are 'on', a window appears showing the quizmaster how to judge the question. He or she can either press the ´Yes´ or ´No´ button or press the corresponding keyboard keys ('Y' or 'N'). Especially when running SmartQuiz for the first time, hints like these are very helpful to get to know the system.

5.6   Command line options

The following command line options are available when starting SmartQuiz Live:

Command line	Explanation
-nosnapshot	For recovery reasons, SmartQuiz Live keeps track of all kinds of data generated during a quiz (choices of teams, scores, current question, etc). This collection of data is called a 'snapshot'. When due to some unforeseen reason a quiz is aborted, SmartQuiz Live reads all data from the snapshot for a specific quiz when the quiz is restarted. In this way, the quiz can be continued at the point where it was aborted. The *–nosnapshot* command line setting does not write a snapshot file.
-quickstart	Skip the welcome- and countdown screen
-windowed	Start the application in a normal window so you can still use other applications
-noborder	Use in combination with *–windowed*, run in windowed mode but without caption/border, so it looks like full screen exclusive but runs in normal windowed mode. You can also enable this mode by pressing the M key during the show.
-showfps	Show the number of frames per second (for performance measurement)

-singleuser	Start SmartQuiz Live in single user mode, this option is used when starting the show from SmartQuiz Solo
-scorefile=<file>	Filename for the scorefile, which stores all relevant quiz data (choices per team, scores per team, timing information, etc…)
-startwith=<0..n>	Start the quiz with the specified question e.g. –startwith=5 to start with the 5th question
-autorun	Simulate an audience
-autoexit	Automatically exit the application after the score screen (use in combination with *–autorun*)
-screen=<devicename>	Start the application on the specified output device
-settingsfile=<settingsfile>	Load settings from the given settings file. This allows easy switching between different configurations (like team setups)
-preload	Option (advanced) to preload/pre-render all slides on startup. Only needed if you experience delays during your quiz and have enough memory in your PC

For example to start SmartQuiz Live In full screen windowed mode you can use the command (start from batch file or command window):

```
"Quiz Show.exe" –windowed –noborder c:\myquizzes\quiz1.qx
```

5.7 SmartQuiz Director

SmartQuiz Director, is a tool that give's you advanced control over the running quiz show. It has a separate user interface that can run on your primary screen while the quiz show runs on the attached beamer, TV set or LED screen. You should set your Windows Desktop to 'extended mode' for this (on Windows 10, hit Windows Key + P for this).

The SmartQuiz Director user-interface consists of a command area (left panel), where all the current available command buttons are listed and a set of tabbed views, each having a distinct function.

The available views in Director are:

Questions	Overview of the loaded quiz and controls to navigate between slides
Teams	Overview of all the teams/players and their scores
Responses	Real time response overview
Round scores	Overview of the scores and winners per round *(only visible if rounds are used in the quiz file)*
Extensions	List of installed SmartQuiz 'plugins' and controls to start, stop and configure these plugins
Media Player	A list of media files (sound and video) and controls to add, start, stop or pause a media file (you can also restart a video or sound on the current slide if available)
Mobile	A list of connected mobile devices and various commands to control mobile connections

There are two ways to open the Director window:

1) Check the *Enable SmartQuiz Director* checkbox in Quiz Setup on the Advanced tab to open Director by default on startup
2) At any time during the quiz show, press the 'D' key.

For multi-screen configurations, Director will open on the opposite screen of where the quiz show is running. So if your quiz show runs on the beamer and you have extended your desktop in Windows, Director will open on your laptop screen. You can also explicitly set the target screen for the quiz show in Quiz Setup ('Screens' section)

You can always close Director if you don't need it anymore and come back to it with the 'D' key at any time *(note: if you started a minigame from within Director you first need to end that game or you'd lose control over that game).*

There is also a mobile phone app named SmartQuiz Director with (mostly) the same functionality. It allows you to control the quiz at runtime in a similar way as the desktop Director but gives you the freedom to move around and interact with your audience more freely.

5.7.1 The 'Questions' view

The 'Questions' tab provides you an overview of all the questions in the loaded quiz. You can see thumbnails of all the slides and if you select a question, the question, answers as well as documentation will be shown in the right pane (note that is not a full graphical representation).
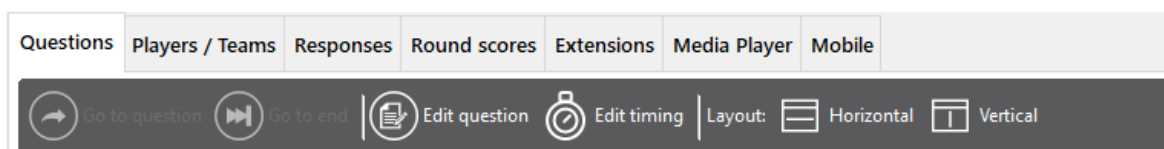
With the toolbar you can do the following:

- **Go to question**: jump to a particular question (this is only possible when there is no question counting down). In order to do this, click on another question in the list followed by a click on 'Go to question'.

- **Go to end**: jump to the end of the quiz (this is only possible when there is no question counting down). When clicking this button, the final score overview is shown
- **Edit question**: just in time editing of the selected question (correct spelling, change the correct answer etc.)
- **Edit timing**: adjust the timing of your questions (countdown time)
- **Layout Horizontal/Vertical**: Switch between a horizontal or a vertical layout

The list of questions shows a visual indication of questions that have been visited (green) as well as the current question which is yellow.

When the selected slide is a minigame slide, you can double click that entry to change the stored configuration 'on-the-fly'. An example where you could use this is when you have a quiz with several Wheel of Fortune minigames used to give away a set of prizes to round winners. When one prize has been given away you may want to remove it from the next Wheel of Fortune if you only have one instance of that price.

5.7.2 The 'Teams' view

The 'Teams' view provides you with an overview of all the players/teams currently active on the system. You can see their Name, the (optional) group they're in, assigned keypad, score, the last recorded response, the total time spent answering (ranking of teams is based on score and if scores are equal, the total amount of time spent during all questions is taken into consideration) and whether a player is enabled.


With the toolbar you can perform the following actions:

- **Disable/Enable** a player
- **Edit** the details of a player: shows a window enabling you to modify team name, group (if applicable), keypad and score. Double clicking on the list will also show the same window
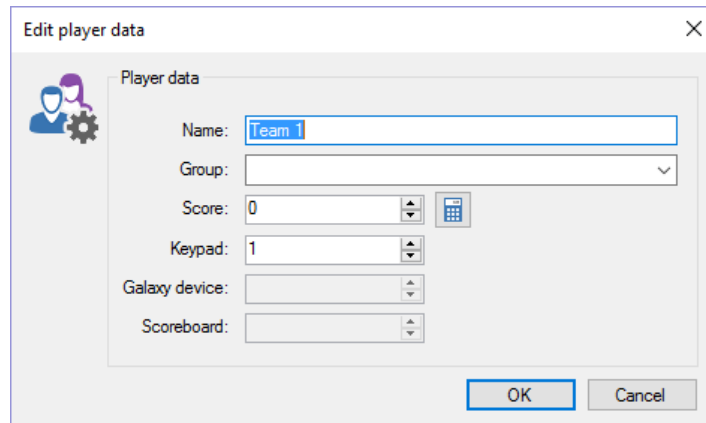
- **Add** a new player/team during a quiz: shows the same window as when you would edit a team\player. Adding a player may come in handy if a new player needs to be added while the quiz show is already in progress. If the assigned keypad is not in range for the current configuration of the receiver (for example you cannot add keypad 105 if your keypad configuration states "1-100") the keypad will be added to the configuration and the receiver will reinitialize.
- **Delete** team: deletes a player\team. In contrary to the disabling\enabling of teams, this really removes the team. It will no longer be shown in score overviews.
- **Show Bingo card**, when playing a Bingo round you can request the Bingo card for the selected player. The played cells are marked green. You cannot see the players marked cells.
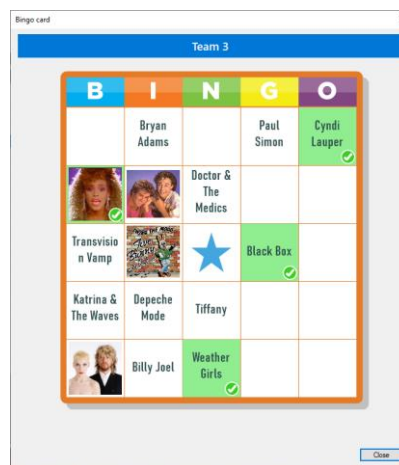
- **Undo** the score changes made during the last question. This can help to undo the points if for example the quiz has an error.
- **Reset** scores: resets all scores and the total time spent to 0.
- **Import**: import the results (points and keypad assignment) from a previous quiz.
- **Add/subtract** points for multiple teams or group teams dynamically. Select multiple rows using shift and/or CTRL click, then click the Edit button in the toolbar to open the following form:

Enter a group name (or select an existing group from the list), or change the Score Addition field to modify the points of all the selected teams.

5.7.3   The 'Responses' view

The 'Responses' view provides you with a 'real-time' overview of the responses being received by the system. You can see the keypad number, team\player name, the response given and at what time (if screen space permits). This is a read-only view and there is nothing to configure and helps you during the quiz show for example to see which response is still missing. When playing a mini game, you can also see here which choice players made during a game (or which players did not make a choice yet).

5.7.4   The 'Round scores' view

If your quiz uses rounds (meaning there is an end-of-round slide somewhere), the 'Round scores' tab will be visible in Director.

The round scores tab shows the score total per round. You can show\hide the scores for each round by expanding\collapsing the round nodes.

QuizXpress Director

Pause Countdown (P)

Toggle Fullscreen (M)

Questions | Teams | Responses | Round scores | Extensions | Media Player

Round

□-1

Round	Name	Score	Total Time (Ms)
1	Team 9	18	8648
1	Team 10	18	12262
1	Team 12	6	7452
1	Team 15	6	10524
1	Team 18	6	10987
1	Team 17	6	10988
1	Team 3	6	12032
1	Team 14	6	12816
1	Team 19	6	13649
1	Team 6	6	13708
1	Team 11	6	14444
1	Team 20	6	14822
1	Team 8	6	14919
1	Team 5	6	17342
1	Team 2	-6	8597
1	Team 7	-6	10517
1	Team 16	-6	11793
1	Team 1	-6	12528
1	Team 13	-6	13066
1	Team 4	-6	16777

□-2

| Round	Name	Score	Total Time (Ms)
2	Team 15	-2	2692
2	Team 12	-2	2827
2	Team 3	-2	3019
2	Team 8	-2	3083
2	Team 10	-2	3139

5.7.5 The 'Extensions' view and SmartQuiz plugins

The 'Extensions' view is your access point to the SmartQuiz extension modules available on your + buy the plugins in our online shop, after which you will receive an upgrade of your license. *Please note that plugins are not available in the SmartQuiz home license.*

Currently 9 plugins are available, of which 2 are free and fully activated on installation.

- A full 3D *virtual horserace* mini game where the audience can bet on a horse using their wireless keypads after which a race will run with a random outcome. Points will be added based on the outcome of the race.
- A *card game* where the audience needs to survive several cards by correctly predicting the next card (red/black or higher/lower) to gain points.
- A *cups-and-ball* game (also known as the shell game) where the audience needs to guess under which cup a ball is located after shuffling the cups. Points or prizes can be won with this game.
- A *Wheel of Fortune*. Spin the wheel and win a prize or points!
- *Penalty shootout,* a soccer game in a full stadium where the audience needs to guess if and where a penalty is scored.
- An *Auction* module. Use this for your fundraiser trivia events to auction items.
- A *performance ranking* module where players can rank a performance of one of the other players. Supports choosing videos to enable karaoke contests. This is a free plugin.
- A *clock/slideshow* module that shows the current time or a countdown timer optionally mixed with a picture slideshow (e.g. for advertising purposes). To be used during breaks of the quiz. This is a free plugin.
- *Message Broker*, a module that can be used to control external equipment from SmartQuiz. A variety of events happening in SmartQuiz can be used to trigger for example DMX lights.

There are three actions you can perform on an installed plugin; configure, launch and end. 'Configure' opens a window to change settings for the plugin. 'Launch' starts the plugin on the main quiz screen for the contestants and with the 'End' button you terminate a plugin and return to the normal quiz screen.
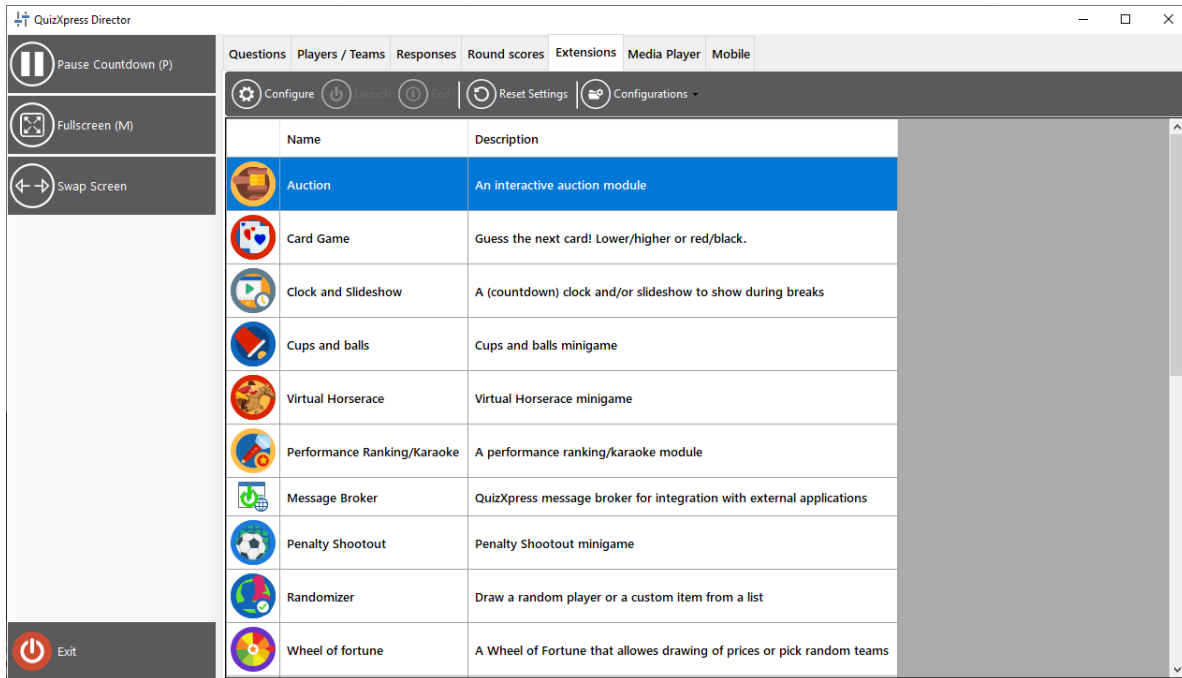
Once running, the plugin may present additional buttons in the left side panel to allow you to access specific functions of the plugin.

Typically, there is a Next button in the left-hand panel which advances you through the game (alternatively you can use the spacebar or the presenter remote's next button to advance through the game).

5.7.5.1 Plugins: configuration options
This section will explain more about the configuration options of the plugins. It will show the configuration window for each plugin along with a description of the options.

5.7.5.1.1 Virtual horse race
In the horse racing game, each player bets on a horse using their handhelds after which a race will run with a random outcome. Points will be added based on the outcome of the race.

The Virtual Horserace module has the following configuration options:

- Background image: select the background image shown on the screen where the players pick the winning horse
- Header: text that is shown on the screen where the players pick the winning horse Number of horses: pick the number of horses that participate in the race
- Track: choose different track lengths which last approximately 30, 50 or 90 seconds
- Points to win: points that can be won for the different rankings
- Distant finish – close finish: choose here if horses should finish closely or distant

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- Show mini map during the race with horse positions: shows a little overview in the top right corner during a horse race outlining the positions of the horses
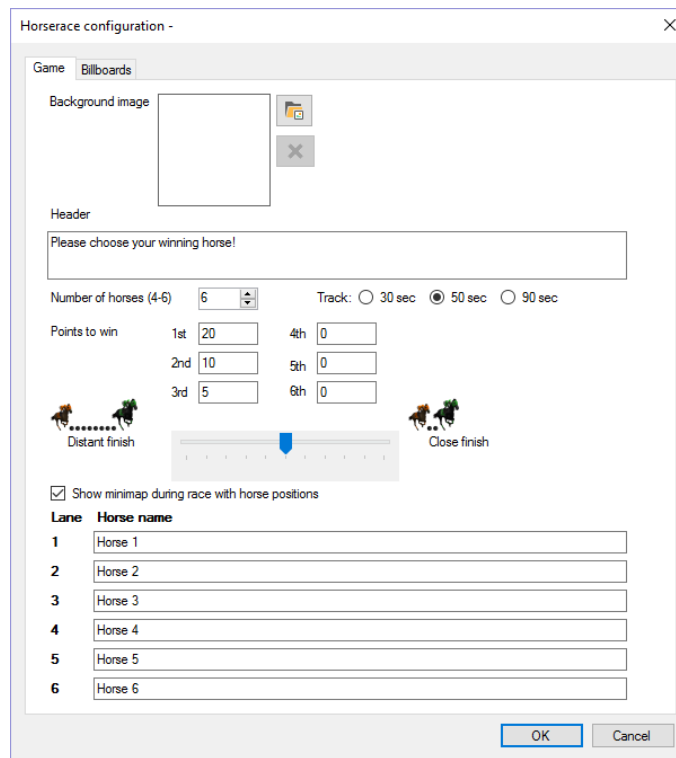
- Horse names: you can enter the names of the horses here
- Billboards tab: there are four billboard signs next to the racetrack. You can choose your own images to be displayed in these billboards

Please find below a picture of the horse race game in action.

In order to go through the various steps of the horserace (players chose horse, go to the start, start the race) just press the 'Next' button in the left-hand side panel.

5.7.5.1.2   Cups and Balls

In the cups and balls game the audience needs to guess under which cup a ball is located after shuffling the cups. Initially, the ball is shown. Then, the cups are shuffled, and each player needs to closely watch. Finally, each player needs to tell under which cup the ball is. Points or prizes can be won with this game.

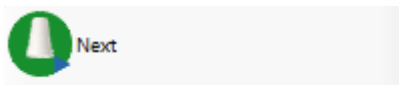Available configuration options:
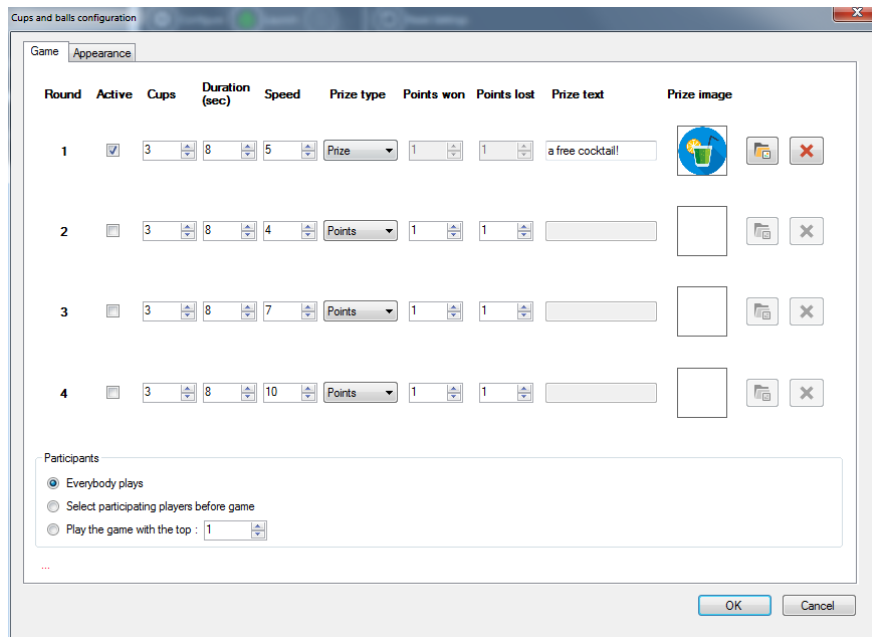
- Round: you can define up to four games that will run one after another (for example with increasing speed/number of cups).
- Active: indicates whether a round is active (if not active, it will be skipped)
- Cups: the number of cups that will be played with
- Duration: the duration of the shuffling of the cups
- Speed: the speed of the shuffling
- Prize type: indicate of a prize can be won or if points can be won
- Points won: the amount of points a player wins if he or she is correct (if the 'Prize type' is 'Points')
- Points won: the amount of points a player loses if he or she is incorrect (if the 'Prize type' is 'Points')
- Prize text: text shown when a prize is won
- Prize image: image of the prize won. Images can be selected or deleted using the two buttons next to the image.
- Participants: all players can play along, only top ranked players can play along, or selected players can play along (selection is done before the game starts, on the director screen).

- Appearance tab: here you can select images to be shown on the cups (for example a company logo), a background image as well as the texture of the table that the cups are on. Also, you can select an alternative background music which plays once the cups are shuffling

Please find below a picture of the cups and balls game in action.
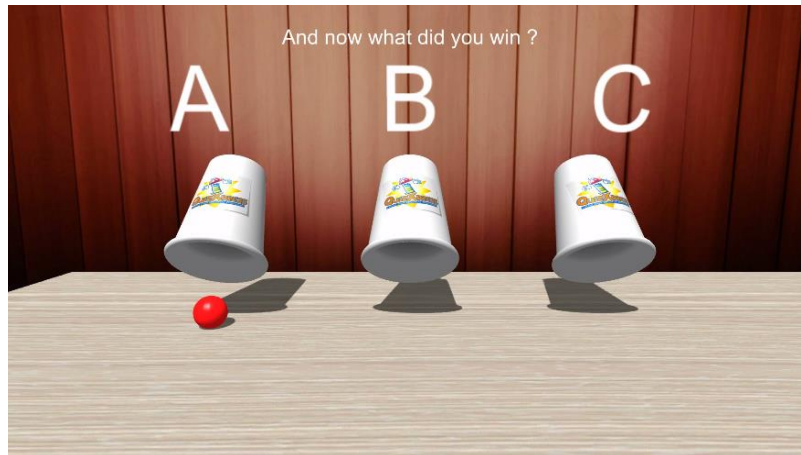
In order to go through the various steps of the game (cups are loaded, ball is shown, cups are shuffled, players choose a cup, ball is revealed) just press the 'Next' button in the left hand side panel.

5.7.5.1.3   Card game

In the card game the audience needs to survive several cards by correctly predicting the next card (red/black or higher/lower) to gain points.
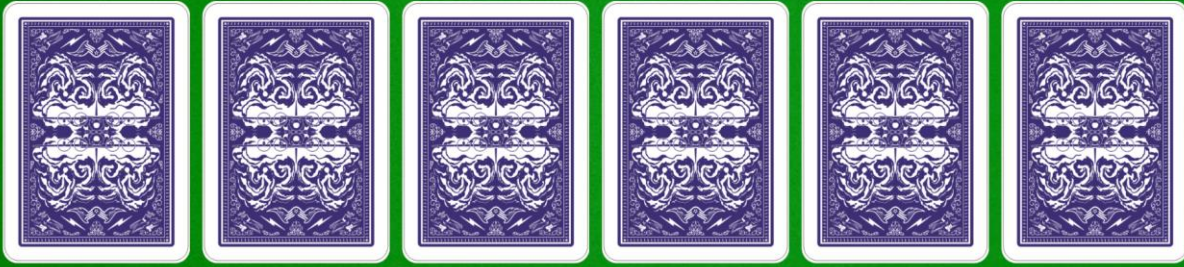
Available configuration options:
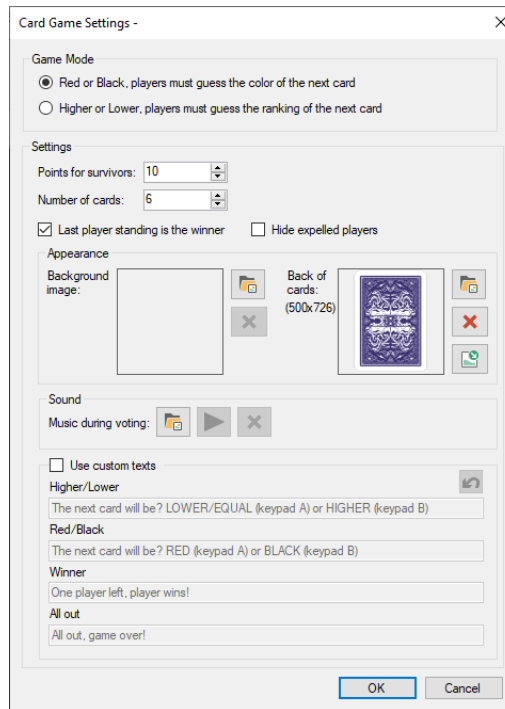
- Game Mode: choose between red\black or higher\lower guessing
- Points for survivors: how many points do the players win when they survived up to the end
- Number of cards: how many cards are on the table
- Last player standing is the winner: with this option, the player who survived last wins, even when not all cards have been turned
- Hide expelled players: hide the players from the player grid that are no longer in the game.
- Background image: choose a background image shown during the game
- Music during voting: choose the music that is played while all players make their bets
- Back of cards: the image to be used at the back of the card (use 357 x 500 pixels). Use this to brand the game for your own purpose.
- Use custom texts: override the default texts presented to the players with your own texts.

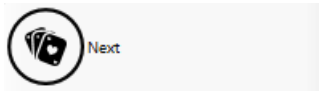Please find below a picture of the card game in action.

Each player is represented by a square. When a choice is made, the square turns ether red or black.

In order to go through the various steps of the cards game (show message to the players to make a choice, reveal the next card) just press the 'Next' button in the left-hand side panel.
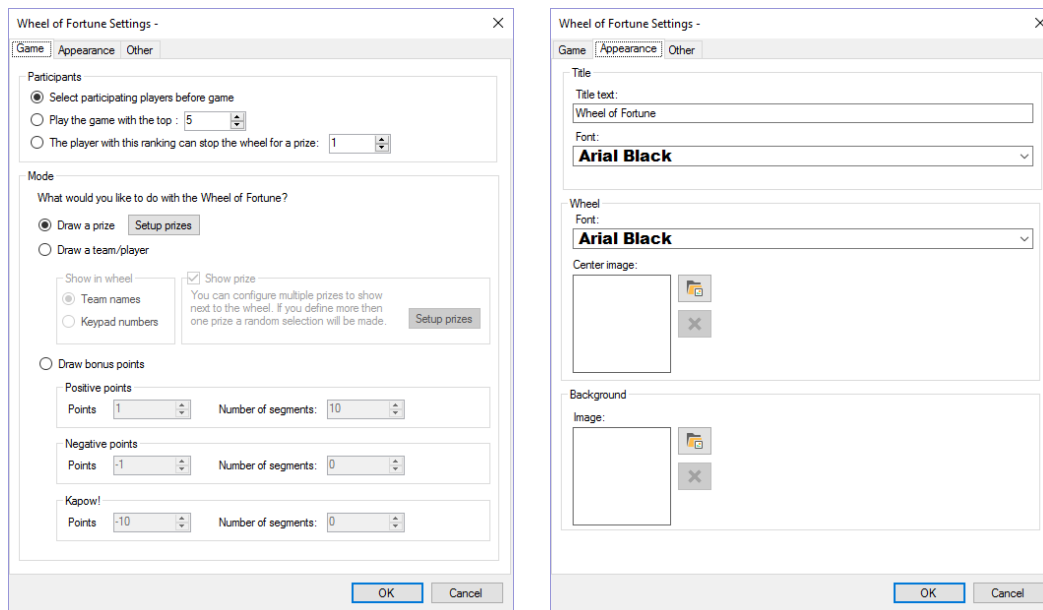

The square of players that are out of the game are greyed out indicating they no longer participate in this session of the cards game.

### 5.7.5.1.4   Wheel of Fortune module

The wheel of fortune allows you to spin a wheel in order to draw a prize or points for a team, or just draw a specific team.

Please find below the configuration screens with their default settings:

- Participants: selected players play the wheel (selection is done before the wheel starts, on the director screen), the top ranked players play the wheel or a single player of a certain rank can stop the wheel with his or her keypad.
- Draw a prize: prizes (which can also be positive or negative points) are shown in the wheel. By pressing the 'Setup prizes' button the prizes can be configured.
- Draw a team/player: the participant selected are distributed across the wheel. The number of segments on the wheel can be chosen by selecting a value for 'Number of segments'. If the checkmark is checked before 'Show prize', prizes which can be won (or lost) are shown next to the wheel. While the wheel spins, the prizes highlight one after another. When the wheel stops on a player\team, the highlighted prize is won (\lost in the case of negative points). Prizes (or points) can be defined by pressing the 'Setup prizes' button. This mode does not work in combination with the 'stop the wheel' option in the 'participants' section, as for the stop the wheel game prizes are required in the wheel.
- Draw bonus points: the positive, negative and Kapow! points are distributed across the wheel in the number of segments indicated. For positive and negative points, each segment increases resp. decreases in value (for example: positive points 1 and number of segments 5 results in the values 1,2,3,4 and 5 ; negative points -2 and number of segments 4 results in the values -2,-4,-6,-8). Kapow! points are negative points which are fixed in the number of sections specified. The Kapow! segments are the ones players do not want to land on! The total number of segments for the 'Draw bonus points' section cannot exceed 30.
- Appearance tab: set the title text of the game and the fonts used. Choose a background image as well as the image shown at the center of the wheel.
- Other tab: Set the wheel spinning speed as well as the spin time.

Please find below a picture of the wheel of fortune game in action.
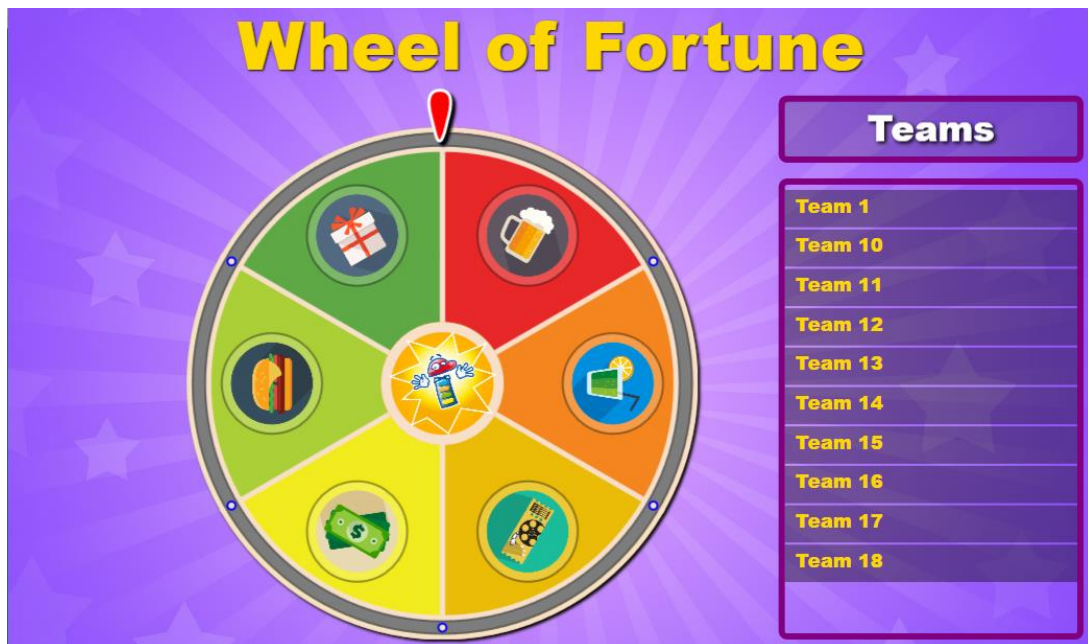
In order to spin the wheel, press the 'Spin' button in the left-hand side panel.
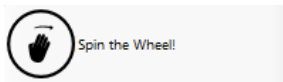
When the 'Stop the wheel' setting is on, the player that can stop the wheel with his or her keypad is indicated in the 'Teams' panel in the game. The wheel can also be stopped by pressing the 'Stop the Wheel!' button (but typically this is not necessary as the player should stop the wheel).
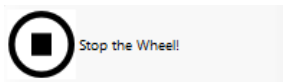
5.7.5.1.5   Penalty Shootout

The purpose of the Penalty Shootout mini game is to predict if the football player is going to score (and in which section of the goal), if the penalty will be missed or if the goalie will stop the penalty.

The available configuration options are:

- Background image on loading screen: sets the image that is shown while the game is loading
- Score%: set the chance of scoring or missing
- Points to win on good predication: assign points to the possible outcomes of the game:
  - Player scores in section A
  - Player scores in section B
  - Player scores in section C
  - Player scores in section D
  - Player misses (E)
  - Keeper stops the ball (F)

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- Billboards tab: there are four billboard signs next to the racetrack. You can choose your own images to be displayed in these billboards
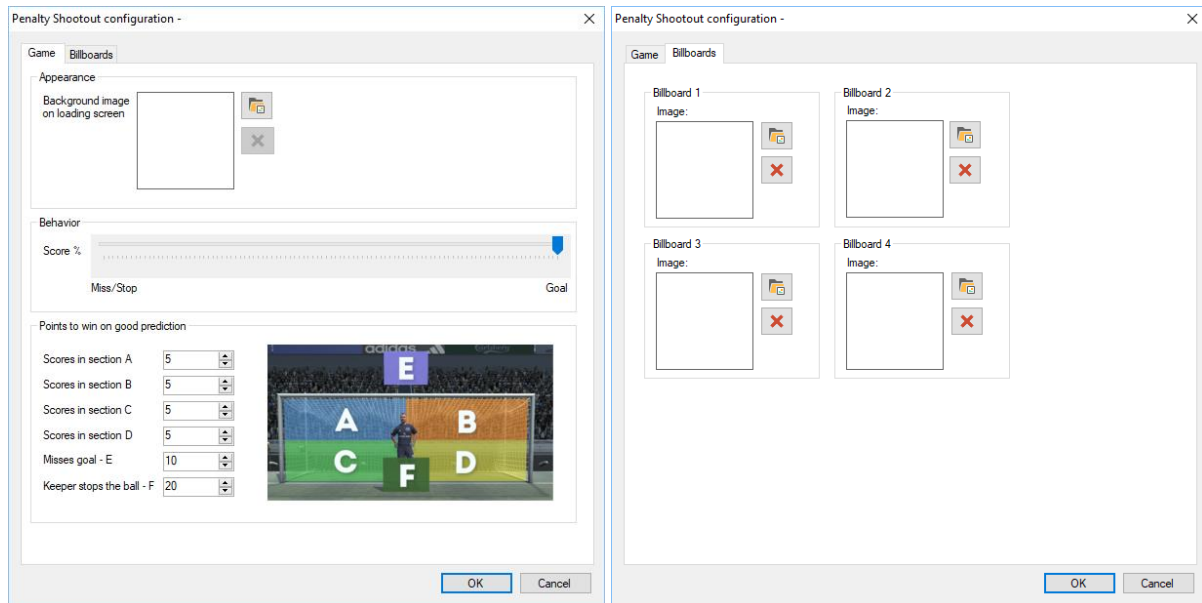
Below you can see two pictures of the penalty shootout game in action.
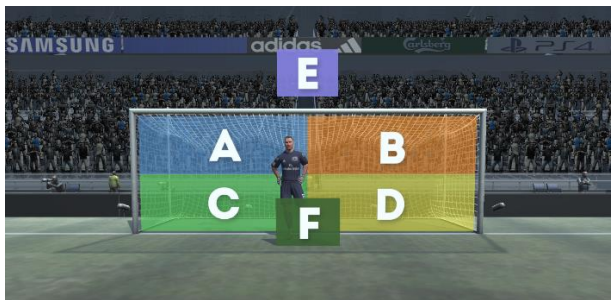
5.7.5.1.6   Auction

With this plugin you can auction items during a quiz where the audience bids with their handhelds. Ideal to use for fundraisers!

During the auction, while the amount increases, players opt out when they are no longer interested.

The available configuration options are:

- Item under sale: picture of the item that is auctioned
- Description: description of the item that is auctioned. The description is displayed at the top of the auction screen.
- Background: background image of the auction screen.
- Background fill color: alternatively, a solid background color can be set for the auction screen.
- Currency: currency displayed before the current auction money amount
- Show cents: incorporate cents in the auction money amount
- Start bid at: set the start price of the item auctioned
- Bid step: set the step at which the auction price will be incremented

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- Step timer: set the timeframe after which the auction amount will be raised
- Start the auction manually: start the auction manually by pressing Next (otherwise it will start immediately)
- Bidders must register for the auction: bidders opt out when they are no longer interested in the item auctioned. By default, everybody participates. If you want each bidder to first explicitly indicate whether he or she wants to participate in the auction, put a check before this setting.
- Bidding music: music played during the auction (no music, select one music file or select a folder containing music files)
- Winner music: Set the music played when the auctioned item is sold
- Auction title text: the auction title will be displayed over the picture of the auctioned item picture (or only the text if there is no picture set).
- Auction title text color: the color of the auction title text.
- Remove left bidders from the grid: With this setting checked, players that opted out of an auction are removed from the bidder's panel.
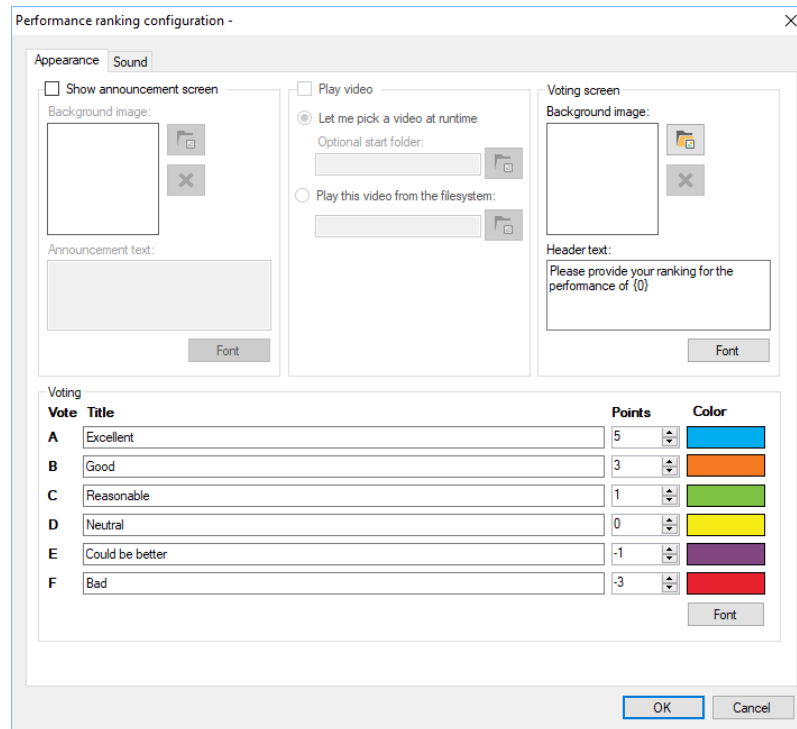- Bidder grid panel color: set the color of the bidder grid panels.
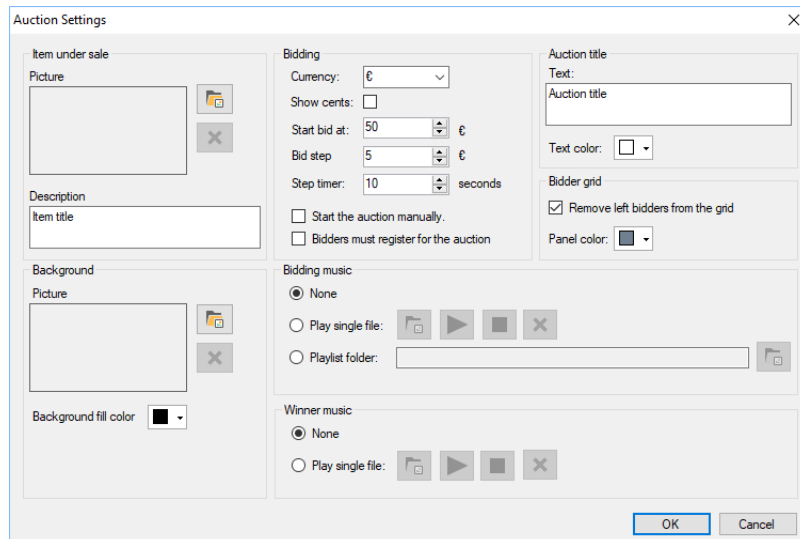
Below you can see a picture of an auction in action:

5.7.5.1.7   Performance ranking

With the performance ranking module, you can hold talent and karaoke competitions. The audience\players can rank a performance of one of the other players.

The available configuration options are:

- Show announcement screen: enable this option to show an announcement screen before the performance.
- Background image (announcement screen section): select a background for the announcement screen.
- Announcement text: Announcement text to show. When you want to incorporate the name of the player that is going to perform add {0} which will be replaced with the name of the selected player.
- Play video section: enable this option to show a video during the performance or select a video from the file system which will then be played during the performance. Typically used to show a karaoke video.
- Background image (voting screen section): choose the background picture shown on the voting screen
- Header text: choose the text shown on the voting screen. When you want to incorporate the name of the player that has performed add {0} which will be replaced with the name of the selected player.
- Title\Points\Color fields: enter labels shown on the voting screen indicating performance quality. Each label has a number of points attached as well as a color.
- Sound tab: on the sound tab you can configure the music played before the voting starts, the music played during the voting and the music played after the voting.

Please find below a picture of the different screens of the performance ranking module in action.

When the performance ranking plugin is started, a window is shown in which one of the players must be selected being the player who is going to be judged by the other players.

When the 'Start Voting' button is pressed in the left-hand panel of SmartQuiz Director, performance starts, and players can start giving their opinion on the performance. On the voting screen, at the bottom left the time is shown that passed since the beginning of the performance as well as the number of players that voted so far.

When the 'End Voting' button is pressed in the left-hand panel, players can no longer vote, and the final score is shown on the screen.

Alternatively, when the 'Play video' setting is enabled, the button initially reads 'Start Video'. Pressing it shows a video or lets you select one depending on the settings. After this the button changes to 'Start Voting'.

After the voting process has ended, pressing the 'Start Voting' button repeats the whole process. Another player can now go on stage and give his or her best performance!
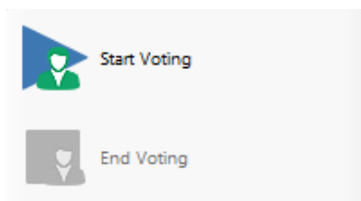
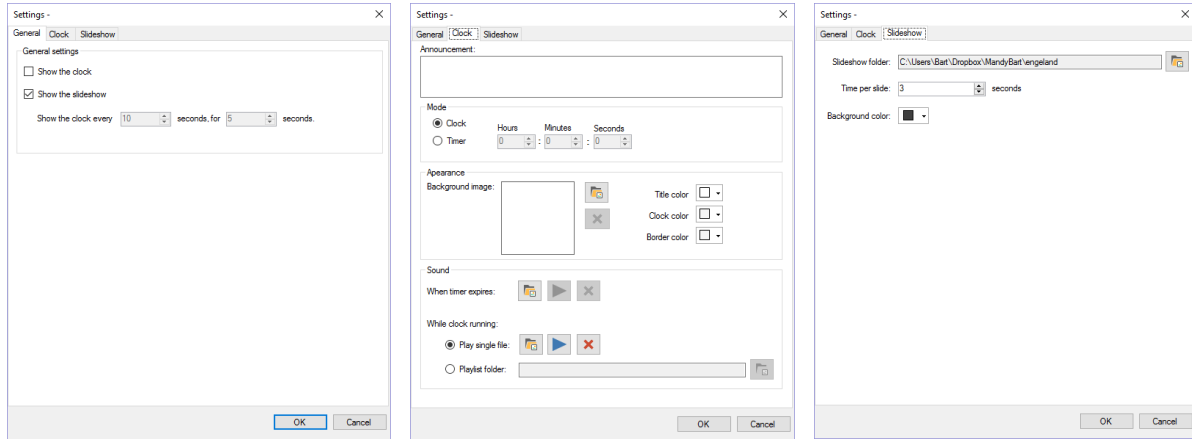### 5.7.5.1.8 Clock and slideshow module

This module can either show a digital (countdown) clock, a picture slideshow with cool transition effects or a mix of both.

Configuration options:

On the first page you can configure if you want to show the clock, the slide show or both (in which case the clock will show at a configurable interval for a certain amount of time)
For the clock you can configure the following options:

- Announcement: text which is displayed on screen above the clock
- Mode – Clock: the time is shown on screen
- Mode – Timer: a time counts down from the specified time to 00:00:00
- Background Image: image which is shown in the background
- Timer expires sound: played when the timer expires
- Clock ticking sound: played while the clock is ticking or,
- A playlist folder: the folder from which the module will randomly play MP3 files while the clock is ticking. (note that when you use the clock *embedded in* the quiz that this folder also exists on PC where you run your quiz)

On the last page you can configure the slideshow by selecting a folder from which the slideshow selects pictures and some timing information.

Please find below a picture of the clock in action (default settings).
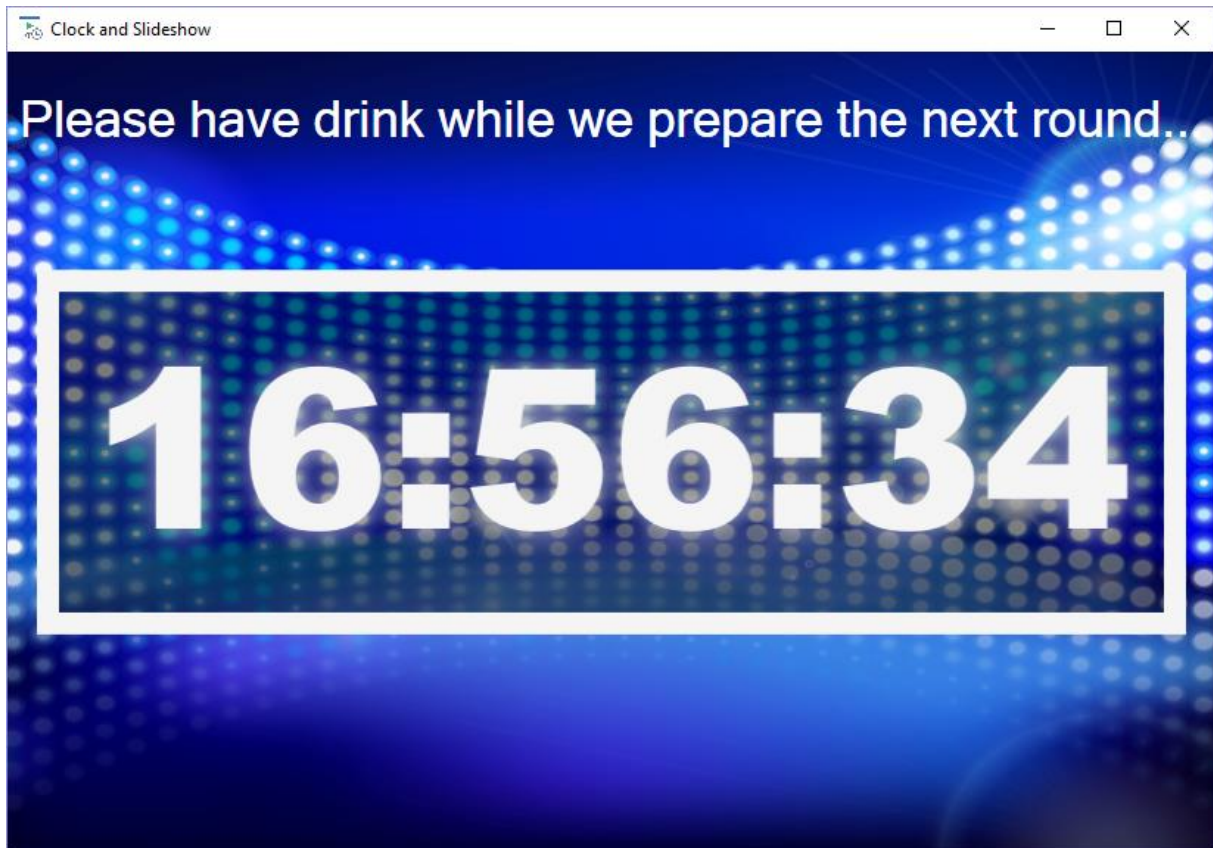
5.7.5.1.9 The Randomizer module

The SmartQuiz randomizer can be used to randomly draw one or more players/teams from the audience, for example to raffle a price, have a karaoke competition, play a game or do anything else to complete your game show night. This module first shows an animation (two configurable different flavors) of all the team names and at the command of the quizmaster (space bar or by using the quizmaster remote control) draws and presents the results. The following configuration options are available:
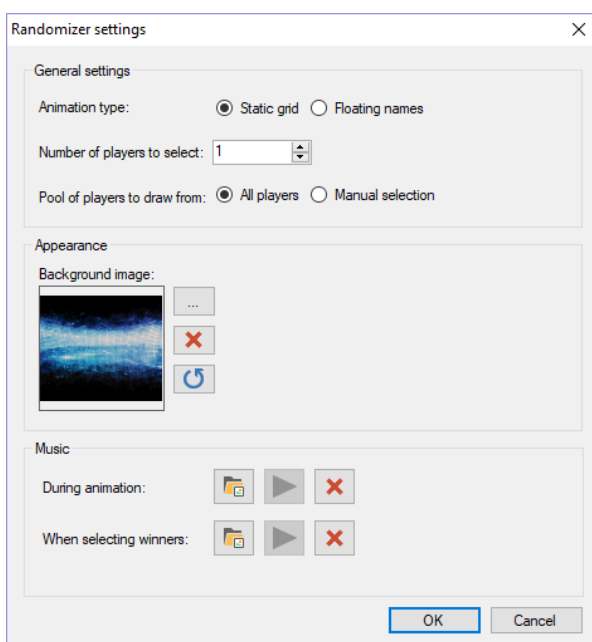
For the animation you can choose between a static colorful grid or a floating team names animation:

You can draw from a subset of the entire audience (by means of a selection dialog) or include the whole audience (no manual selection needed)

In the 'Appearance' section you can configure the background picture to show. The 'Music' section allows you to specify different sounds during the animation and when the selection has been made.

5.7.5.1.10 The Message Broker module

As of version 6, SmartQuiz supports integration with external devices via MIDI or TCP/UDP. One example of a device that you can now integrate with SmartQuiz is a DMX light controller.

In SmartQuiz there is a special plugin module named Message Broker. This component is the middleman between events happening in SmartQuiz (like going to the next slide, ending of countdown, a buzzer is hit etc.) and an external computer/device using a mapping that can be configured. Message Broker supports two protocols for outgoing messages: TCP/UDP (ASCII and OSC, for the Max programming environment) and MIDI, and one for incoming messages: TCP/UDP ASCII.

Message Broker is accessible for configuration from the SmartQuiz Director screen in a running quiz player. So, in contrary to the other plugins displayed above this plugin cannot be inserted into a quiz and does not have to be started explicitly from SmartQuiz Director.

To enable MIDI support, go the configuration screen of MessageBroker by selecting the Message Broker plugin and then clicking the *Configure* button in SmartQuiz Director. Set the Mode to 'On' on the Midi Out tab.
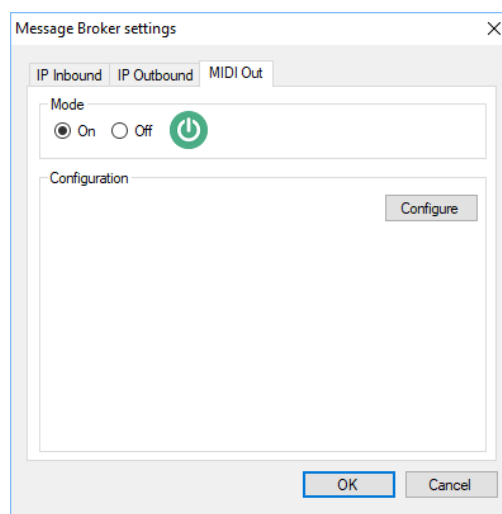
In order to configure the MIDI mappings (SmartQuiz events to MIDI outputs) click the Configure button which shows the MIDI Configuration window.
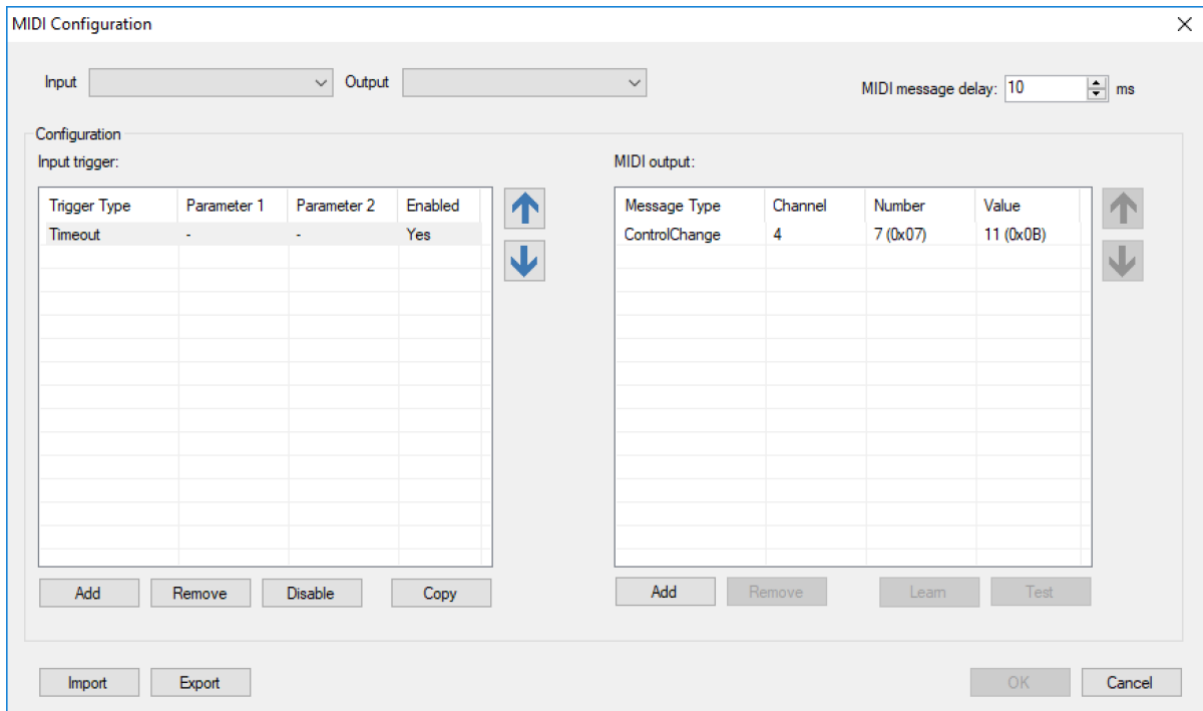
On top of the screen you can select the MIDI in- and output device to be used. The input device is currently only used for the learn function which will help in getting the right commands into the mapping definition easily. The output device is where SmartQuiz will send MIDI messages when events happen in the quiz.

In the middle section you see a list of triggers on the left (triggers are the events that happen inside SmartQuiz) and the configured MIDI output(s) on the right for the selected left-hand trigger.

To add a trigger, click the Add button and configure your input trigger:
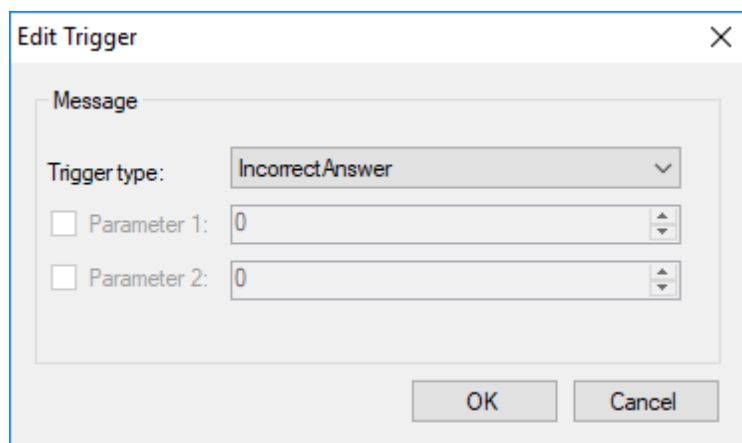
There are several types of triggers you can use. Some triggers may have a parameter that you can optionally use to specialize your trigger.

For example: in the following case the trigger fires when a fastest finger event occurs on buzzer 2:
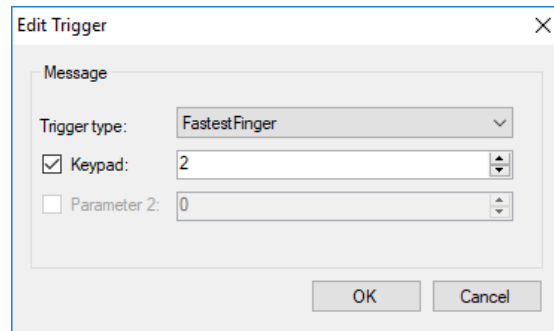
When a trigger is defined, you need to tell the system what MIDI messages should be sent to the selected MIDI output device (the list on the right side). These sequences of MIDI messages can be configured manually or can be 'learnt' from the connected MIDI device (like a physical light controller).

To define a message manually click the right Add button in the MIDI output section:

To edit an existing message, you can double-click the message in the list (this way you can also edit a trigger).

A better way is to let the system figure it out. To do so hit the *Learn* button (it will turn green). Put your light controller in the desired light configuration (MIDI messages should appear in the list while you do so). When you are done, click *Learn* again to turn learn mode off.

Once a MIDI output sequence has been entered you can use the Test button to send those messages to the output device and see if it correctly sets the values in the controller.
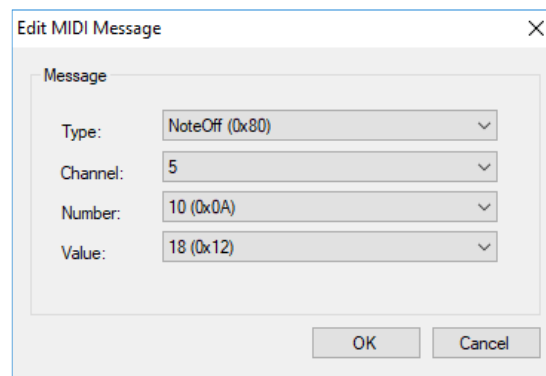
When you have configured all your triggers/MIDI sequences this way you can close the configuration dialog, then close the Message Broker settings dialog (with OK and not Cancel otherwise your changes will be discarded) and from that point on SmartQuiz will send the MIDI messages to the selected MIDI output device.

To test the system without any external MIDI devices there are two tools to consider:

MIDI loopback driver: https://www.tobias-erichsen.de/software/loopmidi.html

You can use this to communicate with a virtual MIDI device, there are no physical connections.

Virtual MIDI Sliders: http://www.granucon.com/SoftwarePages/Vms.aspx
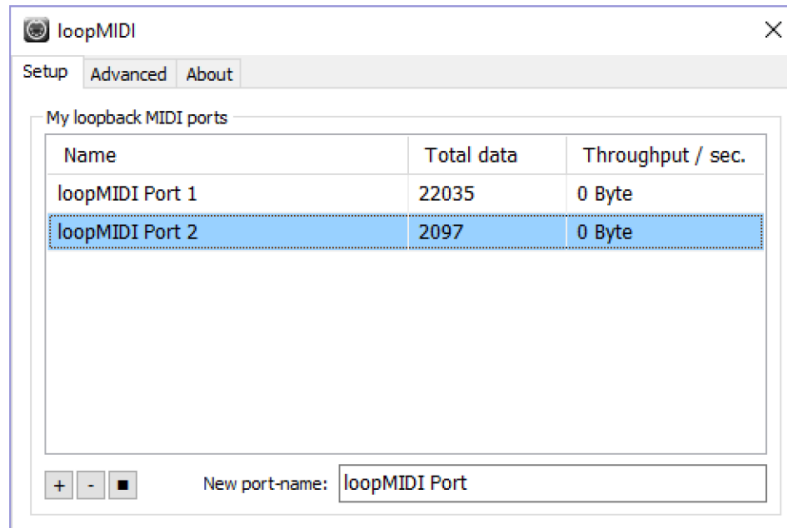
You can use this software to see how SmartQuiz drives a generic MIDI controller. The Message Broker learn function also works with this virtual MIDI device:
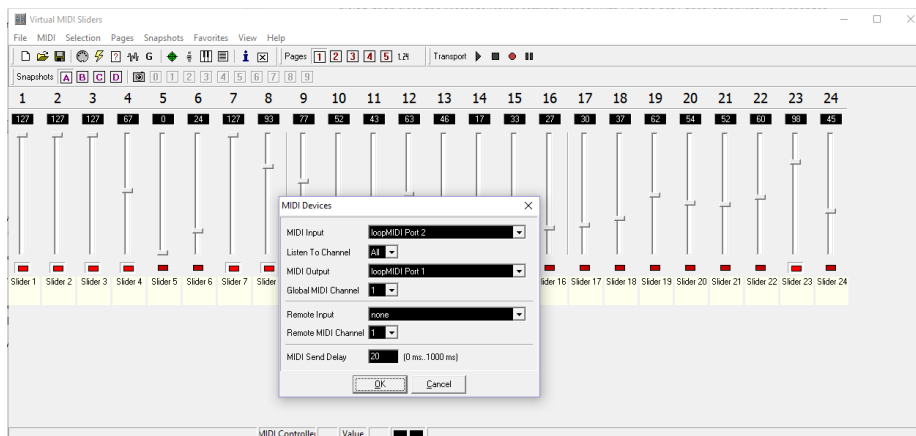
5.7.6   The 'Media Player' tab

This tab in Director shows the SmartQuiz media player. Using the media player, you can:

- Launch a full screen video on the main screen
- Show a full screen picture on the main screen
- Start playing an MP3 file
- Present a promo image on the Smart Buzzer app
- Replay/resume the video on the current slide
- Replay/resume the sound on the current slide
- Maintain a list of media files

When adding files to the list, these files are actually copied to the local SmartQuiz application data folder (Explorer path `%AppData%\SmartQuiz\Media`). This is to prevent any issues when original files are moved, deleted etc. So, if you delete a file from the list, it will be deleted from the SmartQuiz storage but the original file will remain untouched.
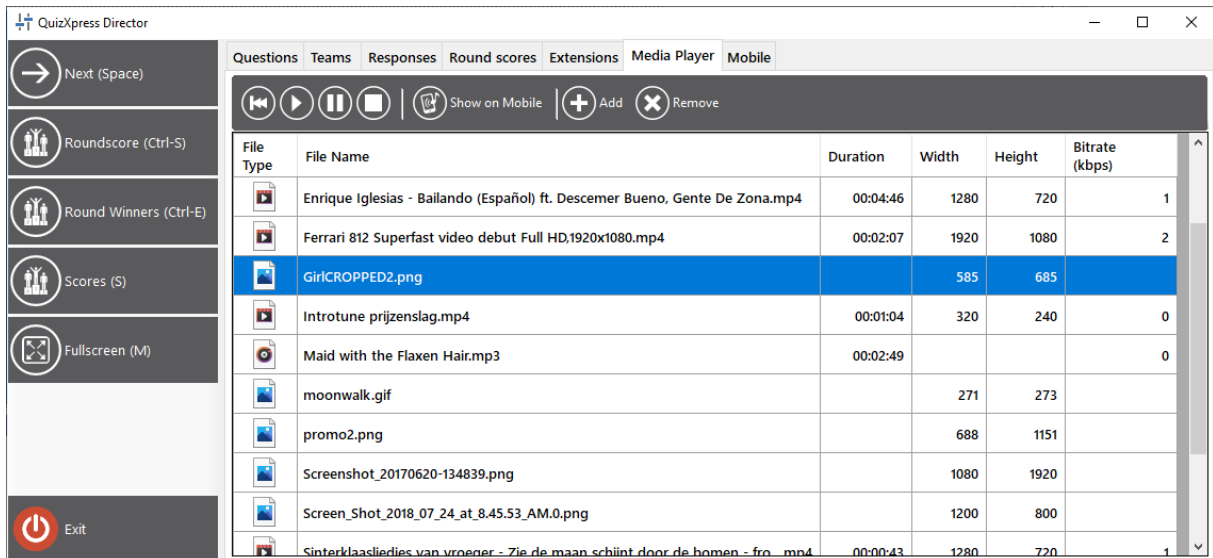
5.7.7   The 'Mobile' tab

The *Mobile* tab shows all currently connected mobile devices.
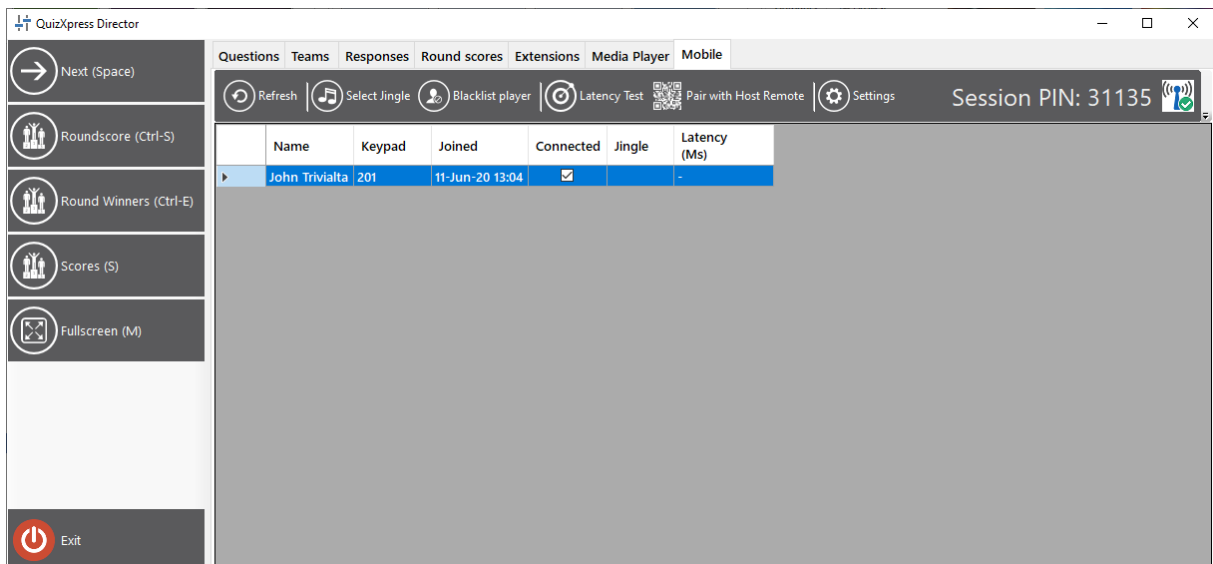
From here you can:

- Force **jingle selection** on the Smart Buzzer app
- **Blacklist** the selected player permanently so that this player can no longer rejoin your quiz
- Perform a **latency test** to all devices
- Show the **QR code** to be scanned by the Director app to pair with the computer
- Open the real-time **mobile settings** dialog
- See the current PIN (when running in server mode)
- Send a text message to the selected player

The latency test is mostly used when running on local Wi-Fi mode to test if all your players have a solid connection to your router. It basically sends a ping to all devices and measures the time it takes to receive a response. This is plotted in a chart like:
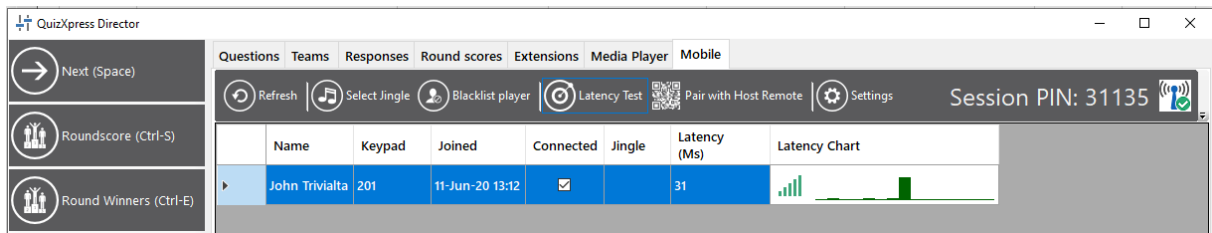
When the device is very slow or disconnected, the chart will turn red and as a quiz master you could warn the player to move closer to the access point. Note: do *not* let the latency test running during your quiz as the test is using Wi-Fi bandwidth and server capacity.

There are a few advanced settings that you can find under the *Settings* button:
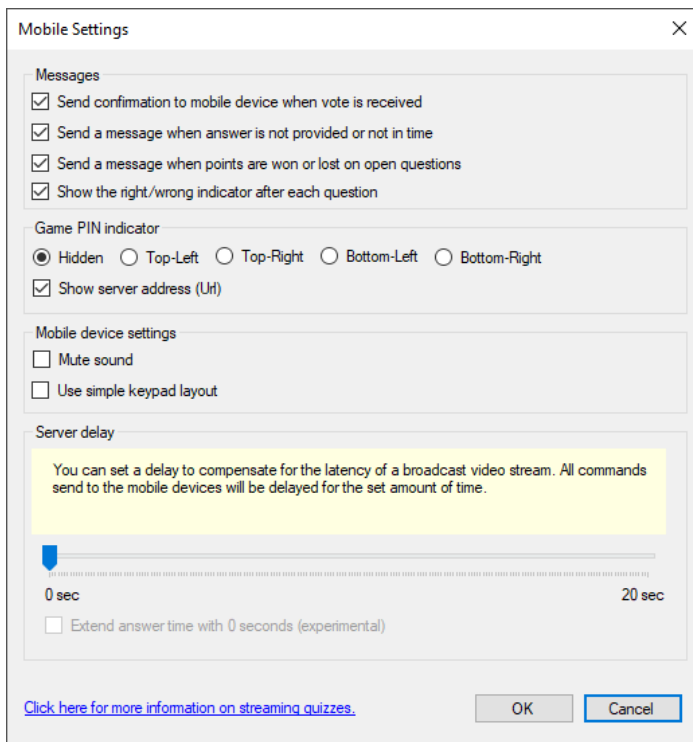
The top checkboxes control optional confirmation messages being sent to the connected devices. These messages help the users understand what's happening. The first option reports each received answer back to the device with a message like: 'We received answer D'. The second option only sends back a warning when no answer was received, or the answer was not processed in time (for example due to the latency in the video stream). The third options sends a message with points won/lost to the device after each question and with the last option you can control whether the device shows if the player answered correctly or wrong.

With the 'Game PIN indicator' setting you can configure a PIN indicator to show during the quiz in four different locations on the quiz screen. This setting is obviously not applicable when using Wi-Fi mode as no PIN is used in Wi-Fi mode. The PIN indicator will appear as follows:

Then there are some settings to control the mobile keypad like whether it should play sounds and for the buzzerpad website there is an option to set it to simple keypad behavior meaning it will only display a 7 button keypad (legacy mode)

The *Server delay* slider can be used to delay all actions being send to the mobile devices to create a better synchronization with you broadcast stream. Keep this value to 0 when not streaming. For example, when the latency on your YouTube stream is ~3 sec you can set the delay to 3 sec. This means when the countdown starts on the players YouTube stream, it will also start on their device. Without the delay the device countdown would start 3 seconds before the timer starts on YouTube which can be confusing.

When the 'Extend answer time' option is checked, the system continues to accept votes event after the countdown clock has expired for the time set in the 'Server delay' slider. This can be used to compensate for stream latency. For example when there is a 5 seconds delay on the stream, the players at the other end of the stream are still watching the clock ticking for 5 seconds while it has already stopped in the studio. So when this option is on, the system will still accept votes in these last 5 seconds preventing players missing a question.

5.7.8   The 'Galaxy' tab

The *Galaxy* tab gives you extended control over your connected wireless Galaxy LED devices. This tab is only visible when Galaxy support is enabled in Quiz Setup. Galaxy devices come in different flavors like wristbands, spheres and cubes:

During a quiz, Galaxy devices give feedback to the players by changing their color (to name a few examples: your vote is received, your answer was correct, your answer was incorrect, you are out of the game).

These changes all happen automatically. But there is more that you can do with Galaxy! On the Galaxy tab in SmartQuiz Director there are various options to use your Galaxy devices manually in a different way:

- Set them to a fixed color (matching colors of your event for example)
- Choose one or more lucky winners
- Use them as a light show when playing music

On the next page you will find a picture of the SmartQuiz Director Galaxy tab and a further explanation of the options.
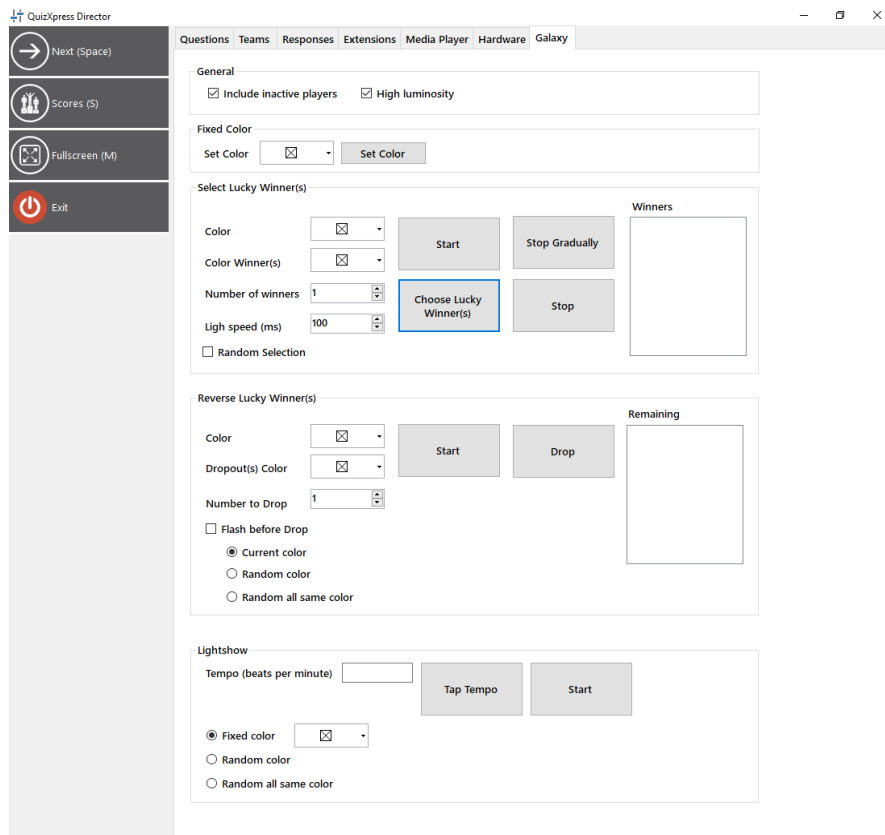
General section

- Include inactive players: the Galaxy devices of players that are inactive (dropped out of the game) also participate
- High luminosity: give the lights more brightness (this implies a bit more power consumption)

Fixed color section

Here you can set all Galaxy devices to a fixed color. You can for example use this to set them to a color which is primary for your event during breaks or for setting a certain mood for example when playing a video.

Select Lucky Winner(s)

With this section you can choose one or more lucky winners from the audience by lightning up the Galaxy devices of the winners. The light of the lucky winner(s) goes through the audience and comes to a halt indicating who the winner is. The options are as follows:

- Color: sets the initial color of the Galaxy devices for all players.
- Color Winner(s): sets the color of the lucky winner(s) Galaxy device(s).
- Number of winners: sets how many players win.
- Light speed: sets the speed in milliseconds in which the lucky winner(s) light(s) go through the crowd.

- Random selection: when enabled, the lights go through the audience randomly. Otherwise, the lights go through the galaxy devices from number 1 upwards. Note: when the players in the audience are randomly placed, the setting has no effect. It only has effect when the Random selection setting is off, and the players are lined up (for example in front of an audience).
- Start button: light up all galaxy devices in the audience with the initial color.
- Choose Lucky Winner(s): let the lucky winner light(s) go through the audience.
- Stop Gradually: let the lucky winner lights come to a halt gradually.
- Stop: stops the lucky winner lights immediately, the winner(s) are known immediately.

The Winners box displays the lucky winner(s) so that the quizmaster can also see the keypad numbers of the player(s) who won (note: these are not necessarily the same as the Galaxy device numbers, players can have a Galaxy device which has a different id).

Reverse Lucky Winner(s)

The reverse lucky winner option lets you pick one or more winner(s) by gradually dropping out players. So, where the lucky winner chooses one or more winners from an audience the reverse lucky winners drops players until one or more winners are left. The options are as follows:

- Color: sets the initial color of the Galaxy devices for all players.
- Dropout(s) Color: sets the color of the players which are dropped out.
- Number to Drop: sets the number of players to drop.
- Flash before Drop: here you can indicate if you want the galaxy devices to flash before the dropped players are shown. There are three options here:
    - Current color: flash all remaining player Galaxy devices in the current color
    - Random color: flash all remaining player Galaxy devices in a random color (each flash each galaxy device shows a different random color).
    - Random all same color: flash all remaining player Galaxy devices in the same random color (each flash another random color is shown for all Galaxy devices).
- Start button: light up all Galaxy devices in the audience with the initial color.
- Drop button: drop the number of indicated players.

The *Remaining* box displays the keypad numbers that are still in the race to win.

Lightshow

With the lightshow settings you can add an extra dimension to music that is played by using the Galaxy devices for a light show. The options are as follows:

- Tempo (beats per minute): sets the frequency at which the devices light up
- Tap Tempo button: most often you don't know the tempo (beats per minute) of the music that is being played. By tapping the Tap Tempo button along with the music, a couple of times the tempo is determined and shown in the Tempo (beats per minute) box.
- Start button: starts the light show

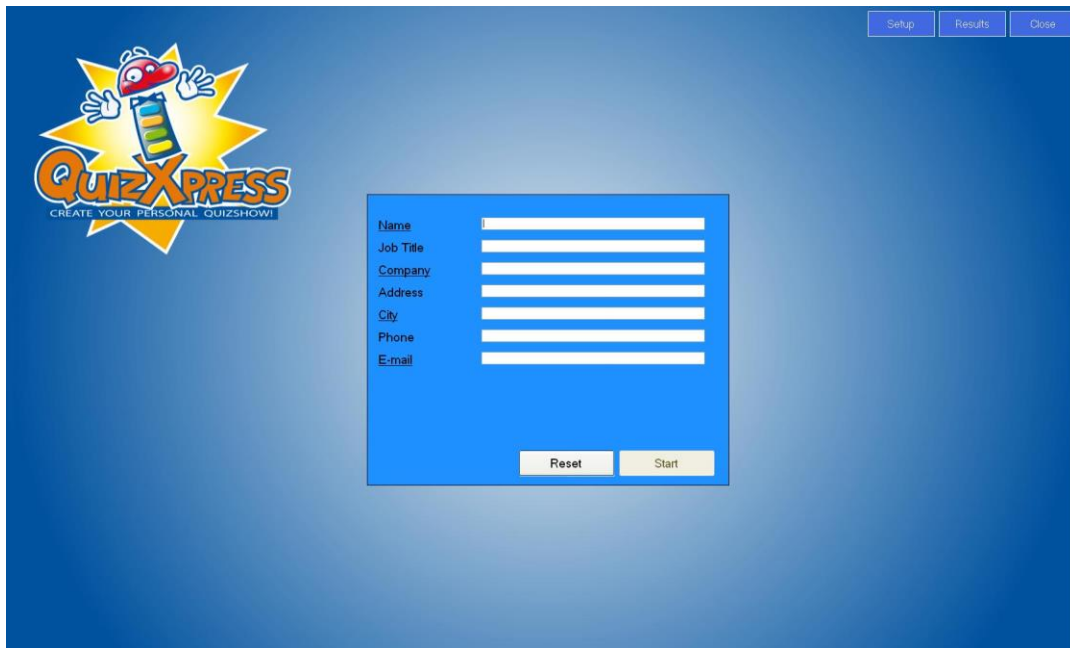- There are three color options for the light show:

- Fixed color: flash all Galaxy devices in the fixed color
- Random color: flash all Galaxy devices in a random color (each flash each Galaxy device shows a different random color).
- Random all same color: flash all Galaxy devices in the same random color (each flash another random color is shown for all Galaxy devices).

6   Running your quiz at a tradeshow booth with SmartQuiz Solo

SmartQuiz Solo is a variant of SmartQuiz Live That allows a single person to play a quiz. Before starting the quiz however, he or she needs to enter some personal data, after which the quiz starts. By using a single buzzer this person can answer the questions presented. The final score, as well as the time used to answer all the questions (all the correct ones) are recorded and can be shown, sorted by score, on request.

Imagine being at a trade show where you would like to attract people to your booth by letting them play a quiz. Of course, you would like to retrieve some information from these people. Therefore they need to fill in some information before the quiz starts. After a person has finished the quiz, the start (data entry-) screen of SmartQuiz Live is shown again, ready for the next player. As all scores are saved to an Excel file, at the end of the day you can pick out the winner who (for example) wins a prize. SmartQuiz Solo can be started from the start menu through Start>All Programs > SmartQuiz > SmartQuiz Solo.

The start screen of SmartQuiz Solo looks as follows:

The 'Results' button, used to show the results stored, is shown in the upper right side of the screen. It is not shown automatically, however. It is a 'hidden button', which is only shown after pressing the Control (Ctrl) key; this to prevent unauthorized persons to view the scores.

The 'Setup' button can be used to customize the data entry fields that are shown (please see 0 for more information).

After filling in all necessary information (underlined entry fields are mandatory), the 'Start' button becomes green and a user should press start to start the quiz. The welcome screen of the quiz is shown. Pressing the buzzer will advance to the first question. Questions are answered by using the A, B, D or D button on the buzzer used. When a question has been answered a player can continue by

pressing any key on the buzzer used. So in short, the full quiz can be operated by using a single buzzer. After a person has finished a quiz, the score screen is shown, which looks as follows:
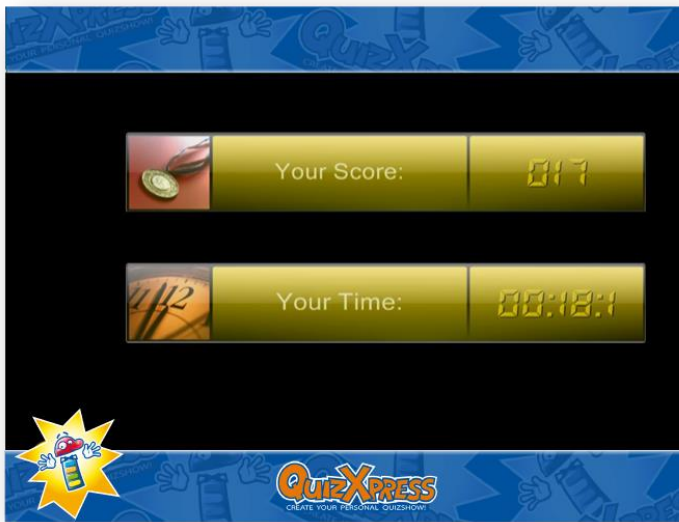
The score screen shows both the player's score and the time that was needed to answer the questions. In this time, only the time used when answering questions correctly is considered. After pressing one of the buzzer buttons, the initial screen of SmartQuiz Live is shown again.
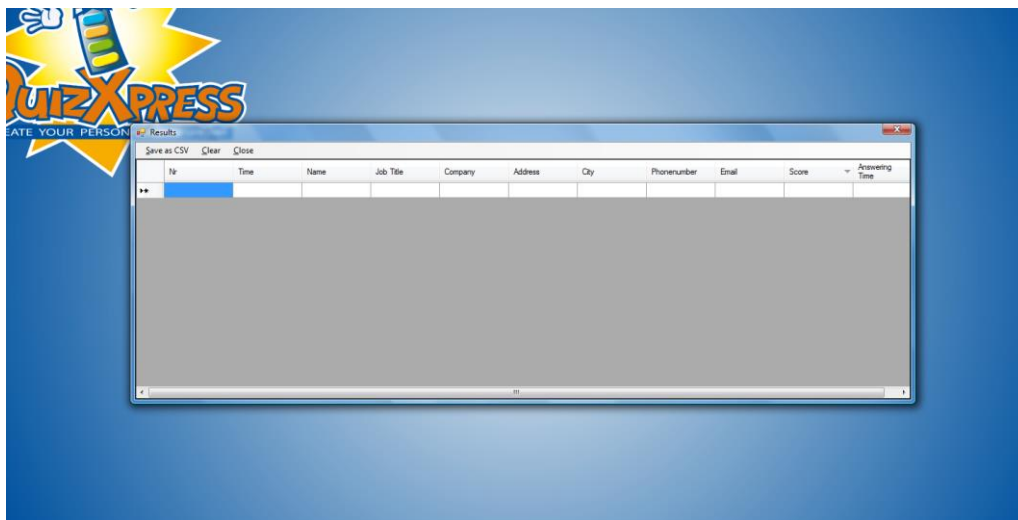
Pressing 'Results' shows the score screen with all participants that played so far:

6.1.1   Customizing the SmartQuiz Solo data entry screen
Both the background and the fields that can (or need to be) entered can be customized.

#### 6.1.1.1   Customizing the background picture
The background image of the data entry screen of SmartQuiz Solo can be customized by (re)placing a .jpg with file name "`SmartQuizSolo.jpg`" or a *.png* image with file name "`SmartQuizSolo.png`" into the installation directory of SmartQuiz.

6.1.1.2   Customizing the data entry fields

The data entry fields of SmartQuiz Solo can also be customized. In order to customize the fields, press the 'Setup' button shown on the top of the screen (like the 'Results' button this button becomes visible when pressing <Ctrl>). After pressing 'Setup' the following screen is shown:

In the window that is shown (see next page), all data entry fields can be entered (there is a maximum of 10 fields). If a field <u>must</u> be entered by a participant before the quiz can be started, place a checkmark in the 'Mandatory' column of the field. In this case, the field will be underlined on the start screen of SmartQuiz Solo, indicating to a participant that the field needs to be entered before he or she can start the quiz. When all mandatory fields are entered, the 'Start' button becomes green and a user should press start to start the quiz.

Note: if the number of fields is changed, previous stored score results will be cleared after confirmation. In this case, a message will be shown remembering you to first save the previous results if required (this can be done by first showing the current results by pressing the 'Results' button followed by choosing 'Save as CSV').
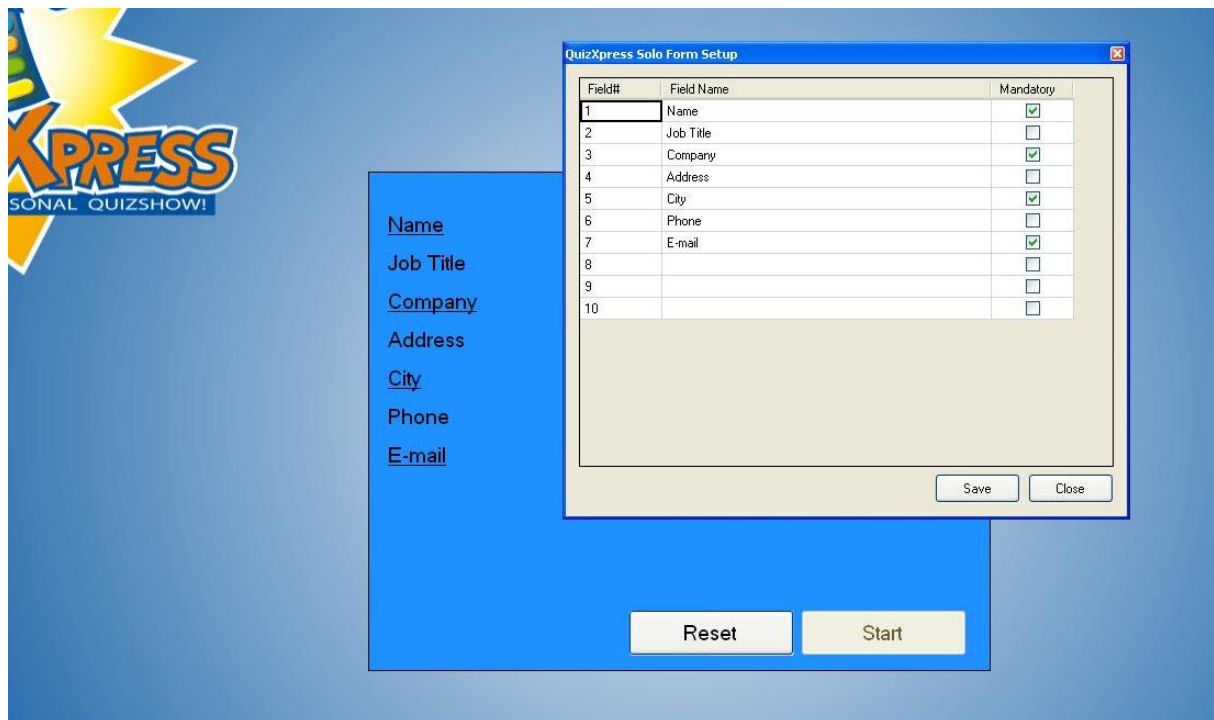
7 Analyzing quiz results with SmartQuiz Analyzer

As of version 3.3, SmartQuiz ships with a graphical analyzer tool. Analyzer helps you understand and visualize the data collected during the quiz. You can open multiple datasets in Analyzer allowing you to compare datasets collected over time. There are three views available:

- Question view
- Team view
- Demographic Groups (if demographic groups were present during a quiz)

The question-centric view looks as follows:

1) The list of all questions in the dataset
2) The question itself with the possible answers (if the .qx quiz file is available on the system a picture of the slide is rendered, if it is no longer available, you'll only see a textual representation)
3) The responses and scores (for the selected question) per team/player. When demographic groups are available, a 'demographic groups' tab is shown bottom right. In this tab, for each group, the number of votes per answer for the selected question is shown in a table.
4) A pie chart showing the response distribution for the selected question. When demographic groups are available, in the demographic groups tab, the response distribution for a group can be shown by selecting this group from the list box shown on top of the response distribution graph.

The team view has the following layout:
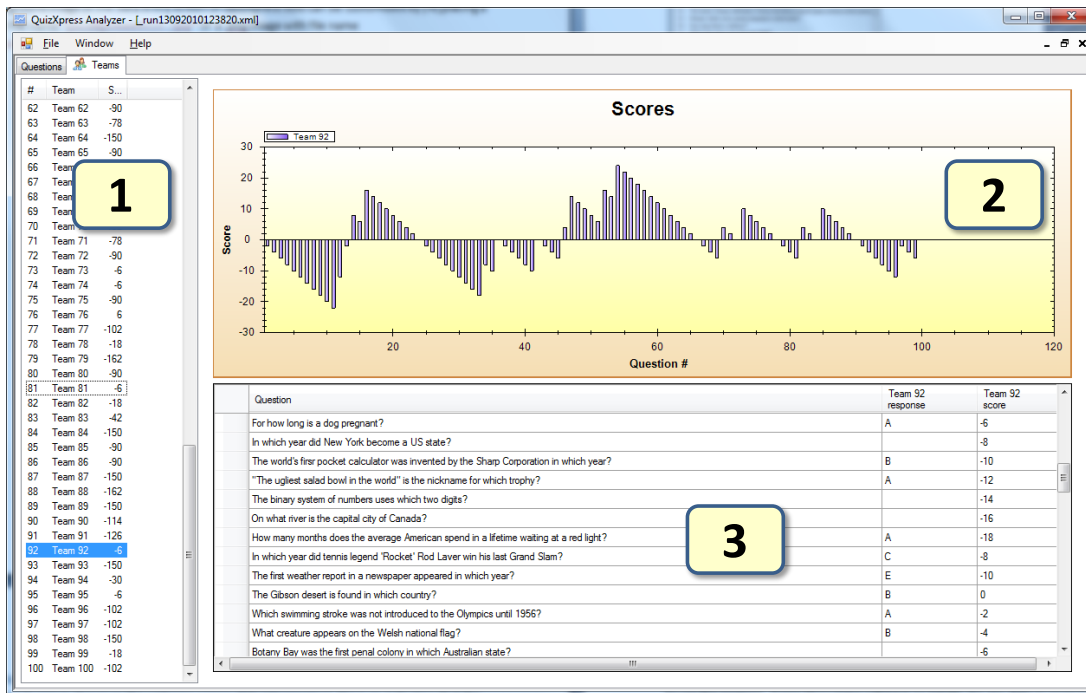
1) The list of team-/player names. Note that you can select multiple teams here.
2) A chart showing the score development over time
3) The questions and responses for the selected team(s)

The demographic group view has the same layout. In the table, for each question, all answers are displayed. For each selected group, the number of votes for each of the answers is displayed. The score development over time for the selected group(s) is also shown.

All data shown in Analyzer is stored during a quiz by SmartQuiz Live in the form of XML documents in the SmartQuiz application data folder (on Windows 7 the location of this folder is 'C:\Users\<username>\AppData\Roaming\SmartQuiz\Scores'). Please note that you can open this folder from SmartQuiz Studio under the Tools->Advanced menu).

7.1   Exporting results to Excel

Results can be exported to Excel by invoking the 'Export to Excel' command from the 'File' menu. The resulting Excel file will have a maximum of 4 worksheets:

- Score: Shows the score ranking
- Response: Shows all questions, with per question the responses, points gathered and total points per team
- Demographic Scores (if demographic groups are present): Shows the group score ranking
- Demographic Responses: Show for each question all responses per group per answer.

8   Troubleshooting

In this section you can find some common problems and their solutions.

8.1 Buzzer Connection issues

If a blinking buzzer/keypad is shown on the welcome screen of SmartQuiz Live, this is an indication that the buzzers are not connected properly. In order to resolve this:

- Open the Quiz Setup application and check if the buzzer type selected on the 'Buzzers' page corresponds with the buzzers you are actually using. For Fleetwood Reply buzzers, be sure to set the correct channel of the base station and the ids of the keypads used.

As stated before, you can use the *Buzzer Test* application, available from the SmartQuiz start menu to check if the buzzers have been setup correctly. This application is also suitable to test the range of your buzzers while you are at the production site.

Note: Windows 7 with the latest revision of the wireless Buzz^{TM} buzzers require a special procedure. Please contact us if you need help with this. On Windows 7, this revision of the buzzers is recognized as a USB HUB while it should use a USB HID (like mouse, keyboard etc.). You must set this manually.

8.1.1 Using Fleetwood Reply Systems keypads

To avoid troubles, you should always test the entire system before its use. For large rooms, you should obtain floorplans ahead of time, and decide on equipment placement. Keep the Reply equipment away from other radio devices, speakers, and large metal objects. The receiver should be placed as high as possible in the room so a clear line-of-sight can be established to the keypads. Walls may affect the range of the keypads. Be aware of the presence of WIFI routers in the room. These may affect the range of the Reply devices. For more information about proper setup of this keypad system, consult the Fleetwood Reply Mini user manual available from the download section of our site.

8.1.2 Using Sony wired buzzers on Windows Vista

The following revision of Sony <u>wired</u> buzzers does not work on Windows Vista: SCEH-0005. Please contact us if you need help with these buzzers.

All wireless versions of the Sony buzzers work with Windows. For Windows 7 and higher it may be required to follow a special procedure, depending on the revision of your buzzers. Please consult appendix C for the procedure on how to install the latest revision of the Sony buzzers on Windows Vista and Windows 7.

8.1.3 Large setups with Sony buzzers

 If needed, the receivers can be placed away from the computer by using <u>active</u> USB cables. In this way, 'islands' of people around a receiver can be created and allowing bigger groups to participate. SmartQuiz has been tested with up to 12 Sony Buzz^{TM} buzzers, but up to 20 buzzers have been used in the field. With wired buzzers there is no limitation. People have been using SmartQuiz with up to 120 wired Buzz^{TM} buzzers on a standard USB infrastructure.

9   Advanced topics

9.1   SmartQuiz Live recovery mode

To prevent loss of data or having to restart the quiz in case of a system failure, SmartQuiz Live has a built-in recovery mechanism. After ever completed question, the system saves its entire internal state to disk in a *snapshot* file, including scores, buzzer assignment data, the current question etc.

The snapshot file is removed if the application ends *normally*. If the system ends *abnormally* for some reason, the file remains and is detected the next time SmartQuiz Live starts. It will then prompt you with a question:
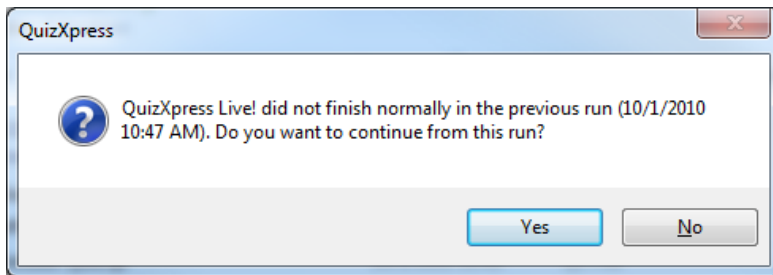
When you answer 'Yes' the system will reload the snapshot and you can continue where you left. Answering 'No' will start the system normally. So, whatever happens, you do not have to annoy your audience by having to replay part of your quiz.

Note: this recovery mode is not active when you start your quiz from SmartQuiz Studio in test mode. When you run your quiz for a real audience it is therefore advised to start your quiz by double clicking the .qx file or by starting Quiz Show.exe and select a file manually or by starting the quiz with 'Run Production' from within SmartQuiz Studio.

10 Tips and tricks

This chapter contains some general advice, thoughts and recommendations for successfully creating and running your quiz shows (in random order).

Know your system

You do not want to stand in front of a 150 people audience being ill-prepared. So, know how the system works, how to operate it, its limitations and what to do in case things do not go as expected.

Test your quiz

With the many available options, it is easy to forget to set a particular setting resulting in a quiz slide that behaves different than expected. You can test drive your quiz with the keypad simulation option in Studio. Lean back and watch your quiz running while the system acts as if there is a real audience. Also make sure you have set the right 'correct answer' on multiple choice slides. You do not want to have an argument with the audience about what was the correct answer. If you *did* make a mistake however you can always *undo* the last question in SmartQuiz Director!

Organize your quiz in rounds of similar questions

Creating different rounds with the same type of questions is easier to follow for your audience. Some ideas for rounds are:

- A 'Get the picture' round that has questions with pictures partially hidden with one of the effects
- A 'Guess the artist' round where you play a part of a song on each slide and the audience needs to guess the artist (note to make it less easy you can only provide the first letters of the artists in the answers)
- A 'True/False' round, with statements that the audience must validate.
- A Trivia Ladder round
- A Last Man Standing round where people drop off until only one is left

Also, it is better not to mix open questions and multiple choice questions in one round because each type of question has a different way of providing input (different keys on the keypad) so it may be confusing to your audience if every question is different.

Keep your quiz small by keeping media files external (or use the pack function)

With QX4, you can keep both your sound- and video files externally. This will keep your quiz files small and manageable. You can keep the files on their original path, or you can store them in the folder where the quiz file itself is stored. When copying your quiz to another computer you'll need to copy all external files as well (in which case you'll probably always need to put the files in the folder with the quiz file) or use the 'Pack' function to create a distributable quiz with all media embedded. When SmartQuiz Live starts, it will check if all external files are accessible and give a warning warn if not.

Have a backup system

For a critical event you may want to consider setting up a backup environment. This means having a second computer and/or a second RF receiver and cable, programmed to the identical id as your main receiver. This is needed as each keypad is paired with a single receiver so normally you cannot simply swap your receiver. However, we can provide you with a receiver that has the exact id as your main receiver. This way you can simply swap the receiver if it is broken or move to another computer without reprogramming your keypads. Please contact us for more details.

Know your target device

SmartQuiz supports three different aspect ratios for the slides; 4:3, 16:9 and 16:10. For a standard beamer you should use 4:3, however, when you are running your quiz on a widescreen TV-set you want to use 16:9 as it will look way better without large areas of unused space on the sides. As of QX5 you can change the aspect ratio on the fly in Studio. Make sure however to inspect your slides after that.

Explain the system to your audience

Start your quiz with a couple of slides that explain how the system works, how to operate the keypads, how you've setup your score system (e.g. with decreasing points) etc. After that, you can insert a couple of *test* questions that will not affect the scores but behave like real questions.

Use shapes and text

In SmartQuiz you can add text (or a picture) to your slide that becomes visible *after* the question is finished (all have answered, or time is over). For example, for an 'open' question, you can show the correct answer as a piece of text in this way.

Appendix A: Installing the SmartQuiz keypads/buzzers system

Please proceed as follows to install the SmartQuiz receiver and configure SmartQuiz to work with the buzzers.

In order to install the SmartQuiz receiver plug it in an available USB port. Windows will now install the receiver automatically on first usage. You will see the following messages in the windows taskbar.

Now you can configure SmartQuiz to use the SmartQuiz buzzers (please also refer to section 4.1.1.1).

- Start Quiz Setup
- On the 'Buzzers' tab page of Quiz Setup, select *SmartQuiz Keypad*.
- When the receiver is plugged in, you can press the 'Test' button, after which a connection is made. A green checkmark appears if successful.
- Now close Quiz Setup and start SmartQuiz Buzzer Test, which can be found on the Start menu under SmartQuiz. Pressing one of the buzzers should now light up the corresponding numbered box on the screen and show the chosen answer.
- When the preceding steps have been executed successfully SmartQuiz Live is ready to work with SmartQuiz Buzzers.

Note: SmartQuiz keypads work with 2 AAA type batteries.

The SmartQuiz receiver has three LED-lights. The red one indicates if it has power, the yellow one indicates communication and the green one indicates RF polling activity. During the quiz show, the green one should be blinking. If not, you should restart the device with F12.

Appendix D: Software License Agreement

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