

Quizzes are a fun way to communicate, gather data about app users, and spice up your application. There are lots of options to choose from when configuring quiz screens. Quiz screens share some common properties with other screen types such as background colors, navigation bar titles, etc. This document focusses on some less obvious quiz properties.

Show Correct Answers: When a user is taking a quiz, and selects an answer, you may or may not want to show the correct answer. Showing the correct answer will highlight the answer when they make a selection.

Points per Correct Answer: Use this property to set how many points a user earns when they answer a question correctly.

Show Reward if Points Over: This property is used in conjunction with a Reward Screen. The idea is that if a user answers enough questions you may want to show them a reward screen. This means you'll need to configure a screen to show as a reward prior to setting this property. If this feature is used, a button labeled 'Show Reward' will show when the quiz ends.

Finished Screen Nickname / Reward Screen Nickname: When a user is done taking a quiz, you may want to lead them to another screen, or, if you want, to a Reward Screen.

Finish Screens and Reward Screens can be any type of screens you configure. You'll need to configure these screens prior to setting these properties. This is because you need to know the nickname of the screen to use as the finish or reward screen. If a user earns a reward, the reward screen option will show and the finish screen option will not. If the user does not earn a reward, or if no reward is configured, the finish screen option will show only if you configured one.

Question Text: Some quizzes use text-only to 'ask the question' and others use images only. And, some use both text and images. When adding or updating questions, the Question Text is required. However, you may not want to show any text. In this case, enter the word "none" (without the quotes) and the text will not display in the quiz. This is useful when you're creating quizzes that use images only.

The screenshot shows the 'Quiz Behavior' configuration screen. It contains various settings for quiz behavior, each with a text input field and a 'Select' button. The settings are:

- Number of Question (number):** Input field.
- Delay Between Questions (number):** Input field.
- Randomize Question Order:** Dropdown menu with '--select--'.
- Show Correct Answers:** Dropdown menu with '--select--'.
- Points Per Correct Answer (number):** Input field.
- Show Reward if Points Over (number):** Input field.
- Finished Screen Nickname:** Input field with 'Radiology Calculator' and a 'Select' button.
- Finished Screen Transition Type:** Dropdown menu with '--select--'.
- Reward Screen Nickname:** Input field with a 'Select' button.
- Reward Screen Transition Type:** Dropdown menu with '--select--'.
- Show Scoreboard Option:** Dropdown menu with '--select--'.
- Sound Effect Correct:** Input field with a 'Select' button.
- Sound Effect Incorrect:** Input field with a 'Select' button.
- Sound Effect Finished:** Input field with a 'Select' button.
- Sound Effect Reward:** Input field with a 'Select' button.

On the right side of the screen, there are explanatory text blocks for 'Number of Questions', 'Reward Screens', 'Scoreboards', 'Sharing', and 'Sound Effects'. A 'save' button is located at the bottom right.

Question Images: If you're using images for each quiz question, be sure they are the proper dimensions. Any "size" will work but they look much better if they are sized for their purpose.

Image Names: If you use image names (and not image URL's) you'll need to "add images" to your project after downloading the source-code from your buzztouch control panel. Add images to the project by dragging them into the BT_Images folder. Drag them into your project in Xcode or Eclipse (after opening your project) and not into the source-code folder you downloaded. Xcode and Eclipse need to "know about" these images and adding them to the project is how you tell Xcode or Eclipse "hey, I wanna use these images in my project"

Tip: Create a folder on your computer to store all your app images. When you download the source-code for your project, open Xcode or Eclipse and drag the entire folder of images into the BT_Images folder.

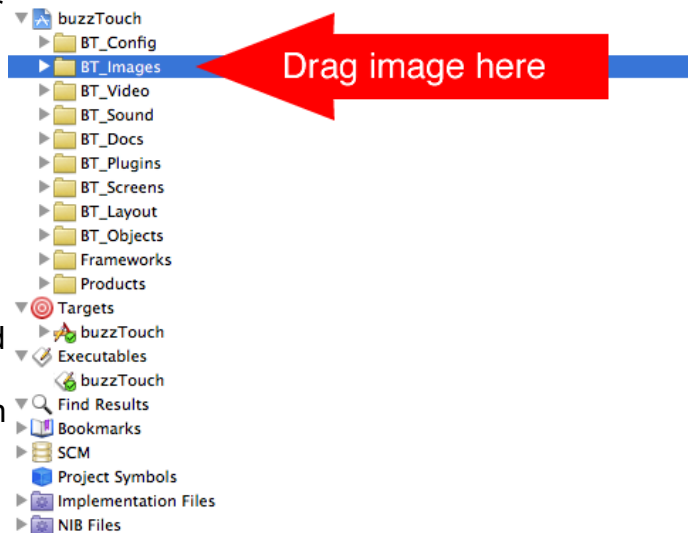


Image URL's: If you use image URL's (and not image names) the images will be downloaded from the internet and saved on the device. Images are saved to improve performance and are available when the application is offline.

Image Sizes:

Recommended image size: 300 x 150 for small devices. 748 x 350 for large devices.

Data URL: If you want to pull questions from a remote data source, such as your web-server, enter the URL to the file. The file may be static, such as a plain text file of questions, or it may be dynamic, such as a PHP script that outputs questions stored in a database.

If you use a text file, you may enter something like this in the Data URL box:

<http://www.mysite.com/quizquestions.txt>

If you use a dynamic script, you may enter something like this in the Data URL box:

<http://www.mysite.com/quizquestions.php>

Both of these URL's need to output Quiz Questions in a valid JSON format. Each question consists of an itemId, itemType, questionText, correctAnswerText, incorrectText1, incorrectText2, and incorrectText3. Optionally, it may include an imageNameSmallDevice, imageURLSmallDevice, imageNameLargeDevice and imageURLLargeDevice.

A series of question items is wrapped in a "childItems" object and output like this:

```

{"childItems":[

  {"itemId":"question1", "itemType":"BT_questionItem", "questionText":"What is the
capital city of Nevada?", "correctAnswerText":"Carson City", "incorrectText1":"Las Vegas",
"incorrectText2":"Reno", "incorrectText3":"Tahoe",
"imageUrlSmallDevice":"http://www.mywebsite.com/quizImage1.png"},

  {"itemId":"question2", "itemType":"BT_questionItem", "questionText":"What is the
capital city of California?", "correctAnswerText":"Sacramento", "incorrectText1":"Modesto",
"incorrectText2":"Monterey", "incorrectText3":"Los Angeles",
"imageUrlSmallDevice":"http://www.mywebsite.com/quizImage2.png"}

]
}

```

Pay special attention to the square brackets. All the questions items are inside the square brackets. Also, pay special attention to the commas separating each question. The last question in the list is not followed by a comma. The white-space you see between questions should not be included in the output, it is here for readability only.

Scoreboard URL: Scoreboard URL's serve two purposes. First, they “accept” quiz results so they can be saved to a backend database. Next, they output JSON data that is consumed by the mobile application to produce the scoreboard screen. This means the script at this URL has two jobs. To save quiz results, and to output quiz results. Quiz Results are appended to the end of the URL. Example, if you setup a custom script at:

<http://www.mywebsite.com/quizresults.php?command=getQuizResults>

The mobile application would append variables to the end of the URL and request this URL:

<http://www.mywebsite.com/quizresults.php?command=getQuizResults &VARIABLES HERE>

These variables will be appended to the URL:

NOTE: Your URL must include the starting question mark (like the example above). If you don't have an important variable to append, use `quizresults.php?1=1` or anything else. The mobile app will append ampersands and values so you need to append the first question mark.

userDisplayName=the name entered in the score-board screen name box (string)
 totalPoints=quiz points earned (integer)
 totalSeconds=quiz seconds to complete (integer)
 numberOfQuestions=quiz number of questions (integer)
 numberCorrect=quiz number of questions answered correctly (integer)
 numberIncorrect=quiz number of questions answered incorrectly (integer)
 deviceModel=the device model (String, ex: iPhone, iPod Touch, Motorola Droid)
 deviceId=the unique device id (String, usually around 20 characters but could be up to 50)
 deviceLatitude=the latitude of the device (float, may be negative, may be blank)
 deviceLongitude=the longitude of the device (float, may be negative, may be blank)

Scoreboard Output: After your URL accepts the data, and saves it, it will need to output JSON data to return to the mobile device. This data is used to display the scoreboard list. A series of scoreboard items is wrapped in a “childItems” object and output like this:

```
{"childItems":[

  {"itemId":"1", "titleText":"Joe", "descriptionText":"03-20-2011 13:25:23 (gmt) 750 points in 60 sec. Ipad-Simulator", "rowAccessoryType":"none", "loadScreenWithItemId":"none"},

  {"itemId":"2", "titleText":"Bill", "descriptionText":"03-20-2011 13:26:35 (gmt) 750 points in 14 sec. Ipad-Simulator", "rowAccessoryType":"none", "loadScreenWithItemId":"none"},

  {"itemId":"3", "titleText":"Sally", "descriptionText":"03-20-2011 13:32:38 (gmt) 750 points in 323 sec. iPhone-Simulator", "rowAccessoryType":"none", "loadScreenWithItemId":"none"},

  {"itemId":"4", "titleText":"Tina", "descriptionText":"03-20-2011 13:08:48 (gmt) 150 points in 5 sec. iPhone-Simulator", "rowAccessoryType":"none", "loadScreenWithItemId":"none"}

]
```

Like before, the white-space you see between items should not be included in the output, it is here for readability only.

NOTE: It's important to include “none” for the rowAccessoryType and “none” for the loadScreenWithItemId values so nothing happens when the item is selected in the list. Yes, you could customize this behavior. The scoreboard is a BT_screen_menuList so you can include any properties any other menu-list may use. That discussion is beyond the scope of this document.