## Create a new App inventor project – name it **QuizGame**

### Set up the Components

Use the component designer to create the interface for QuizGame. When you finish, it should look something like the snapshot below (more detailed instructions below the snapshot).

Viewer	Components
Display hidden components in Viewer	<ul> <li>Screen1</li> <li>PictureImg</li> <li>QuestionLbl</li> <li>HorizontalArrangement1</li> <li>Label2</li> <li>TextBox1</li> <li>FeedbackLbl</li> <li>HorizontalArrangement2</li> <li>SubmitBtn</li> <li>NextBtn</li> </ul>
	Media 1.jpg 2.jpg

To create this interface, put the following components into the Designer by dragging them from the Component Palette into the Viewer. Apart from those components highlighted below use the default properties..

© Screen1	Screen1
Pcturelang     QuestionLbl     MorizontalArrangement1     Label1     TextBox1     FeedbackLbl     HorizontalArrangement2     SubmitBtn	AboutScreen
NextBtn	BackgroundColor White BackgroundImage None CloseScreenAnimation Default
	Icon None
	OpenScreenAnimation Default
Rename Delete	ScreenOrientation Unspecified
Media	Scrollable ☑

Components	Properties
Screen1	QuestionLbl
<ul> <li>Pictaretms</li> <li>QuestionLbl</li> <li>MorizontalArrangement1</li> <li>EedbackLbl</li> <li>MorizontalArrangement2</li> <li>SubmitBtn</li> <li>NextBtn</li> </ul>	BackgroundColor None FontBold FontItalic FontSize 16.0 FontTypeface monospace Text Question TextAlignment left TextColor Black
Rename Delete Media 1.jpg 2.jpg	Visible showing ▼ Width Automatic Height Automatic

Components	Properties
⊖ 🗍 Screen1	HorizontalArrangement1
<ul> <li>PictureImg</li> <li>QuestionLbl</li> <li>HorizontalArranger.ent1</li> <li>Labeiz</li> <li>TextBox1</li> <li>FeedbackLbl</li> <li>HorizontalArrangement2</li> <li>SubmitBtn</li> <li>NextBtn</li> </ul>	AlignHorizontal Left AlignVertical Top Visible showing Width Fill parent Height Automatic



Components	Properties
Screen1	FeedbackLbl
<ul> <li>PictureImg</li> <li>QuestionLbl</li> <li>HorizontalArrangement1</li> <li>Label2</li> <li>FeedbackLbl</li> <li>NorizontalArrangement2</li> <li>SubmitBtn</li> <li>NextBtn</li> </ul>	BackgroundColor None FontBold FontItalic FontSize 14.0 FontTypeface default
	TextAlignment left TextColor Black Visible
Rename Delete	Width



Components	Properties
Screen1	NextBtn
<ul> <li>PictureImg</li> <li>QuestionLbl</li> <li>HorizontalArrangement1</li> <li>Label2</li> <li>TextBox1</li> <li>FeedbackLbl</li> <li>HorizontalArrangement2</li> <li>NextBtn</li> </ul>	BackgroundColor Default Enabled FontBold FontItalic FontSize 14.0 FontTypeface default Image None Shape default ShowFeedback
Rename Delete	Text Next

Now that you have all the essential properties configured, feel free to change the colours / text size and alignments of any components that you want to.

### **Creating variables**

To store some values that the game names we are going to create a few variables.

Blocks	Viewer
Built-in Control Logic Math	initialize global name to get get get get global CurrentQuestion to
Text Lists Colors	set <b>C</b> to <b>b</b> initialize local name to <b>b</b>
Variables     Procedures     Screen1     ProtureImg	initialize global (answers) to t i create empty list
QuestionLbl     MorizontalArrangemei	

The **CurrentQuestion** is going to store the number of the current question during the game. It will be updated each time the user moves onto another question.

The **questions** variable is a list of questions – initially an empty list.

The **answers** variable is the list of answers – initially an empty list too.

#### Setting the game up – creating a procedure

Each time we need to show a question on screen we need to display the question text and the associated image. We will need to do this many times so we can create a procedure. A procedure is a series of operations that we can group together and call each time rather that repeatedly rewrite the same code.



#### Setting the game up – adding questions and answers

When the game first starts we need to set up the questions and answers and then show the first question and associated image one on screen.

Blocks	Viewer
<ul> <li>Built-in</li> <li>Control</li> <li>Logic</li> <li>Math</li> <li>Text</li> <li>Lists</li> <li>Colors</li> <li>Variables</li> <li>Procedures</li> <li>Screent</li> <li>Screent</li> <li>Pricturels right</li> <li>Insertent.bl</li> <li>HorizontalArrangeme</li> <li>Label2</li> <li>TextBox1</li> <li>FeedbackLbl</li> <li>HorizontalArrangeme</li> <li>A peedbackLbl</li> <li>HorizontalArrangeme</li> <li>SubmitBtn</li> </ul>	when Screen1 BackPressed do when Screen1 ErrorOccurred component functionName errorNumber message do when Screen1 Initialize do when Screen1 Initialize do when Screen1 OtherScreenClosed otherScreenOrientationChanged do

Once you put these blocks together, connect your phone and test this feature out!

#### The submit button

When clicked we need to check the answer in the TextBox (entered by the user) and compare it with the expected answer. To do this we'll use an IF ...ELSE statement. If TRUE we let the user know the answer was correct otherwise (FALSE) we let the user know the answer was incorrect.



Once you put these blocks together, connect your phone and test this feature out!

#### The next button

When the user options to move to the next question, we need to update the **CurrentQuestion** variable and set up the next question ... we can use the **SetQuestion** procedure that bit.



Once you put these blocks together, connect your phone and test this feature out!

Add an icon to the app.

# **Complete Program**

## Here's the complete QuizGame program.



#### **Possible improvements**

- 1. More questions
- 2. Add a sound when the user answers correctly and another sound if wrong!
- 3. Keep a score
- 4. Display the correct answer if the user get a question wrong
- 5. Have one of the questions a song track that plays and the user needs to identify the song.