

# MUSIC MAKER: CHALLENGE

You will write  
the code now to  
Record music you  
make with your Music  
Maker!

## START HERE

1

Open your MusicMaker project and go  
to the Designer. ----->

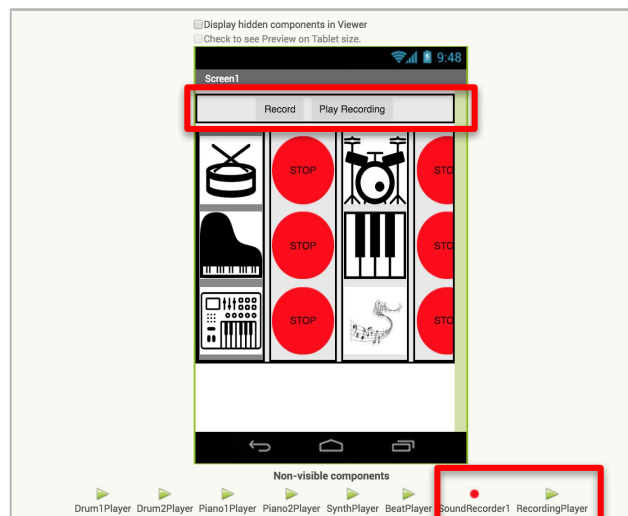


2

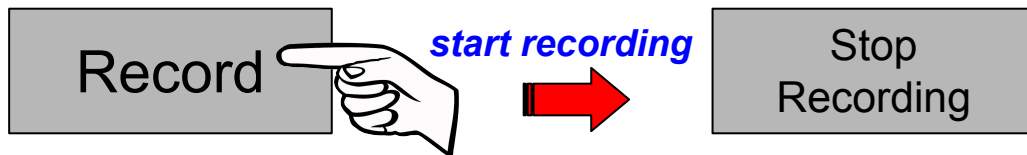
Add the following Components:

Drawer	Component	Name	Property	Setting
Layout	Horizontal-Arrangement	Record-Arrangement	<i>Width</i>	"Fill Parent"
User Interface	Button	RecordButton	<i>Text</i>	"Record"
User Interface	Button	PlayRecordingButton	<i>Text</i>	"Play Recording"
Media	Player	RecordingPlayer		
Media	SoundRecorder	SoundRecorder1		

Your new components should  
appear like this when you're  
finished. ----->



Here is the idea; when the user presses a Record button, the app will start recording. But the button text will also change to say “**Stop Recording**”.



Likewise, if the app is currently recording, when the user presses the button the app will stop recording and change the button's text back to “**Record**”.



## BOOLEAN VARIABLE

3

You will use a Boolean variable to keep track of whether the app is recording or not. Initially, you are not recording, so the variable is **false**. Create and initialize the new variable, and name it **recording**.

The screenshot shows the MIT App Inventor interface. On the left, the 'Blocks' palette has the 'Variables' category circled in red. In the center 'Viewer' area, the 'initialize global name to' block is circled in red, with an arrow pointing to a specific instance where the name is 'recording' and the value is 'false'. On the right, another 'Logic' block is circled in red, showing a 'false' value selected from a dropdown menu. Arrows indicate the flow from the 'Variables' category to the 'initialize global' block and then to the 'Logic' block's value selection.

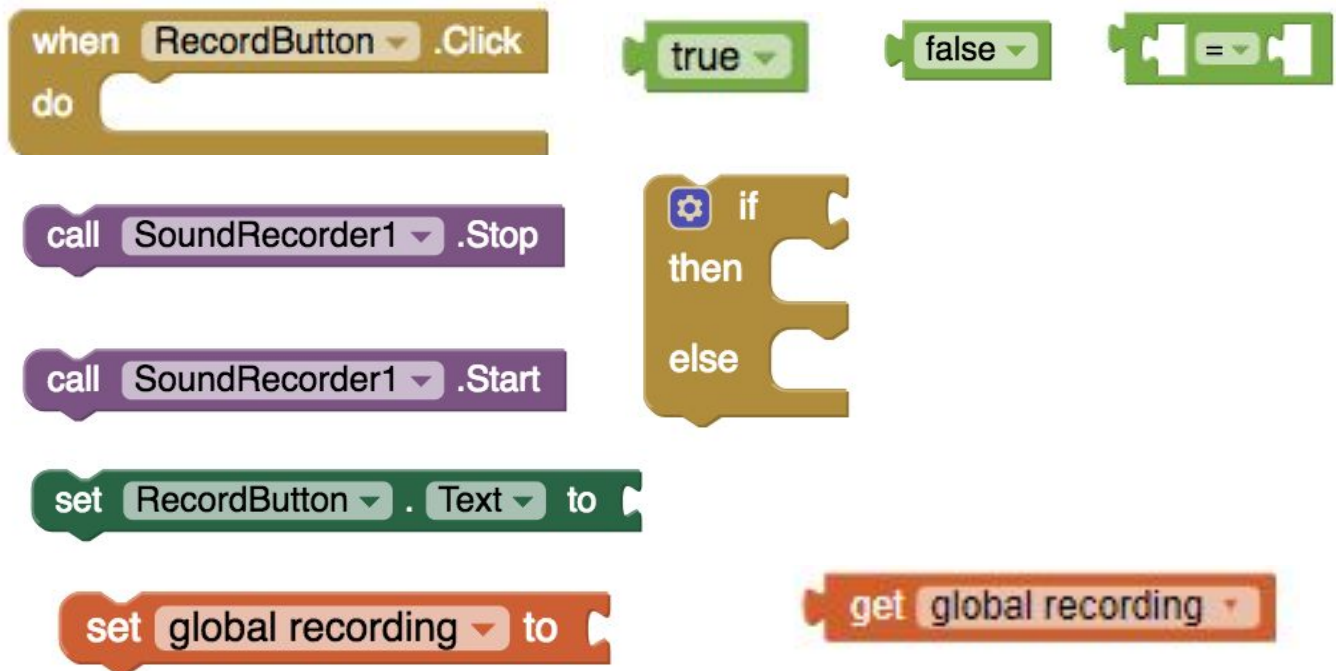
## CHECK IF WE ARE RECORDING

- 4 When the **RecordButton** is clicked, you need to check whether or not you are recording.

If recording:

- Stop recording.
- Display “Record” on **RecordButton**.
- Set **recording** to *false*.
- else (not recording)
  - Start recording.
  - Display “Stop recording” on **RecordButton**.
  - Set **recording** to *true*.

Use the blocks below.



## AFTER RECORDING

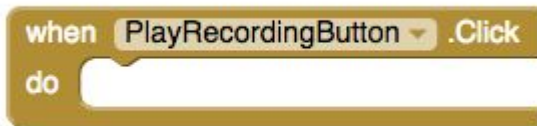
5

For the **SoundRecorder**, after the music is recorded, you want to save the recording so the **RecordingPlayer** component can replay it. The sound variable is the recorded sound, so set the *Source* of your **RecordingPlayer** to **sound**.



6

Also code the **PlayRecordingButton.Click** event!



What should happen when the user clicks this button?

7

You might want to disable the **PlayerRecordingButton** until the sound has been recorded. Can you figure out how to disable and enable that Button?

8

As always, test your app to make sure it works as expected!

