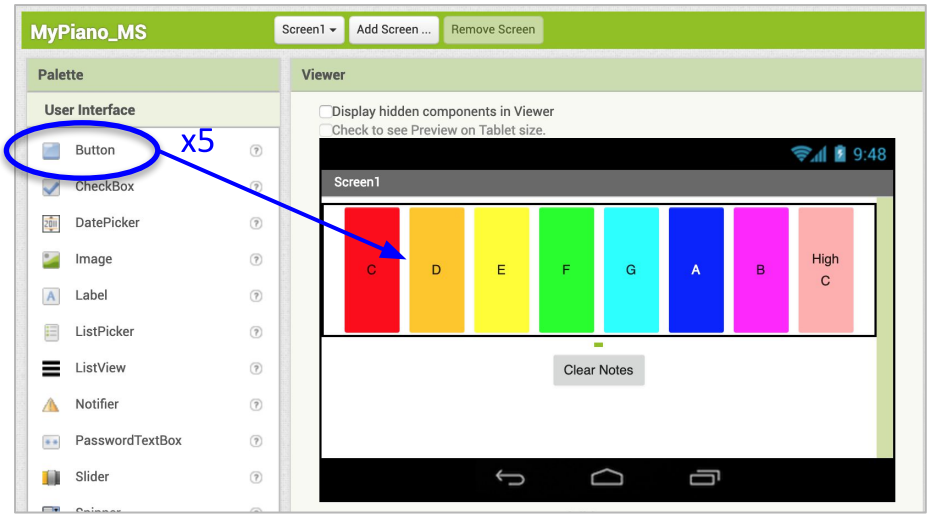
MY PIANO: CHALLENGE

Thanks for trying some of the Challenges. Try one, two, or all of the suggestions, or come up with your own!

ADD SHARP NOTE BUTTONS

1. Switch to the Designer.

2. Add 5 more Buttons for the 5 Sharp Notes (C, D, F, G, and A). Remember to name them CSharpButton, DSharpButton, etc) so the sound file works properly.

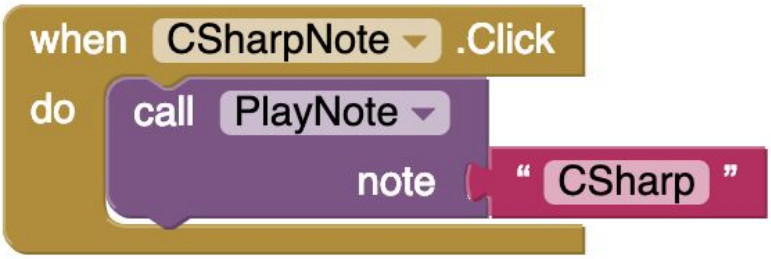


3. Since you added 5 new Buttons, you have a total of 13. If you want all the *Width's* to add up to 100%, what percentage should each **Button** *Width* be? You can round down to the nearest whole number.

ADD SHARP NOTES (continued)

4 Switch to the Blocks Editor.

5 Add Button.Click event blocks for all you new Buttons. Remember to set the note parameter to match the Button name, since that matches the sound filename.



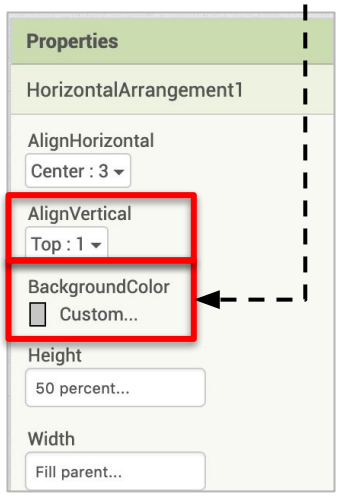
MAKE THE BUTTONS LOOK LIKE A PIANO

1 Switch to the Designer.

2 Changing the key color is really easy! Change all the regular buttons to a white *BackgroundColor*, and all the Sharp buttons to a black *BackgroundColor*. You will have to change the *TextColor* for the black buttons to white so they appear on the black background.

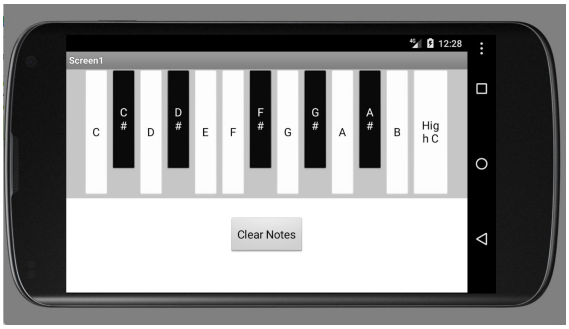
3 To make the white buttons show up, change **HorizontalArrangement1's** *BackgroundColor* to a light grey (or some other color).

4 And change the *AlignVertical* property to "**Top: 1**" for **HorizontalArrangement1**.



5 You could make the Sharp Note **Buttons** not quite as tall as the regular notes. 40% is a good option, but you can try different values to see what you like.

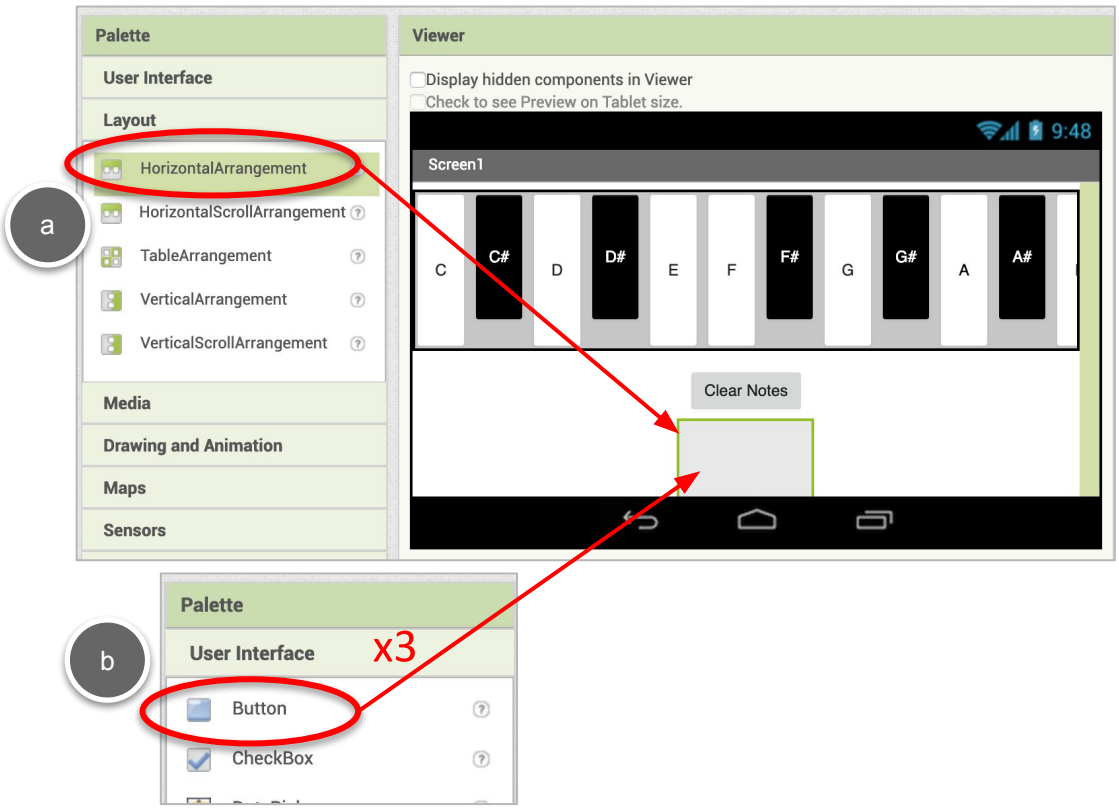
Should look something like this!



RECORD YOUR MUSIC

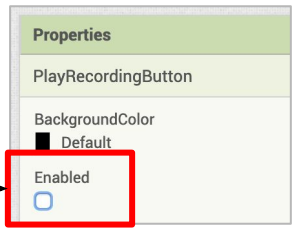
1. Switch to the Designer.

2. Add a **HorizontalArrangement** to the Viewer, and drop 3 **Buttons** into the **HorizontalArrangement**.

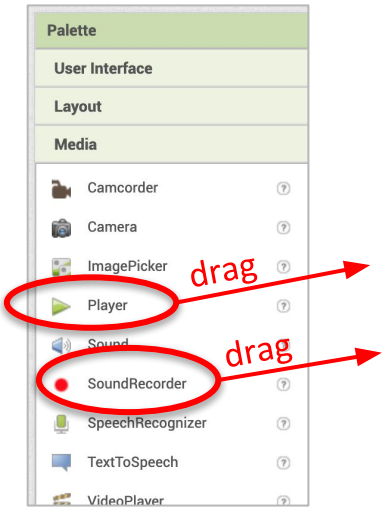


3. Name them **RecordButton**, **StopRecordingButton**, and **PlayRecordingButton**, in that order and change the *Text* property for each to its purpose.

4. Uncheck the *Enabled* box for the **StopRecordingButton** and the **PlayRecordingButton**.



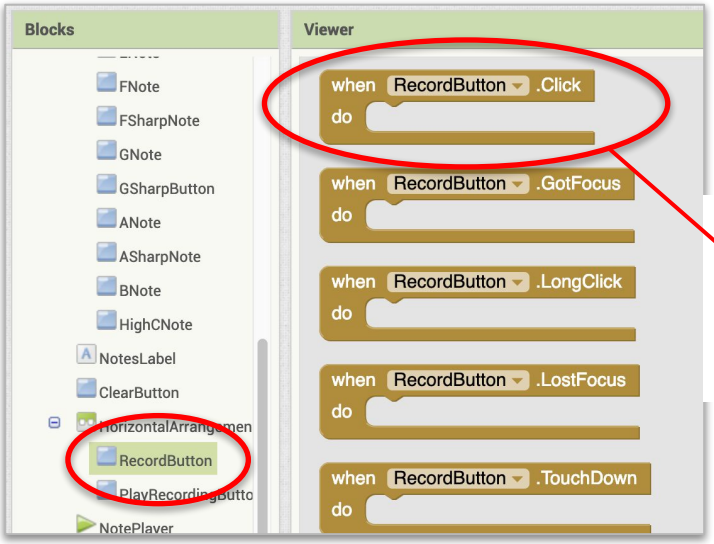
5. Drag in a **SoundRecorder** component and another **Player** component from the Media drawer. Rename the Player component **RecordingPlayer**.



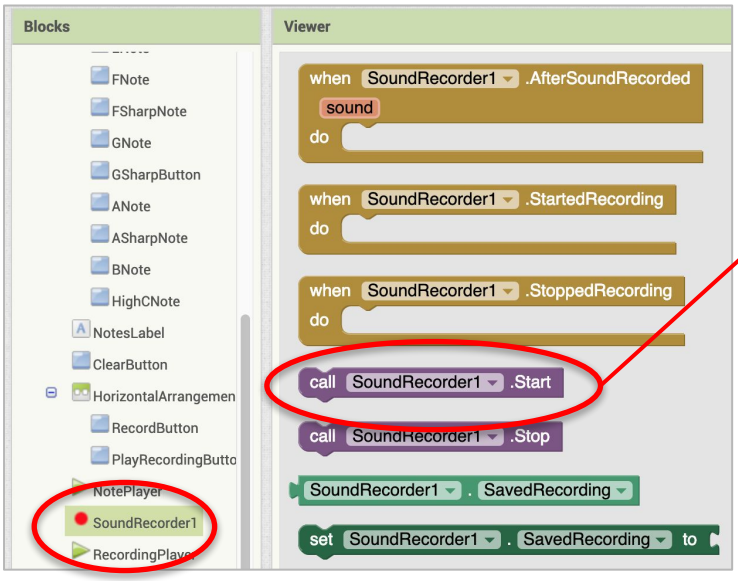
RECORD YOUR MUSIC (continued)

6 Switch to the Blocks Editor.

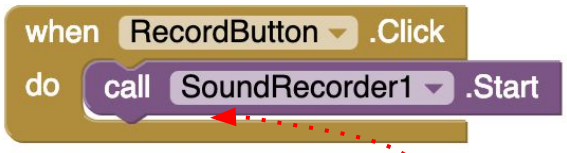
7 Drag out a **RecordButton.Click** event block.



8 When the user clicks this **Button**, you want to start the **SoundRecorder**.

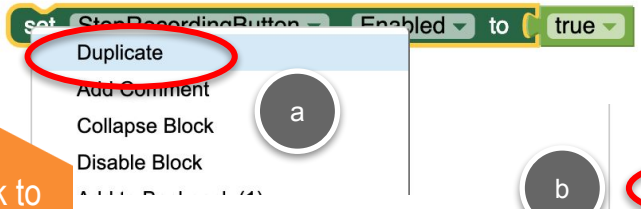


RECORD YOUR MUSIC (continued)



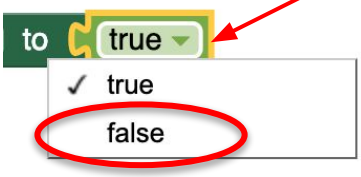
9 You also want to enable the **StopRecordingButton** so they can stop the recording when they wish.

10 Since the app is recording, disable the **RecordButton** by Duplicating the **set StopRecordingButton.Enabled** block and changing **StopRecordingButton** to **RecordButton** in the dropdown.



Right click to the get popup menu

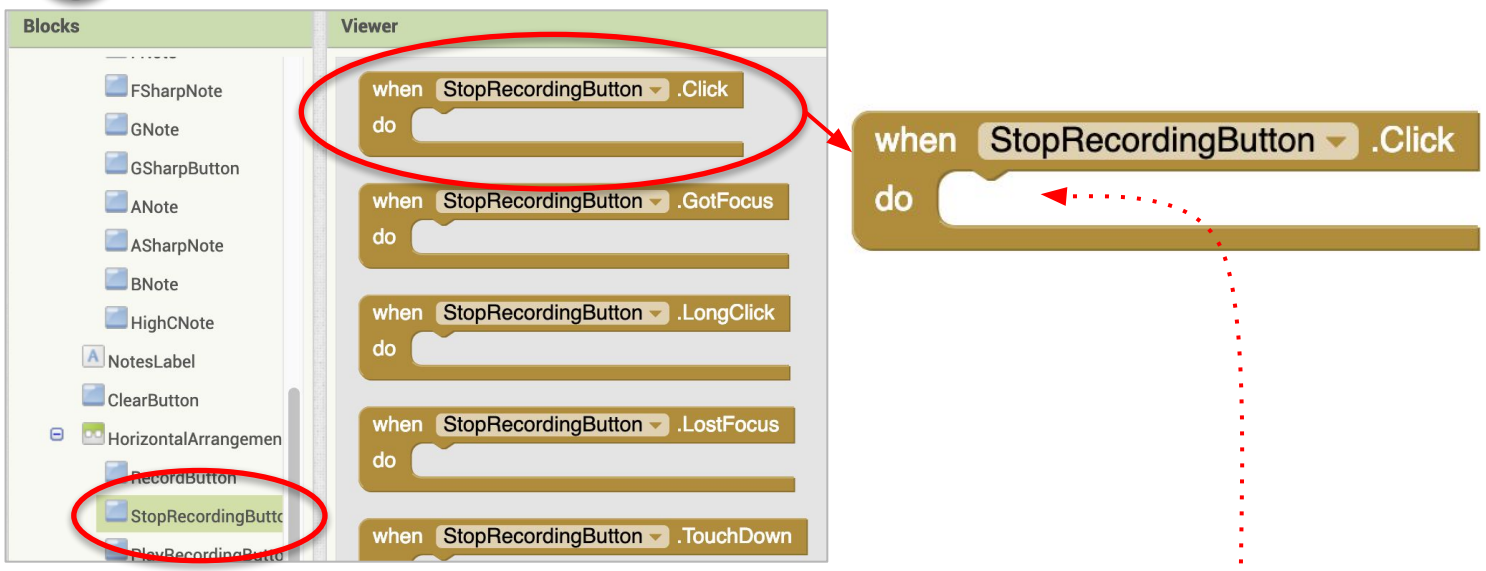
11 And change **true** to **false** in the dropdown.



RECORD YOUR MUSIC (continued)

12 Duplicate the **set RecordButton.Enabled to false** block and change it for **PlayRecordingButton.** You want to make sure the user doesn't try to play back a recording while the app is recording.

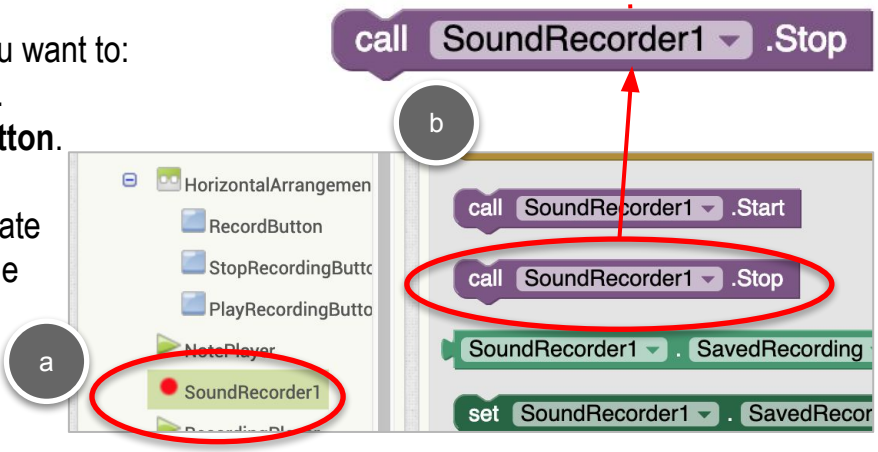
13 Drag out a **StopRecordingButton.Click** event block.



14 When the user stops recording, you want to:

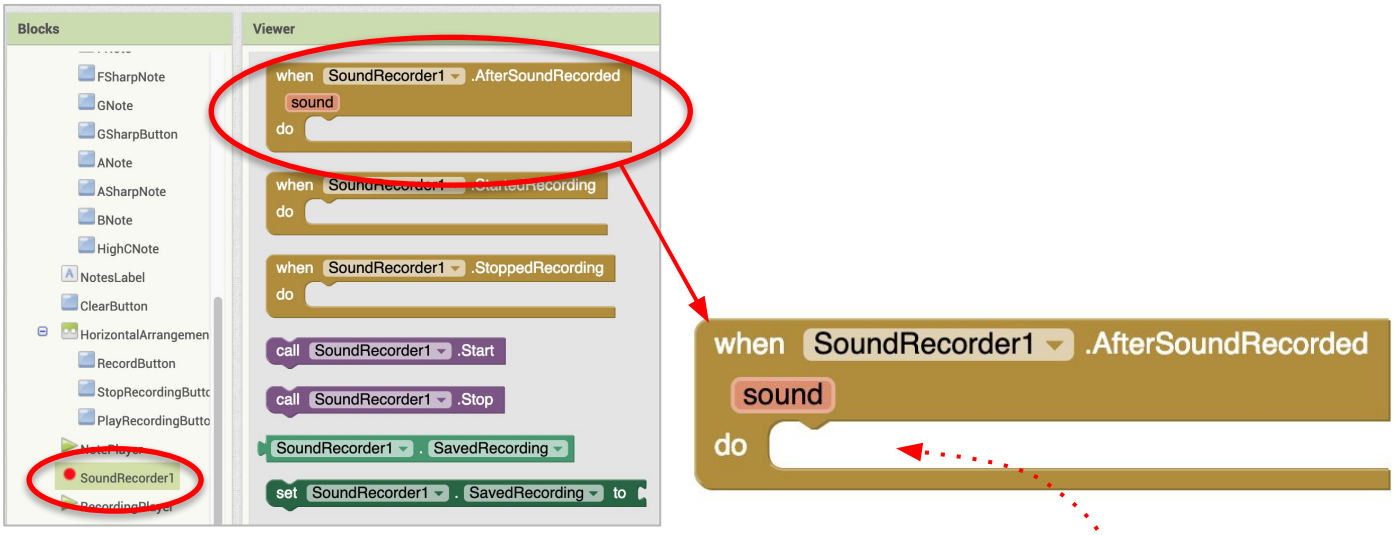
- Stop the **SoundRecorder1**.
- Disable **StopRecordingButton**.
- Enable **RecordButton**.

Use the Duplicate feature to duplicate and change what you need from the **RecordButton.Click** event.

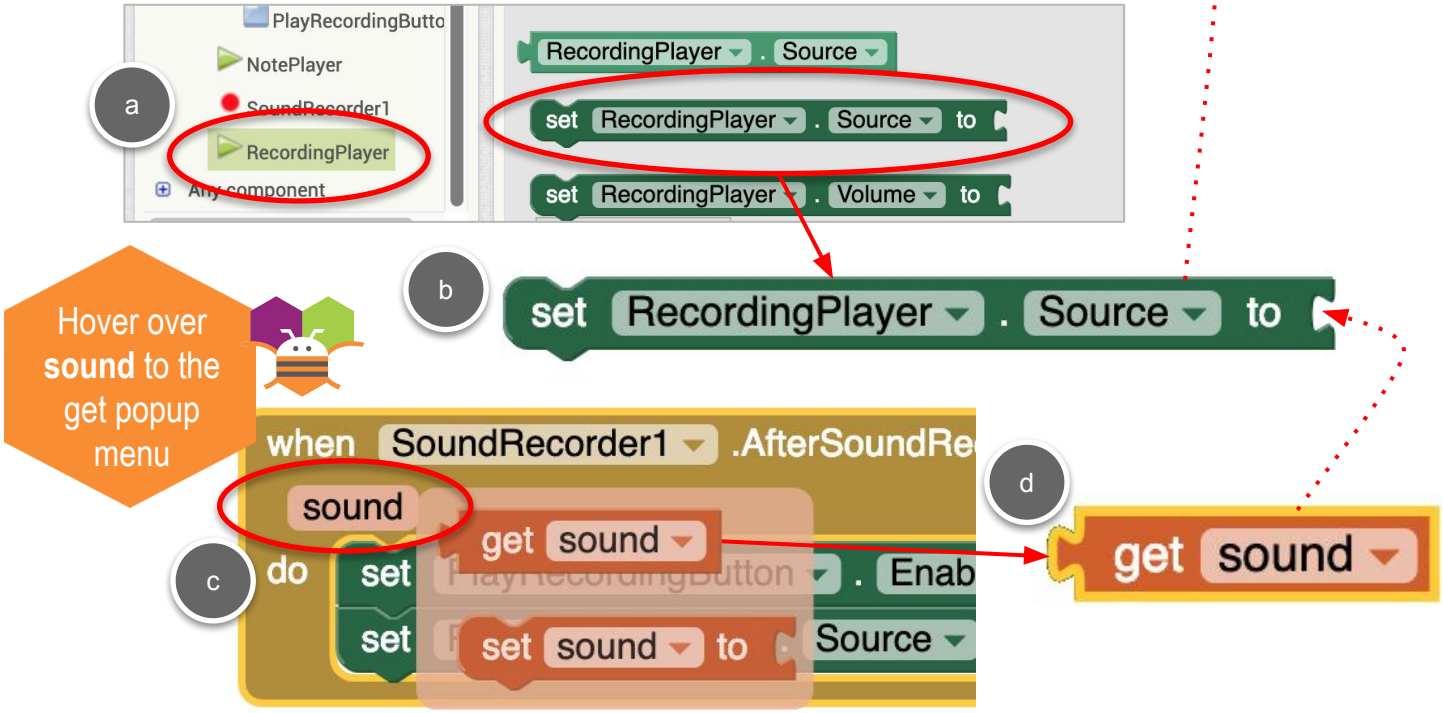


RECORD YOUR MUSIC (continued)

15 When the **SoundRecorder** finishes, it triggers an event, **SoundRecording.AfterSoundRecorded**. Drag out this block.

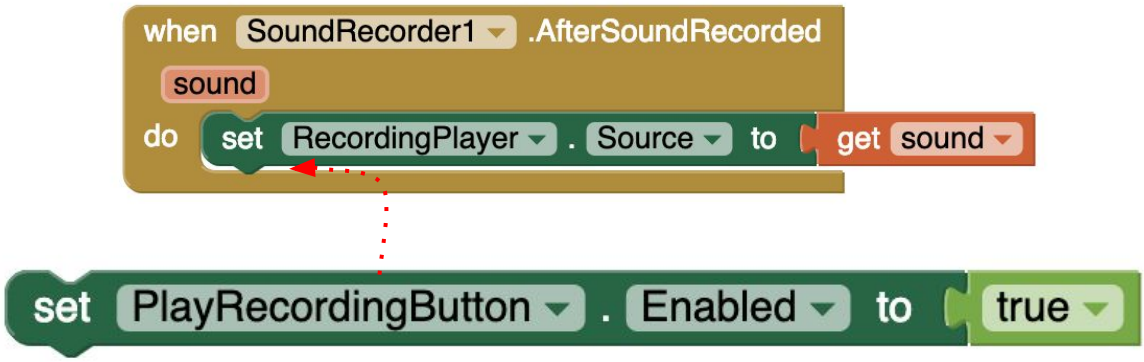


16 Set the *Source* for **RecordingPlayer** to the **sound** returned by the event.



RECORD YOUR MUSIC (continued)

17 Now that you've set the Player's Source, enable the PlayRecordingButton so the user can play it back.



18 Add the **PlayRecordingButton.Click** event, and start the Player!

19 Try it out! Press the Record button, play some music, Stop the recording, and then play it back! How does it sound?