

MY PIANO: PART 1

In this lesson, you will create a project with App Inventor that will play notes like a piano!

START HERE

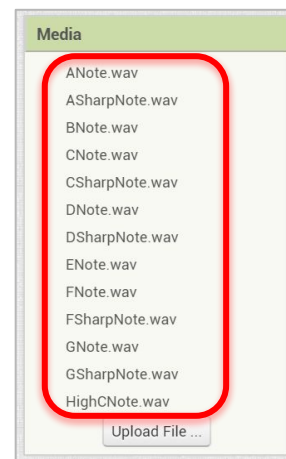
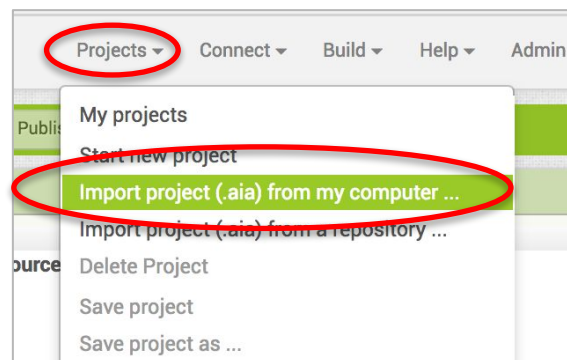
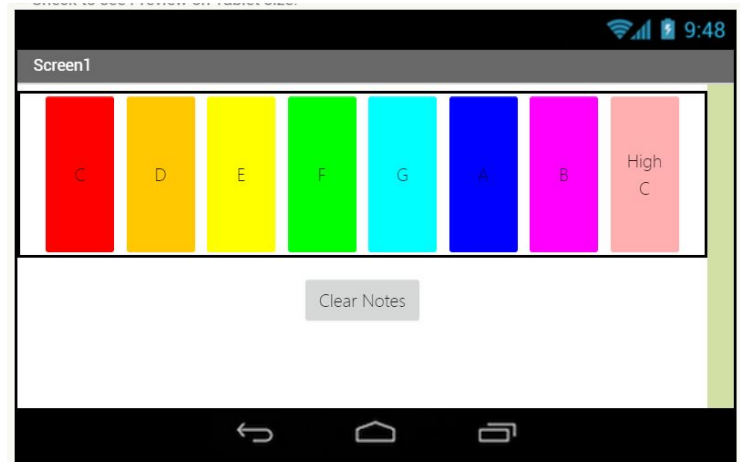
1 Go to the MIT App Inventor website (<http://ai2.appinventor.mit.edu>) and sign in to your account.

2 Import the “MyPiano_Template.aia” project provided by your teacher.

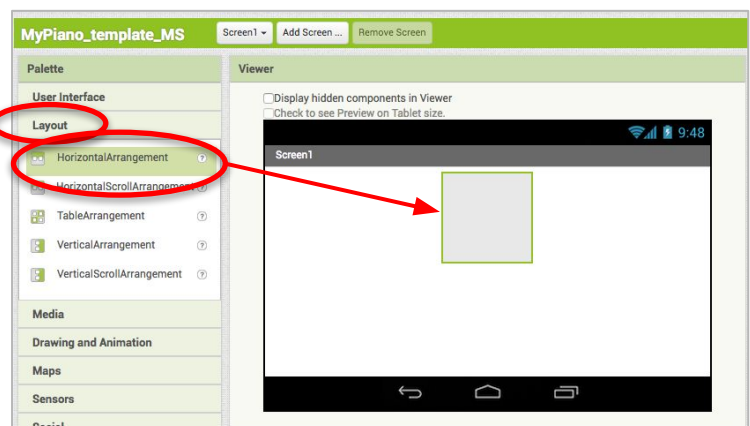
3 Your Designer is empty except for media files. Note that all the sound files are included and appear in the Media panel.

The goal is a piano with eight keys, side by side. To do that you need to add a HorizontalArrangement.

4 Drag out a **HorizontalArrangement** from the Layout Drawer.

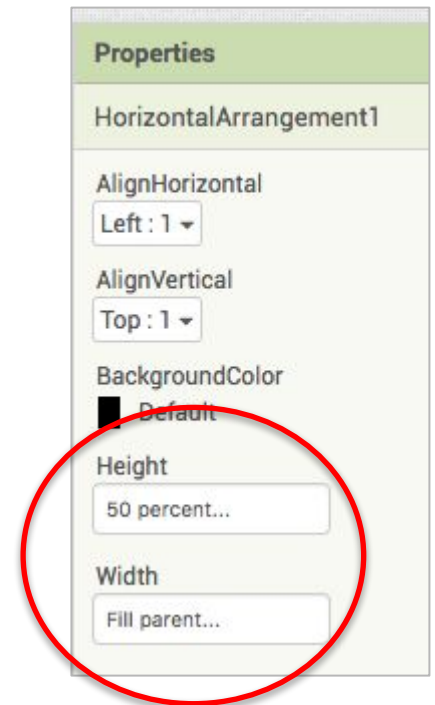
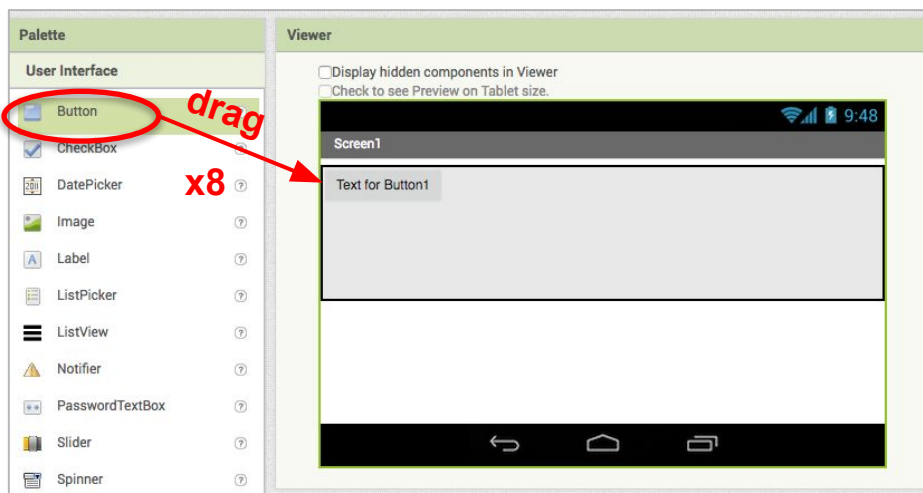


Also note the Viewer shows the phone sideways. The Screen is in **Landscape** mode.



LET'S CONTINUE

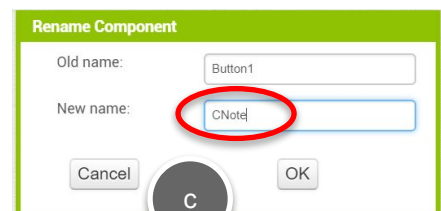
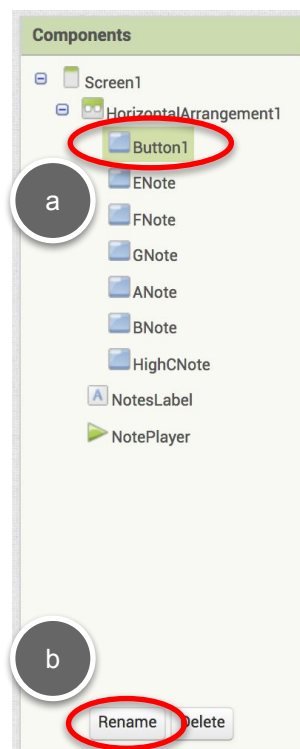
- 5 Change the *Height* of the **HorizontalArrangement** to **50%** and its *Width* to **Fill Parent**.
- 6 Drag *eight* Buttons into the **HorizontalArrangement**. They will appear side by side.



The correct order of piano keys is “**C D E F G A B HighC**,” so name each button according to its note.

You may not be able to see all the keys in the Viewer. We'll fix that next.

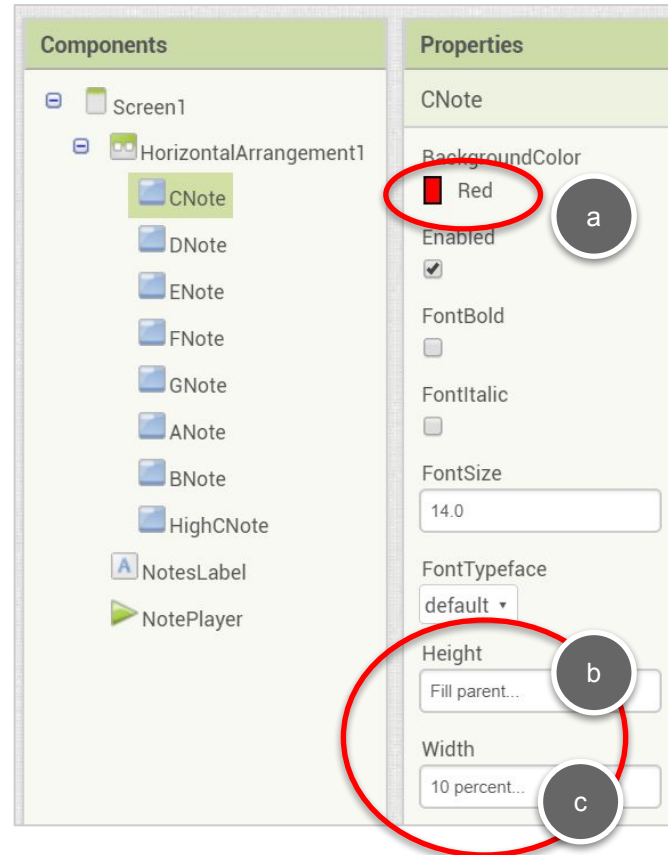
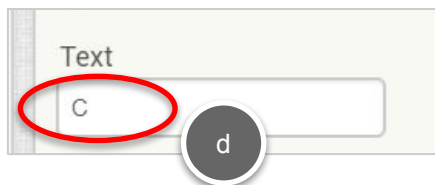
- 7 Click on **Button1** in the Components window and change its name to “**CNote**”.
- 8 Rename **Button2** “**DNote**”.
- 9 Rename the remaining keys in this order “**C D E F G A B HighC**”.



SETTING PROPERTIES

10 Change **CNote's** Properties as follows:

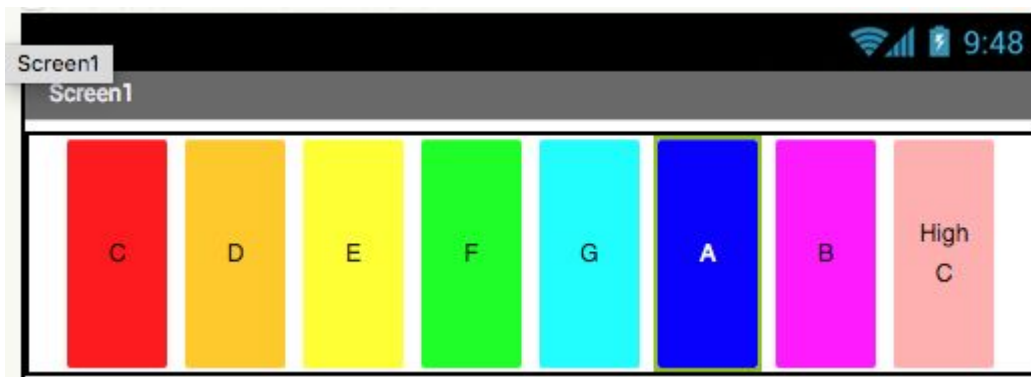
- Background Color: **Red**
- Height: **Fill parent**
- Width: **10 percent**
- Text: **C**



11 Change properties for **DNote**:

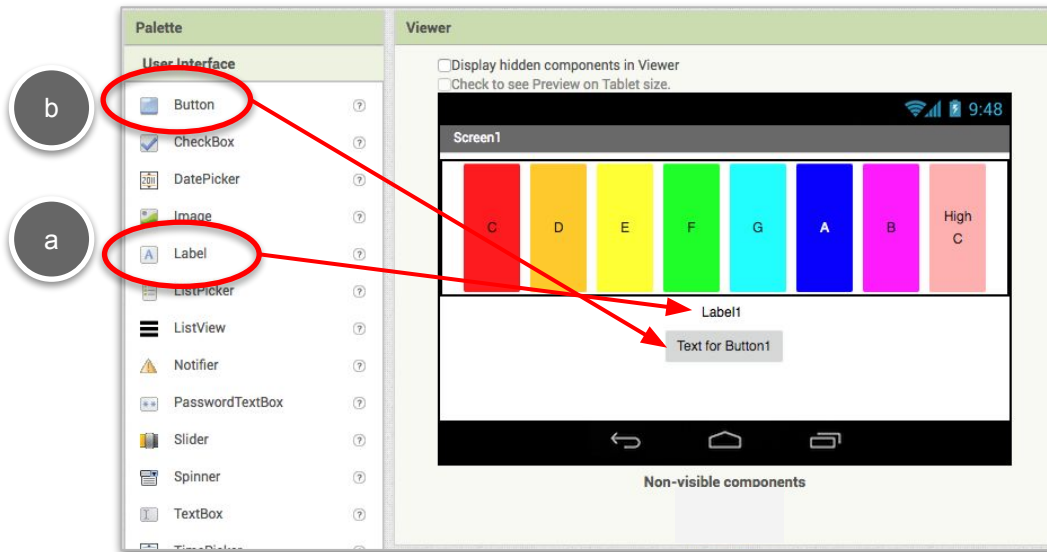
- Background Color: **Orange**
- Height: **Fill parent**
- Width: **10 percent**
- Text: **D**

12 Change the remaining keys so your layout looks like the one below.

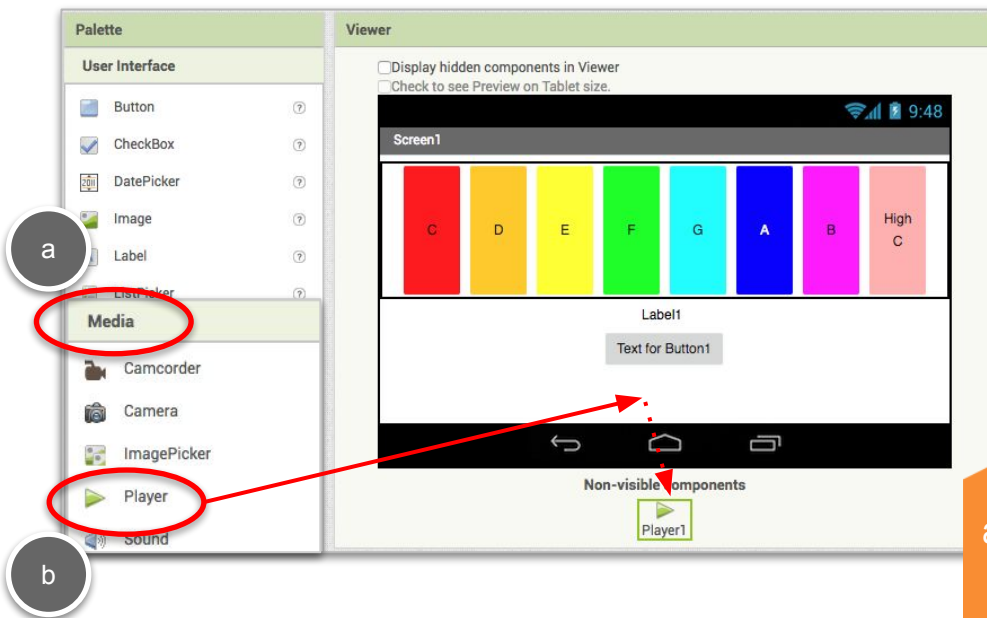


ADDING MORE COMPONENTS

13 Drag a **Label** and a **Button** and place them both below **HorizontalArrangement1**.



14 From the **Media** drawer, drag a **Player** component onto the Viewer.



While you may use a Sound component for short sounds, the Player component is more reliable to play all sound files.

ADDING MORE COMPONENTS (continued)

15

Name the Button “**ClearButton**”, the Label “**NotesLabel**”, and the Player “**NotePlayer**”.



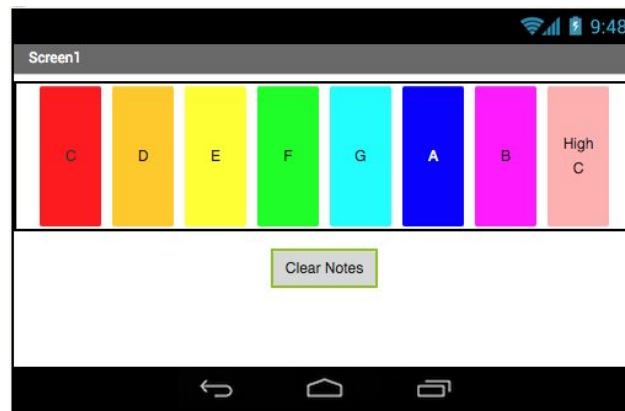
16

Set the *Text* property for **NotesLabel** to **blank** (erase all the text).

17

Set the *Text* property for **ClearButton** to “**Clear Notes**”.

Your layout should look like this:



You'll code
the blocks
in Part 2!



COMPUTATIONAL THINKING CONCEPTS

The following are the Computational Thinking Concepts learned in Part 1.

My Piano

1. Naming:

