# MUSIC MAKER: PART 2

In Part 2, you will add the code blocks to play and stop the instruments when the buttons are pressed.

START HERE

1 Open your MusicMaker project in (http://ai2.appinventor.mit.edu).

2 Add a **Player** component to your app by dragging it from the **Media** Drawer in the Designer Palette to the Viewer.

3 Rename it appropriately for your chosen instrument. This example will play drums.

drag

Rename Component

Old name: Player1

New name: Drum1Player

Cancel   OK

4 Check the *Loop* option to play the sound repeatedly and set its *Source* to the appropriate sound file.

Properties
Drum1Player
Loop ✔ **a**
PlayOnlyInForeground ☐
Source drums.wav... **b**
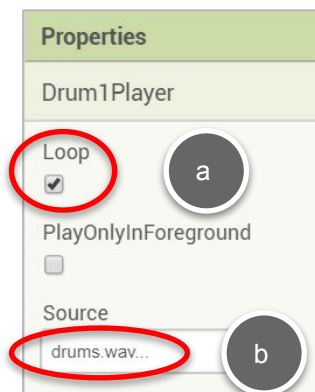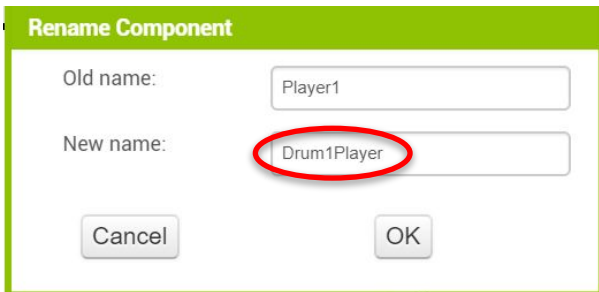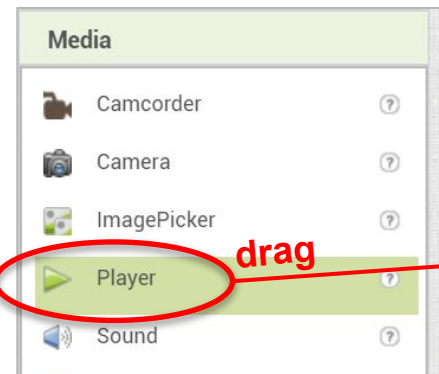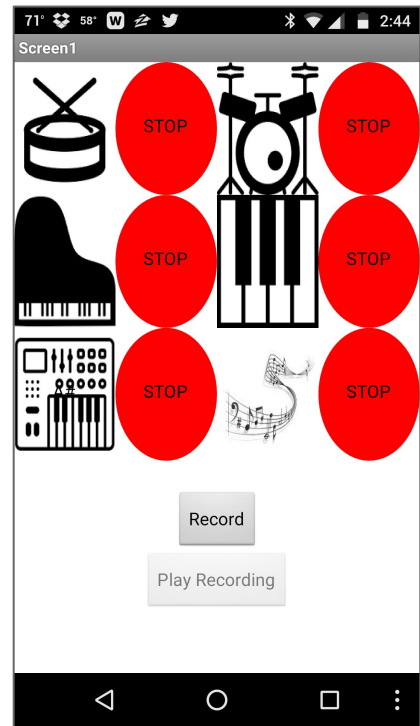
CODING THE BLOCKS

6 Here is an example of what you need to do to code your Play Buttons, using **Drum1Button** to play a drums sound.

This will set **Drum1Player** to play the sound file "**drums.wav**", which we set it in Step 4.

```
call Drum1Player . Start
```

```
when Drum1Button . Click
do
```

Remember to use the correct matching Player component for the sound

7 Now code the Stop function for your Buttons. Here are the blocks to Stop the Drums above.
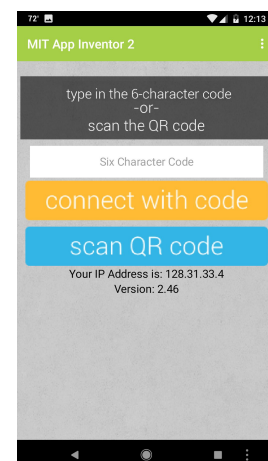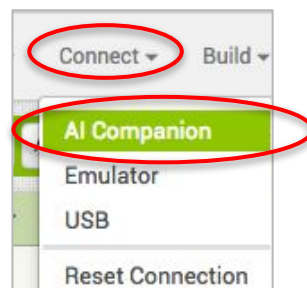
```
when StopDrum1Button . Click
do
```

```
call Drum1Player . Stop
```

TESTING!

8 Now test starting and stopping that instrument with your two Buttons!

Start MIT AI2 Companion on your tablet

Connect ▾   Build ▾

AI Companion
Emulator
USB
Reset Connection

MIT App Inventor 2

type in the 6-character code
-or-
scan the QR code

Six Character Code

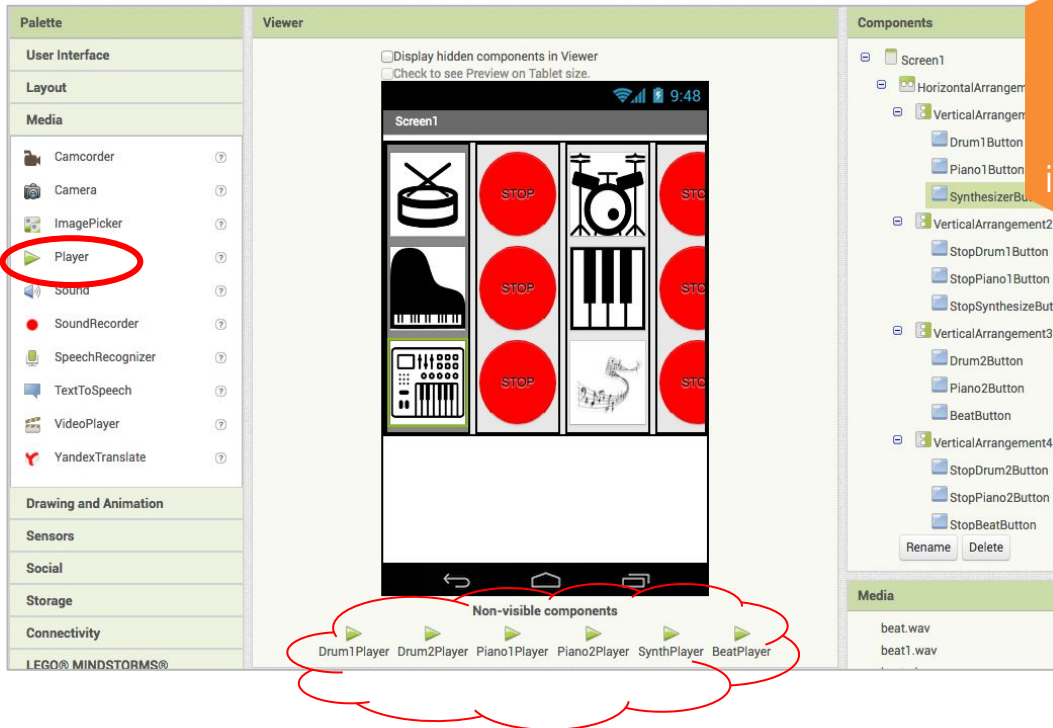connect with code

scan QR code

Your IP Address is: 128.31.33.4
Version: 2.46

MIT
APP INVENTOR

NOW DO THE REST!

9 Add all the other instruments! For each one, you need a Button to start it, a Button to stop it, and a Player to play the matching sound. Don't forget to name your components according to their instrument!

Because the instruments will play simultaneously, *in parallel*, each instrument needs its own Player.

10 After adding all your Buttons, test your app again. You should be able to play multiple instruments at the same time. Check that all the start and stop buttons work!

If you want a challenge, try recording the music as it plays, and then play it back!

**Choose Ways to
Extend Your App**

Here are a
few features you
could add if you
want to expand
your app

Try the
Challenge:
record and play
back your
music

Add a Pause
button for each
instrument

Instead of
2 buttons, make
one button
toggle
play/stop.

Add more
instruments

What other ideas
do you have?

MIT
APP INVENTOR

COMPUTATIONAL THINKING CONCEPTS

The following are the Computational Thinking Concepts covered in Part 2.

Music Maker
1. Naming: