

Tutorial: Using Processing to Generate an Android App

To build an Android app with Processing is simpler than it seems when you have the proper tools and approaches. To get started with the project, I used the sample code for GUI indicators as the Android app. To get access to the code, locate it in the same file as this tutorial. (Please email Hieu or me (Jonathan) if you have any questions: hieutn3@uci.edu, cylim1@uci.edu)

Material List:

1. Processing (version 3.0.2)
2. The PC with the developed code on it
3. The code you are building the Android app with
4. MobileGo
5. A device to run your developed Android app on
6. Android SDK

Below are the steps needed to successfully create an Android app:

1. Open up the Processing program that has the code in it.
2. After opening the program, locate the scroll list labeled as “Java” on the top right of the program.
3. Click into the scroll list, find the option “Add Mode....”, and select it.
4. As soon as you select “Add Mode...”, a screen named “Mode Manager” will pop up, and so you can install the mode called “Android Mode” located in the Mode Manager.
5. Now, go ahead and download the Android SDK from this link:
<http://developer.android.com/sdk/index.html>
6. After downloading and installing Android SDK, run the Processing program, and either locate or download the downloaded Android SDK file if Programming asks you where the Android SDK is.
7. If you are running the program on the Dragon Touch tablet from CalPLUG, please continue with the procedures from Step 10. If not, please refer to the next step.

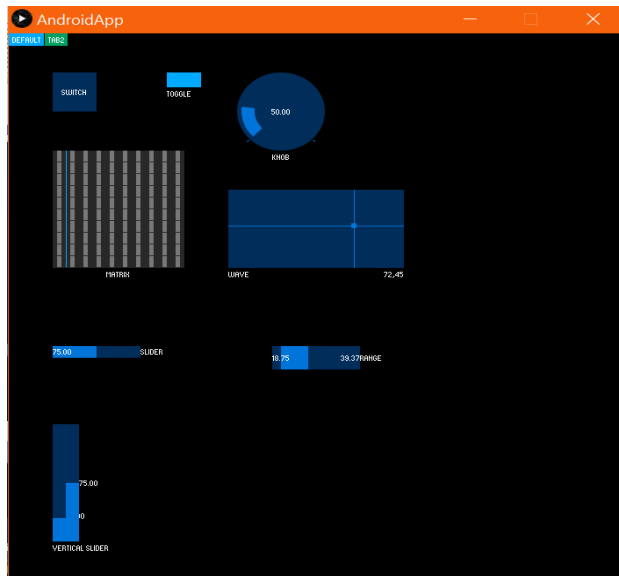
Picture of the Dragon Touch Tablet (Figure 1.)



8. Connect your Android device to the computer (make sure that you have already enabled USB Debugging on your Android device prior to connecting it to your computer), and run the program.
9. You have created an app on your Android device.
10. Please download the program called MobileGo from the following link:
<http://www.wondershare.net/mobilego/?icn=nav>
(Note: MobileGo works only on Windows 8/7/Vista/XP and any IOS devices)
MobileGo can provide the driver needed for us to run the Android app, which the Dragon Touch tablet does not.
11. Now, open your Processing program.
12. Search for Device Manager on your computer, and try to locate the tablet you are using to run the program on in the Device Manager.
13. After locating the device, right click, and click into Properties.
14. In Properties, find the tab called "Driver" and click into it.
15. Uninstall the original driver on the tablet, and reinstall the driver from the MobileGo program.
16. Then, go back to the Processing program, run it as usual, and you should be able to turn your Processing program into an Android app.

Default Tab

When Run on PC with Java Mode



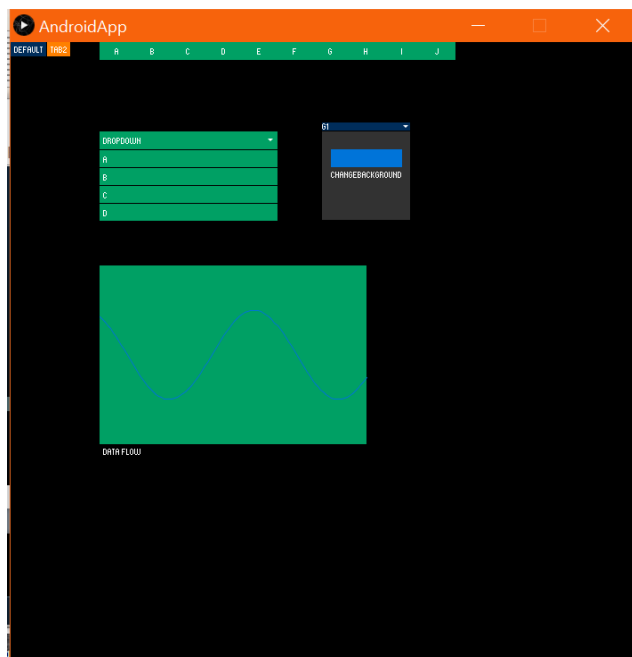
(Figure 2.)

When Run on Android Device
with Android Mode

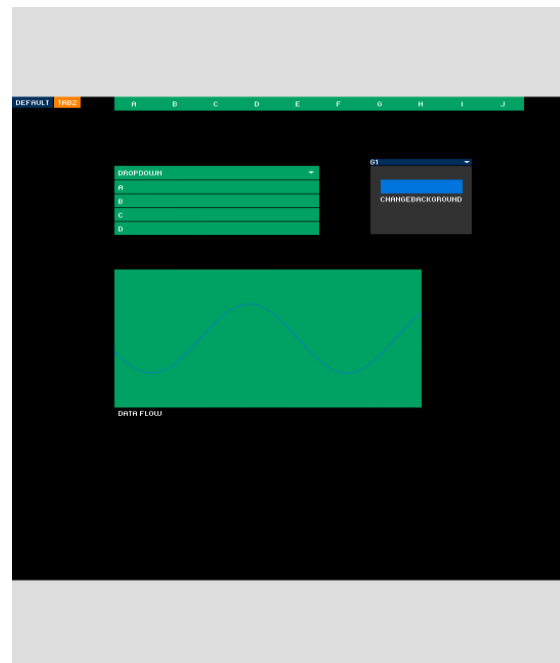


(Figure 3.)

Second Tab



(Figure 4.)



(Figure 5.)