

Hello all!

I am so excited that the **Android class** has come! Just to make sure that everyone is on the same page and ready to go, I recommend that you all download some software before you get to **class**.

## **Steps to Setting up Eclipse for Android (best done in order)**

### **1. For PC Users only: Download The Java JRE/JDK**

here: <http://www.oracle.com/technetwork/java/javase/downloads/index.html>. Choose the first of the three options.

### **2. For all users: Download The Eclipse IDE here:**

<http://www.eclipse.org/downloads/>

When you get to the download page, any of the first three download options will work just fine, but you may want to stick with "Eclipse Classic" if this is your first time using an IDE.

### **3. Download the **Android SDK****

here: <http://developer.android.com/sdk/index.html>

Just choose whichever one works for your operating system.

### **4. Install the ADT into Eclipse**

The ADT is an extension of Eclipse that allows us to build Android projects inside Eclipse. Some of the uses it provides are (1) the ability to create an Android Project that automatically generates all the files we talked about, (2) the interface to create all those layouts via drag and drop, and (3) the ability to create an on screen emulator to practice your projects on.

a. In Eclipse, Go to Help>>Install New Software

b. In the text box, type <http://dl-ssl.google.com/android/eclipse/> and choose Add...

c. In the big box below, select all the Developer Tools.

d. Press Next until you are finished. All default settings are fine.

e. Restart Eclipse (this may not be necessary for Macs, but it is

a good idea anyway)

## **2. Installing the Android SDK**

The Android SDK is the library of Android specific code. We will learn more about this in class. Without this, we can't do anything special for the Android, like use the touchscreen interface or access Google Maps, or email.

- a. Download the Android SDK for your OS here <http://developer.android.com/sdk/index.html>.
- b. Save it a spot that you will remember, for PC users: DO NOT save it to any folder in "Program Files", the computer gods will get angry.
- c. Open Eclipse, if it's not already open.
- d. Go to Eclipse>>Preferences (Mac) or Window>>Preferences (PC).
- e. Select Android on the right, and Browse for the location of the SDK you just downloaded.
- f. Google may ask to track usage statistics. Pick whichever option makes you feel comfortable. Your functionality will not be affected if you choose not to be tracked.
- g. Press Apply and OK.

## **3. Configuring your SDK**

Even though we have installed the SDK, we still need to tell Eclipse that how we are going to use it. Are we only going to develop for the latest version of Android? Are we going to be using the Google API to configure maps? These are questions that configuring will answer.

- a. In Eclipse, go to Window>>Android SDK and AVD Manager.
- b. Select available packages.
- c. You will see a few options. I actually recommend doing all of the Android Repository packages and at least the Google Inc, add on for Third Parties (this will give us access to maps in our last class).
- d. Select what you and install your selected items. It may take a while, depending on the mood of your computer.

#### **4. Creating an Emulator**

The emulator allows you to launch your application on your computer screen to see how it looks. Some features, such as the use of the accelerometer (the hardware that knows when you are tilting your phone) will not work on an emulator. But all of the features we use for our time together will work.

- a. In Eclipse, go to Window>>Android SDK and AVD Manager
- b. Select Virtual Devices.
- c. Choose New.
- d. Give your device a name. No spaces are allowed, but capital letters are.
- e. Choose a target SDK. Because Android has gone through many updates, there are multiple possible libraries. The 1.5 version will work on any phone ever made, but is significantly less robust. Tablets run on 3.1 right now. Given the current market, 2.1 is a pretty safe bet for most Android users, but all the higher end phones have 2.3.1. Choose whichever one you like. You can also make multiple emulators with different SDKs.
- f. Choose a "skin" which is basically the emulated screen size and controls. If you are on a 13-inch or smaller laptop, do not choose the default, because the emulator will be too big for your screen and you will not be able to use your controls. For 13-inch laptops, choose HVGA and for netbooks choose QVGA. Performance is not terribly affected, just the screen size.
- g. Select Create.