

G54MDP Lab Session 01 – Development Tools

The lab computers should have everything you need to get started with Android development, in particular Java, the Eclipse IDE, and the Android SDK. If you prefer to work away from the lab / on your own computer, you can download these freely as follows:

Java: <http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Eclipse and Android SDK bundle: <http://developer.android.com/sdk/index.html>

The Android developer site is your primary resource for tutorials and API documentation: <http://developer.android.com/index.html>

The aim of this first exercise is to introduce you to these tools, in particular going through the first steps of the "building your first app" exercise from the Android developer website.

This includes:

- Creating a new project
- Creating a new virtual device using the emulator
- Running a simple Hello World application on the emulator
- Logging and debugging

This will create a skeleton application to which we can add functionality and explore various Android concepts in future weeks.

The Android SDK is installed in c:\Android\adt-bundle [...]

Eclipse can be found at eclipse\eclipse.exe within the Android SDK bundle.

- Read through <http://developer.android.com/training/basics/firstapp/creating-project.html> and create a new Android project. Follow the instructions to compile and run this application on the emulator.
- Read through <http://developer.android.com/training/basics/firstapp/running-app.html#Emulator> and create and start a new virtual device using the emulator. If you are not familiar with using the Android OS then take some time exploring your virtual phone (use the mouse as a "finger" to interact with the screen)

- Add some simple console output to your application for debugging:

You'll need to import the logging class in your activity:

```
import android.util.Log;
```

Then use the following static method to print a debug message to the console when the Activity is created:

```
Log.d("g54mdp", "MainActivity onCreate");
```

Run your application and ensure that you can see the output in either the LogCat window in eclipse, or directly by using **adb** on the command line:

```
[ADT bundle] sdk\platform-tools\adb.exe logcat
```