

PGR Android Sessions

Chapter 2

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The Book:
The Busy Coder's Guide to Android Development
by Mark Murphy

Hardware Requirements

- RAM - more the better - 3gb + ideal
- CPU - faster the better. Note: emulator uses 1 core only
- 2.5GHz = good for phone emulator
- 2.5GHz = not good for tablet emulator

Java

- Writing in Java
- Source gets turned into Dalvik bytecode (the APK file)
- Install the JDK (plain JDK fine)
 - Java SE SDK
 - Java 5 or 6 ok, 7 not supported

Alternative Java

- ❑ Official Java from Sun/Oracle recommended
- ❑ OpenJDK might work on Ubuntu
- ❑ Not supported with our sessions but welcome to try it out.

Learn Java

- ❑ Not familiar with Java?
- ❑ Might wish to brush up on Java fundamentals

Java Concepts Needed

- ☐ Language fundamentals (know C#?)
- ☐ Classes & Objects
- ☐ Methods & data members
- ☐ Public, private, and protected
- ☐ Static & instance scope
- ☐ Exceptions

Java Concepts Needed

- ☐ Threads & concurrency control
- ☐ Collections
- ☐ Generics
- ☐ File I/O
- ☐ Reflection
- ☐ Interfaces

Install Android SDK

- ❑ Tools can be found on Android Developers Web Site
- ❑ <http://developer.android.com/sdk/index.html>
- ❑ Once installed, run Android SDK Manager

Android SDK Install:

- ☐ SDK Platform
- ☐ Documentation for Android SDK
- ☐ Samples for SDK
- ☐ Google APIs
- ☐ Android SDK Platform-tools
- ☐ Android Support package

Install the ADT for Eclipse

- ❑ Install Eclipse if not installed already
- ❑ Install Android Development Tools (ADT)
 - ❑ Eclipse->Help->Install new
 - ❑ Click Add
 - ❑ <https://dl-ssl.google.com/android/eclipse>

Set Up the Emulator

- AVD = Android Virtual Device
 - Create one: Eclipse->Window->AVD Manager
- Start up once and leave running

Setup an Android Device

- ❑ On device: Settings->Applications->Development
- ❑ Put a check for USB Debugging
- ❑ Setup dev machine to talk to device
 - ❑ Install drivers if device not found/recognized

Questions