



Accelerating Information Technology Innovation
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Lecture 2: Android Basics

AITI Nigeria Summer 2012
University of Lagos.

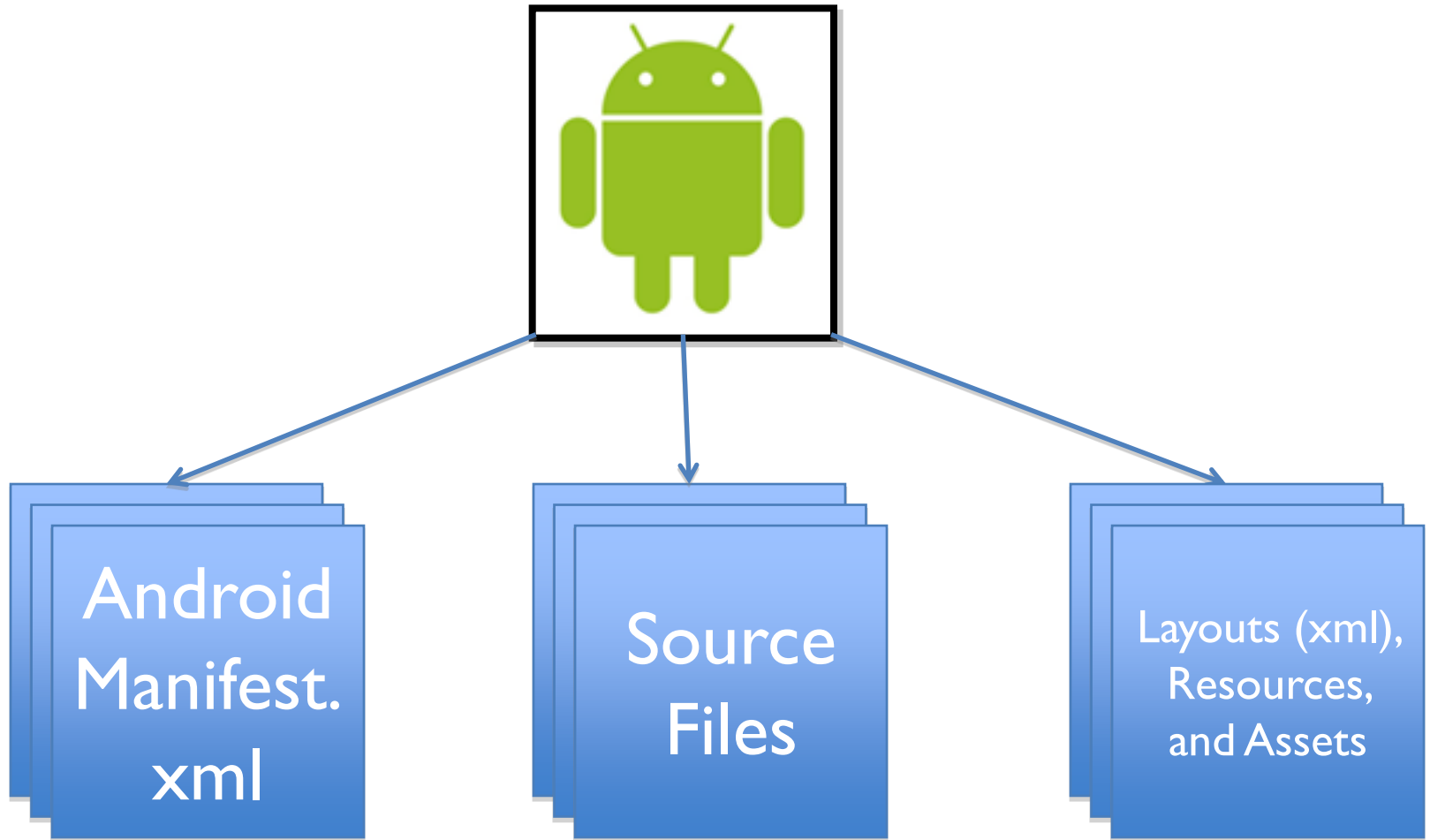
Agenda

- The Android Platform
- Structure of Android application/project
- Android Application Build Process
- Android Programming with Eclipse
 - Software Requirements
 - Creating Android Projects
- Anatomy of Android Projects in Eclipse

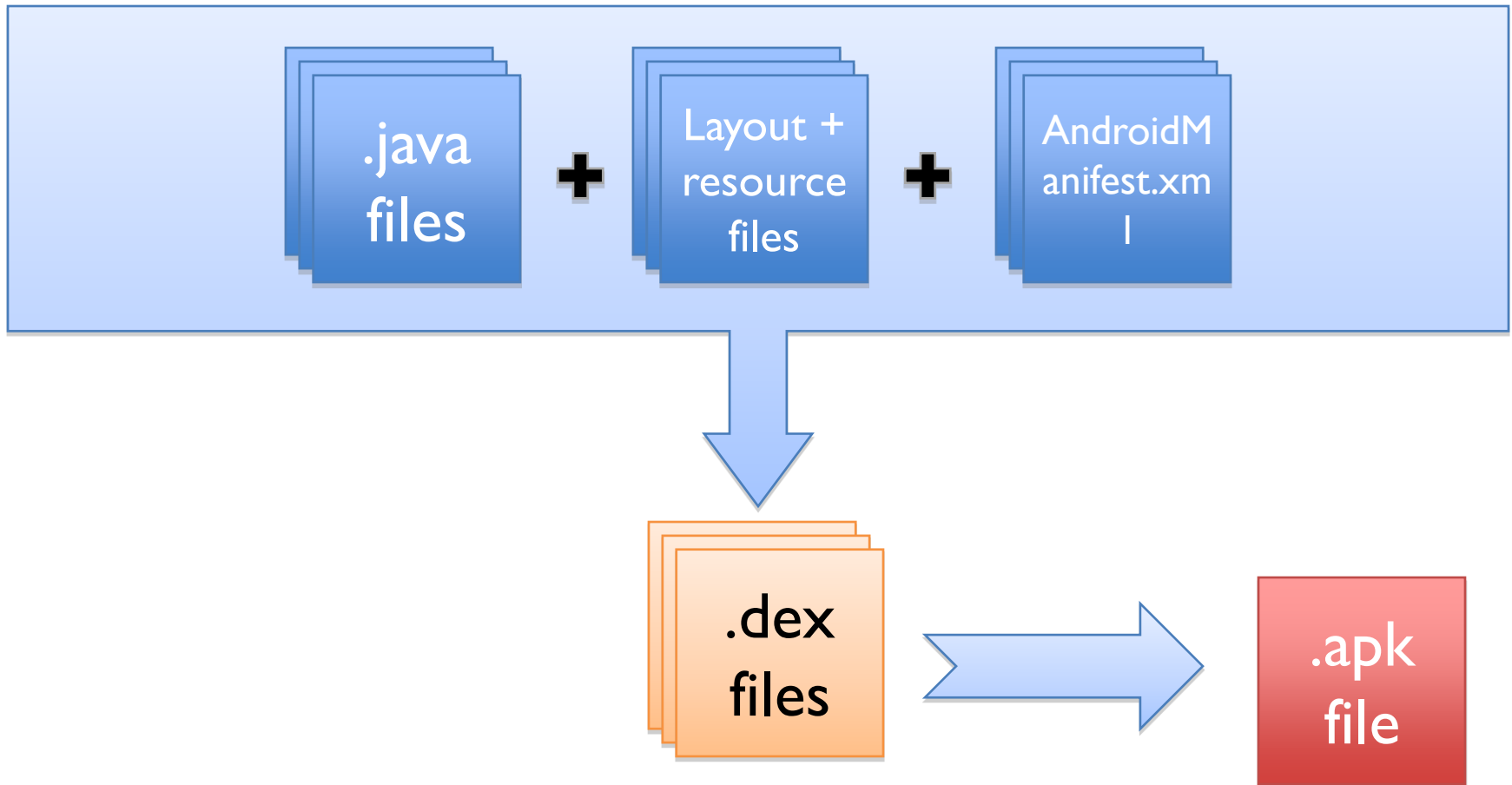
Android Platform

- Linux-based OS
- Dalvik VM vs. JVM
- Platform components: GPS, WiFi, Camera, Audio/Video recording + playback, Sensors (acceleration, temperature, proximity, gyroscope, magnetic, ...)
- SQLite Local Database Storage
- Built-in Applications (Home, Contacts, Phone, Browser, Voice Recognition, Camera, ...)

Structure of an Android App



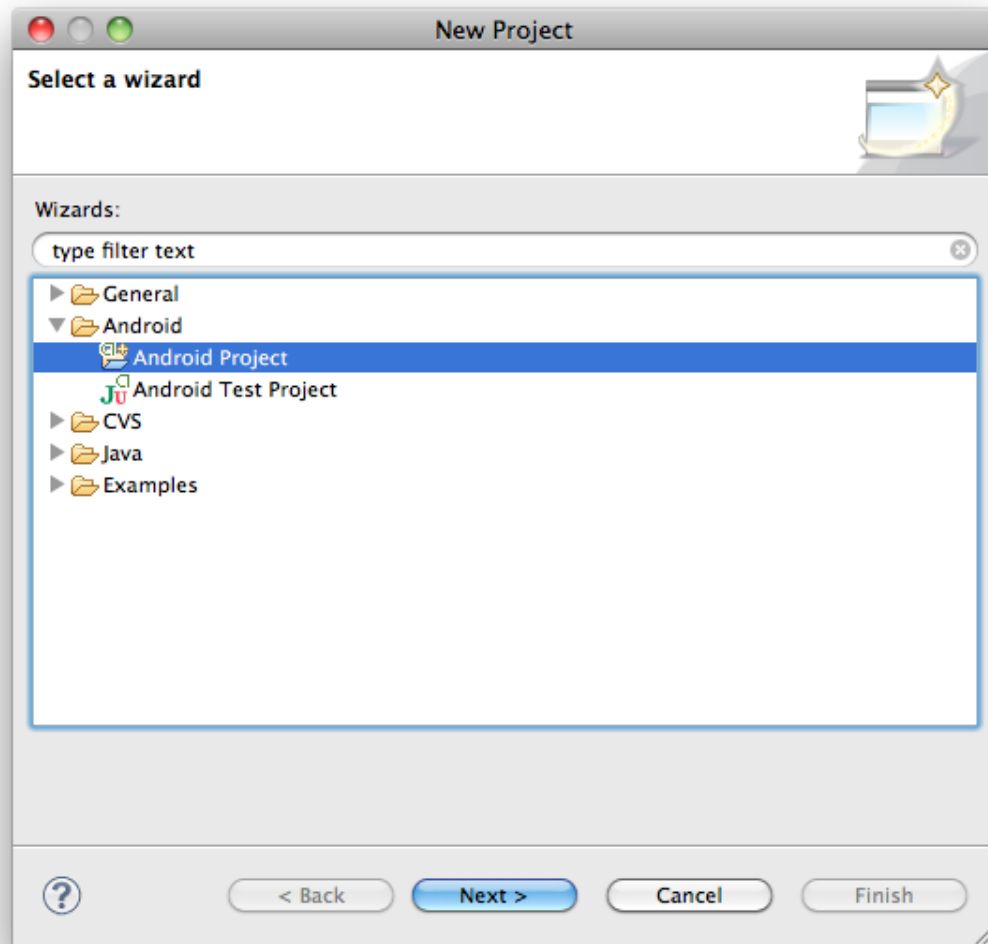
Android App Build Process



Android Programming with Eclipse

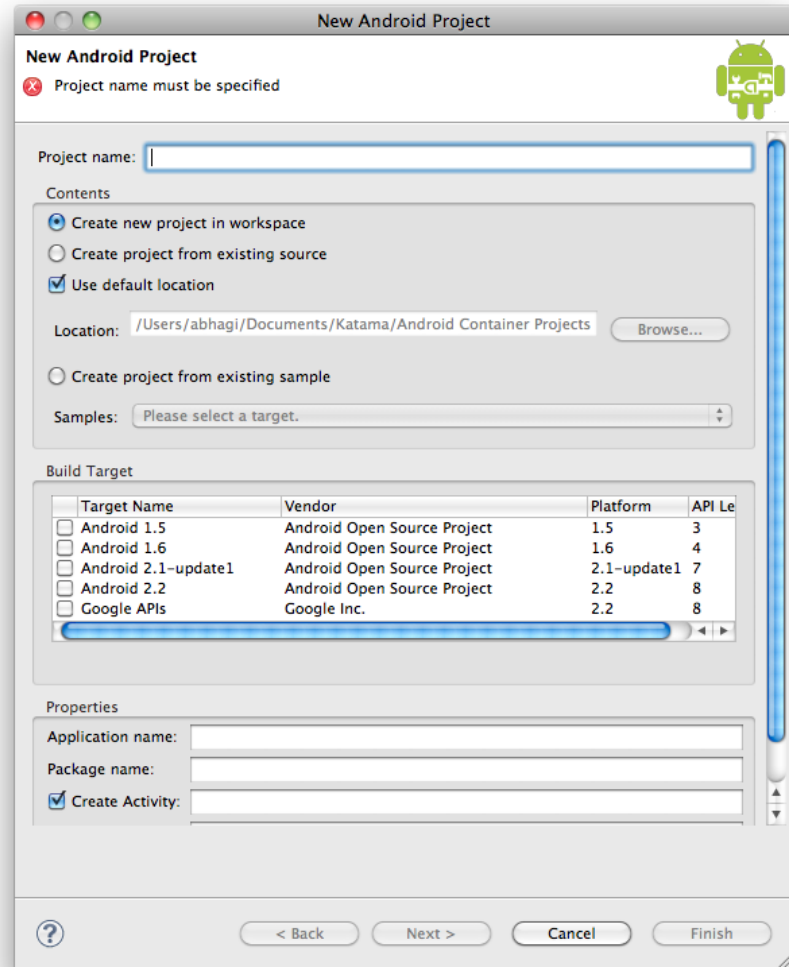
- What you need:
 - Eclipse
<http://www.eclipse.org/downloads/>
 - Android SDK
<http://developer.android.com/sdk/index.html>
 - Eclipse ADT Plug-in
<http://developer.android.com/sdk/eclipse-adt.html>
 - Platforms (Android 2.1, 2.2, etc.)
 - USB Driver
 - Emulator (Android Virtual Device)

Creating Android Projects, Step 1:



Creating Android Projects, Step 2:

- Project Name
- Build Target
- Application name
- Package name
- Activity name
- Min SDK Version



Anatomy of Android Project (in Eclipse)

