



# Accelerating Information Technology Innovation

<http://aiti.mit.edu>

Cali, Colombia  
Summer 2012  
Lesson 2 – Android Basics

# Agenda

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- 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

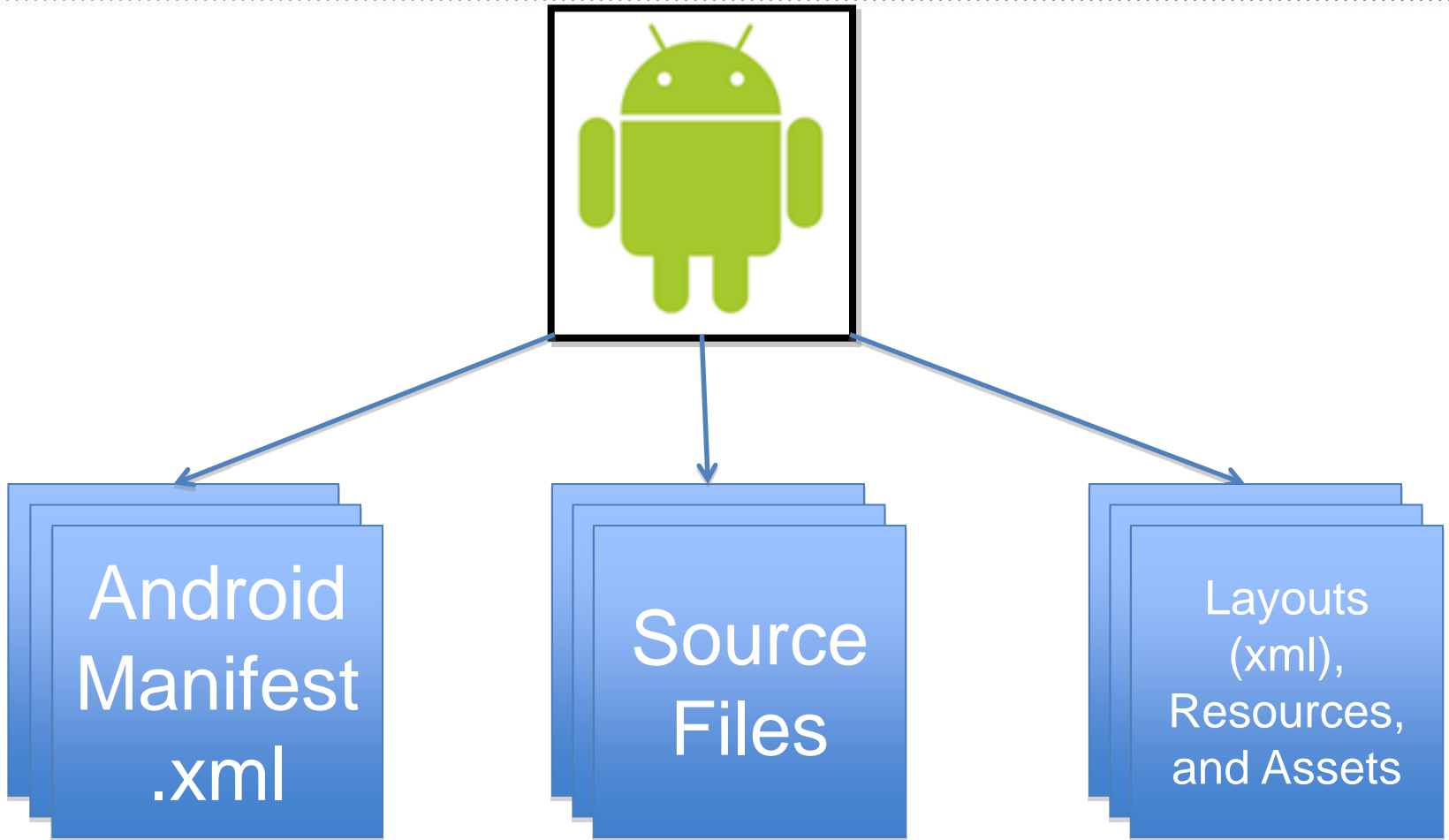
# Android Platform

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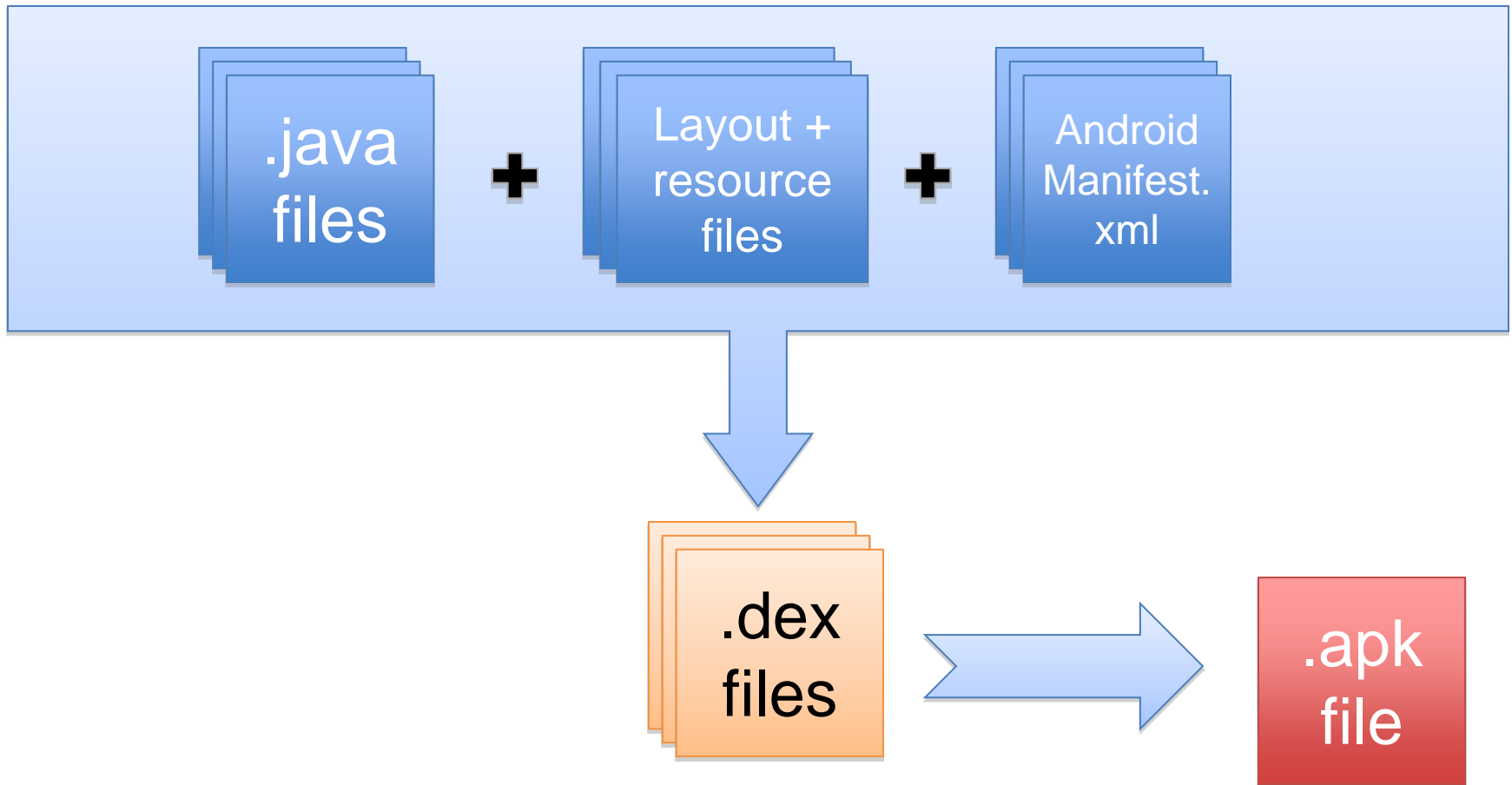
- Linux-based OS
- Dalvik VM vs. JVM
- Platform components: GPS, WiFi, Camera, Audio/Video recording + playback, Sensors (acceleration, temperature, proximity, gyroscope, magnetic, ...)
- SQLite Local Database Storage
- Built-in Applications (Home, Contacts, Phone, Browser, Voice Recognition, Camera,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

# Structure of an Android App

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# Android App Build Process



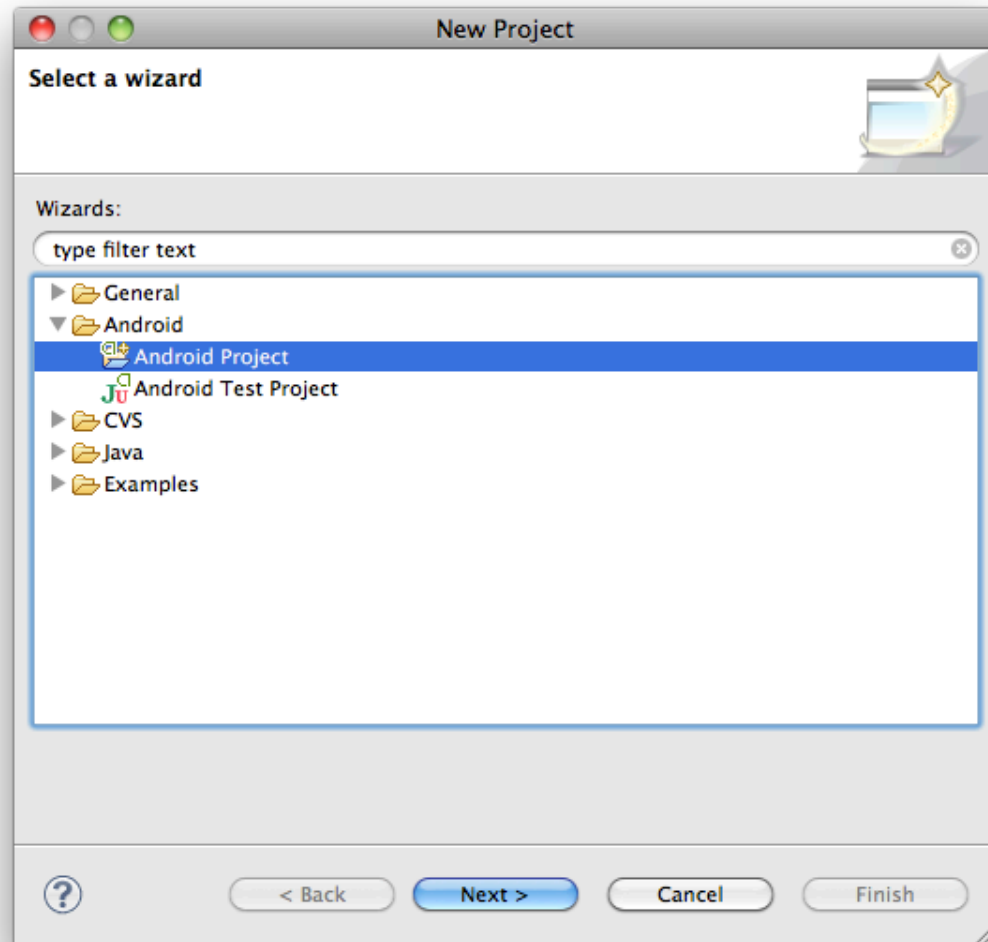
# Android Programming with Eclipse

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- 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>
  - Android API (Android 3.2, 4.0.3, etc.)
    - Latest version is Android v4.0.3 (API 15)
  - USB Driver
  - Emulator (Android Virtual Device)

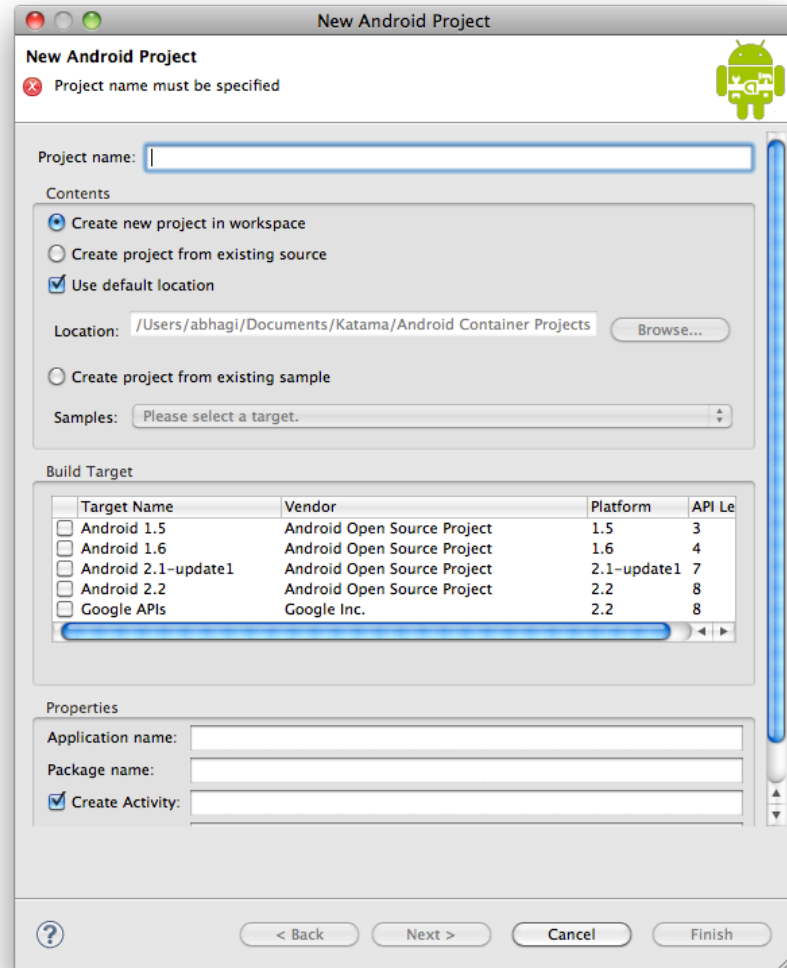
# Creating Android Projects, Step 1:

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# Creating Android Projects, Step 2:

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





# Anatomy of Android Project (in Eclipse)

