Linux Kernal

Core operating system –

- provides job (process, thread) scheduling

- device drivers

- access control (users, groups and file permissions)

- networking and file access APIs

- inter-process communications (IPC) etc.

Native Libraries

Native C/C++ libraries (accessible via the NDK for cross-platform development)

- GNU libc core libraries
- OpenGL ES for drawing to graphics chip
- FreeType for font and text rendering
- SSL libraries for encryption
- WebKit for HTML/CSS/JS rendering
- SQLite embedded relational database
- Dalvik Virtual Machine for Java

Android Runtime

Java based runtime system for running applications

- Dalvik Virtual machine - Originally based off Apache Harmony open source Java implementation. Recently announced that they are switching to OpenJDK

- Core Java libraries – parts written in pure Java, and others that use JNI to interface with core system libraries

Application Framework

Java libraries used to build applications

- Window Manager

- View System

- Content Provider

- Notification Manager

- Resource Manager

- Activity Manager