

# Java API framework

The main Android OS from app point of view

- Provide high-level services and environment to apps
- Interact with low-level libraries and Linux kernel

Some components

- Activity Manager - manages the lifecycle of apps
- Package Manager - keeps track of apps installed
- Power Manager - wakelock APIs to apps

# Native C/C++ libraries

Many core Android services are built from native code

- Require native libraries written in C/C++
- Some of them are exposed through the Java API framework as native APIs e.g. Java OpenGL API

➔ Technique: JNI – Java Native Interface  
app developer can use Android NDK to include C/C++ code (common in gaming apps)