

CIOSCUD

What is an OS?

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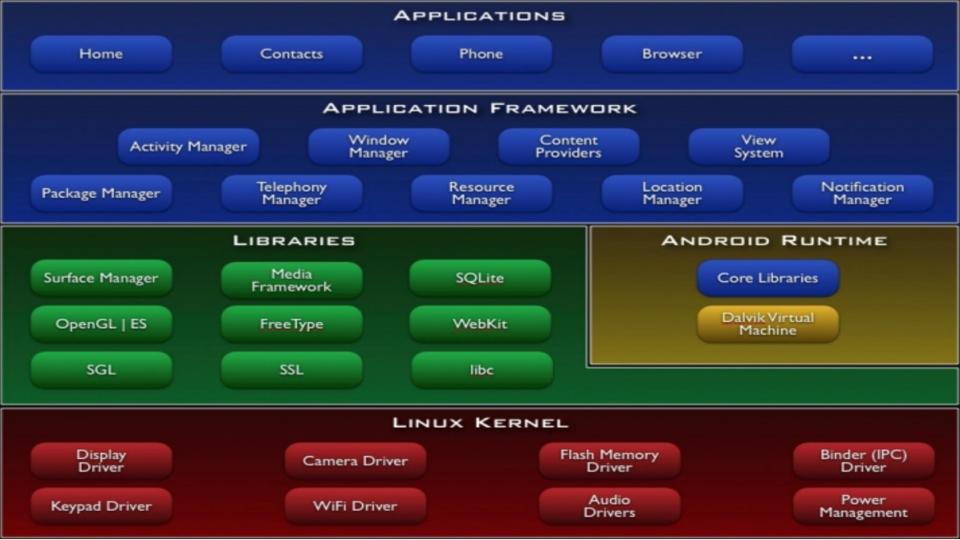


Table of Contents

- 1. Processor
- 2. Memory
- 3. Software
- 4. Input / Output

Thread Scheduling

Scheduling tasks via the AlarmManager System Service

```
Calendar cal = Calendar.getInstance();
Intent intent = new Intent(this, MyService.class);
PendingIntent pintent = PendingIntent.getService(this, 0,
intent, 0);
AlarmManager alarm = (AlarmManager)
getSystemService(Context.ALARM SERVICE);
// schedule for every 30 seconds
alarm.setRepeating(AlarmManager.RTC WAKEUP,
cal.getTimeInMillis(), 30*1000, pintent);
```

2. Memory / Hardware

- 1. Memory management
- 2. RAM
- 3. Cache
- 4. Network chip
- 5. MicroSD
- 6. Power Supply

Battery



From - http://www.creotix.com/tech/interesting/advantages-of-rooting-android-phone/1469/

Memory / Hardware - Code

```
MemoryInfo mi = new MemoryInfo();
 ActivityManager activityManager = (ActivityManager)
   getSystemService(ACTIVITY SERVICE);
 activityManager.getMemoryInfo(mi);
 long availableMegs = mi.availMem / 1048576L;
//Percentage can be calculated for API 16+:
  long percentAvail = mi.availMem / mi.totalMem;
```

3. Software

- 1. Security
- 2. Error / warning messages
- 3. CRUD of methods
- 4. Drivers
- 5. Resolution Compatibility
- 6. Version history

Android Version History



5. Input / Output

- 1. Camera / Audio
- 2. GPS
- 3. Peripherals
- 4. Sensors
- 5. Touchscreen
- 6. Vibrations

Android Vibrations





From - http://bit.ly/1WgEGVT

From - http://bit.ly/1YUp2xo

Code for Creating Touchscreen Event

```
public boolean onTouchEvent(MotionEvent e) {
  // get touchX and touchY
  switch (e.getAction()) {
    // .... other cases ...
    case MotionEvent.ACTION UP:
          thread.setBubble(touchX, touchY);
          float totalTime = e.getEventTime() - e.getDownTime();
      Toast.makeText(ctx, "Touch time in ms was " + totalTime,
                     Toast.LENGTH SHORT).show();
          break;
  return true;
```



That's all Folks!