An introduction to Android Development

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OVERVIEW

- Java basics

- Evolution of android

- Development in android

JAVA

memegenerator.net

HISTORY

- James Gosling 1995

- WORA

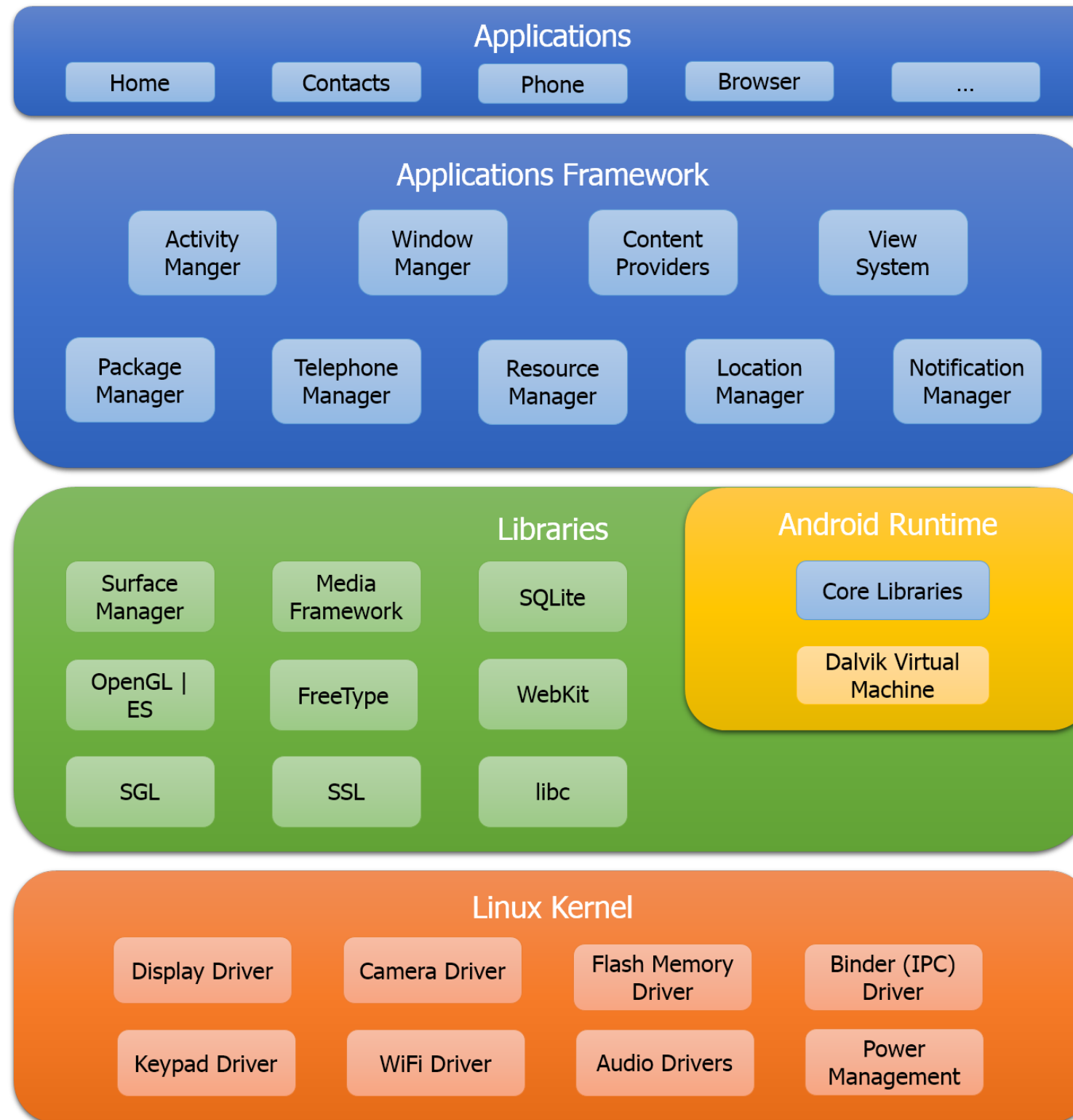- Compiled & interpreted

- Slow

ANDROID?

- Android Inc.

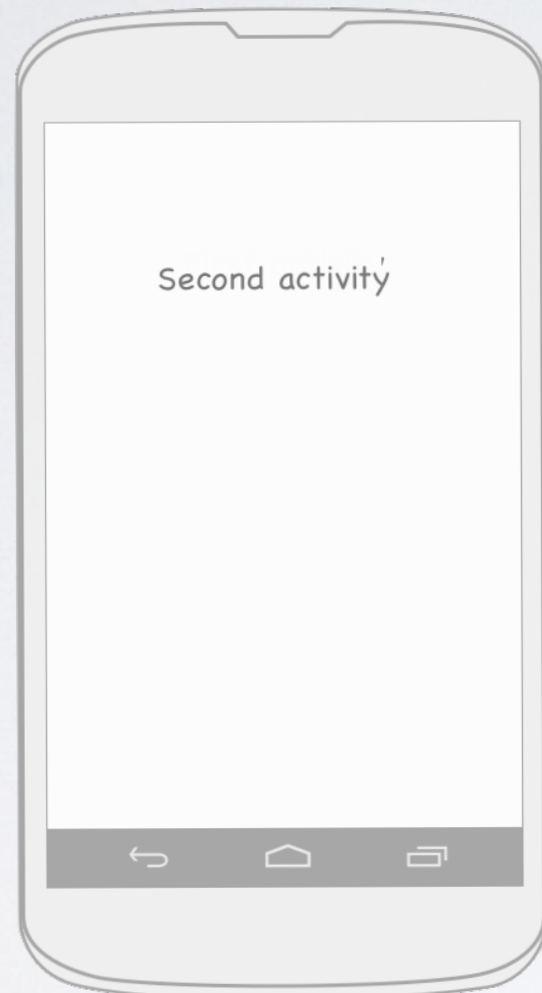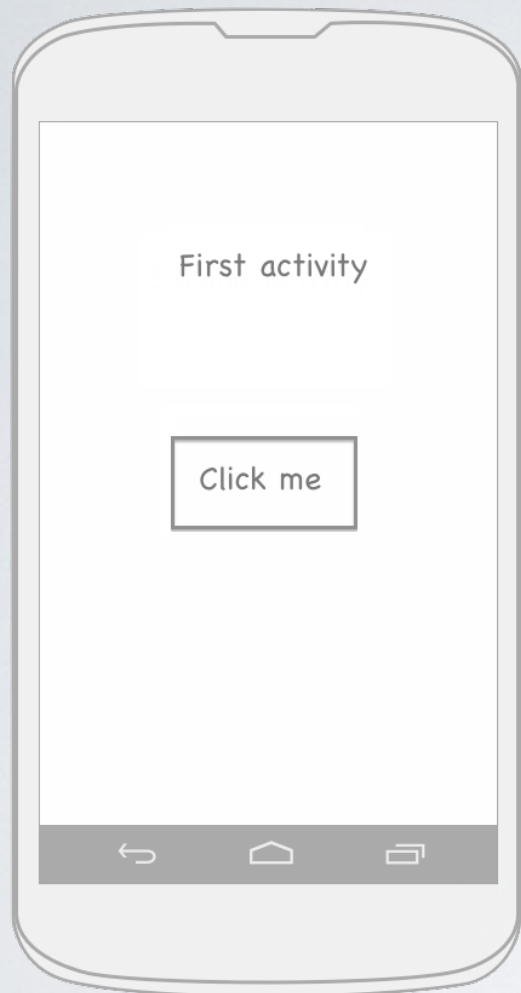- Open Handset Alliance
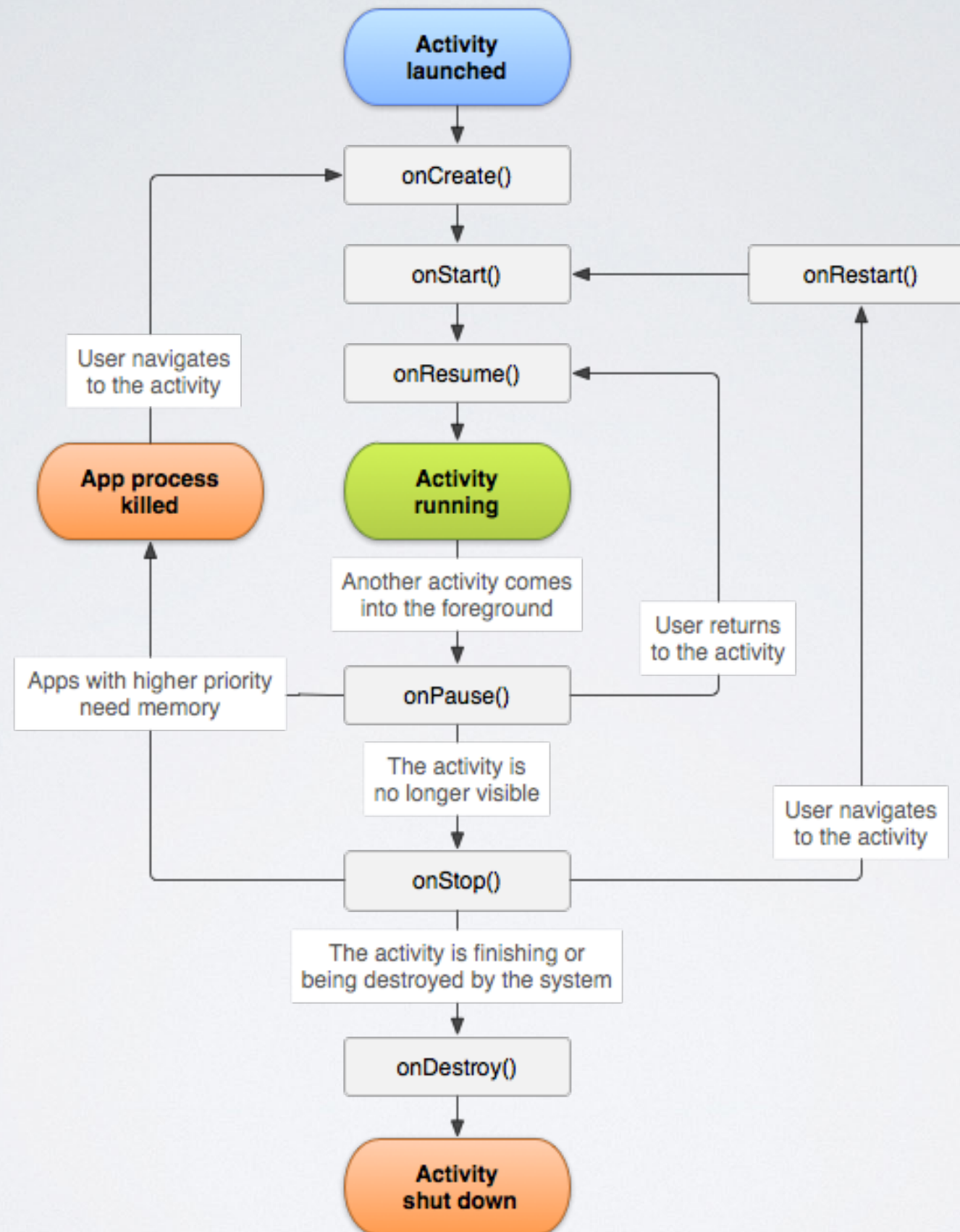
- AOSP

- Google

ANDROID

Alpha
09/2008

Beta
02/2009

Cupcake
04/2009

Donut
09/2009

Eclair
10/2009

Froyo
05/2010

Gingerbread
12/2010

Honeycomb
02/2011

Ice Cream
Sandwich
10/2011

Jelly Bean
08/2012

KitKat
09/2013

Applications

Home Contacts Phone Browser ...

Applications Framework

Activity Manger Window Manger Content Providers View System

Package Manager Telephone Manager Resource Manager Location Manager Notification Manager

Libraries

Surface Manager Media Framework SQLite

OpenGL | ES FreeType WebKit

SGL SSL libc

Android Runtime

Core Libraries

Dalvik Virtual Machine

Linux Kernel

Display Driver Camera Driver Flash Memory Driver Binder (IPC) Driver

Keypad Driver WiFi Driver Audio Drivers Power Management

Activities

First activity

Click me

Second activity

```
public class MainActivity extends Activity {

}
```
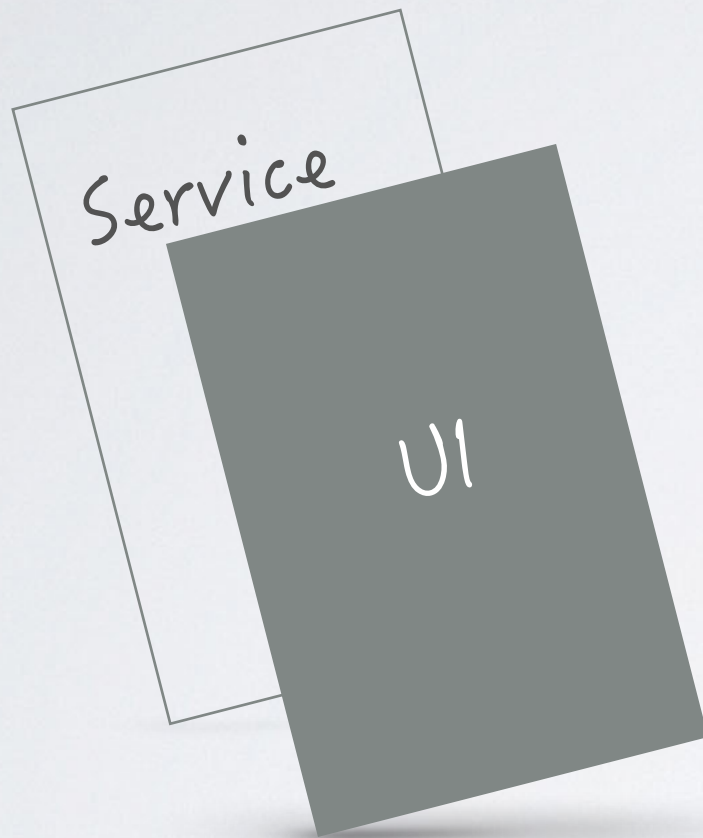
LIST VIEW

- Messaging

- Contacts

- Email

Services

Service

UI

```java
public class MyService extends Service {

}
```

Broadcast receivers

```java
public class MyReceiver extends BroadcastReceiver {

}
```

Content providers

```java
public class MyContentProvider extends ContentProvider {

}
```

Additional components

- Fragments

- Views

- Layouts

- Intents

- Resources

- Manifest

SAVING DATA?

- SharedPreferences

- SQLite

DATA EXCHANGE?

- XML

- JSON

```
{

    "Location"    :    "Chengannur",

    "Condition"   :    "Haze",

    "Temperature" :    "28"

}
```

BACKGROUND OPERATIONS?

AsyncTask to the rescue!

- onPreExecute

- doInBackground

- onPostExecute

THANK YOU! :)

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