

1½ Hour Android Bootcamp

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The Fundamentals

MarakanaTechTV's Android Bootcamp



<http://www.youtube.com/playlist?list=PLE08A97D36D5A255F>

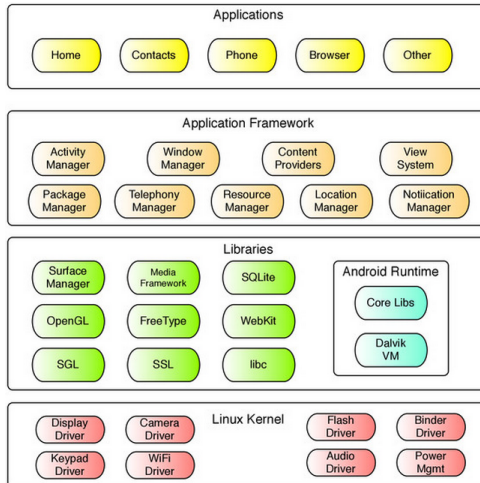
The Fundamentals

Android Platform

Version	API Level	Nickname
Android 1.0, 1.1	1, 2	Android
Android 1.5	3	Cupcake
Android 1.6	4	Donut
Android 2.0, 2.0.1, 2.1	5, 6, 7	Éclair
Android 2.2	8	FroYo
Android 2.3, 2.3.3	9, 10	Gingerbread
Android 3.0, 3.1, 3.2	11, 12, 13	Honeycomb
Android 4.0.2, 4.0.4	14, 15	Ice Cream Sandwich
Android 4.1.1, 4.2	16, 17	Jelly Bean
<i>Android 5.0</i>	<i>18</i>	<i>Key Lime Pie</i>

The Fundamentals

Android Platform



The Fundamentals

Android Programming



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Android Programming



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Android Programming

Main Building Blocks

- Activity

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Android Programming

Main Building Blocks

- Activity
- Service

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Android Programming

Main Building Blocks

- Activity
- Service
- Broadcast Receiver

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Android Programming

Main Building Blocks

- Activity
- Service
- Broadcast Receiver
- Content Provider

The Fundamentals

Android Programming

Main Building Blocks

- Activity
- Service
- Broadcast Receiver
- Content Provider
- Intent

The Fundamentals

Android Programming

Managers

- Media

The Fundamentals

Android Programming

Managers

- Media
- Internet

The Fundamentals

Android Programming

Managers

- Media
- Internet
- Phone

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Android Programming

Managers

- Media
- Internet
- Phone
- Bluetooth

The Fundamentals

Android Programming

Managers

- Media
- Internet
- Phone
- Bluetooth
- Notifications

The Fundamentals

Android Programming



<http://developer.android.com>

Hello World!

Create a new Android Application Project in Eclipse

Hello World!

Explore the GUI Designer

- Activities
- Layouts
- Widgets
- Toolbars
- Properties

Hello World!

Create and Run Hello World 0.1

Hello World!

Explore App Anatomy (files)

- `Manifest.xml`
- Resources in `res/`
- Java code in `src/`
- (Libraries in `libs/`)
- (Assets in `assets/`)

Hello World!

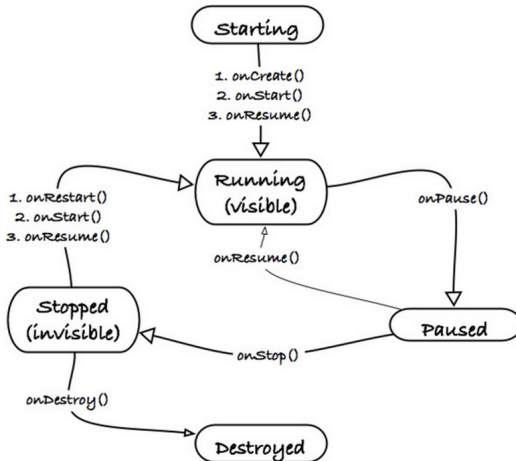
Implement Interactivity

Hello World!

Implement Interactivity Hello World 0.2!

A Real App

Activities



A Real App

Activities

Use Logcat; Live Logcat

- Log Activity Lifecycle
- TAG, you're it!

A Real App

Activities

Create a 'Real' App

A Real App

Activities

Our Stages of Development

- Create an Activity for scheduling the alarm

A Real App

Activities

Our Stages of Development

- Create an Activity for scheduling the alarm
- Test; Log

A Real App

Activities

Our Stages of Development

- Create an Activity for scheduling the alarm
- Test; Log
- Create a Service that can trigger an alarm

A Real App

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Our Stages of Development

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A Real App

Activities

Our Stages of Development

- Create an Activity for scheduling the alarm
- Test; Log
- Create a Service that can trigger an alarm
- Test; Log
- Connect the two with Intents

A Real App

Activities

Our Stages of Development

- Create an Activity for scheduling the alarm
- Test; Log
- Create a Service that can trigger an alarm
- Test; Log
- Connect the two with Intents
- Meh... It probably works...

A Real App

Activities

Create an Activity for Scheduling the Alarm

A Real App

Activities

Create an Activity for Scheduling the Alarm • Message

A Real App

Activities

Create an Activity for Scheduling the Alarm

- Message
- Frequency

A Real App

Activities

Create an Activity for Scheduling the Alarm

- Message
- Frequency
- Period

A Real App

Activities

Create an Activity for Scheduling the Alarm

- Message
- Frequency
- Period

Add to `manifest.xml`!

A Real App

Activities

Create a Service that can Trigger an Alarm

A Real App

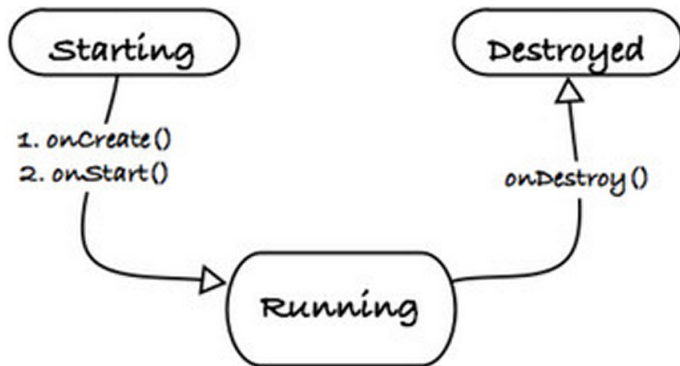
Activities

Create a Service
that can Trigger an Alarm

Add to `manifest.xml`!

A Real App

Services



A Real App

Services

Log Service Lifecycle

A Real App

Services

Try IntentService;
it's easier...

A Real App

Services

Call a Notification using NotificationManager

A Real App

Services

Schedule the Notification using AlarmManager

A Real App

Intents

Send our Alarm Information using Intent extras

A Real App

Intents

Do we have Time?

A Real App

Intents

Do we have Time?
Feature Ideas?

Conclusion

`www.mhelvens.net`