Android Overview

Most of the material related to Android is adapted from
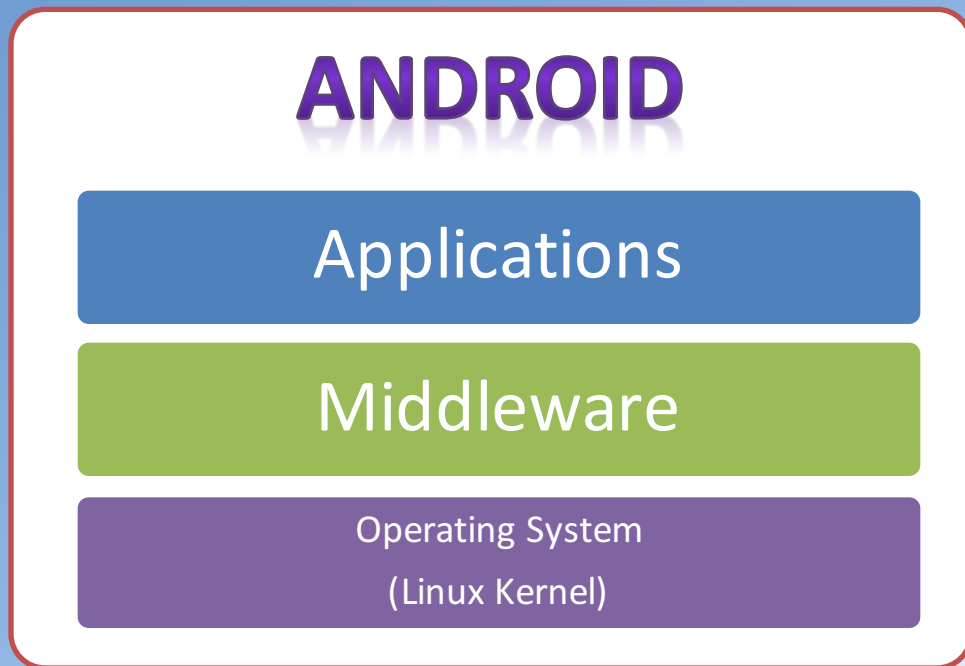http://developer.android.com/

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Android Overview

- A software stack for mobile devices
- Developed and managed by Open Handset Alliance
- Open-sourced under Apache License

ANDROID

| Applications |
| Middleware |
| Operating System (Linux Kernel) |

Android Platform Versions

- Moving target, new platforms released regularly

Name	Version	API Level	Release Date	Linux Kernel
Base	1.0	1	Sep. 2008	
Base_1_1	1.1	2	Feb. 2009	
Cupcake	1.5	3	Apr. 2009	2.6.27
Donut	1.6	4	Sep.2009	2.6.29
Éclair	2.0		Oct. 2009	2.6.29
	2.1-update 1	7	Jan. 2010	2.6.29
Froyo	2.2	8	May 2010	2.6.32
Gingerbread	2.3/2.3.1/ 2.3.2	9	Dec. 2010	2.6.35
	2.3.3/2.3.4	10	Jul. 2011	2.6.35
Honeycomb	3.0.x	11	Feb. 2011	2.6.36
	3.1.x	12	May 2011	
	3.2.x	13	Jul. 2011	

Android Platform Versions

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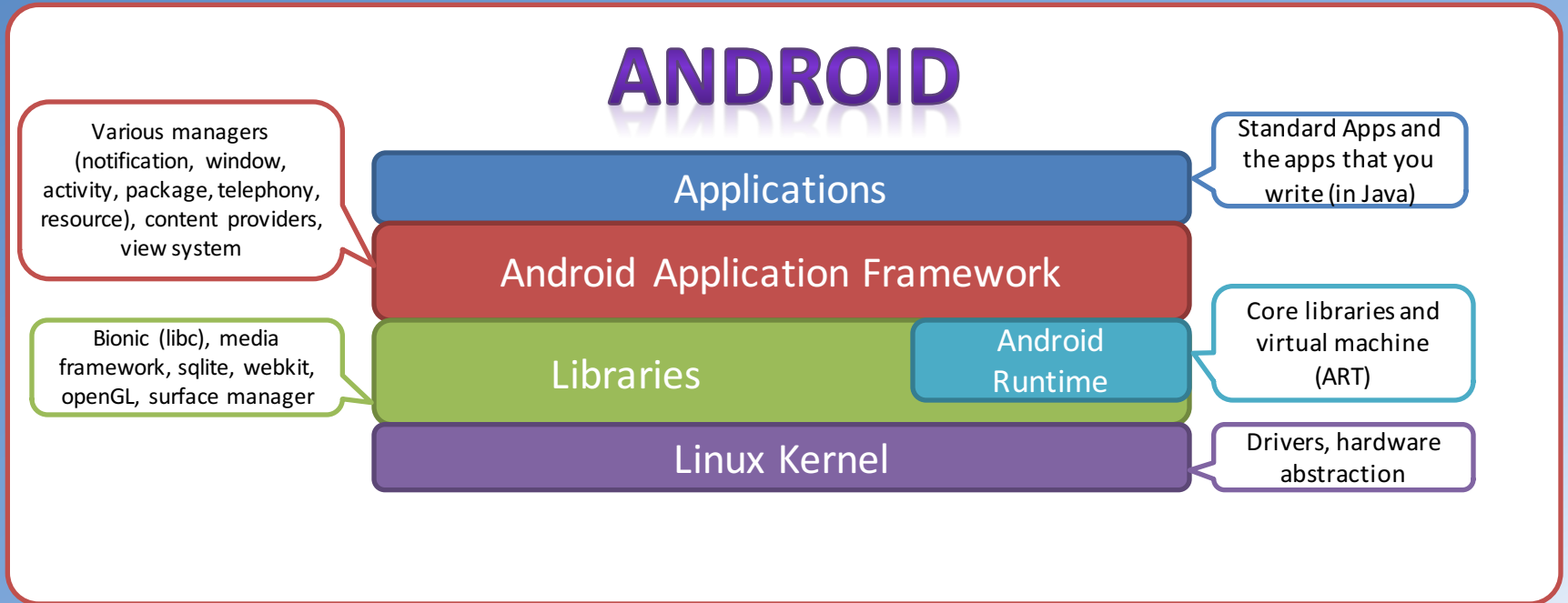| Name	Version	API Level	Release Date	Linux Kernel
Ice Cream Sandwich	4.0/4.0.1/4.0.2	14	Dec. 2011	3.0.1
	4.0.3/4.0.4	15	Jan. 2012	
Jelly Bean	4.1	16	Jun. 2012	3.0.31
	4.2/4.2.1/4.2.2	17	Nov. 2012	3.4.0
	4.3.x	18	Jul. 2013	3.4.39
KitKat	4.4	19	Oct. 2013	3.8
	4.4.1/4.4.2	19	Dec. 2013	3.10
	4.4.3/4.4.4	19	Jun. 2014	
KitKat (wearables)	4.4W.2	20	Jun./Oct. 2014	
Lollipop	5.0/5.0.1	21	Nov./Dec. 2014	3.16.1
	5.1/5.1.1	22	Mar./Apr. 2015	
Marshmallow	6.0/6.0.1	23	Oct./Dec. 2015	3.18.10

Android Platform Versions

as of May. 02, 2016
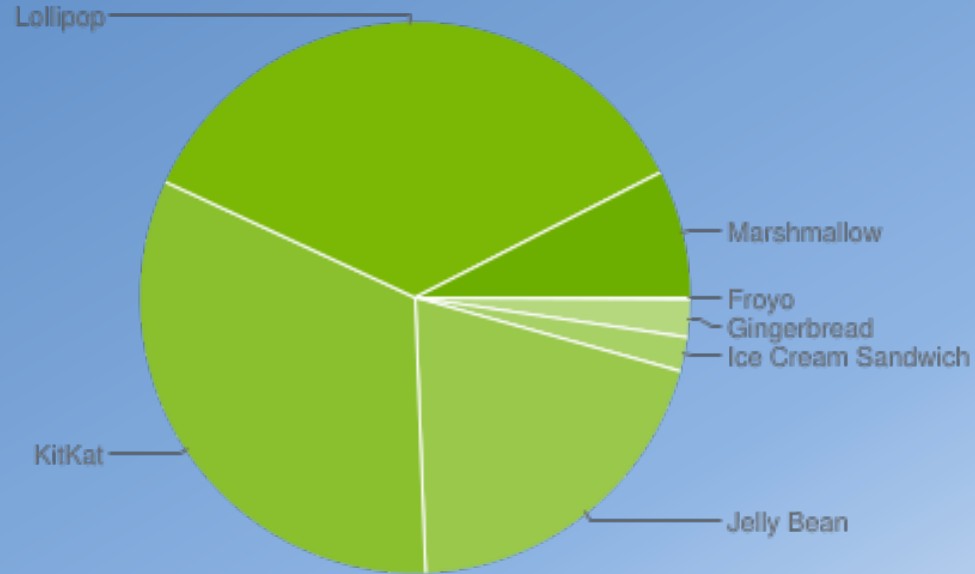
https://developer.android.com/about/dashboards/index.html?utm_source=suzunone

Android Architecture

ANDROID

Various managers (notification, window, activity, package, telephony, resource), content providers, view system

Bionic (libc), media framework, sqlite, webkit, openGL, surface manager

Applications

Standard Apps and the apps that you write (in Java)

Android Application Framework

Libraries

Android Runtime

Core libraries and virtual machine (ART)

Linux Kernel

Drivers, hardware abstraction

First Hands-on Exercise

- Enough of theory for now!
- Fire up your Android Studio and let's do our first hands-on exercise
  - Hello World!