

WELCOME

Mobile Applications Testing



Platforms / OS : What do I HAVE ?



Platforms / OS :

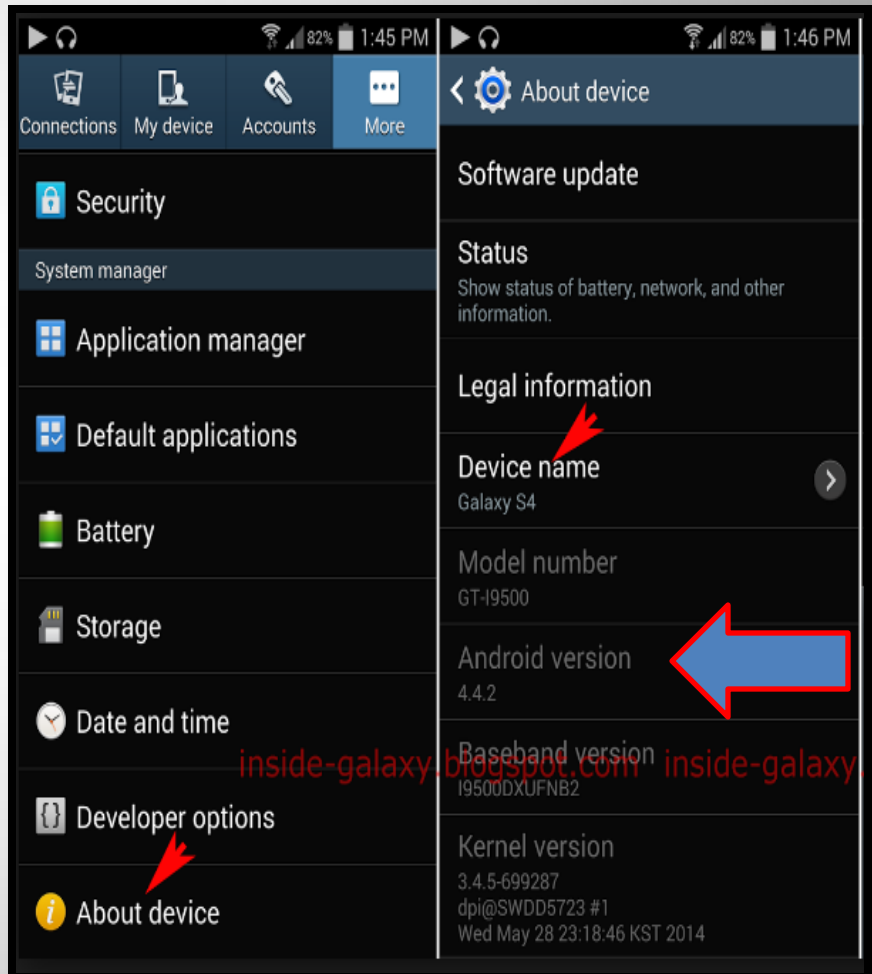
How to find my Android OS Version ?



**Open your
device
SETTINGS**

**Scroll to
ABOUT
PHONE**

**Look for line
which says
"Android
Version"**



Platforms / OS :

How to find my Apple iOS Version ?

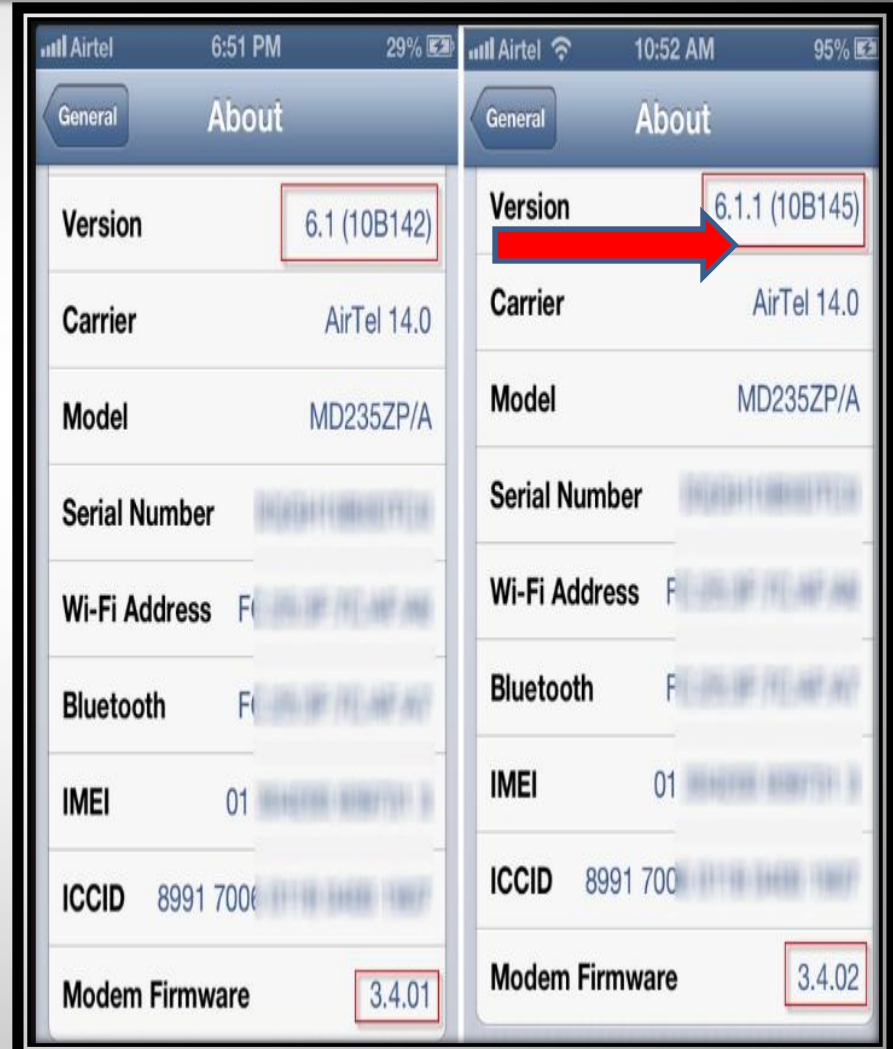


Open the
Settings

Tap 'General'

Tap 'About'

Scroll down
for 'Version'



Platforms / OS :

How to find my WinPhone OS version ?



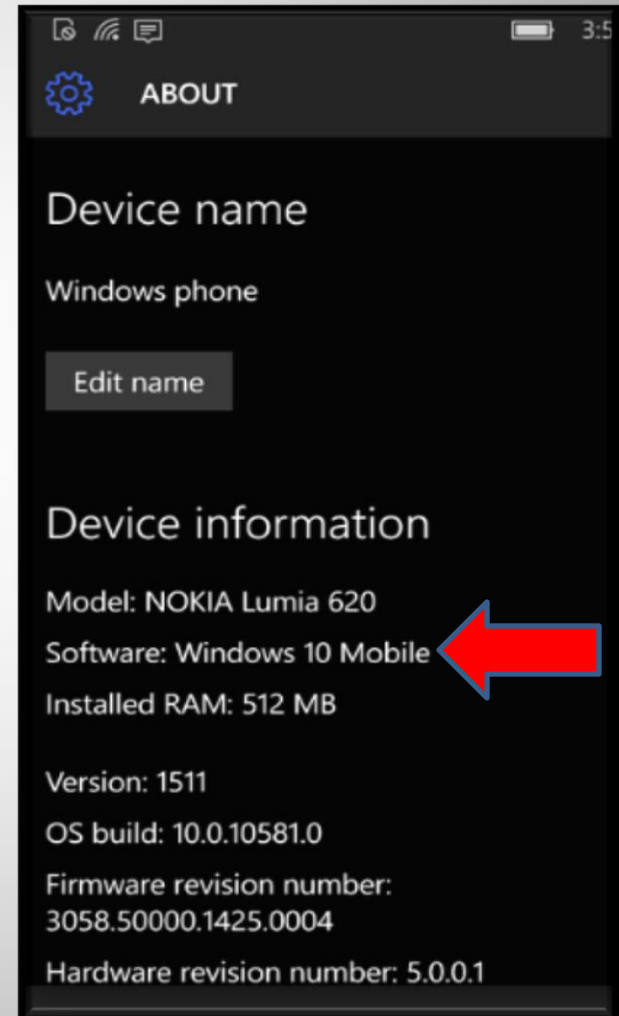
Windows Phone home screen

Swipe left to reveal more icons

Scroll down and tap 'SETTINGS'

Scroll down and tap 'ABOUT'

'About' screen, tap MORE INFO



Platforms / OS :

BLACKBERRY current ver : 10.3.2

BlackBerry (RIM) is a proprietary operating system

It is tailor-made for business, with functionality taking a seat over personality or appearance

Its main focus is on messaging, email and other communication features.



Platforms / OS :

Windows Phone current ver : 10.0

- Windows Phone (WP) is a family of mobile operating systems developed by Microsoft for SmartPhones

Replacement successor to Windows Mobile and Zune
WP features a new UI derived from Metro design language.



Platforms / OS :

ANDROID

ANDROID

*is a mobile **operating system** developed by GoogleBased on the Linux Kernel and designed primarily for touch screen Mobile Devices such as : SmartPhones and Tablets.*

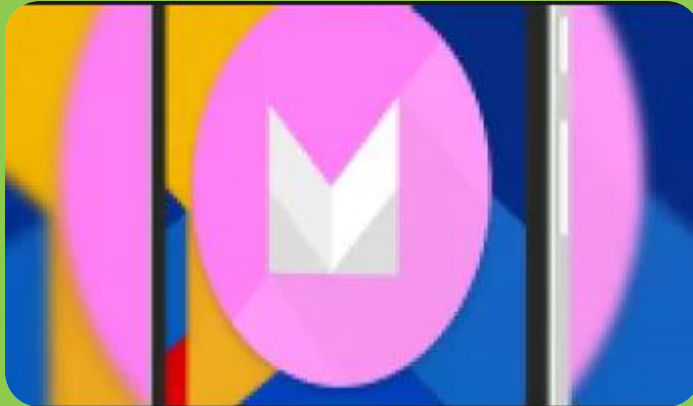


Platforms / OS :

ANDROID version 6.0-6.0.1

API level 23

“MARSHMALLOW”



Officially released in
October 2015



Platforms / OS :

ANDROID version 7.0-7.0.1
API level 24-25

ONLY

*Nexus 6, 5X, 6P, 9, Nexus Player,
Pixel C, and General Mobile 4G*

Android 7.0-7.1 "Nougat"

7.0 :First released as a beta build on March 9, 2016, it was officially released on August 22, 2016, with Nexus devices being the first to receive the update.



Platforms / OS :

ANDROID HISTORY 2009-2015

04-2009



Android 1.5 Cupcake

09-2009



Android 1.6 Donut

11-2009



Android 2.0 Eclair

05-2010



Android 2.2 Froyo

12-2010



Android 2.3 Gingerbread

The Dream Run of  **ANDROID** *from*
Version 1.0 to 6.0.1

10-2015



Android 6.0 Marshmallow

02-2011



Android 3.0 Honeycomb

11-2011



Android 4.0
Ice Cream Sandwich

07-2012



Android 4.1 Jelly Bean

10-2013



Android 4.4 KitKat

11-2014



Android 5.0 Lollipop

Platforms / OS :

ANDROID OS HISTORY

Code name	Version number	Initial release date	API level
N/A	1.0	September 23, 2008	1
	1.1	February 9, 2009	2
Cupcake	1.5	April 27, 2009	3
Donut	1.6	September 15, 2009	4
Eclair	2.0 – 2.1	October 26, 2009	5 – 7
Froyo	2.2 – 2.2.3	May 20, 2010	8
Gingerbread	2.3 – 2.3.7	December 6, 2010	9 – 10
Honeycomb ^[a]	3.0 – 3.2.6	February 22, 2011	11 – 13
Ice Cream Sandwich	4.0 – 4.0.4	October 18, 2011	14 – 15
Jelly Bean	4.1 – 4.3.1	July 9, 2012	16 – 18
KitKat	4.4 – 4.4.4	October 31, 2013	19 – 20
Lollipop	5.0 – 5.1.1	November 12, 2014	21 – 22
Marshmallow	6.0 – 6.0.1	October 5, 2015	23
<i>Nougat</i>	7.0 - 7.1	October 14, 2016	24 - 25

Platforms / OS :

ANDROID ARCHITECTURE

ARCHITECTURE OF ANDROID



Android operating system is a stack of software components which is roughly divided into five sections and four main layers as shown below in the architecture diagram.



Platforms / OS :

ANDROID ARCHITECTURE

Linux kernel

- This provides basic system functionality like process management, memory management, device management like camera, keypad, display etc.

Libraries

- It is this layer that enables the device to handle different types of data

Android Runtime

- The Android runtime also provides a set of core libraries which enable Android application developers to write Android applications using standard Java programming language

Application Framework

- The Application Framework layer provides many higher-level services to applications in the form of Java classes. Application developers are allowed to make use of these services in their applications.

Applications

- You will find all the Android application at the top layer. You will write your application to be installed on this layer only. Examples of such applications are Contacts Books, Browser, Games etc.



Platforms / OS :

ANDROID FILE FORMAT .APK

- *Android application package (**APK**) is the package file format used by the Android operating system for distribution and installation of mobile apps and middle-ware*

What is an APK File?

- Just like Windows (PC) systems use an **.exe** file for installing software, Android does the same. An **APK** file is the file format used for installing software on the Android operating system.

Platforms / OS :

iOS

- *iOS (originally iPhone OS) is a mobile operating system created and developed by Apple Inc. and distributed exclusively for Apple hardware*
- It is the operating system that presently powers many of the company's mobile devices, including the iPhone, iPad, and iPod touch.



Platforms / OS :

iOS latest version 10.0 – 10.X

- Apple unveiled iOS 10, the next-generation operating system for the iPhone, iPad, and iPod touch, on Sept 13, 2016
- [iOS 10.2.1](#), was released on January 23, 2017
- most recent beta version, [iOS 10.3 Beta 2](#), was released on February 6, 2017
- <https://david-smith.org/iosversionstats/>



Platforms / OS :

iOS latest version 10.X

<http://www.mobiloitte.com/blog/evolution-iphone-os-1-ios-10-journey-ios>



iPhone OS 1
(1st Generation)



iPhone OS 2 (3G)



iPhone OS 3 (3GS)



iOS 4 (iPhone 4)



iOS 5 (iPhone 4S)



iOS 6 (iPhone 5)



iOS 10 (iPhone 7)



iOS 9 (iPhone 6S)



iOS 7 (iPhone 5S)



iOS 8 (iPhone 6)

Evolution

OS to iOS 10 - Journey of iOS

...

Platforms / OS :

Version Name HISTORY → iOS



1.0:Alpine (1.0.0 - 1.0.2: Heavenly)	6.0: Sundance
1.1: Little Bear	6.1: Brighton
1.1.1: Snowbird, 1.1.2: Oktoberfest	7.0: Innsbruck
2.0: Big Bear	7.1: Sochi
2.1: Sugarbowl	8.0: Okemo
2.2: Timberline	8.1: OkemoTaos
3.0: Kirkwood	8.2: OkemoZurs
3.1: Northstar	8.3: Stowe
3.2: Wildcat (iPad only)	8.4: Copper
4.0: Apex	9.0: Monarch
4.1: Baker	9.1: Boulder
4.2: Jasper (4.2.5 - 4.2.10: Phoenix)	9.2: Castlerock
4.3: Durango	9.3: Eagle
5.0: Telluride	10.0: Whitetail
5.1: Hoodoo	

Platforms / OS :

iOS (iPhone) Architecture (simplified)

Cocoa Touch Layer

It is a top layer of the iPhone OS stack and it contains the frameworks that are most commonly used by iPhone application developers.

Media Layer

It is the second layer from the top of the stack. It provides the iPhone OS with audio, video, animation and graphics capabilities.

Core Services Layer

It is the third layer from the top of the stack. The iPhone Core Services layer provides much of the foundation on which the above layers are built.

Core OS Layer

The Core OS Layer is the bottom layer of the iPhone OS stack and sits directly on top of the device hardware. This layer provides a variety of services

iPhone Hardware

Hardware devices are managed by iPhone OS and provides the technologies needed for implementing native applications on the phone.

