The Wayback Machine - https://web.archive.org/web/20221205043715/https://zcom.te...

## ZCOMTECH.

(https://web.archive.org/web/20221205043715/https://zcom.tech/)

# All About Mobile Operating Systems A Complete Overview.

posted on NOVEMBER 28, 2022 Author - DEV D

FILED UNDER: FEATURED (HTTPS://WEB.ARCHIVE.ORG/WEB/20221205043715/HTTPS://ZCOM.TECH/FEATURED/)

Now a day everyone has their own mobile device and personal computer which has an operating system installed on it. Whether it's a laptop or desktop computer, smartphone tablet or smartwatch OS play an important role in controlling the devices internal hardware. Here in this post, we discuss about the mobile operating system, different types of **mobile operating system** with its popularity how it works and more. So stick with us and read the complete article to get a complete overview of mobile operating systems.

# What Is a Mobile Operating System?

A mobile operating system is basically software that allows smartphones, tablets, and other devices to run applications and programs. A mobile OS typically starts up when a device powers on (by long-pressing the power button), presenting a screen with icons or tiles that present information and provide application access, this whole overview of the application and adapting/swiping/ on the screen can be said as a mobile operating system.

# **History of Mobile Operating System**

• **1973–1993** – Mobile phones use embedded systems (An embedded system is a computer system—a combination of a computer processor, computer memory, and input/output peripheral devices—that has a dedicated function within a larger mechanical or electronic system.) to control operation.

#### 1993–1999

- 1993 April PenPoint OS by GO Corporation becomes available on the AT&T EO Personal Communicator.
- 1994, March Magic Cap OS by General Magic was first introduced on the Sony Magic Link PDA.
- **1996**, August Nokia releases the Nokia 9000 Communicator running an integrated system based on the PEN/GEOS 3.0 OS from Geoworks.
- 1997 EPOC32 first appeared on the Psion Series 5 PDA. Release 6 of EPOC32 will later be renamed to Symbian OS.
- 1999, June Qualcomm's pdQ became the first smartphone with Palm OS.
- **2001**, June Nokia's Symbian Series 80 platform was first released on the Nokia 9210 Communicator. This is the first phone running an OS branded as Symbian, and the first phone using that OS that allows user installation of additional software.

- September Qualcomm's Binary Runtime Environment for Wireless (BREW) platform on their REX real-time operating system (RTOS) is first released on the Kyocera QCP-3035.
- 2002, Java Platform, Micro Edition or Java ME is a computing platform for the development and deployment of portable code for embedded and mobile devices used in blackberry.
- In June **2002** Nokia's Symbian Series 60 (S60) platform is released with the Nokia 7650, Nokia's first phone with a camera and Multimedia Messaging Service on a mobile operating system
- **In 2003**, Motorola introduced the first linux based cell phone Motorola A760 based on Linux MontaVista distribution.
- 2005, May Microsoft announces Windows Mobile 5.0. November Nokia introduces Maemo OS
- **2007**, January **Apple's iPhone with iOS** was released, a real game-changer.
- 2008 July Apple releases iPhone OS 2
- In the same year that is **2008 October** OHA released **Android** (based on Linux kernel) 1.0 with the HTC Dream (T-Mobile G1) as the **first Android phone**, another game changer in the mobile operating system Market.
- February **2010,** Samsung introduced the Bada OS and showed the first Bada smartphone, the Samsung S8500. It's later released in May 2010.
- In April **2010**, Apple released the iPad (first generation) with iPhone OS 3.2. This is the first version of the mobile Operating System to support tablet computers.
- **2013**, January BlackBerry releases their new operating system for smartphones, BlackBerry 10, with their Q10 and Z10 smartphones. BlackBerry 10 is not backward compatible with the BlackBerry OS used on their previous smartphones.
- **In** February **2018,** Samsung released Samsung Experience 9.0 based on Android "Oreo" 8.0 globally to Samsung Galaxy S8 and S8+. In **May** Huawei released LiteOS version 2.1. In November, Samsung announced the One UI as the latest version of the Samsung Experience UI.

# **Types Of Mobile Operating Systems**

When you purchase a smartphone the manufacturer of that particular smartphone brand has already chosen the operating system for that specific device. Although, you have to learn more about the mobile operating system before you purchase a smartphone/tab/device to ensure compatibility and support for the mobile applications you want to use. So what are the types of mobile operating systems?

#### Android Operating System (OS) (GOOGLE INC.)

Android (https://web.archive.org/web/20221205043715/https://zcom.tech/android-operating-system.html/) is a mobile operating system based on a modified version of the Linux kernel and other open-source software, designed primarily for touchscreen mobile devices such as smartphones and tablets. Android is developed by a consortium of developers known as the Open Handset Alliance and commercially sponsored by Google. It was unveiled in November 2007, with the first commercial Android device, the HTC Dream, being launched in September 2008. Updates and new versions of the Android mobile operating system have been developed under "dessert-inspired" version names (Cupcake, Donut, Eclair, Gingerbread, Honeycomb, KitKat, Oreo, etc.)

## iPhone OS / iOS (Apple Inc.)

iOS (formerly iPhone OS) is a mobile operating system created and developed by <u>Apple Inc (https://web.archive.org/web/20221205043715/https://www.apple.com/)</u>. exclusively for its hardware(iPhone, iPad, other Apple products). It is the world's second-most widely installed mobile operating system, after Android. It is the basis for three other operating systems made by Apple: iPadOS, tvOS, and watchOS. It is proprietary software, although some parts of it are open source under the Apple Public Source License and other licenses.

#### **Bada (Samsung Electronics)**

Bada is a discontinued operating system for mobile devices such as smartphones and tablet computers. It was developed by Samsung Electronics. Its name is derived as bada, meaning "ocean" or "sea" in Korean. It ranges from mid-to-high-end smartphones. The Samsung Wave was the first smartphone to use this mobile OS. Bada provides mobile features such as multipoint-touch, 3D graphics and application downloads and installation.

#### Blackberry OS (Research In Motion)

BlackBerry Operating System is a proprietary mobile operating system developed by Canadian company BlackBerry Limited for its BlackBerry line of smartphone handheld devices. The operating system provides multitasking and supports specialized input devices that have been adopted by BlackBerry for use in its handhelds, particularly the trackwheel, trackball, and most recently, the trackpad and touchscreen.

#### Palm OS (Garnet OS)

Palm OS (also known as Garnet OS) is a discontinued mobile operating system initially developed by Palm, Inc. Palm OS was designed for ease of use with a touchscreen-based graphical user interface. It is provided with a suite of basic applications for personal information management. Later versions of the OS have been extended to support smartphones.

## Symbian OS (Nokia)

Symbian is a discontinued mobile operating system (OS) and computing platform designed for smartphones. Symbian was used by many major mobile phone brands, like Samsung, Motorola, Sony Ericsson, and above all by Nokia. It was also prevalent in

Japan by brands including Fujitsu, Sharp and Mitsubishi. As a pioneer that established the smartphone industry, it was the most popular smartphone OS on a worldwide average until the end of 2010; afterward, it was overtaken as we all know by Android And iOS.

### Windows Mobile (Windows Phone)

Windows Mobile is a discontinued family of mobile operating systems developed by Microsoft for smartphones and personal digital assistants. Windows Phone featured a new user interface derived from the Metro design language. Unlike Windows Mobile, it was primarily aimed at the consumer market rather than the enterprise market. Although in front of android and iOS it couldn't stand up and was discontinued.

## **Operating System based on Android Open Source Project (AOSP)**

- **Colour OS** developed by OPPO Electronics Corp. As of 2016, OPPO officially releases ColorOS with every OPPO and Realme device.
- **EMUI** developed by Huawei Technologies Co. Ltd. and its sub-brand Honor. EMUI is preinstalled on most Huawei and Honor products. While it was based on the open source Android operating system, it consists of closed source and proprietary software.
- **Fire OS** developed by Amazon, Fire OS is an Android-based mobile operating system produced by Amazon for its Fire range of tablets, Echo and more.
- **GrapheneOS**, formerly named Android Hardening, is a variant of Android that runs on Pixel 2 or Pixel 3 hardware.
- **HTC Sense,** developed for htc hardware like smartphones and more. The first device with Sense, the HTC Hero, was released in 2009.
- **iQOO UI is** a custom user interface that is based on Vivo **Funtouch OS**, which itself is based on the Android Open Source Project (AOSP). The overall UI mostly resembles its predecessor, however with their own customized UI on top of the Funtouch OS.

- **MiFavor**, was the custom Android UI that was developed by ZTE for their smartphone that is running the Android platform.
- MIUI, Mi User Interface (MIUI), developed by the Chinese electronic company
   Xiaomi Inc., is a mobile operating system used in Xiaomi products like smartphones
   and more.
- One UI, formerly called TouchWiz and Samsung Experience is a front-end touch interface developed by Samsung Electronics In 2008 with partners, featuring a full touch user interface.
- **Oxygen OS**, is developed by OnePlus to replace Cyanogen OS on OnePlus devices such as the OnePlus One, and it is preinstalled on the OnePlus 2, and further.
- **Pixel UI was** developed by Google, unlike the Nexus phones, where Google shipped with the "stock" Android, the UI that came with the first generation Pixel phones were slightly modified as compared to the "stock" Android. As part of the Google Pixel software, the Pixel UI and its home launcher are closed source and proprietary, thus it is only available on the Pixel family devices.
- Realme UI is a mobile operating system developed by Realme which is based on OPPO ColorOS, which was based on AOSP.
- **Sony Xperia UI** (formerly known as Sony Ericsson Timescape UI) was the frontend UI that was developed by Sony Mobile In 2010 for their Sony Xperia series that is running on the Android platform.
- **ZenUI** is an interface developed by ASUS with partners, featuring a full touch user interface. ZenUI is used by Asus for its Android phones and tablet computers and is not available for licensing by external parties.

# The function of the Mobile Operating system

The main function of mobile operating systems is to allow smartphones, tablets, PDAs and other handheld devices to run applications and programs. An operating system has main functions to manage the Smartphone Internal resources, such as the processor, memory, number of applications provided and much more, to establish a user interface,

and to execute and provide services for applications software. Mobile operating systems are based on open (Android) or closed source (iOS). Depending upon the sources, security and other things can be defined.

# Popular Mobile OS

Here are some of the most popular mobile operating systems. Android stands at the top spot with 72% of the market share, followed by **iOS** 26.40% of the total Market share, 0.8% Owned by others. Source: <u>Statista</u>

(<a href="https://web.archive.org/web/20221205043715/https://www.statista.com/statistics/272698/global-market-share-held-by-mobile-operating-systems-since-2009/">https://web.archive.org/web/20221205043715/https://www.statista.com/statistics/272698/</a>

## Android OS (Google)

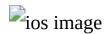


Android mobile OS is an open source

(https://web.archive.org/web/20221205043715/https://zcom.tech/open-source-and-closed-source.html/) mobile operating system powered by Linux Kernel (https://web.archive.org/web/20221205043715/https://zcom.tech/linux-for-beginners.html/) developed by Google. It's majorly programmed by C, C++ and Java and is designed primarily and specifically for touchscreen mobile devices like <a href="maintenant-type-smartphone-buying-guide.html/">smartphone-buying-guide.html/</a>) and tablets. By Far it is the dominant mobile operating system in the market. Android OS is customizable as it is an Opensource, it has Android Open Source Project (AOSP). Some of the advantages of Android OS are Flexible UI, common in most of mobile phones, Incomparable Apps in terms of sheer volume, High-customizing capability

\* Wide range of devices, highly convenient. Disadvantages are, some android devices have a history of delayed updates and it is less secure compared to iOS.

#### iPhone OS/ iOS (Apple)



iOS is a great mobile operating system developed by Apple inc. It is so far the most advanced mobile OS in the world and currently the strongest rival against Android in the mobile OS section. Coded in Objective-C, this mobile OS is completely closed-source and is exclusively designed for Apple products such as the iPhone, iPad and iPod Touch, etc. Advantages of owning iOS is Beautiful UI, Great quality of apps with good security, Regular version updates, secured smartphone. Disadvantages include, Closed-source i.e, can't be customized or limited Customizability, not a cost-friendly device as compared to Android devices.

For More read Android vs. iOS.

(https://web.archive.org/web/20221205043715/https://zcom.tech/android-phone-vs-iphone.html/)

#### Also read:

- <u>Updated WordPress Ping List for Faster Indexing Of New Post</u>
   (https://web.archive.org/web/20221205043715/https://zcom.tech/wordpress-ping-list.html/)
- <u>Best PDF Reader Apps For Android To Read And Edit PDF Files</u>

  (<a href="https://web.archive.org/web/20221205043715/https://zcom.tech/best-pdf-reader-for-android.html/">https://web.archive.org/web/20221205043715/https://zcom.tech/best-pdf-reader-for-android.html/</a>)
- <u>Apple AirPods microphone not working? apply these solutions</u>
   (<a href="https://web.archive.org/web/20221205043715/https://zcom.tech/apple-airpods-microphone-not-working.html/">https://web.archive.org/web/20221205043715/https://zcom.tech/apple-airpods-microphone-not-working.html/</a>)
- What is Telegram, its features and how do I use it!
   (https://web.archive.org/web/20221205043715/https://zcom.tech/what-is-telegram.html/)

#### COPYRIGHT © 2022 · WEBSITE DESIGNED & MANAGED BY ZCOMTECH

AFFILIATE DISCLOSURE - SOME OF THE LINKS TO PRODUCTS ON THIS WEBSITE ARE AFFILIATE LINKS. IT SIMPLY MEANS, AT NO ADDITIONAL COST TO YOU, WE'LL EARN A COMMISSION IF YOU CLICK THROUGH AND BUY ANY PRODUCT.