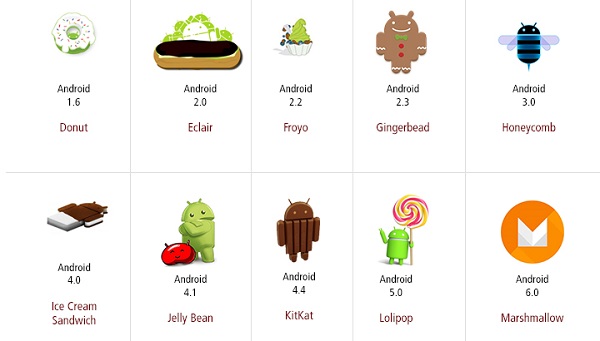
History of Android

The code names of android ranges from A to N currently, such as Aestro, Blender, Cupcake, Donut, Eclair, Froyo, Gingerbread, Honeycomb, Ice Cream Sandwitch, Jelly Bean, KitKat, Lollipop and Marshmallow. Let's understand the android history in a sequence.



What is API level?

API Level is an integer value that uniquely identifies the framework API revision offered by a version of the Android platform.

Android versions, name, and API level

|  |  |  |  |
| --- | --- | --- | --- |
| **Code name** | **Version numbers** | **API level** | **Release date** |
| No codename | 1.0 | 1 | September 23, 2008 |
| No codename | 1.1 | 2 | February 9, 2009 |
| Cupcake | 1.5 | 3 | April 27, 2009 |
| Donut | 1.6 | 4 | September 15, 2009 |
| Eclair | 2.0 - 2.1 | 5 - 7 | October 26, 2009 |
| Froyo | 2.2 - 2.2.3 | 8 | May 20, 2010 |
| Gingerbread | 2.3 - 2.3.7 | 9 - 10 | December 6, 2010 |
| Honeycomb | 3.0 - 3.2.6 | 11 - 13 | February 22, 2011 |
| Ice Cream Sandwich | 4.0 - 4.0.4 | 14 - 15 | October 18, 2011 |
| Jelly Bean | 4.1 - 4.3.1 | 16 - 18 | July 9, 2012 |
| KitKat | 4.4 - 4.4.4 | 19 - 20 | October 31, 2013 |
| Lollipop | 5.0 - 5.1.1 | 21- 22 | November 12, 2014 |
| Marshmallow | 6.0 - 6.0.1 | 23 | October 5, 2015 |
| Nougat | 7.0 | 24 | August 22, 2016 |
| Nougat | 7.1.0 - 7.1.2 | 25 | October 4, 2016 |
| Oreo | 8.0 | 26 | August 21, 2017 |
| Oreo | 8.1 | 27 | December 5, 2017 |
| Pie | 9.0 | 28 | August 6, 2018 |
| Android 10 | 10.0 | 29 | September 3, 2019 |
| Android 11 | 11 | 30 | September 8, 2020 |

### **Android Version 1.0 to 1.1: No codename**

Android officially publish its Android version 1.0 in September 2008. It is the initial version of Android operating system. It supports Web browser to show [HTML](https://www.javatpoint.com/html-tutorial) and [XHTML](https://www.javatpoint.com/xhtml-tutorial) web pages, camera, access web email server (POP3, IMAP4, and SMTP). This version contains Google Calendar, Google Maps, Google Sync, Google Search, Google Talk, Instant messaging, Media player, Notifications appear in the status bar, wallpaper, YouTube video player, Alarm Clock, Calculator, Dialer, Pictures (Gallery), Wi-Fi and Bluetooth support.

### **Android version 1.5: Cupcake**

On April 27, 2009, the Android updated to 1.5 with the codename of the dessert item (Cupcake). It has [Linux](https://www.javatpoint.com/linux-tutorial) kernel 2.6.27. It supports third-party virtual keyboard, Video recording and playback in MPEG-4, Copy and paste feature, Animated screen translations, auto-rotation option, ability to upload a video to YouTube, upload photos to Picasa, check phone usage history.

### **Android version 1.6: Donut**

On September 15, 2009, Android 1.6 was released with the name Donut. It contains numerous new features such as voice and text entry search, bookmark history, contacts, web, "speak" a string of text, faster camera access, user can select multiple photos for deletion, support text-to-speech engine, WVGA screen resolutions.

### **Android version 2.0 to 2.1: Eclair**

On October 26, 2009, Android 2.0 was released, whose codename was Eclair. It was based on Linux kernel 2.6.29. It contains the several new features as expanded account sync, Microsoft Exchange email support, Bluetooth 2.1, ability to tap a Contact photo and select to call, [SMS](https://www.javatpoint.com/sms-full-form), ability to search all saved SMS, [MMS](https://www.javatpoint.com/mms-full-form) messages, delete the oldest message automatically when the defined limit is reached, Minor API, bug fixes.

### **Android version 2.2 to 2.2.3: Froyo**

On May 20, 2010, Android 2.2 (Froyo) was released based on Linux kernel 2.6.32. It contains several features as speed, memory, performance optimization. JIT compilation, Integration of Chrome's V8, [JavaScript](https://www.javatpoint.com/javascript-tutorial) engine into the Browser application, support Android Cloud to Device Messaging service, Adobe Flash support, security updates, and performance improvement.

### **Android version 2.3 to 2.3.7: Gingerbread**

On December 6, 2010, the Android 2.3 (Gingerbread) was released based on Linux kernel 2.6.35. It includes the following changes: support for extra-large screen size and resolutions, updated user interface design with increased simplicity and speed, enhanced copy/paste functionality, select a word by press-holding, support Near Field Communication (NFC), headphone virtualization, new Download Manager.

It has improved bug fixes for Nexus S, voice or video chat using Google Talk, network performance for Nexus S 4G, Gmail application, battery efficiency, fixed a voice search bug, Google Wallet support for Nexus S 4G.

### **Android version 3.0 to 3.2.6: Honeycomb**

On February 22, 2011, Android 3.0 (Honeycomb) was launched for the first tablet for Android-based on Linux kernel 2.6.36. It contains the features like "holographic" user interface for tablet, added system Bar, simplified multitasking tapping Recent Application in system Bar, redesign the keyboard making fast typing, quick access to camera exposure, hardware acceleration, support for multi-core processor, UI refinements, connectivity for USB accessories, support for joysticks and gamepads, high-performance Wi-Fi lock, improved hardware support, Google Books, fixed data connectivity issues when coming out of Airplane mode.

### **Android version 4.0 to 4.0.4: Ice Cream Sandwich**

On October 19, 2011, Android 4.0.1 (Ice Cream Sandwich) was launched, which was based on Linux kernel 3.0.1. It was the last version of officially support Adobe System Flash player. It introduces the numerous new features: refinements to "Holo" interface with new Roboto font family, separation of widgets in a new tab, integrated screenshot capture, improved error correction on the keyboard, improved copy and paste functionality, build-in photo editor, fixed minor bugs, improvement to graphics, spell-checking, better camera performance.

### **Android version 4.1 to 4.3.1: Jelly Bean**

On June 27, 2012, Google announced Android 4.1(Jelly Bean) in the Google I/O conference. It is based on Linux kernel 3.0.31. It updates to following features: smoother user interface, enhance accessibility, expandable notification, fixed bug on Nexus 7, one-finger gestures to expand/collapse notifications, lock screen improvement, multiple user accounts (tablets only), new clock application, Bluetooth low energy support, volume for incoming call, 4K resolution support, native emoji support, bug fixes for the Nexus 7 LTE.

### **Android version 4.4 to 4.4.4: KitKat**

On September 3, 2013, Google announced [Android 4.4 (KitKat)](https://www.javatpoint.com/android-kitkat). Initially, its code name was "Key Lime Pie". Google started on Google's Nexus 5 on October 31, 2013. The minimum required amount of RAM should available to Android is 340 MB. The other devices with less than 512 MB of RAM must report themselves as "low RAM" devices. It includes several new features as clock no longer display bold hours, wireless printing capability, WebViews are based on Chromium engine, sensor batching, built-in screen recording feature, better application compatibility, camera application loads Google+ Photo instead of Gallery.

### **Android version 5.0 to 5.1.1: Lollipop**

[Android 5.0 "Lollipop"](https://www.javatpoint.com/android-lollipop) was initially named "Android L" on June 25, 2014. It was officially introduced on November 12, 2014. Lollipop provides several features like redesigned user interface, support for 64-bit CPUs, support for print previews, material design, Project Volta for battery life improvement, multiple user accounts, audio input, and output through USB devices, join Wi-Fi networks, support for multiple SIM cards, device protection, high-definition voice calls, native Wi-Fi calling support.

### **Android version 6.0 - 6.0.1: Marshmallow**

[Android 6.0 "Marshmallow"](https://www.javatpoint.com/android-marshmallow) was disclosed under the codename "Android M" on May 28, 2015, for Nexus 5 and Nexus 6 phones, Nexus 9 tablet.

On October 5, 2015, Android lunches "Marshmallow" for all android devices. It contains the various new features as App Standby feature, introduce the Doze mode to save battery life, native fingerprint reader support, run-time permission requests, USB-C support, Unicode 7.0 & 8.0 emoji support.

### **Android version 7.0 to 7.1.2: Nougat**

[Android 7.0 "Nougat"](https://www.javatpoint.com/android-nougat) was the major release for the Android operating system. Its initial codename was "Android N". It was first released as a developer preview on March 9, 2016, with factory images for the Nexus device.

On August 22, 2016, the final preview built was released with following features: file-based encryption, zoom in the screen, multi-window support, new Data Saver mode, JIT compiler makes 75 percent faster app installation, picture-in-picture support, support manager APIs, circular app icons support, send GIFs directly from the default keyboard, battery usage alerts.

### **Android version 8.0 to 8.1: Oreo**

[Android 8.0 "Oreo"](https://www.javatpoint.com/android-oreo) was the 8th major release of the Android operating system. It was first released for developer preview on March 21, 2017. The final developer preview was released on July 24, 2017.

On August 21, 2017, its stable version was released with several features: picture-in-picture support, support for Unicode 10.0 emoji (5.0), restructured settings, adoptive icons, notification channels, notification dots, 2 times faster boot time, Google Play Protect, Integrated printing support, Neural network API, shared memory API, Android Oreo Go Edition, autofill framework, automatic light, and dark themes.

### **Android version 9.0: Pie**

Android 9.0 "Pie" was the ninth major version of the Android operating system. It was first announced and preview launched by Google on March 7, 2018. It was officially released on August 6, 2018. It has the following features: the clock has moved to the left of the notification bar, the "screenshot" button has been added, battery percentage always shown on display.

### **Android version 10:**

[Android 10](https://www.javatpoint.com/android-10) is the tenth extensive version of the [Android](https://www.javatpoint.com/android-tutorial) operating system. Android 10 has developed under the codename "Android Q". It was initially announced by Google on March 13, 2019 and its first beta version was released on same day and its second beta was released on April 3, 2019.

The stable version of Android 10 was released on September 3, 2019. It contains features like new permissions to access location in the background, floating setting panel, support for an AV1 video codec, support for biometric authentication, support the WPA3 Wi-Fi security.

### **Android 11**

[Android 11](https://www.javatpoint.com/android-11) operating system is the eleventh big release of Android. It is the 18th version of Android mobile OS, which was released on 8 September 2020. The alphabetic naming system of Android, based on deserts, was stopped since Android 10. So therefore, this operating system has branded with "Android 11".

**Features included in Android 11**

* **Conversations:** Get all your message in one place.
* **Accessibility:** Perceptive apps help us to control and navigate our phone using voice command.
* **Device controls:** Android 11 allows us to control all our connected devices (IOT) from a single point.
* **Content capture:** Android 11 comes with a screen recording feature that captures our phone's current screen activity.
* **Predictive tools:** By predicting our habits and patterns of working, it suggests accordingly.
* **Privacy & security:** Android 11 gives more security and privacy fixes to our smartphone straight from Google Play.
* **Media:** We can play music from other devices connected to our phones.