

# **STUDY ON ANDROID OREO FEATURES, VERSION HISTORY AND SUPPORTABILITY LANGUAGE**

**Soniya V<sup>1</sup>, Rajasekhar J<sup>2</sup>**

*<sup>1,2</sup>Assistant Professor, Branch CSE, St Peter's Engineering College, Hyderabad (India)*

## **ABSTRACT**

*Android Oreo (codenamed o being developed) is the upcoming major 8.0 arrival of the Android Operating framework. It is formally and discharge out to pixel and Nexus phones in next couple of weeks, with new highlights and refresh of past rendition Nougat. Kotlin, an official android dialect declared by Google on May 17, 2017 which is a default dialect and completely bolstered in Android Studio 3.0. Kotlin interoperability with java have settled on it famous decision for developers*

**Keywords: Android; Oreo; Nougat; Kotlin; Version history**

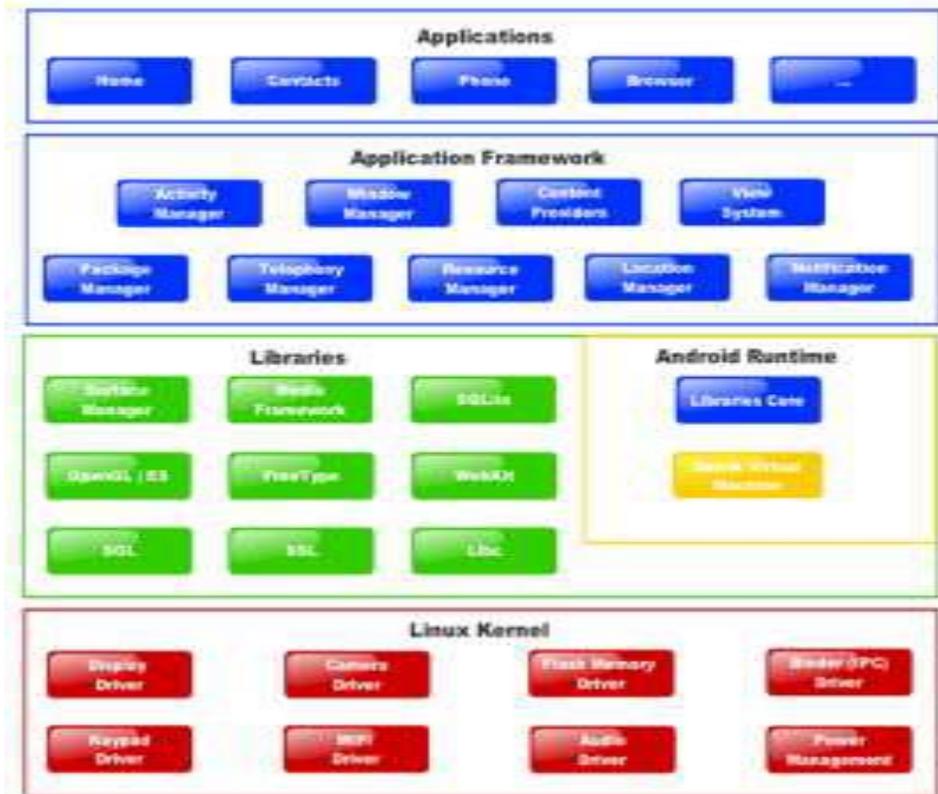
## **I. INTRODUCTION**

Android is a product stage and working framework for cell phones, in view of the Linux piece, and created by Google and later the Open Handset Alliance. It enables designers to compose oversaw code in the Java dialect, controlling the gadget by means of Google-created Java libraries. Android is accessible as open source. Android is an uninhibitedly downloadable open source programming stack for cell phones that incorporates a working framework, middleware and key applications in view of Linux and Java. Google acquired the designer of Android in 2005, and Android was uncovered in 2007. Google discharged the Android code as open-source under the Apache License. Android has various engineers composing (applications) everywhere throughout the world. Above all else the designers compose their content in Java, and after that download the applications from the outsider destinations or online stores. In February 2012, 450,000 applications were accessible for Android yet the evaluated number of downloads since December, 2011 was more than 10 billion. There are more than 300 million Androids being used and more than 850,000 gadgets initiated each day. Android is the a standout amongst the most utilized portable working framework with a piece of the overall industry of 48% and

More than 400,000 applications accessible in Google play store. Android applications have been introduced more than 10 billion times and cover a tremendous scope of classes from recreations and amusement to budgetary and business administrations. Android programming improvement and the Google Play Market are moderately open and unlimited. This offers the two engineers and clients more adaptability and flexibility, yet additionally makes huge security challenges. Now Google announced Kotlin is an official language for developing android applications. Kotlin interoperability with java have settled on it well known choice for designers. Kotlin can be utilized with

existing Android Studio's device bringing every one of the benefits of a cutting edge dialect to the Android Platform with no new limitations. Fig explains the architecture of android.

ANDROID ARCHITECTURE



II. VERSION HISTORY

The version history of the Android operating System started with the arrival of the Android alpha in November 2007, the principal business form, Android 1.0, was discharged in September 2008. Form 1.0 and 1.1 were not discharged under particular code names, but rather since April 2009's Android 1.5 "CupCake", Android renditions have had dessert shop themed code names. Each is in sequential request, with the latest being Android 7.1.2 "Nougat", discharged in August 2016. As of June 2017, the up and coming Android discharge is Android 8.0 "Oreo". Following table explains the version history of Android operating system.

Code Name	Version Name	Initial Release Date	API Level
N/A	1.0	Sep 23, 2008	1
	1.1	Feb 9, 2009	2
Cup Cake	1.5	Apr 27, 2009	3
Donut	1.6	Sep 15, 2009	4

Éclair	2.0-2.1	Oct 26, 2009	5-7
Froyo	2.2-2.2.3	May 20, 2010	8
Gingerbrad	2.3-2.3.7	Dec 6, 2010	9-10
Honey Comb	3.0-3.2.6	Feb 22, 2011	11-13
Ice Cream Sandwich	4.0-4.0.4	Oct 18, 2011	14-15
Jelly Bean	4.1-4.3.1	July 9, 2012	16-18
Kit Kat	4.4-4.4.4	Oct 31, 2013	19-20
Lollipop	5.0-5.1.1	Nov 12, 2014	21-22
Marshmallow	6.0-6.0.1	Oct 5, 2015	23
Nougat	7.0-7.1.2	Aug 22, 2016	24-25
Oreo	8.0	Aug 21, 2017	26

### **III. ANNOUNCEMENT**

Android Oreo, more brilliant, speedier, more effective and sweeter than any time in recent memory is the eighth significant arrival of the Android working framework. It was first discharged as a designer review on March 21, 2017, with manufacturing plant pictures for current Nexus and Pixel gadgets. The last engineer review was discharged on July 24, 2017, with the steady form discharged in August 2017. . It included refreshed and joined highlights. The world's most loved cookie is your new most loved Android discharge. It is slated that every one of them getting the new OS by early 2018.

### **IV. FEATURES**

1. Picture-in-Picture: Now user will be able to keep watching Netflix in a tiny window if user suddenly remember to bang out that email forgot to send. This is great for larger-screened phones.
2. Smart Text Selection: This is a rocking feature: text selection is much smarter in Android O. Now the OS will know to select all the text, for example, when user are trying to copy and address. Smart text selection also includes the ability to tap on the selected text and, if it's an address, begin directions there or if it's a phone number, dial the number.
3. Notification Dots: Notification dots will now appear above apps that have pending notifications. Yay! But it gets better: long tap on a dot to get contextual menu actions user can carry out in a single tap.
4. Google Assistant: New code inside Android Oreo has shown that Google is planning on making Assistant a lot more useful. Google Assistant will, inside Android Oreo, be open to developers, so user can leverage it within their applications.

This means user can use Assistant whilst inside an application; Assistant will simply work in the background. This keeps people inside applications and also serves to bolster the usability of applications in the long run.

This is the sort of innovation Google Assistant needs if it is to become indispensable. Like Android, Google wants Assistant to be everywhere and used by all manner of applications. By doing this Google ensures Assistant grows and evolves beyond phones and smart speakers.

5. Auto fill: It's a pain having to type in your information, such as addresses, usernames, and even passwords on forms in apps and on the web. Android O makes this easier by allowing the OS to autofill info across apps and the web.

6. Wi-Fi Awareness: Ever have two devices that want to talk to each other but can't because both aren't on the same internet network? Well that doesn't matter anymore. In Android O a new feature called Wi-Fi Awareness will allow Wi-Fi devices to talk to each other via an ad hoc local network.

7. Vitals: While this feature won't be obviously noticeable when using Android O on the device, that doesn't matter. Vitals works in the background keeping the device more safe and secure from viruses, hackers, and worms. Think of it as a new security layer for Android.

## **V. CONCLUSION**

This paper, explains about the android version history and their API levels, supportability languages and also explains about the upcoming version of Android 8 Oreo, the API level and its features.

Android Oreo highlights new extended features which will be more comfortable to the user.

## **REFERENCES**

- [1] "Android Operating System", ijetmr, Volume 1, Issue 1
- [2] "Android 7 Nougat and Android Version History", IJRCS
- [3] <https://developer.android.com/kotlin/index.html>
- [4] <https://www.android.com/versions/oreo-8-0/>
- [5] <https://kotlinlang.org/docs/reference/android-overview.html>
- [6] <https://www.blog.google/products/android/android-oreo-superpowers-coming-device-near-you/>