ANDROID NOUGAT CPU SCHEDULING

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Submitted To

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Introduction

- Android is operating system for mobile devices development by Google. It is used by several smart phones and tablet.
- The android operating system (OS) is based on the Linux kernel.
- The goal of android project is to create a successful real-world product that improves the mobile experience for end user.

History

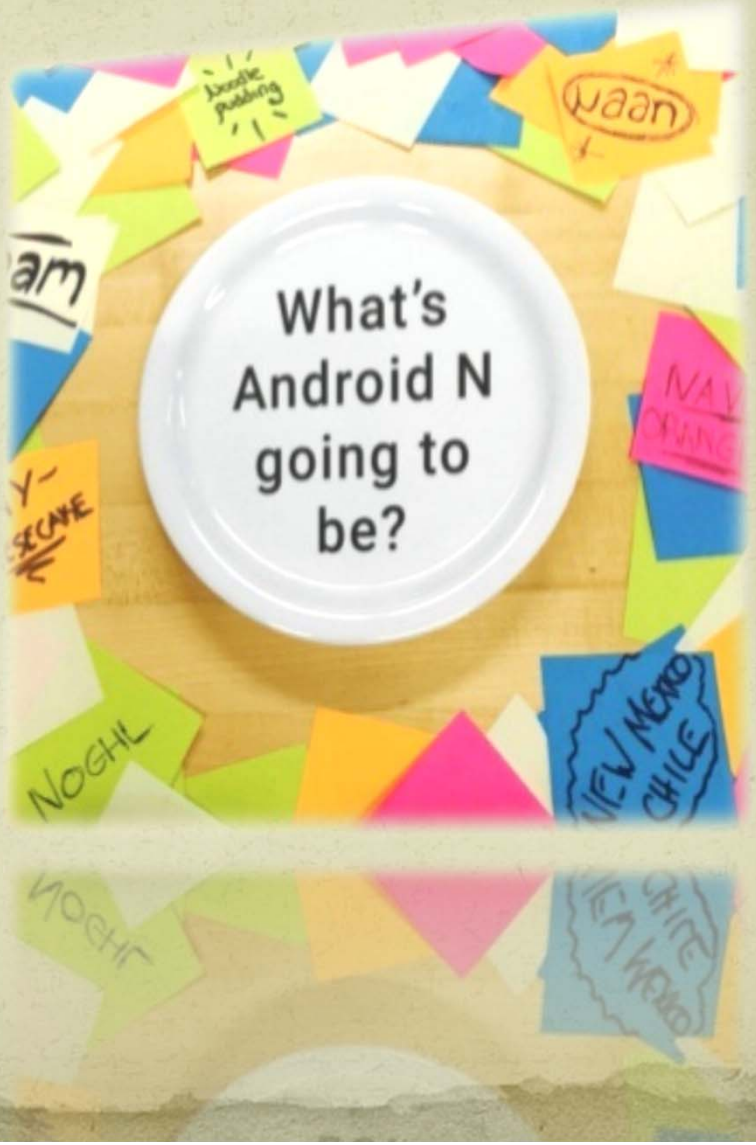
It was founded by Andy Rubin (employee of Google) in 2003,in Palo Alto in California.
Later, it was purchased by Google in august 2005
The latest version of android is Nougat 7.0

Nougat 7.0

- Android 7.0 "Nougat" is the seventh major version of the Android operating system . It was launched on August 22, 2016.
- Including the ability to display multiple applications on-screen at once in a split-screen view .
- android nougat will result in even better graphics , smoother and faster performance.
- it is adds some important new features to help keep users safer and more secure.

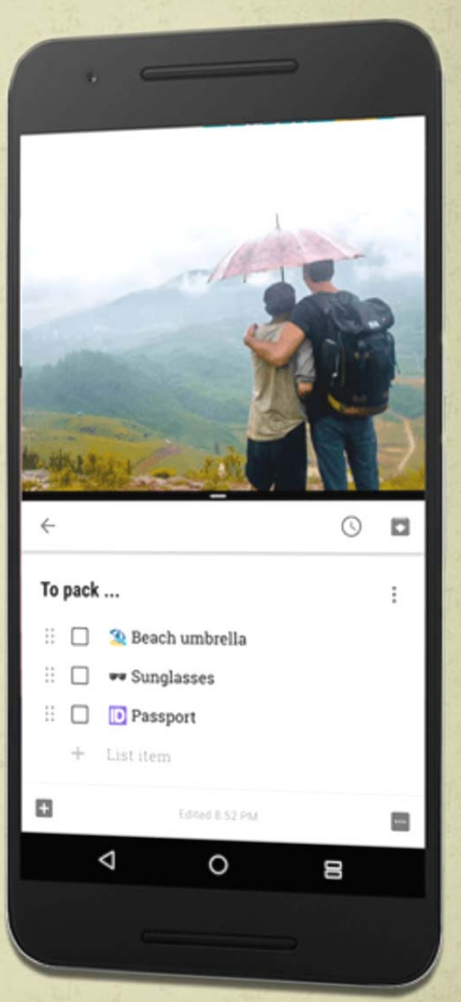
Android Nougat Features

- Multi-Window Mode.
- Data Saver.
- Improved Security.
- Doze .
- Direct Reply



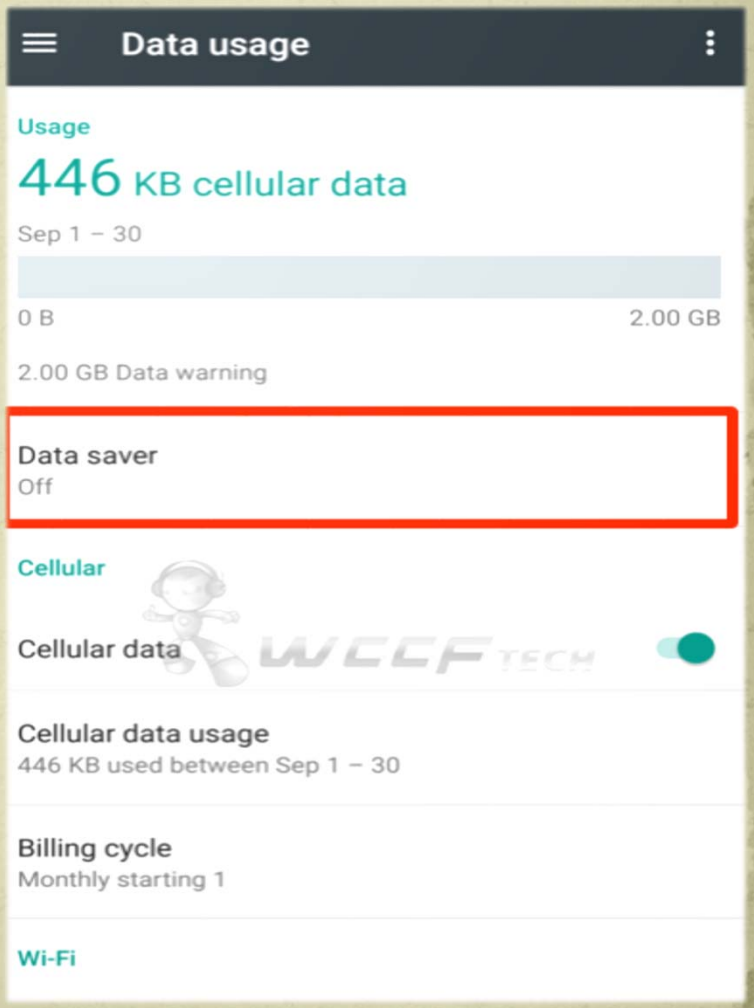
Multi-Window Mode

One of the biggest changes in the new version , Now we can use more than one app in a single screen.



Data Sever

This feature is a new system service that helps reduce cellular data use by apps; it gives users control over how apps use cellular data.



Improved Security

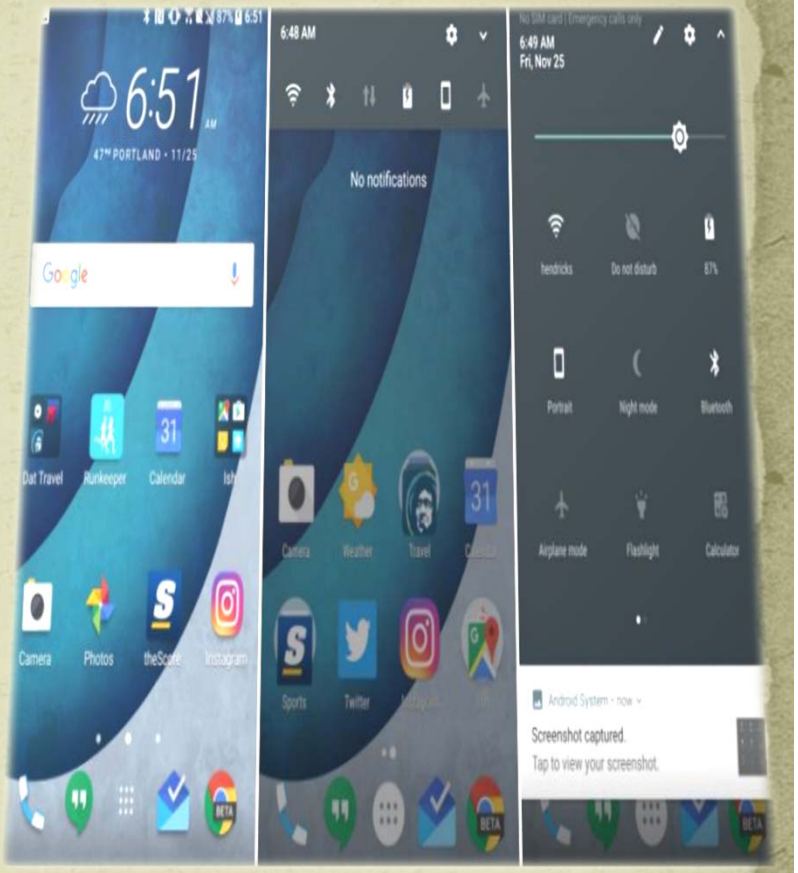
Keeping your data private and personal is important. and apps and their data will remain unavailable and encrypted.

New features in Android Nougat make things even more secure.

Doze

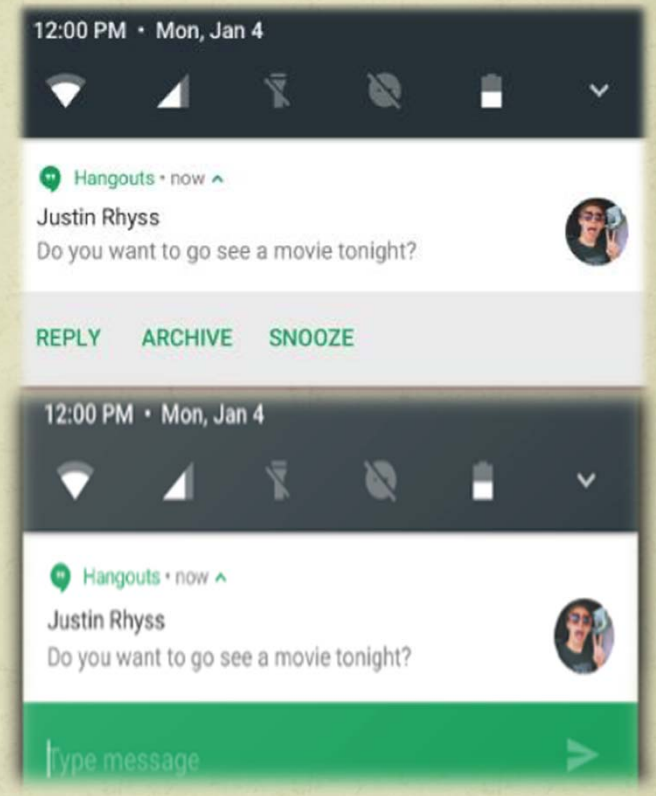
Doze mode is a way to save battery life.

Doze applies the full CPU and network restrictions on Power Manager , alarms , and GPS/Wi-Fi scans.



Direct Reply

When a user receives a notification for incoming message, Android Nougat makes it possible to reply to the message within the notification.



Cpu In Android Nougat

- The CPU scheduling provides multiple process execution time .
- This can be done without degradation in performance
- We can do multiple task at the same time
- It provides the best performance
- Mostly uses CFS (completely fair scheduling)

  *It gives importance to priority

  *If there is high priority then there is a low decay factor

  *Low priority generally works more quickly

  *Also supports group scheduling

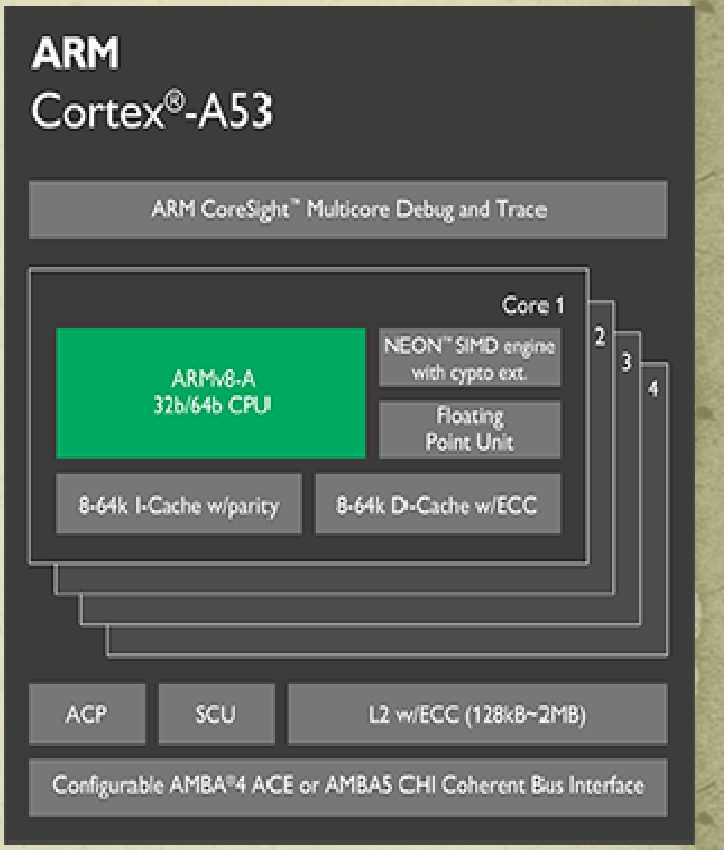
Cpu In Android Nougat

- Android 7.0 supports several CPU architectures, including 32-bit and 64-bit devices.
- Android 7.0 brings further enhancements by applying a subset of CPU .
- Android Nougat, is powered by an octa-core (4x2.1 GHz Cortex-A53 & 4x1.7 GHz Cortex-A53).

Cpu In Android Nougat

- The ARM Cortex-A53 processor offers a balance between performance and power-efficiency. Cortex-A53 is capable of supporting 32-bit and 64-bit devices.

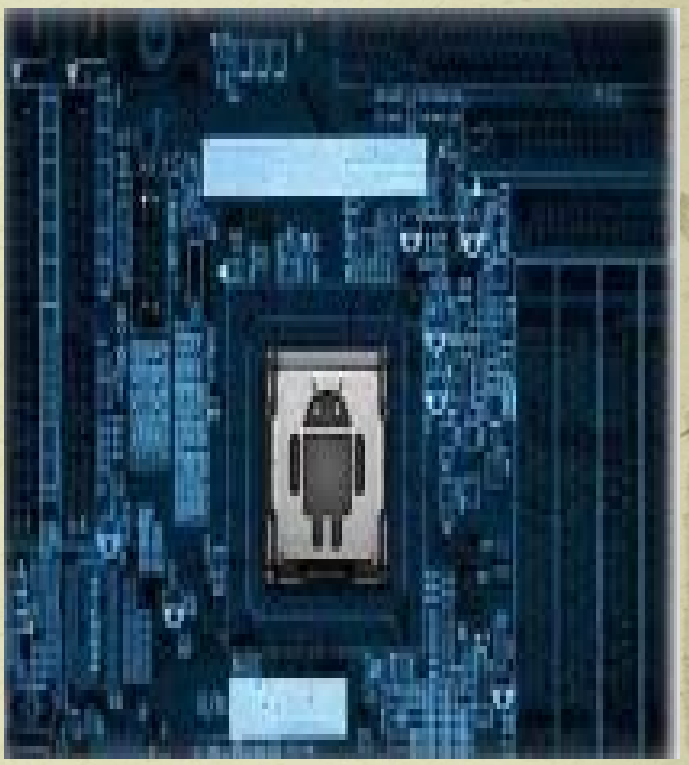
- The Cortex-A53 offers a much higher performance than the Cortex-A7.



CPU Architecture

- A cpu is a processor which is responsible for every what the device does.

- An android 7.0 cpu architecture is an important factor to know exactly what type of processor is in your device to make sure downloading the right files.



Conclusion

- showed a variety of new features and capabilities for users and developers, such as Multi-window mode, improved security, and Data Saver.
- provide the multiple processes execution at the same time without the performance degradation.
- In android nougat it provides us the facility of using multiple tasks in the screen at the same time .
- Develop Android nougat using a set of processors.
- provide this service with the best performance is the main goal of this.

Thank
You