

# Android 10 What's New?

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# Android 10

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WHAT'S NEW?

# Background

## Android 10

- ❖ What is Android 10?
  - ❖ It's the next version of Android
- ❖ When did Android 10 launch in full?
  - ❖ Early September 2019
- ❖ How much does Android 10 cost?
  - ❖ It is a free update

# Background

## Android 10

- ❖ Android 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.

# Background

## Android 10

- ❖ Android Inc. was founded in Palo Alto, California, in October 2003 by Andy Rubin, Rich Miner, Nick Sears, and Chris White.



- ❖ In July 2005, Google acquired Android Inc. for at least \$50 million.

# Background

## Android 10

- ❖ The Android operating system has been the world's most popular mobile software since 2011.
- ❖ StatCounter Global Statistics



Mobile Operating System Market Share Worldwide - September 2019

# Android 10

## Release Date

- ❖ Android 10 has been officially released.
- ❖ It isn't available for all phones just yet.
- ❖ Each OEM must develop their own version of the update for each phone and work with carriers to release it.
- ❖ This can take months.
- ❖ Don't be surprised if you don't get Android 10 until 2020.

# Android 10

## Google Pixel Phones

- ❖ Google Pixel phones get the latest version on launch day
- ❖ Surprising to no one, the **Essential phone** is also getting day one compatibility in select markets
- ❖ Phones that have Android 10 to date
  - ❖ Google Pixel 3 / Pixel 3 XL
  - ❖ Google Pixel 3a / Pixel 3a XL
  - ❖ Google Pixel 2 / Pixel 2 XL
  - ❖ Google Pixel / Pixel XL



# Name Change

## Android 10

- ❖ On August 22, 2019, it was announced that Android "Q" would officially be branded as Android 10, ending the historic practice of naming major versions after desserts.
- ❖ Google plans to keep the dessert names for future internal development builds.
- ❖ Some of the dessert names:
  - ❖ Apple Pie; Cup Cake; Donut; Eclair; Froyo; GingerBread; HoneyComb; Ice Cream Sandwich; Jelly Bean; Kitkat; Lollipop; Marshmallow.

# Name Change

## Android 10

- ❖ The new name comes as part of an overhaul to the design, branding and logo, which aims to make it easier for users to navigate the OS, as well as understand which version of Android is the latest one.
- ❖ As part of the design update, Google will change the logo and color scheme of Android to give it a "more modern, accessible look."

# Name Change

- ❖ Google is also changing the color of the logo from green to black to make it easier for visual impaired people to see it.

Android 10



Android Pie - 9

android 

# Android 10

## Beefing up Security

- ❖ There are more than 2.5 billion devices worldwide
- ❖ Any lapse in security can have profound consequences for users.
- ❖ A recent report revealed that malicious apps on Google Play had been downloaded more than 8 million times by Android users.

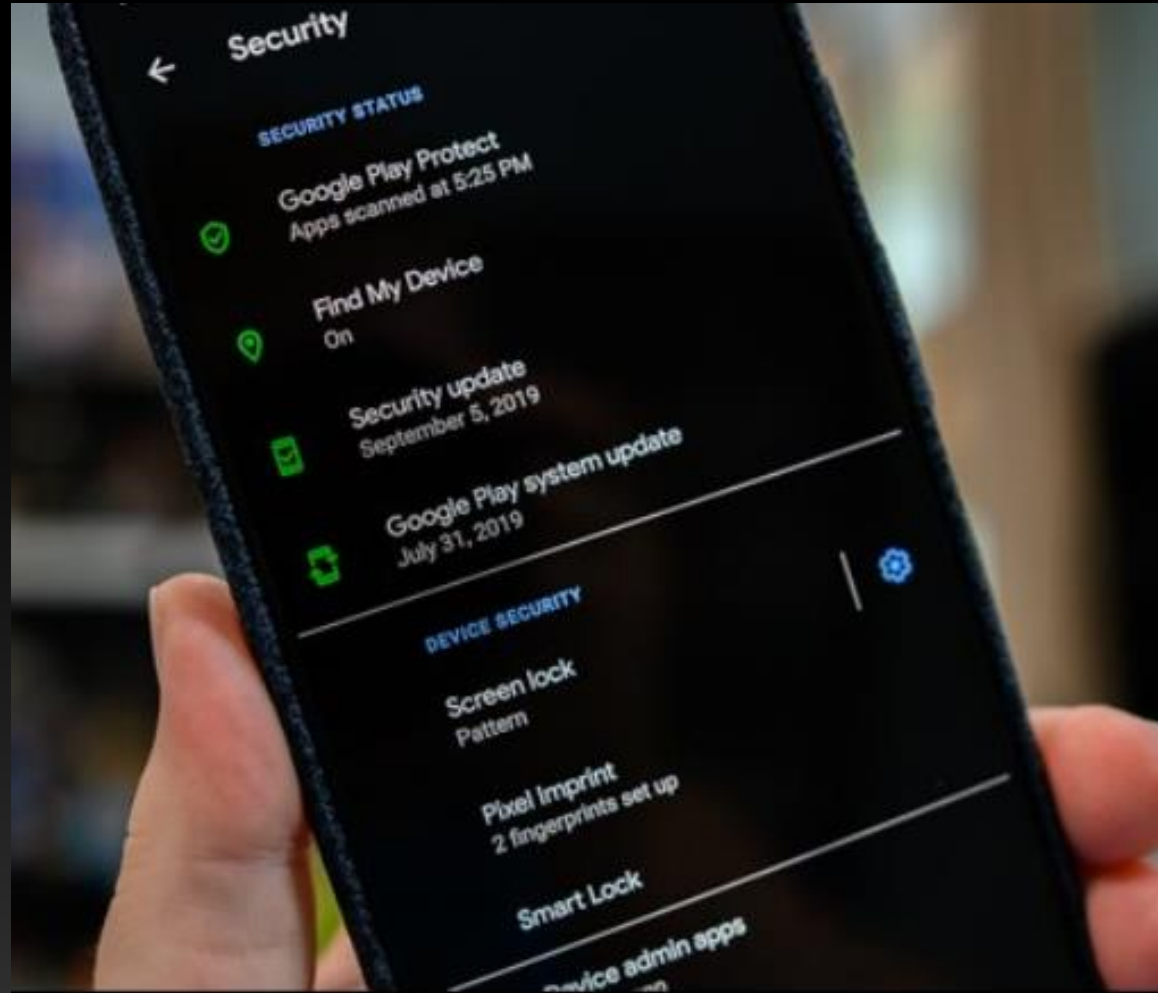
# Android 10

## Beefing up Security

- ❖ Android devices already get regular security updates.
- ❖ In Android 10, you'll get them even faster and easier.
- ❖ With Google Play system updates, important Security and Privacy fixes will now be sent directly to your phone.
- ❖ Manually check for security patches by going to Settings > Security > Google Play system update

# Beefing up Security

Android 10



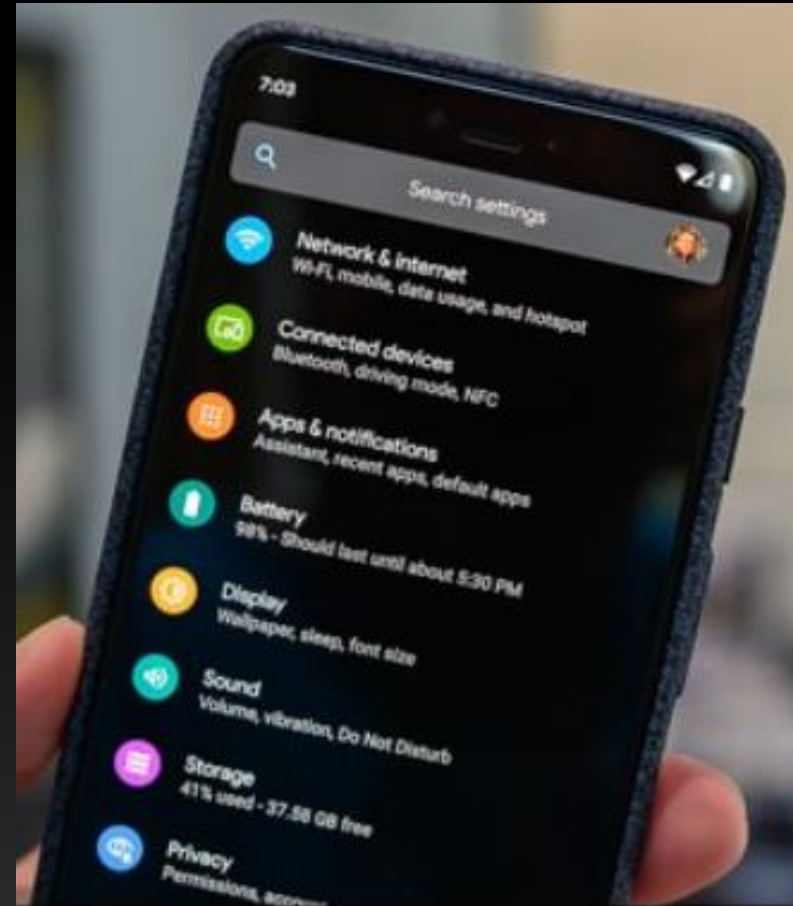
# Android 10

## System-Level Dark Mode

- ❖ As part of the new update, Google also introduced dark mode - a highly-anticipated feature among Android users
- ❖ The new Dark theme is designed to "take it easy on your eyes" when using a smartphone in low-light conditions.
- ❖ Google claims it will also help prolong a device's battery life.

# System-Level Dark Mode

Android 10





# Android 10

## New Device Support

- ❖ Android 10 comes with support for folding phones.
- ❖ Its interface can seamlessly transition between different screen shapes.
- ❖ Both Samsung and Huawei had planned to release folding smartphones later this year in the form of the Galaxy Fold and the Mate X.
- ❖ Their launch has been delayed due to issues with the mechanism.

# Android 10

## Native 5G

- ❖ Another of the big trends that is becoming a reality starting this year as mobile network operators around the globe finalize testing and deploy 5G.
- ❖ Several 5G-capable smartphones have already been released.
  - ❖ Huawei Mate X
  - ❖ Samsung Galaxy S10 5G
  - ❖ Xiaomi Mi Mix 3
  - ❖ LG V450 ThinQ
  - ❖ ZTE Axon 10 Pro 5G

# Android 10

## Focus Mode

- ❖ This is one of the several digital wellbeing features in Android 10.
- ❖ What if, besides setting timers so you can restrict your usage of certain applications you could just flip a switch and block them until you were ready to use them again?

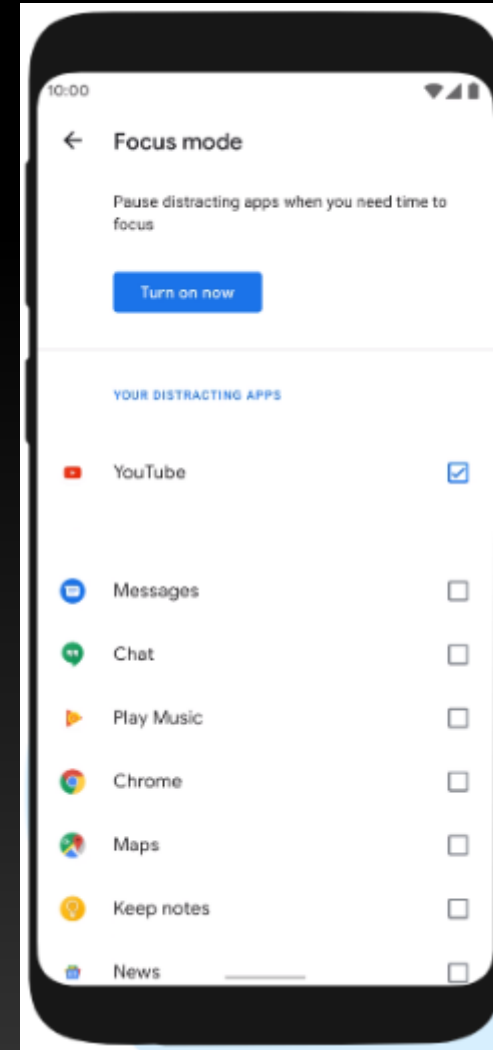
# Focus Mode

## Android 10

- ❖ As the name suggests, it helps us stay in focus.
- ❖ It fights distraction.
- ❖ When we don't want phone calls, emails, the news... it's like a 'do not disturb' mode instead of a blanket cutoff.
- ❖ It lets us decide which apps have access to notification and which don't.

# Focus Mode

Android 10



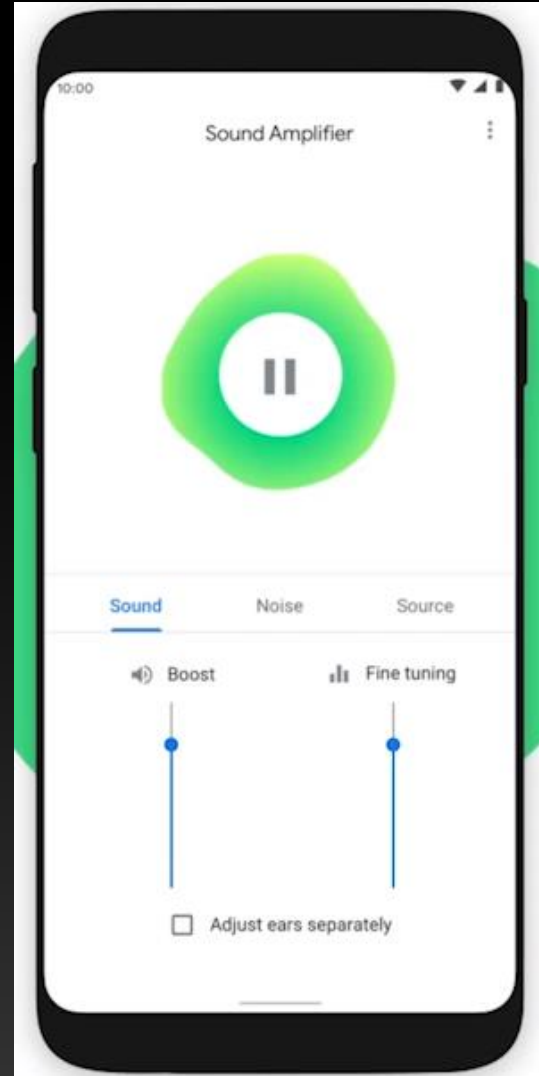
# Sound Amplifier

## Android 10

- ❖ Hear what's around you more clearly.
- ❖ With Sound Amplifier, your phone can boost sound, filter background noise, and fine tune how you hear best.
- ❖ Whether talking to someone, watching TV, or listening to a lecture – just plug in your headphones and hear everything more clearly.

# Sound Amplifier

Android 10



# Live Captions

## Android 10

- ❖ Live Caption works with videos, podcasts and audio messages, across any app – even stuff you record yourself.
- ❖ Feature will live-caption any video that's being played, without a data connection.
- ❖ As soon as speech is detected, captions will appear, without needing Wi-Fi or cell phone data, and without any audio or captions leaving your phone.



# Live Captions

## Android 10

- ❖ To activate Live Caption, play a video and then press a volume button. The volume slider that shows up will have a caption button at the bottom -- tap it.
- ❖ You can then move around the caption by dragging it around the screen.

# Live Captions

Android 10



# Smart Reply

## Android 10

- ❖ Smart Reply offers quick responses and actions to incoming messages.
- ❖ You can easily send a one- to two-word answer to someone or tap on a link to open a corresponding app.
- ❖ The actions work with YouTube links and addresses found in Google Maps.
- ❖ Android 10 can also use Smart Reply with any of your favorite messaging apps.

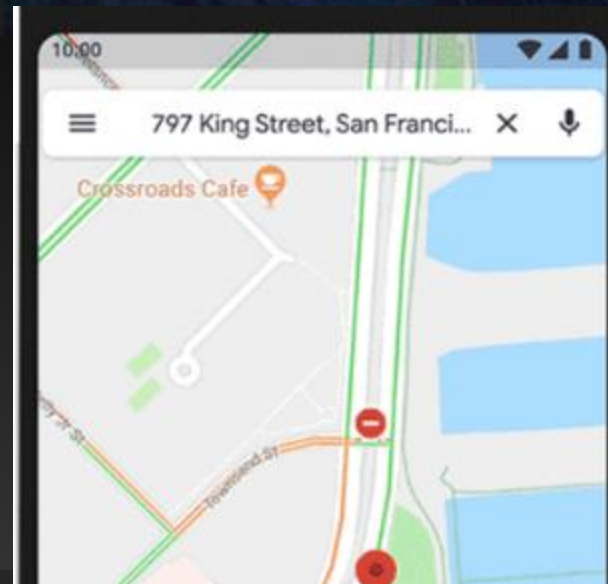
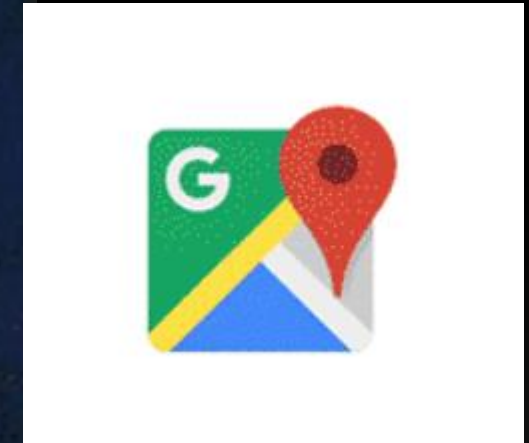
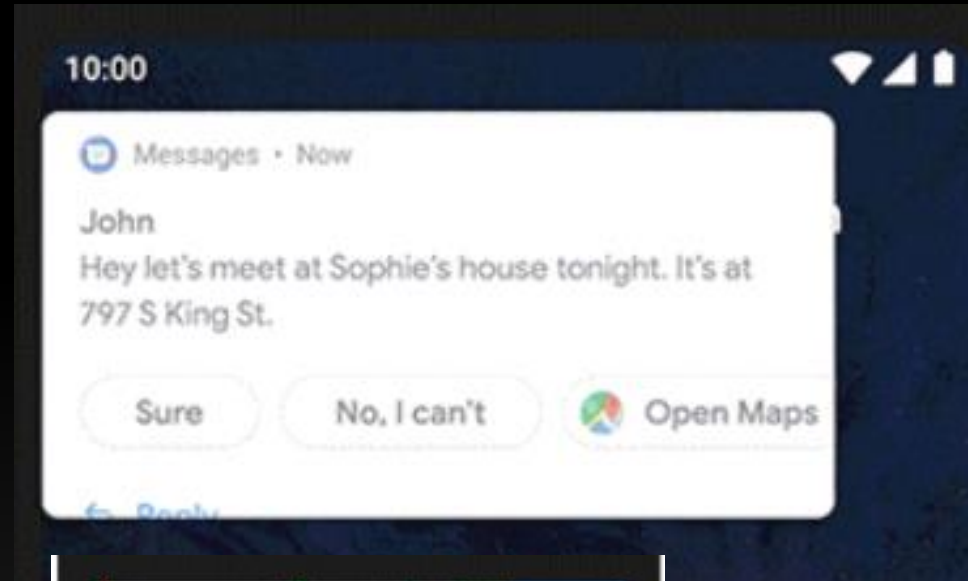
# Smart Replies

## Android 10

- ❖ Is Google possibly snooping on you and what you're up to?
- ❖ The company says that all this is done on the device, thanks to on-device machine learning, and nothing ever leaves your device for Google's remote servers.

# Smart Replies

Android 10



# Android 10

## Better Permission Controls

- ❖ New permission manager with better controls.
- ❖ Updated location permission dialog appears when app requests the device's location.
- ❖ Instead of granting the app all or nothing access, new option only allows the permission while the app is open.
- ❖ Change disables the app's ability to check the device's location in the background when it's closed.

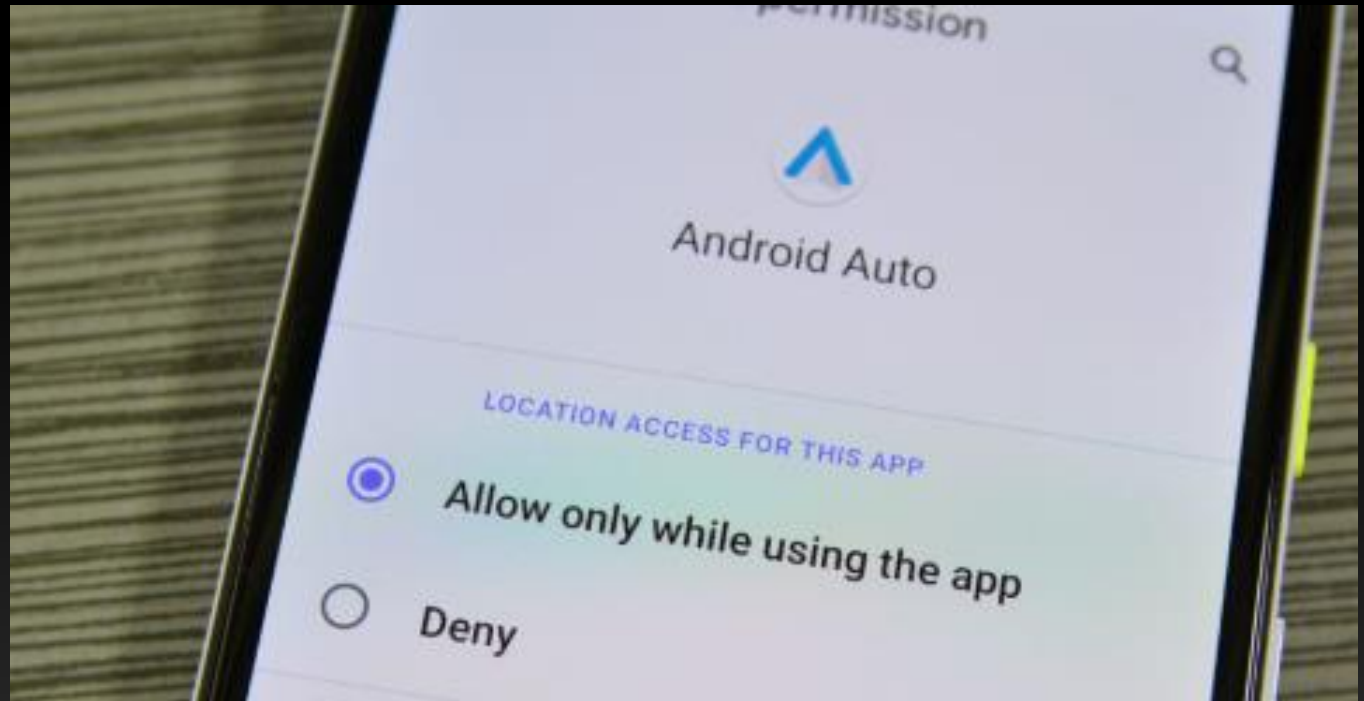
# Android 10

## Better Permission Controls

- ❖ Updated permissions menu can be accessed by going to Settings > Privacy > Permission manager.
- ❖ You can see what apps have permission to perform certain types of actions and revoke access to each permission as needed.

# Better Permission Controls

Android 10





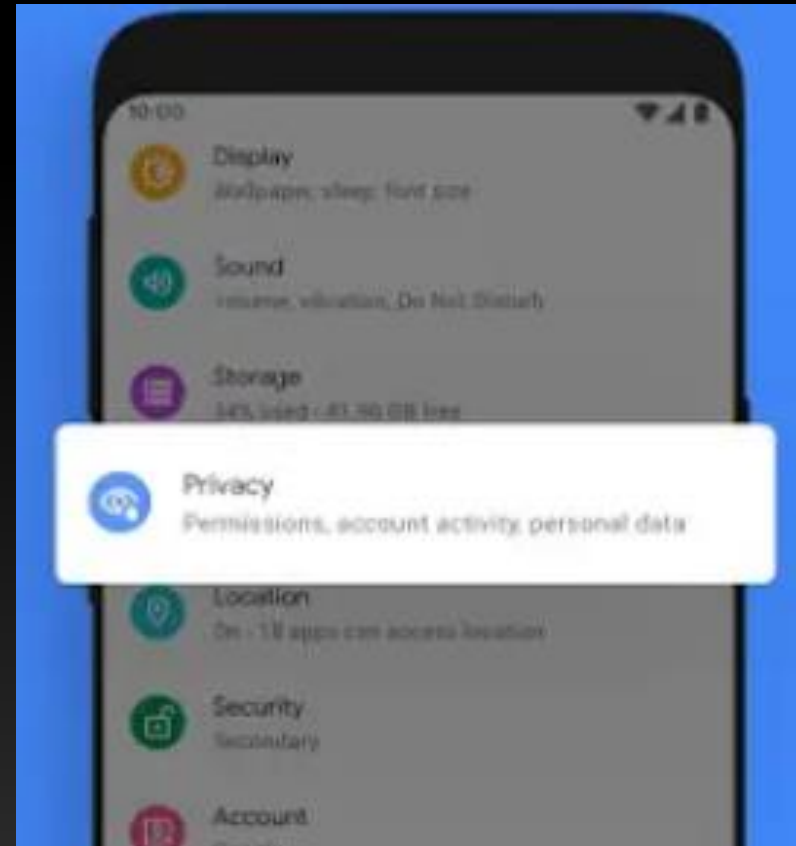
# Android 10

## Privacy Controls

- ❖ Google has done quite a bit to improve Android's security credentials and privacy-focused features.
- ❖ Find and adjust all your privacy settings in one place.
  - ❖ MAC address randomization
  - ❖ Limiting apps' access to critical location information on a need basis.
  - ❖ Opt out of ad retargeting and personalization.
  - ❖ Dedicated Privacy Menu

# Privacy Controls

Android 10



# Full Gesture-based Navigation

## Android 10

- ❖ Gestures have increasingly played a key role in Android navigation
- ❖ The three- or two-button navigation system has been replaced with a gesture bar.
- ❖ A quick swipe up will take you home
- ❖ A swipe and hold will open the Recents menu
- ❖ A long swipe from the home screen opens the app drawer

# Android 10

## Full Gesture-based Navigation

- ❖ What happened to the Back button?
- ❖ The back gesture is now available by swiping inward from either side of the display.
- ❖ An arrow icon will appear as you swipe to indicate the action.

# Full Gesture-based Navigation

## Android 10

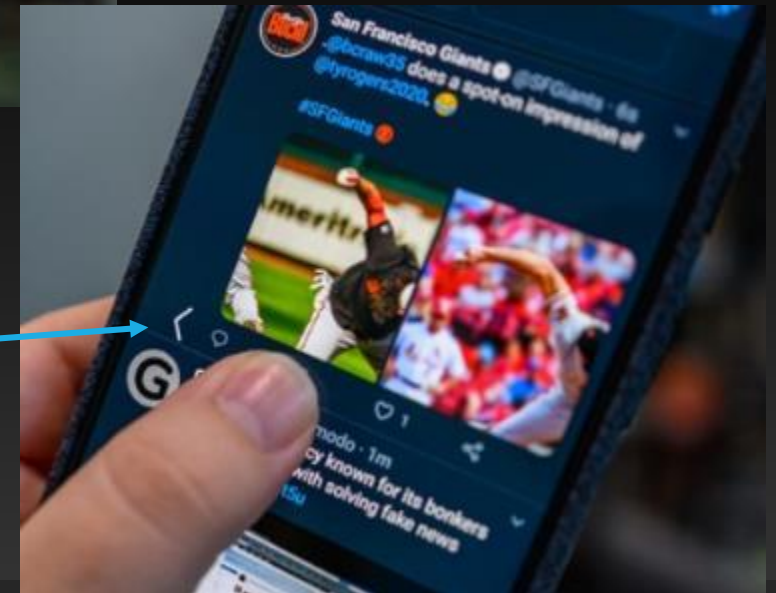
- ❖ The Google Assistant also received a new gesture.
- ❖ Swipe diagonally towards the middle of the display from either of the bottom two corners, and a short animation will appear on the bottom of the device.
- ❖ Shortly after, the virtual assistant will be ready to go.

# Full Gesture-based Navigation

Android 10



Gesture Navigation



Back Arrow

# Full Gesture-based Navigation

## Android 10

- ❖ Google Assistant - Pixel or Essential Phone,
- ❖ Change the navigation style by going to Settings > System > Gestures > System navigation.
- ❖ You can switch between the new "Gesture navigation," "2-button navigation," which was the default in Android 9 Pie, and the classic "3-button navigation."

# Android 10

## Built-in Screen Recording

- ❖ You can take advantage of Android's built-in screen recorder any time you wish to share your screen.
- ❖ This feature allows recording, pausing recordings, stop and save, and, of course, share.
- ❖ There aren't any special settings or confusing options, making it a pretty straightforward tool.



# Android 10

## Built-in Screen Recording

- ❖ By default, this new feature is hidden from users.
- ❖ You unlock it through the Developer Options.
- ❖ With a few steps, you can take advantage of this feature and never have to download another screen recording app again.
- ❖

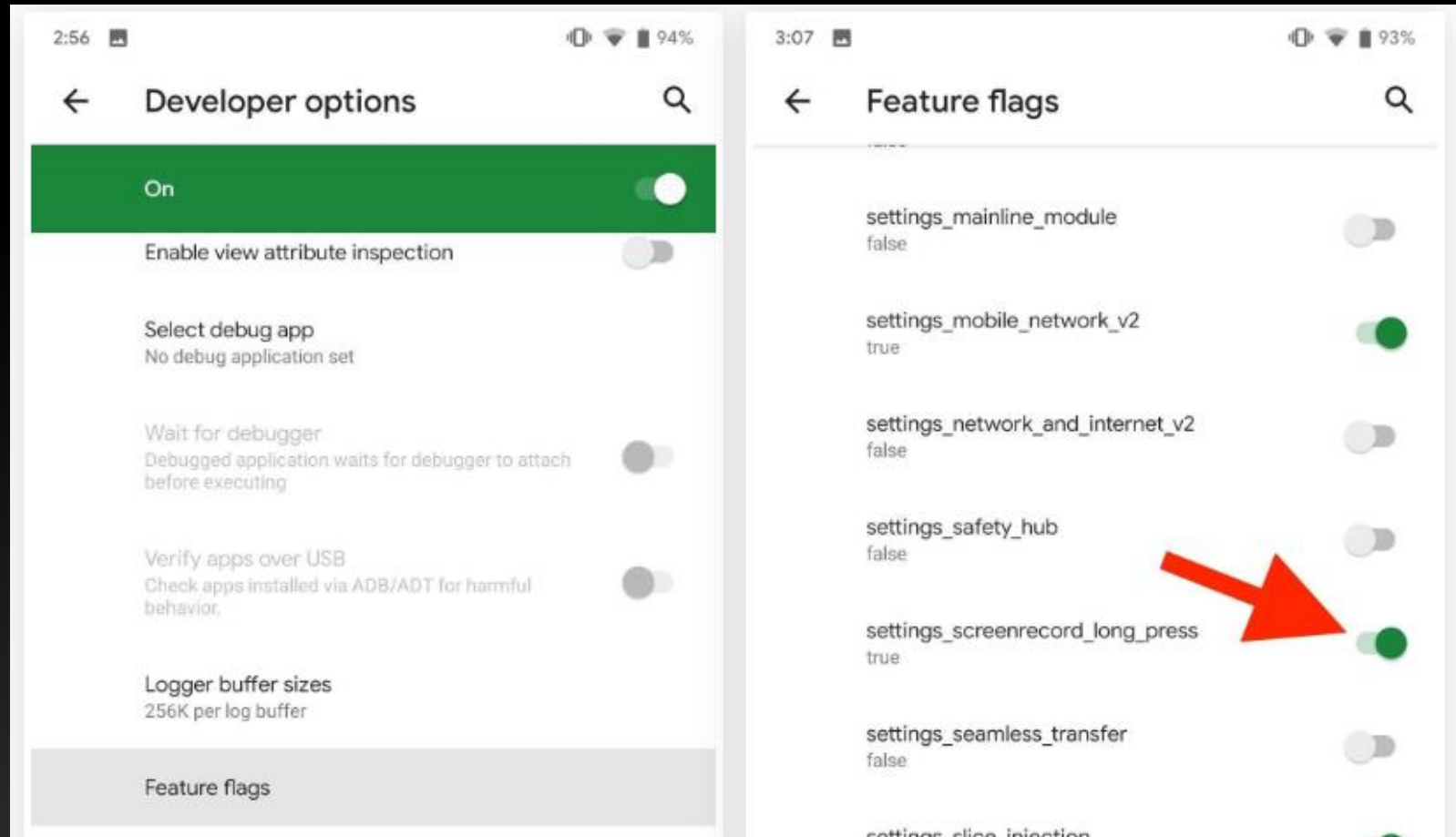
# Android 10

## Built-in Screen Recording

- ❖ "Developer options" menu,
- ❖ Select "Feature flags" in the *Debugging* section.
- ❖ Next, find the "settings\_screenrecord\_long\_press" flag and toggle it on.

# Built-in Screen Recording

Android 10



# Android Auto

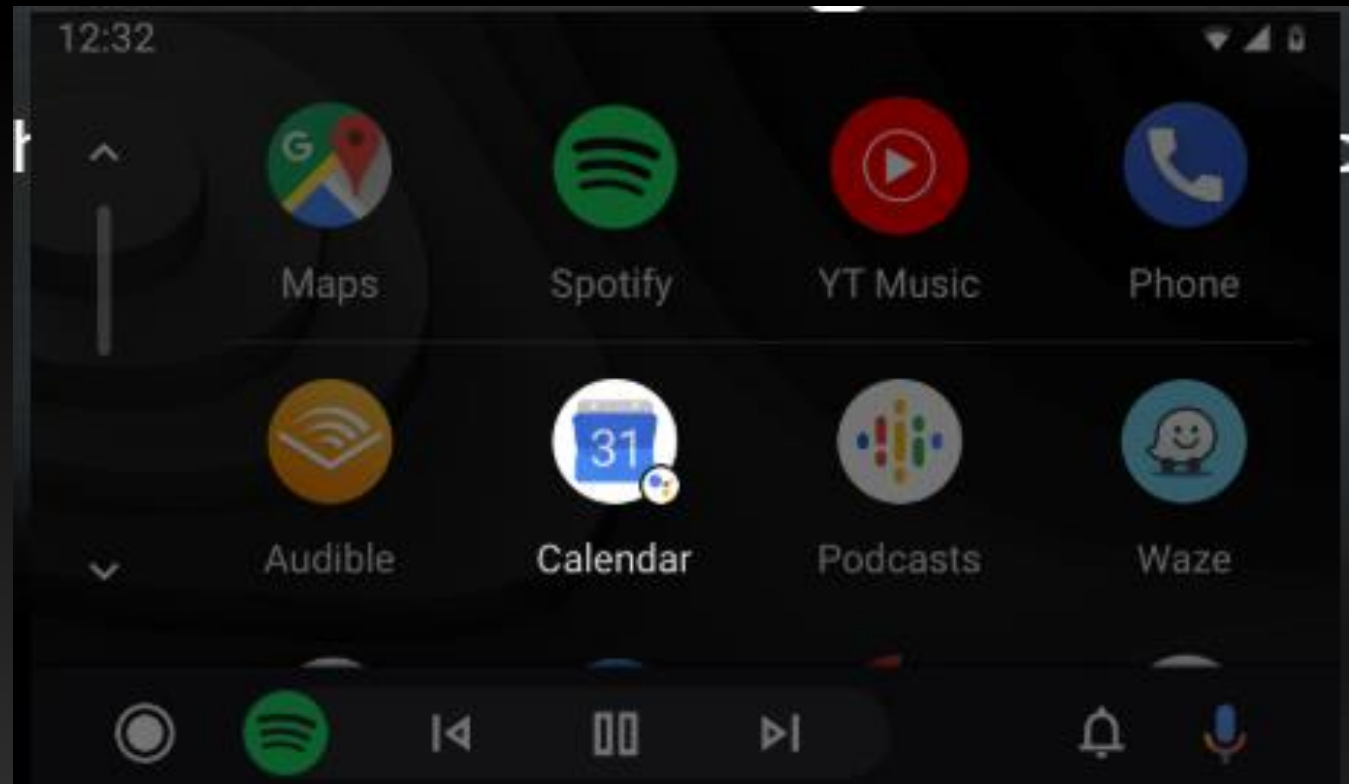
## Android 10

- ❖ Android Auto now comes built-in
- ❖ With compatible cars or aftermarket stereos, simply plug in your smartphone using a USB cable.
- ❖ You can simply plug in your phone and start using Android on your car's display.
- ❖ No app download needed.

# Android Auto

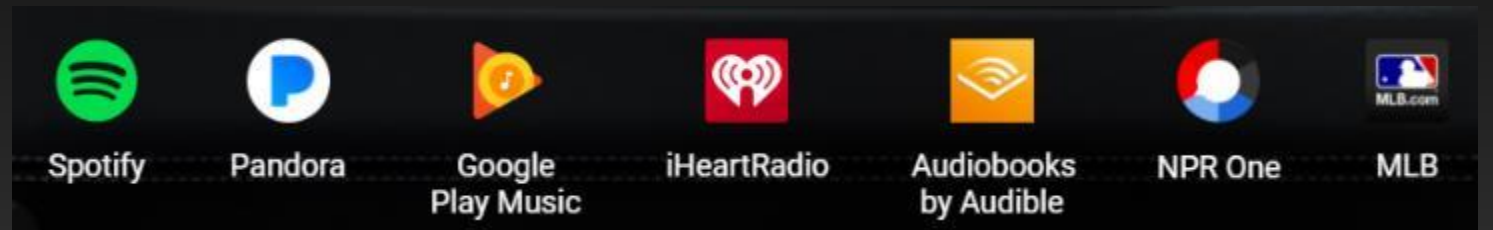
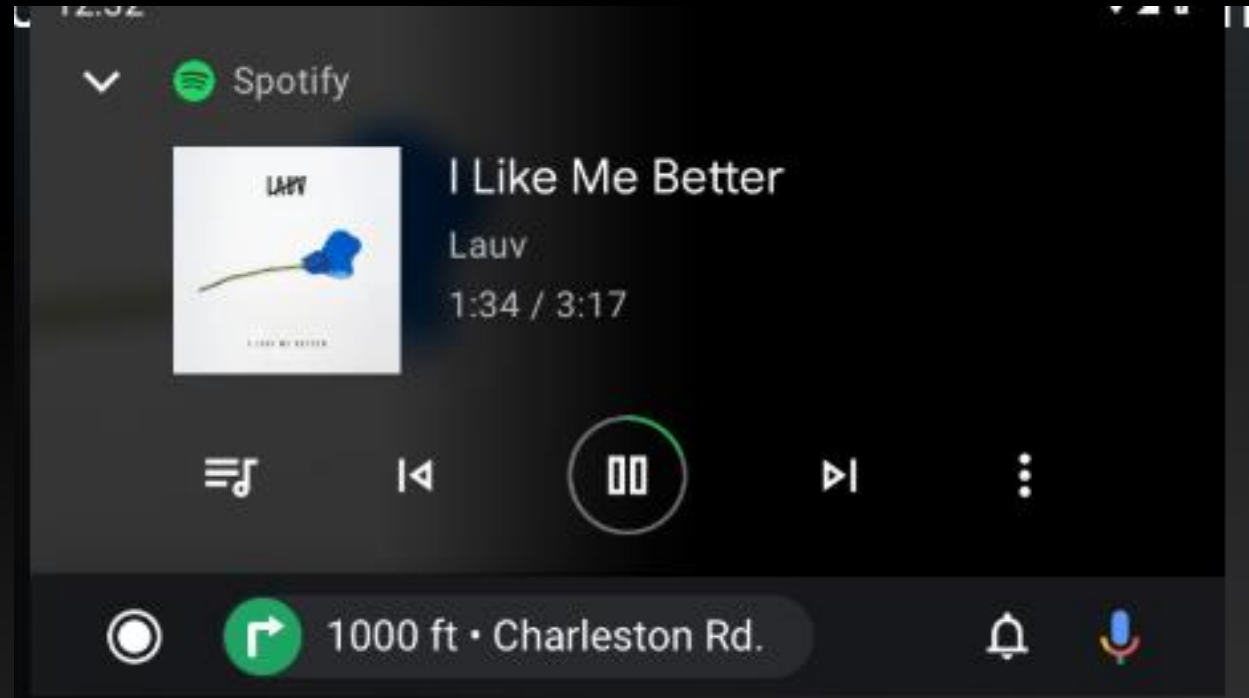
❖ Tap for Google Assistant

Android 10



# Android Auto

Android 10



# Android 10

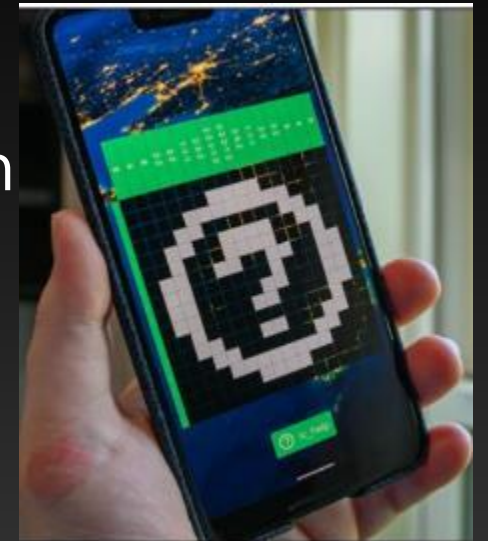
## Android 10's Easter Egg

- ❖ Instead of a Flappy Bird clone found in previous Android versions, there's now a puzzle that offers hours of entertainment.
- ❖ Go to...
- ❖ Settings > About phone > Android version and then tapping on "Android version" in rapid succession.
- ❖ Then tap and hold each of the on-screen items to move them around the display.

# Android 10's Easter Egg

## Android 10

- ❖ You will be taken to a custom nonogram puzzle game. You can solve it by following the number blocks surrounding the board and tapping on individual squares.
- ❖ Once completed, you will see an Android-related icon





# Android 10

## Android 10's Easter Egg

- ❖ When you solve a puzzle, the next time you launch the Easter Egg you'll get a brand new Nonogram to solve.
- ❖ It's quite simple, just use the legends to work out which grid squares need to be filled in – rotate your display to see the legends on either side.
- ❖ Once you have done that you'll reveal an image.

# Android 10's Easter Egg

## Android 10

- ❖ Some of them are more difficult than others but they can be solved simply by trial and error.
- ❖ Check out this 9to5 Google video....
- ❖ <https://9to5google.com/2019/09/03/android-10-easter-egg/>

# Resources

## Android 10

- ❖ The Best New Features in Android, Available Now
- ❖ <https://www.howtogeek.com/439341/the-best-new-features-in-android-10/>
- ❖ Android Auto
- ❖ <https://www.android.com/auto/>
- ❖ Gadget Hacks
- ❖ <https://android.gadgethacks.com/how-to/enable-built-screen-recorder-android-10-0194955/>

# Resources

## Android 10

- ❖ Android 10 release date, new features and everything you need to know
- ❖ <https://www.techradar.com/news/android-10>
- ❖ [www.android.com](http://www.android.com)
- ❖ Check out this 9to5 Google video....
- ❖ <https://9to5google.com/2019/09/03/android-10-easter-egg/>

# Resources

- ❖ StatCounter Global Statistics
- ❖ <https://gs.statcounter.com/os-market-share/mobile/worldwide>

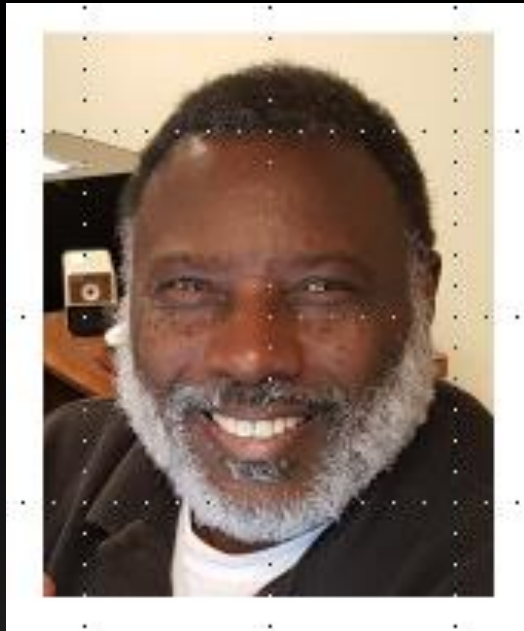
Android 10

# Resources

## Android 10

- ❖ How-to Geek graphics
  - ❖ Justin Duino, author
- ❖ Other graphics from ...
- ❖ Android.com
- ❖ Android Auto

# Questions?



What's New in Android 10?

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Member of



An International  
Association of Technology  
& Computer User Groups