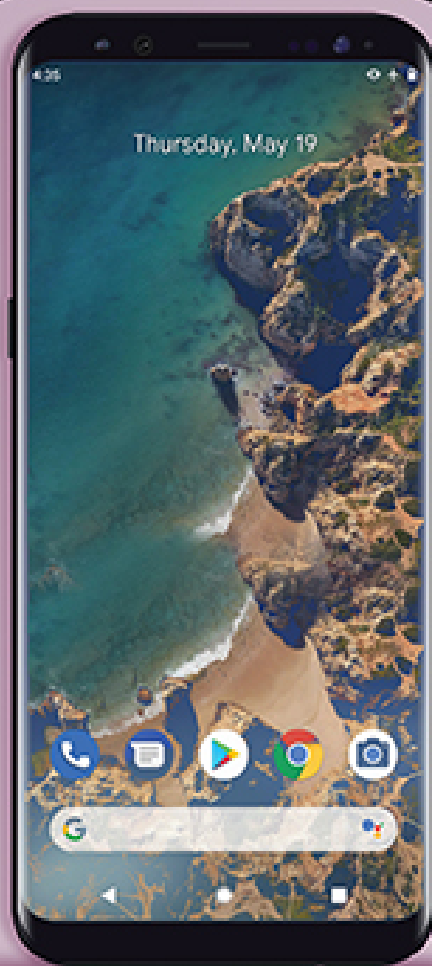


LEARNING MADE EASY



# Android<sup>®</sup> Smartphones

for  
**dummies**<sup>®</sup>  
A Wiley Brand



Get started with the  
Android operating system

Set up and  
customize your device

Send messages, take photos,  
and download apps

**J.F. DiMarzio**

Wrote the first Android user guide  
in 2008 for version 0.8



# Android<sup>®</sup> Smartphones

by J.F. DiMarzio

for  
**dummies**<sup>®</sup>  
A Wiley Brand

## **Android® Smartphones For Dummies®**

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# Android® Smartphones For Dummies®

To view this book's Cheat Sheet, simply go to [www.dummies.com](http://www.dummies.com) and search for “Android Smartphones For Dummies Cheat Sheet” in the Search box.

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# Introduction

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The first Android smartphone was released in 2008, and over these past 15 years, smartphones have become more feature-rich and more complicated — to the point that many of them include capabilities that people may not even realize are possible. Smartphones have become so ingrained in our daily lives that manufacturers may now simply assume everyone knows how to use every feature of every smartphone. On top of that, any smartphone manufacturer can use the Android operating system on its hardware, which adds another level of complexity to an already diversly complex platform. *Android Smartphones For Dummies* demystifies Android smartphones, from the most basic functionality to the hidden gems that even seasoned users may not realize are there.

## ***About This Book***

I wrote this book to put everyone using an Android smartphone on a level playing field. If you have ever thought that smartphone technology has passed you by, this book is the tool you need to catch back up with the crowd. Here you find all the basics as well as many tips, tricks, and cheats that make using an Android smartphone easy and trouble-free.

*Android Smartphones For Dummies* covers everything from the initial setup of your smartphone to calling, texting, and tweeting right from your device. You even discover how to take enviable photographs, customize your device to suit your personality and needs, and set up Google Assistant routines to help make your life even easier. The material in this book is stripped down to

basic, easy-to-follow, jargon-free steps that are a breeze to understand.

## ***Foolish Assumptions***

This book assumes you have already purchased or are interested in purchasing an Android smartphone. That's really it. There is no further skills or knowledge needed other than an interest to learn to ins and outs of your Android smartphone.

## ***Icons Used in This Book***

Throughout this book, icons in the margins highlight certain types of valuable information that call out for your attention. Here are the icons you'll encounter and a brief description of each.



**TIP**

The Tip icon marks tips and shortcuts that you can use to make configuring and exploring your Android smartphone easier.



**REMEMBER**

Remember icons mark the information that's especially important to know. To siphon off the most important information in each chapter, just skim through these icons.



TECHNICAL  
STUFF

The Technical Stuff icon marks information of a highly technical nature that you can skip over if you don't want to get into the nitty-gritty details.



WARNING

The Warning icon tells you to watch out! It marks important information that may save you headaches while using your Android smartphone.

## ***Beyond the Book***

In addition to the abundance of information and guidance related to Android smartphones that I provide in this book, you get access to even more help and information online at [Dummies.com](http://Dummies.com). Check out this book's online Cheat Sheet. Just go to [www.dummies.com](http://www.dummies.com) and search for "Android Smartphones For Dummies Cheat Sheet."

## ***Where to Go from Here***

I wrote *Android Smartphones For Dummies* to be nonlinear. That means you can pick it up at any point, in any chapter, and get something useful out of it without having to read the whole book from the first chapter on.

**Part 1**  
**The Unboxing**

## IN THIS PART ...

Discover the ins and outs of the Android mobile operating system and what makes a smartphone an Android smartphone.

Explore what comes packaged with your smartphone, how to install a SIM card, and how to care for your device.

Understand the difference between a locked and unlocked smartphone and what carrier services you need to get the most out of your phone.

Find out how to set up your Android smartphone and customize security and accessibility settings.

Become a pro at navigating the smartphone interface and understand the difference between a tap, a swipe, and a hold.

# Chapter 1

## Introducing All Things Android

---

### IN THIS CHAPTER

- » **Discovering what make a device an Android device**
  - » **Checking out the different versions of Android software**
  - » **Comparing Android versus iPhone**
- 

In this chapter, you explore the details of the Android mobile operating system and Android-based smartphones. If you are new to Android smartphones, this is the perfect place to start your journey. If you are switching to Android from iPhone, this chapter also outlines some of the differences between the two platforms.

## *What Are Android Devices?*

There is no such thing as the one Android smartphone. Unlike its major market competitor — the iPhone — Android is an open-source mobile operating system that any smartphone manufacturer can use for its devices. Because of this, hundreds of different Android smartphones are available around the world — and they all offer different features.



TECHNICAL  
STUFF

The term *open source* means that the source code (all the lines of programming code that make the Android software what it is) is available freely to anyone who wants to use it.

One of the consequences of making Android open source is that any smartphone manufacturer can change the Android code to do anything it wants it to do. And so there are going to be some major differences between these phones. Some phones are going to have bigger or smaller screens, sharper or wider cameras, and more or fewer buttons. The Android software itself may also appear slightly different on different smartphones and be able to do slightly different things.

Think of it this way: Everyone knows what a car stereo is. Every car has a car stereo in it. However, no two car manufacturers are going to have the exact same stereos. Some will have access to satellite radio, some will have cassette players, some will have touchscreen controls, and some will have physical buttons. But in the end, they all have similar basic functions. In the following sections, I outline some of the most popular Android smartphone brands and highlight some of the differences between them.

## ***Samsung***

Samsung phones are some of the most popular smartphones in the world. In fact, a recent report from Counterpoint Research shows that Samsung is the most popular brand of Android smartphone, and the second most popular smartphone in the world behind Apple's iPhone.



Samsung produces several different models of smartphone for sale around the world, but its most popular is the flagship Galaxy line.



TECHNICAL  
STUFF

A flagship smartphone is the most featured model of smartphone from a particular manufacturer. It is meant to showcase the abilities of the manufacturer's line.

The Galaxy brand comes in several models:

- » Galaxy A
- » Galaxy S
- » Galaxy Z

The Galaxy S line is also further divided into the S, S+, and S Ultra models. The differences between the S, S+, and S Ultra are mainly screen size, except the S Ultra also comes with a stylus that enables you to draw and interact with the screen.



TIP

If you are familiar with older Samsung models, the Galaxy Note is now the Galaxy S Ultra. This is why the Galaxy S Ultra comes with the familiar Galaxy Note stylus.

Other model highlights include the innovative folding screens of the Galaxy Z models, and the affordability of the Galaxy A line.

## ***Google Pixel***

Google is the manufacturer that “owns” the Android software. Even though it offers the source code openly, Google still owns it. However, Google did not always make its own Android smartphones. Starting in 2010, Google began a branding relationship with manufacturers such as HTC, Samsung, LG, and Motorola to create the Google Nexus line of phones. These phones were meant to showcase the functionality of the Android mobile operating system as Google intended it to be used.



TECHNICAL  
STUFF

Google began manufacturing its own smartphones in 2016. These smartphones became the Google Pixel line of phones.

Today you can get the Pixel 6 and Pixel 6 Pro smartphones from Google. The major difference between these models is the size of the screen — with the Pixel 6 Pro having a slightly larger screen than the Pixel 6.

## ***Other hot brands***

The list of Android smartphones seems endless. Other popular brands and models include:

- » Motorola Edge
- » Motorola Edge Plus
- » Nokia 8.3
- » One Plus 9
- » One Plus 9 Pro
- » Sony Xperia 1 ii
- » Xiaomi Mi 10

# *Looking at the Different Flavors of Android*

Android software changes from year to year. In Android, these changes are known as *flavors*, and there is a delicious history behind why Android versions are known as flavors.

When the Android operating system was first introduced to the public in 2009, Google decided to forego the popular structure of numbering its versions and instead chose to name each version of Android after a sweet treat. Version 1.5 of Android was therefore named Cupcake. From there, the list of Android flavors continued in alphabetical order:

- » Cupcake
- » Donut
- » Éclair
- » Froyo
- » Gingerbread
- » Honeycomb
- » Ice Cream Sandwich
- » Jelly Bean
- » KitKat
- » Lollipop
- » Marshmallow
- » Nougat
- » Oreo
- » Pie

Android Pie was released in 2018, and was the last flavor of Android to be publicly released with a sweet name. Starting in 2019, Android switched to Android 10 — with Android 11, Android 12, and Android 13 released in subsequent years.

## ***Samsung's version of Android***

The fact that Google offers Android as an open-source software platform has led to one of the most confusing aspects of using Android smartphones among consumers. Most Android smartphone manufacturers, Samsung included, have tweaked Android to set their phones apart. These tweaks include features and applications (most often referred to as an *app*) that are only available on that manufacturer's phones.

For example, Samsung developed several versions of Android specifically for use on Samsung devices. Using a Samsung Android smartphone gives users access to features not found on other devices. For example:

- » Samsung devices have a virtual assistant known as Bixby. (See [Chapter 19](#) for more on using virtual assistants.)
- » Samsung devices have software-based navigation buttons to help you “go back,” “go home,” and view your running apps. (See [Chapter 5](#) for details on navigating your way around an Android phone.)
- » Samsung devices have a home screen dedicated to Samsung Free, a list of free news articles, podcasts, games, and other content compiled by Samsung (this is replaced by Google Feed on other Android devices).
- » Samsung devices include their own version of some Google apps such as Calendar, Calculator, Photos, and camera.

Lastly, users of Samsung Android smartphones will notice some differences in the way many menus look. Keep in mind that even with some of these differences, the basic functionality persists through all Android smartphones.



TECHNICAL  
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An *app* is an application that you install to your smartphone. These apps expand the features of your smartphone — like getting access to weather information from around the world or shopping from your favorite stores.

## ***Google Pixel’s ‘pure Android’***

Soon after the release of Android, it became evident that consumers were confused about what Android was — because every smartphone seemed to have a different version of it. For this reason, Google began to release its own flagship smartphone — the Google Pixel — with the key feature being that the Google smartphone would include an unadulterated version of the Android operating system known as “pure Android.” As such, users who purchase the Google Pixel line of smartphones use a version of Android that has not been changed.



REMEMBER

The examples offered throughout this book use pure Android running on a Google Pixel smartphone. However, the basic functionality shown still exists in most Android smartphones — even if it looks a little different or goes by a slightly different name on another phone.

No matter the brand smartphone you use, with an Android phone, you have access to the Google ecosystem of apps to help you with just about every aspect of daily life. [Chapters 7](#) and [8](#) explore these apps as well as what additional apps are pre-installed and where you can find more.

## *Transitioning from an iPhone to an Android: It's Possible!*

Many people switch from one smartphone platform to another. Personally, I have switched from Android to iPhone and back over the years. Now, I use both an iPhone and a Google Pixel Android smartphone on a daily basis. Having used both, I can say that the two are not as different as they might seem on the surface.

Following are some of the major differences you should be aware of when moving from iPhone to Android:

- » **Apple has very strict control over the type and content of apps that are approved for use on iPhone.** When moving from iPhone to Android, the exact app you are looking for might not be available in some cases — but there should be a number of similar options for Android.
- » **Android keeps all apps in the app drawer by default.** This is the standard location for all installed apps on Android smartphones. Android smartphones do not clutter up the home screens with apps; instead, apps are kept in a special menu until they are moved onto the screen. [Chapter 6](#) goes into detail about how Android organizes apps and the home screen(s).