

Android[®] Smartphones

FOR SENIORS



dummies A Wiley Brand

Build confidence with your smartphone

Add apps to enrich your mobile experience

Learn to safeguard your private data

Marsha Collier

270,000 social media followers and podcast listeners can't be wrong



Android SmartPhones For Seniors

by Marsha Collier



Android® Smartphones For Seniors For Dummies®

Published by: John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com Copyright © 2022 by John Wiley & Sons, Inc., Hoboken, New Jersey

Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at http://www.wiley.com/go/permissions.

Trademarks: Wiley, For Dummies, the Dummies Man logo, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and may not be used without written permission. Android is a registered trademark of Google LLC. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc. is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: WHILE THE PUBLISHER AND AUTHOR HAVE USED THEIR BEST EFFORTS IN PREPARING THIS WORK, THEY MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES REPRESENTATIVES, WRITTEN SALES MATERIALS OR PROMOTIONAL STATEMENTS FOR THIS WORK. THE FACT THAT AN ORGANIZATION, WEBSITE, OR PRODUCT IS REFERRED TO IN THIS WORK AS A CITATION AND/OR POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE PUBLISHER AND AUTHOR ENDORSE THE INFORMATION OR SERVICES THE ORGANIZATION, WEBSITE, OR PRODUCT MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING PROFESSIONAL SERVICES. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR YOUR SITUATION. YOU SHOULD CONSULT WITH A SPECIALIST WHERE APPROPRIATE. FURTHER, READERS SHOULD BE AWARE THAT WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ. NEITHER THE PUBLISHER NOR AUTHOR SHALL BE LIABLE FOR ANY LOSS OF PROFIT OR ANY OTHER COMMERCIAL DAMAGES, INCLUDING BUT NOT LIMITED TO SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES.

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002. For technical support, please visit https://hub.wiley.com/community/support/dummies.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2021947994

ISBN 978-1-119-82848-8 (pbk); ISBN 978-1-119-82849-5 (ePDF); ISBN 978-1-119-82850-1 (epub)

Contents at a Glance

Introduct	ion	1
Part 1: Yo	our Phone in the Android Universe	5
	Why Android? What's the Deal?	
	Buying Your Android Smartphone and Accessories	
	Activating and Connecting Your Phone	
Part 2: Ge	etting Started with Your Android Smartphone5	1
CHAPTER 4:	Safety First: Making Your New Phone Private5	3
CHAPTER 5:	Personalizing Your Handset6	7
CHAPTER 6:	Android Typing Tricks with Google's Gboard8	7
CHAPTER 7:	Handling Notifications and Google Assistant	19
Part 3: Le	t's Start Communicating12	7
CHAPTER 8:	Chatting via Voice or Video12	9
CHAPTER 9:	Keeping Track of Friends and Appointments14	.9
CHAPTER 10:	Texting with Poise and Character16	7
CHAPTER 11:	Managing Email with the Gmail App18	9
CHAPTER 12:	Choosing and Using a Smartphone Camera20	3
Part 4: Ex	ploring Android Apps22	:5
CHAPTER 13:	Preinstalled Tools You Want to Use22	7
CHAPTER 14:	Google Mobile Services Apps for Android	.7
CHAPTER 15:	Apps You Might Like in Google Play Store	1
Part 5: Ar	ndroid Today and Tomorrow	'9
CHAPTER 16:	Marsha's MUST-DO Things for Your Phone28	1
CHAPTER 17:	Android 12 and Beyond: The OS Evolution	1
Index	30	17

Table of Contents

INTRODU	JCTION
	About This Book
	Foolish Assumptions
	Icons Used in This Book
	Beyond the Book
	Where to Go from Here4
PART 1: Y	OUR PHONE IN THE ANDROID UNIVERSE
CHAPTER 1:	Why Android? What's the Deal?
	A Little Android History
	The Many Flavors (Versions) of Android9
	Reasons That People Choose Android
	Why You Need a Google Account
	Accessing apps and settings
	Bequeathing your account12
	So Many Choices!
	Tech support options15
	5G? LTE? 4G? VoLTE? Whaaat?
	A Word about Privacy and Security
	Free usually isn't
	The terms of service can be tricky
	Marsha's sage advice about privacy18
CHAPTER 2:	Buying Your Android Smartphone and Accessories 21
	Investigate First — Then Make a Buying Decision22
	Looking at a phone's physical features
	Reviewing before making a decision
	Considering an older model
	Choosing where to buy your phone28
	Consider Your Carrier Choice29
	Checking out the carrier's coverage area
	Finding senior discounts on carrier service

	You Need a Few Accessories, Too	. 32
CHAPTER 3:	Activating and Connecting Your Phone Unbox Your New Phone Insert a SIM Card Turn On Your Phone for the First Time. Connecting to a network Setting up a Google account Setting up a secure lock Restoring data from an older phone Learn Android Smartphone Symbols and Gestures Recognizing common Android icons Meeting the top status bar Exploiting screen navigation and gestures	. 38 . 40 . 41 . 42 . 44 . 44 . 45
	GETTING STARTED WITH YOUR ANDROID HONE	51
CHAPTER 4:	Safety First: Making Your New Phone Private	. 54
	Establish Data Backup	. 59 . 62

	Get the News (and Other Media) You Can Use	
CHAPTER 6:	Android Typing Tricks with Google's Gboard	
CHAPIER 6.		
	Make the Keyboard Decision	
	Noting keyboard features	
	Exploring keyboards you have (or can have)	
	Check Out Keyboard Contenders	
	Gboard, the official Google keyboard	
	Samsung Keyboard	
	Microsoft SwiftKey keyboard	
	Speak Words with Voice Typing	99
	Spell-Check as You Type	
	Extended Keyboard and Special Characters	
	Learn the Emoji Language	
	Delete, Copy, and Paste Text	
	Print Messages, Documents, and Web Pages	105
CHAPTER 7:	Handling Notifications and Google Assistant	109
	Meet the Android Notifications Window Shade	110
	Recognizing notification types and settings	
	Disabling notifications (or not)	
	Controlling notifications via settings	
	Having fun with notifications, or not	
	Taming Google Discover news feed	11/
	Manage Your Phone with the Window Shade Quick Settings	110
	The first-up Quick Settings	
	The full cast of Quick Settings	
	Get the 411 from Google Assistant	
	Knowing what you can do with Google Assistant	
	Installing or deactivating Google Assistant	
PART 3: L	ET'S START COMMUNICATING	127
CHAPTER 8:	Chatting via Voice or Video	
	Make a Voice Call	
	Making international calls from your phone	
	Calling internationally with no contract	132

	Check Voicemail	133
	Get Voicemail Transcriptions	135
	Reply to an Incoming Call by Sending a Text	
	Set a New Ringtone	
	Using a built-in ringtone	
	Downloading a custom ringtone	
	Activating a downloaded ringtone	
	Spend Face Time with Family and Friends	
	Google Duo	
	Google Meet	
	Vooring Typels of Friends and Annaintments	1 40
CHAPTER 9:	Keeping Track of Friends and Appointments	
	Establish Your Phone's Contacts	
	Starting out right with Google Contacts	
	Importing old address books	
	Save Contacts from Email	
	Add a Contact in Other Ways	
	Importing contacts from texts	
	Adding a contact from the call log	
	Type In a Full Contact in the Contacts App	
	Merge Duplicate Contacts	
	Customize, Delete, and Update Contacts	
	Energize Your Calendar App	
	Add Calendar Events from Gmail	166
CHAPTER 10:	Texting with Poise and Character	167
	Compare Types of Text Messaging	
	Turning on RCS chat features	
	Using third-party chat apps	172
	Dress Up Texts in Google Messages	
	The Text Message Bar and Emoji	
	Find Even More Texting Options	
	Share Photos and Videos in Texts	
	Voice-Type (Dictate)	180
	Manipulate the Text in Your Message	
	Schedule a Text Message for Later Delivery	
	Act on Text Messages You Receive	
	Share and Print Documents, Email Messages,	
		185

Printing from Gmail	186
Printing from a web page	186
Managing Fracil with the Creail Ann	400
CHAPTER 11: Managing Email with the Gmail App	
Discover Gmail Features	
Revealing the Gmail app's main menu	
Tending to mailbox organization	
Scoping out the main mailbox	
Send a Gmail Email	
Adding an email signature	
Creating a Vacation Responder email.	
Perform Basic Gmail tasks	
A table of common email tasks	
Printing an email from Gmail	
Link to Other Apps and Gmail Settings	
CHAPTER 12: Choosing and Using a Smartphone C	amera 203
Examine Smartphone Cameras and Bran	ds 204
Paying the right amount of attention to	reviews 204
Phones with camera brand collaboration	ons205
Take a Camera-Spec Safari	205
Enough megapixel, but not too much.	206
Home in on subjects with zoom	207
Exercise Your Android Camera's Capabili	ties209
Just point-and-shoot either stills or vide	eo210
Add interest with your camera's tools.	210
Expand your reach with Google Lens .	
Access camera features on the scrolling	
Go Pro with Pro Mode	
Discovering the Pro settings	
Applying the Pro settings	
Edit Your Photos	
Finding editing options	
Applying the photo editor's tools	
Playing with filters, colors, and more	222

PART 4: EXPLORING ANDROID APPS	225
Take a Shortcut to Features with Android Quick Settings Customizing the Quick Settings Meeting popular Quick Settings Quick Settings That Offer Valuable Options. Opting for Dark mode Maximizing eye comfort Avoiding interruptions. Sharing with "close" friends. Phone-Resident Android Apps Recording your voice Taking a screen shot. Staying on task with Google Calendar Frequenting the Google Play Store	228 231 234 235 236 239 240 242
CHAPTER 14: Google Mobile Services Apps for Android Find Popular Google Apps Google Photos Storing and retrieving Syncing and deleting Sharing Searching Google Maps Finding your way to an appointment Employing the Directions screen options Find My Device Take Note(s) with Google Keep	247248250251252255255
CHAPTER 15: Apps You Might Like in Google Play Store. Establish App Privacy Permissions	262 264 264 265

	Find Favorite and Fun Apps — a Consensus	
	Radio, podcasts, and music	
	Video apps	
	Travel	
	Games	
	News	
	Books	
	Engage Social Media	
	Try Out the Android Accessibility Suite	276
PART 5: A	ANDROID TODAY AND TOMORROW	. 279
CHAPTER 16:	Marsha's MUST-DO Things for Your Phone	. 281
	Make the Orientation Decision	
	Configure Do Not Disturb	
	Use Your Home Wi-Fi for Calls and Browsing	
	Practice Safety When Using Public Connections	
	Use a VPN to secure public Wi-Fi connections	285
	Beware of charging a phone from a public port	287
	Secure Your Power Cables	289
	Set Up Emergency Call and SOS	. 289
	Establishing SOS messaging	. 290
	Activating Emergency mode	291
	Managing Emergency mode	. 294
	Manage Home Screen App Shortcuts	. 295
	Make Folders of Apps	. 299
CHAPTER 17:	Android 12 and Beyond: The OS Evolution	301
	Find Helpful New Features in Android 12	302
	Make purchasing faster with GPay	
	Poke around in Android 12	
	Meet the Soothing Android 12 User Experience	
	Be Ready for the Future	
INIDEV		207
INIIALV		- 2/1

Introduction

his book is for you, even if you're not a senior. You no doubt live a busy life and may rarely have the desire (or time) to learn to operate every last feature of your Android smartphone. Android has so many options, and in this book, I share some of my favorites, some hidden nuggets, and some basic tricks for beginning (and not-so-beginning) users.

I've met too many people who refuse to learn anything regarding technology, and it upsets me. As you grow older (don't we all?), improving cognitive abilities is a top way to fend off mental decline. What better way to boost brainpower than to master the tiny computer in your pocket? Challenge yourself — think of spending time on your smartphone as a form of self-care (and having fun at the same time).

Hopefully, this book can keep you from making embarrassing calls to your kids to "fix" your phone. And even better — this book might help you teach your kids a trick or two. My editors don't necessarily identify with the over 55 crowd, but even they found some good ideas in this book.

So, buy the book. I know we'll have fun learning together.

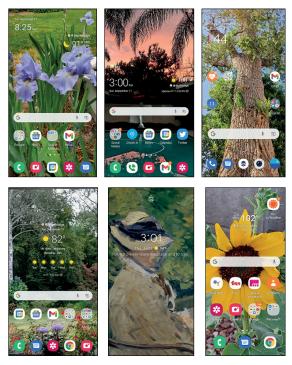
About This Book

The idea for this book was born during the coronavirus pandemic, on the day that vaccinations became available in Los Angeles. I scoured the Internet, found the active link from the misleading information, and wanted to be sure that my over-65 neighbors could sign up for the vaccine as well.

I went from house to house, helping others sign up for an appointment (much to their relief). The problem was not necessarily determining where to go for shots, but rather how to schedule the appointments on their phones.

The over 55 crowd had problems with both Apple and Android phones. Although I've had short stints with iPhones, I am a loyal Android user. I prefer the interface, I love the idea that I can personalize what information I share (and with who), and most of all, because "Android is for everyone."

From my research, I've found that not everyone rushes out to buy the latest, most expensive phones. I suspected as much because that's my philosophy as well. So, I used six different phone models and brands, and not necessarily the latest-and-greatest. The introduction's figure shows some of my "coauthors" for this book.



The Coauthors

The coauthor phones ran the latest version of Android, 11. They include a 2021 OnePlus 9 Pro 5G, a late 2019 Samsung Galaxy Note10+, 2019 Samsung Galaxy S10+, 2021 Samsung Galaxy A32 5G, 2018 Google Pixel 3XL, and a 2017 Pixel 2. I also checked the between Android versions on a 2019 Huawei P30 Pro running Android 10. Using all these phones was confusing at worst, but at best, I learned that the Android

experience flows similarly through all the brands, with additional features, which I'll show you in the book.

All these phones are *impressive*, and the manufacturers did a great job with the design and functionality. The oldest, the 2018 Google Pixel 3XL, is quite a surprise; I enjoyed using that phone as well.

I wrote this book using the pictured phones, all but one of which was running the Android 11 operating system. Android 12 launches in late 2021, so I used a OnePlus 9 5G on the beta tests of Android 12. Chapter 17 has my impressions on the beta-testing experience.

Foolish Assumptions

I assume that you have used a smartphone — or at least used a computer. I also assume that you may be in the market for a phone or have just acquired one. I guide you through the intricacies of buying a phone that best meets your needs, the specific features to look for in a mobile service provider, the basic operations of navigating your Android smartphone, and the most important apps you need to master (even for photography and entertainment). I highlight ways to use your phone that we (my editors and I) expect will improve your Android experience. Most importantly, I present the content in nontechnical language!

Icons Used in This Book

I'm all about illustrating a book. Many figures illustrate the phone screens and tasks laid out in the chapters. You'll also see small icons that point to special advice from me — here they are:



Tips are short notes — from me to you — that make the process of using your smartphone easier.

TIP



These notes are like tips, but a bit more technical sounding. I provide only the technical info that's both important and worthwhile to know.



'

Don't forget these notes. They show up often and are good to stash in the back of your mind.



Warnings contain information that you need to heed. Sometimes, performing certain actions can cause an expensive problem, but don't worry: You won't find many of these.

Beyond the Book

You can find a section on www.dummies.com with more Android tips and Android 12 features (after the Android 12 operating system fully rolls out). While visiting dummies.com, type Android Smartphones For Seniors For Dummies in the search box to find the book's Cheat Sheet. I also have a blog at https://mcollier.blogspot.com, where I post related articles.

In this book, I give you links and contact information for the tech support department for several major phone manufacturers, which should help with any immediate issue.

If you have specific questions, feel free to reach me by completing the contact form at my website (www.coolebaytools.com/contact) or on any of the social media platforms. I'd love to hear from you about the topics you want me to add to the next edition.

I also have a podcast, "Computer and Technology Radio," which I host with Marc Cohen. You can find it on your favorite podcast platform.

Where to Go from Here

Start reading this book anywhere you want. An incredible index can help you find almost any topic you need to learn about. Go to the table of contents and pick a chapter that interests you, or read the book from the beginning.

Interesting and helpful nuggets of information for you abound everywhere in this book. I really hope you enjoy it.

Your Phone in the Android Universe

IN THIS PART...

Meeting the Android OS

Setting up a Google Account

Choosing a smartphone and accessories

Starting up and connecting your phone

Minding privacy and security

- » Knowing the origins and scope of Android
- » Seeing why you need a Google Account
- » Recognizing the many choices
- » Practicing privacy going forward

Chapter **1**

Why Android? What's the Deal?

he smartphone is undoubtedly the most common yet powerful personal technology in your life. In the United States market, you have basically this choice: an Apple iPhone (iOS) or an Android-based phone.

The smartphone platform you choose is a matter of preference. Some people use both Apple and Android products, but in the end usually tend to favor one platform over the other.

Because the iPhone lives in a *walled garden*, Apple makes the decisions and takes the profits on the phone, accessories, services, and apps. Apple products and software work in sync; you have few choices to make.

Conversely, no matter the brand, all Android phones have similar genetics and are the same at their core. But you find a variety of options for accessories, phone brands, services, apps, and (most of all) prices.

The competition for dollars in the Android marketplace begets innovation, and I believe that opting to spend *your* dollars in that marketplace is a good choice. In this chapter, I offer foundational information to help make the Android experience even better.

A Little Android History

Android is the operating system on the majority of the world's smart-phones. It's an open source operating system led by Google (according to https://source.android.com):

As an open source project, Android's goal is to avoid any central point of failure in which one industry player can restrict or control the innovations of any other player.

Translation: If you come up with a device, you too can use the Android operating system to power it for free. (I'm not that smart.)

I believe that much of the magic of Android lies with Google Mobile Services (GMS) — the collection of apps and functionalities that make the Android ecosystem a *useful* environment.

As an Android user, you may wonder why you feel more comfortable using the operating system. The answer is a surprise to many: the Android mobile operating system is based on Linux (another open source operating system) and many Microsoft patents. The influence of these two giants in the software world accounts for the familiarity, and thus the comfort, you may feel when using an Android device. The nearby sidebar "The scope of Microsoft involvement" gives a quick look at the Android–Microsoft connection.



TIP

Note that many Android phones come with Microsoft Office preinstalled. Also, did you know that you can send text messages on your phone from your Windows desktop PC? Android phone owners can just go to messages.google.com/web to connect the devices.

THE SCOPE OF MICROSOFT INVOLVEMENT

It is rumored that Microsoft makes as much as \$24 per Android device sold, as payment for its patents used in the Android operating system. Even smartphone manufacturers cross-license Microsoft intellectual property (IP). Based on these patents, in 2013 Samsung paid Microsoft over a billion dollars in royalty payments. In 2014, it was estimated that Microsoft made \$2 billion.

Microsoft has never revealed the depth of its patent licensing, but in 2014 the Chinese Ministry of Commerce completed an antitrust investigation. The regulators published their results on the Internet, stating that Microsoft owned 310 Android-implementing patents.

Note: The numbers in this sidebar may not be independently verified but have shown up in court documents over the years.

The Many Flavors (Versions) of Android

Throughout this book, I offer stories about the beginnings of, and evolution of, the Android platform. For now, you should know that the version of Android I'm using for this book is Android 11. Chapter 17 talks about Android 12, which is scheduled to release around the time this book publishes. I got hold of a beta (not-readyfor-prime-time) version so that I can see the similarities and differences in the new upgrade.

The Android mascot (Bugdroid) is a small, green robot, shown on the left in **Figure 1-1**. Bugdroid, who gets dressed up with each new version of Android, was designed in 2008 to be an internationally understood symbol — like airport signs — because Android was designed for everyone. Since the platform's inception, Bugdroid appears in advertising and has undergone minor changes over the years. Today, the mascot's green color is updated, and just the top of the head shows (on the right in Figure 1-1).



"The Android robot is reproduced from work created and shared by Google and used according to terms described in the Creative Commons 3.0 Attribution License." https://source. android.com/setup/start/brands#robot-android

FIGURE 1-1

The initial versions of Android, except for A and B, had nicknames based on sweet treats. The nicknames gave a friendly, homey feeling to each update and personalized it to its users. Android 1.5 (Android C) was Cupcake, which was apparently when the naming system began. From there on, the charming version nicknames followed the alphabet, and even though Google publicly discontinued the cute code nicknames, Android 11 (Android R) is Red Velvet Cake, and (rumor has it), Android 12 (Android S) is Snow Cone.

Reasons That People Choose Android



Not all smartphones are iPhones.

The most excellent aspect of Android is that it's customizable. If you don't like one way of doing things, you can switch to another mode. Android is as simple or as complex as you want it to be.

Also, because Android is a free, open source platform, you can buy Android phones at many price points. You can even buy a brand-new phone inexpensively. Samsung has an A series (A for affordable, perhaps?) and other manufacturers make basic phones that won't put a dent in your budget. The more bells and whistles a manufacturer adds, the more it ratchets up the price point. A flagship (top of the

line) Android phone can be as expensive as any other. (Find more advice about picking out your phone in Chapter 2.)

Here are several features I love about owning an Android smartphone:

- **Keyboards and default apps:** I love having the option to try out different keyboards and browsers. You can download many new apps for free from the Google Play Store and try them out. If you come to realize that an app isn't your cup of tea, just uninstall it.
- Sharing: Whenever you want to share a photo, a web page, an email — you name it — tapping the Share icon brings up a simple sheet with app icons. Just tap the one you want to share to, and you're on the way.
- Navigating screens: As many times as I've used iOS devices (iPhone, iPad), my productivity always freezes when it comes to going back a page or a screen. On Android, you can use hand gestures or the bottom-of-screen Back arrow to navigate simply.
- **Notifications:** They're easy to control. You can control how you see them organized on the Home screen, app by app.

These are just a few features, but the truth is, Android is about choice. You're not forced to use any specific brand, and your phone can link to many different devices in your home (such as the thermostat, electric outlets, or lights).

Why You Need a Google Account

If you've ever purchased an Apple product (iPhone, iPod, or iPad), you know that you had to sign up for an Apple ID. Apple asked me to input my credit card information, even though I had no desire to purchase anything in the App Store. I couldn't register the phone without it.

To use the Google apps, you also need an ID, which is officially your account. *But* you don't have to supply any credit card information until you reach the point where you actually want to purchase something.



Technically speaking, you don't *need* a Google account, but I believe that it makes your Android experience better. A Google account is required in order to identify you over Android Mobile Services. You need the account to gain full value from the many native Android apps, such as Gmail, Calendar, Photos, Play Store, or Maps.

Accessing apps and settings

The native apps are free to use, but accessing everything from your account, all in one place, is *handy*. And all the apps are personalized just for you, based on how you use each app on the platform.

You can access your account on your devices (or laptop) by going to myaccount.google.com. From this screen (shown on the left in **Figure 1-2**), you can adjust the settings related to your interactions with Google. The ability to edit settings related to everything from your personal information to privacy, security, and more appears on the tabs on these screens.

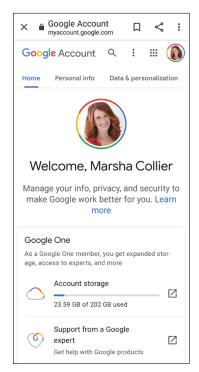


TIP

If your photo doesn't appear in your Google Account, tap the letter that's in the photo circle to upload one from your device or PC. That way, whenever you are in a Google app on a laptop or on your phone, your picture appears in the upper right. Tap it, and it opens up Manage Your Google Account.

Bequeathing your account

From your Google account, you can determine what should be done with the account should you not log in for a while. Google can notify someone you name, give that person access to your data, or delete the account altogether (refer to the right side of Figure 1–2). I definitely want my daughter to have access to my photo archive after I'm gone. Anyway, you can set it all up there.



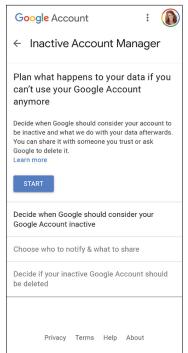


FIGURE 1-2

GOOGLE ONE

After you've used your Google account for a while — and backed up your data — you may fill up a lot of storage space in your complimentary 15 GB or, *gigabytes*. (One GB is approximately 1,000 MB, or *megabytes*).

Everything you save on Google counts toward this storage amount — Gmail messages, photos, documents in Drive. I've had my Gmail account for years and use it as a *de facto* filing cabinet. I've saved all my important emails there because they're easy to search; it's a perfect system. I uploaded my entire photo library to Google Photos, not only for archival purposes but also because Google Photos has fun and useful features. Going beyond a digital storehouse, Google Photos enables you to print photo books with selected pictures to give as special-occasion gifts.

After almost a decade, I have exceeded my 15 free gigabytes and now need to pay for more storage. The price was quite reasonable. I signed up for 200GB of

(continued)

storage for \$29.99 a year — a small price to pay for the security of having my data backed up.

With the new storage on hand, I now have a Google One account, which provides the aforementioned 200GB of storage, access to Google experts for premium support for any problems, 3 percent back in credit at the online Google store (https://store.google.com), and more.

To find out more about Google One services, download the Google One app from the Play Store or go to one.google.com in your browser on your phone or laptop.

So Many Choices!

Many companies make Android phones, and each one works hard to put its own spin on the device. Or not. A Google Pixel phone is pure Android. For those who remember the Blackberry, I've even heard rumors that a new Blackberry model based on Android is coming out!

The additions that manufacturers put on their devices become Android combined operating systems, or *skins*, as software overlays that deliver the interface design of the phone. A lot of extra software can be piled on a phone this way. I remember being given a popular brand's phone to review, and I couldn't get past the complexity of the skin. Screen shots in this book illustrate that similar screens can look different between phones because each manufacturer's device has its own skin design. You'll notice that even Android icons may appear in circles or squares and are modified ever so slightly.

Android skin customizations offer the user an enhanced experience. Its up to you to decide which one works best in your day-to-day phone use.



Just as Android names each version of the software, it's probably no surprise (because branding is important to manufacturers) that each OS skin has its own name: OncPlus = OxygenOS, Samsung = One UI, Xiaomi = MIUI, Oppo = ColorOS.

Note: You receive separate updates on your phone for security, the Android operating system, and the manufacturer's operating system.

Tech support options

In Chapter 2, you find out about buying a phone, but know that you don't have to buy from the cellular carrier. You can buy direct. Because both the manufacturer and carrier are intertwined with your phone, you *might* receive better tech support by contacting the manufacturer.

In **Table 1-1**, I give you tech support contact information for the major phone manufacturers. I have added a Twitter handle for brands that have a dedicated tech support Twitter account. Reaching brands via social media can be the fastest way to find service.



Yes, efficient service *can* happen! On a personal note, I can attest to reaching Samsung support on Twitter (some years ago). Even though my device was out of warranty and the problem was caused by my own idiocy (I put the phone on a counter and spilled a cleaning solution which saturated my phone), I told them I'd pay for the repair. They asked that I mail in my phone, and I was able to track the repair progress on the online portal. The process was super efficient, and my phone was returned to me quickly.

TABLE 1-1 Customer Service Contact Info for Android Phone Manufacturers

Manufacturer	Twitter Handle	Link	Phone
Huawei		https://consumer.huawei. com/us	(888) 548-2934
Lenovo	@LenovoSupport	https://support.lenovo. com/	(866) 426-0911
LG	@LGUSSupport	https://www.lg.com/us/ mobile	(800) 243-0000
Motorola	@Moto_Support	https://motorola-global- portal.custhelp.com/app/ mcp/contactus	(800) 734-5870

(continued)

TABLE 1-1 (continued)

Manufacturer	Twitter Handle	Link	Phone
OnePlus	@OnePlus_Support	https://www.oneplus.com/ support	(833) 777-3633
Орро	@OPPOCareGlobal	https://support.oppo. com/en	(800) 103-2777
Pixel	@Google	<pre>https://support.google. com/pixelphone</pre>	
Samsung	@SamsungSupport	https://www.samsung.com/ us/support	Text HELP to 62913
TCL	@TCL_USA	https://support.tcl.com	(855) 224-4228
Xiaomi		https://www.mi.com/global	(833)-942-6648
ZTE		https://ztedevices.com/ en-gl/support-center	(877) 817-1759

5G? LTE? 4G? VoLTE? Whaaat?

I hope you appreciate the fact that I'm sparing you a long diatribe on the technical aspects of your phone's radio frequency usage. At best, an explanation would be wordy and confusing. And it's unnecessary.

The simple explanation for those letters and numbers associated with your smartphone's signal is this: The higher the number in the radio frequency designation, the faster the data signal can communicate with your phone. The *G* stands for the *g*eneration of the device. *LTE* stands for Long Term Evolution (basically, industry and marketing jargon), and 4G *VoLTE* means that you can make *vo*ice calls over the LTE data network.

Each leap in technology represents more signal capacity. The faster newer-generation technology also means less *latency* (lag time) between the signal source and your phone. It takes less time to get a signal response, which, in the case of 5G, can mean useful advances in personal medical devices, such as remote monitoring, and more. Also, if you live in a home with lots of people using the Internet simultaneously, the 5G signal has more capacity and will improve buffering (latency) for everyone sharing a single signal.