

LEARNING MADE EASY



In Full Color

10th Edition

iPhone®

for
dummies®
A Wiley Brand



Includes coverage of the
iPhone 7 and iPhone 7 Plus

Help with all the newest
features and updates in iOS 10

Info on the iPhone apps
that you should have

Edward C. Baig
Bob "Dr. Mac" LeVitus



iPhone®

10th edition

by Edward C. Baig

USA Today Personal Tech columnist

and

Bob LeVitus

Houston Chronicle "Dr. Mac" columnist

**for
dummies®**
A Wiley Brand

iPhone® For Dummies®, 10th Edition

Published by: **John Wiley & Sons, Inc.**, 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

Copyright © 2017 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. iPhone is a registered trademark of Apple, Inc. 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: THE PUBLISHER AND THE AUTHOR 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 WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

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: 2016954411

ISBN 978-1-119-28313-3 (pbk); ISBN 978-1-119-28315-7 (ebk); ISBN 978-1-119-28316-4 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Table of Contents

INTRODUCTION	1
About This Book	1
Foolish Assumptions	2
Icons Used in This Book	2
Beyond the Book	3
Where to Go From Here	3
 PART 1: MEET YOUR iPhone	 5
CHAPTER 1: Unveiling the iPhone	7
The Big Picture	7
The iPhone as a phone and a digital camera or camcorder	9
The iPhone as an iPod	10
The iPhone as an Internet communications device	10
Technical specifications	11
A Quick Tour Outside	12
On the top and side	12
On the bottom	14
On the front	15
On the back	15
Status bar	16
Home Sweet Home Screen	19
The first Home screen	19
The second Home screen	21
The dock (all Home screens)	22
 CHAPTER 2: iPhone Basic Training	 23
Activating the iPhone	24
Turning the iPhone On and Off	26
Pointing a finger at Touch ID	27
Continuing the setup	29
Locking the iPhone	29
Understanding Pressure-Sensitive Touch	31
Mastering the Multitouch Interface	32
Discovering the special-use keys	33
The incredible, intelligent, and virtual iPhone keyboard	35
Anticipating what comes next	35
Finger-typing on the virtual keyboards	36
Correcting mistakes	39
Choosing an alternative keyboard	40
Cutting, copying, pasting, and replacing	40

Multitasking	43
Navigating beyond the Home Screen.....	45
Organizing Icons into Folders	46
Proactive Searching.....	47
Notifications and the Today View	48

CHAPTER 3: Synchronicity: Getting Stuff to and from Your iPhone..... 53

A Brief iCloud Primer	54
The Kitchen Sync	56
First things first: About iPhone backups	57
Sync prep 101.....	58
Syncing Your Data	62
Syncing contacts	62
Syncing calendars	63
Advanced syncing	64
Synchronizing Your Media	64
Ringtones, music, movies, and TV shows.....	65
Podcasts, iTunes U, and books	68
Photos	69
Manual Syncing	70

CHAPTER 4: Understanding the Phone-damentals 73

Making a Call	74
Contacts	74
Favorites	76
Recents	78
Keypad	79
Visual voicemail	79
Recording a greeting.....	81
Voice dialing	83
Receiving a Call	83
Accepting the call.....	83
Announcing the caller.....	83
Rejecting the call	84
Replying with a text message	84
Blocking callers	85
Avoiding disturbances	85
Choosing ringtones	86
While on a Call	88
Juggling calls.....	89
Making conference calls.....	90
Handing off calls	91
Seeing Is Believing with FaceTime.....	91

PART 2: THE PDA iPhone	95
CHAPTER 5: Taking Control of Your iPhone	97
Controlling Control Center.....	98
Summoning Siri	100
Figuring out what to ask.....	101
Using dictation.....	103
Correcting mistakes	103
Making Siri smarter.....	104
Voice Dialing.....	105
CHAPTER 6: Texting 1, 2, 3: Messages and Notes	107
Getting the iMessage	107
You send me: Sending text messages	109
Alert: You've got messages.....	110
Being a golden receiver: Reading and replying to text messages ..	112
MMS: Like SMS with media	115
Massive multimedia effects overhaul.....	116
Group messaging has never been better	118
Taking Note of Notes	119
CHAPTER 7: Ten Indispensable Utilities	121
Working with the Calendar	121
Year view.....	122
Month view.....	123
Day view	123
Week view.....	123
List view.....	124
Adding Calendar Entries.....	125
Letting your calendar push you around.....	129
Displaying multiple calendars	130
Responding to meeting invitations.....	130
Subscribing to calendars	131
Sharing a family calendar.....	131
Calculate This.....	132
Punching the Clock	133
World clock.....	133
Alarm clock.....	134
Stopwatch.....	135
Timer	136
Bedtime.....	136
Voicing Memos.....	137
Making a recording	137
Listening to recordings.....	138
Trimming recordings.....	138
Adding a title to a recording.....	139
Reminding me	139

It's a Wallet	142
Dropping in on AirDrop	143
Controlling Lights, Locks, and More	144
Using the iPhone in the Car	145
Keeping in Good Health	146

PART 3: THE MULTIMEDIA iPhone 147

CHAPTER 8: Get in Tune(s): Audio on Your iPhone 149

Introducing Your iPhone's Music Player.	150
It's music, just not your music	151
My Music Is Your Music	154
A library without library cards	154
Play it again, list	156
Share and share alike	158
Taking Control of Your Tunes	160
Customizing Your Audio Experience.	162
Setting preferences	162
Setting a sleep timer	164
Using your voice to control your music	165
Shopping with the iTunes Store app.	166

CHAPTER 9: "Smile": Taking Pictures with Your iPhone 167

Taking Your Best Shot.	168
Making Photos Come to Life	170
Keeping Things in Focus.	170
From the front to the rear — and back	172
Firing up the flash	172
Using digital zoom	173
iPhone 7 Plus only — two rear cameras are better than one.	174
Applying filters	175
Binging on burst shooting	176
Using the self-timer.	178
Tracking Down Your Pictures.	179
Choosing albums.	180
Making memories	181
Categorizing your pics.	183
Searching for pictures.	184
Sharing your photos	185
Admiring Your Pictures.	187
Maneuvering and manipulating photos.	187
Launching slideshows.	188
Storing pictures in the (i)Cloud	190
Editing and Deleting Photos.	191
More (Not So) Stupid Picture Tricks	194

CHAPTER 10:	Starring in a Blockbuster: Video on Your iPhone	199
	Finding Stuff to Watch	200
	Playing Video	201
	Shooting Video	205
	Going slow	208
	Going fast	209
	Editing what you shot	209
	Sharing video	211
	Watching video on TV	211
	Restricting video and other usage	212
PART 4:	THE INTERNET IPHONE	213
CHAPTER 11:	Going On a Mobile Safari	215
	Surfin' Dude	215
	Exploring the browser	216
	Blasting off into cyberspace	216
	I Can See Clearly Now	219
	Opening multiple web pages at a time	219
	Looking at lovable links	221
	Book(mark) 'em, Dano	222
	Altering bookmarks	225
	Viewing open pages on other devices	226
	Letting history repeat itself	226
	Launching a mobile search mission	227
	Saving web pictures	228
	Reading clutter-free web pages	229
	Private Browsing	229
	3D Touch and Safari	230
	Smart Safari Settings	231
CHAPTER 12:	The Email Must Get Through	233
	Prep Work: Setting Up Your Accounts	234
	Setting up your account the easy way	234
	Setting up your account the less easy way	234
	See Me, Read Me, File Me, Delete Me: Working with Messages	239
	Reading messages	239
	Filter mail	241
	Managing messages	242
	Threading messages	244
	Searching emails	245
	Darling, You Send Me (Email)	249
	Makin' messages	249
	Settings for sending email	257
	Setting your message and account settings	258
	Special Mail options on 3D Touch models	261

CHAPTER 13: Tracking with Maps, Compass, Stocks, and Weather	263
Maps Are Where It's At	263
Finding your current location with Maps	264
Finding a person, place, or thing	265
Views, zooms, and pans	266
Timesaving map tools: Contacts, Recents, and Favorites	268
Smart map tricks	270
Contemplating the Compass	274
Taking Stock with Stocks	275
Adding and deleting stocks, funds, and indexes	276
Details, details, details	277
Charting a course	277
Weather Watching	278

PART 5: THE UNDISCOVERED IPHONE 281

CHAPTER 14: Setting You Straight on Settings	283
Sky-High Settings	284
Airplane mode	284
Wi-Fi	285
Bluetooth	286
Cellular	288
Report, Sound, and Appearance Settings	289
Notifications	289
Control Center	290
Do Not Disturb	290
Privacy	290
Sounds	292
Happy haptics (iPhone 7 and 7 Plus)	293
Happy Home button (iPhone 7 and 7 Plus)	293
Brightening up your day	293
Auto-lock	294
Wallpaper	295
In General	295
About About	295
Software update	296
Storage & iCloud Usage	296
Background App Refresh	297
Siri	297
Handoff and Suggested Apps	297
CarPlay	297
VPN	298
iTunes Wi-Fi sync	298
Spotlight search	298
Battery	299

Touch ID & Passcode	299
Restrictions	300
Date & Time	301
Keyboard	302
Language & Region	303
Dictionary	303
Accessibility	303
Reset	306
Phoning In More Settings	307
iCloud	307
Promoting harmony through Family Sharing	307
Twitter	308
Facebook	308
Flickr and Vimeo	309
Sorting and displaying contacts	309
Nothing phone-y about these settings	309
Find My iPhone	311
CHAPTER 15: Apps-O-Lutely!	313
Using Your Computer to Find Apps	314
Looking for apps from your computer	314
Getting more information about an app	318
Downloading an app to your computer	320
Updating an app from your computer	320
Using Your iPhone to Find Apps	321
Looking for apps from your iPhone	321
Finding more information about an app	322
Downloading an app to your iPhone	322
Updating an app from your iPhone	324
Deleting and Organizing Your Apps	324
Deleting an app	324
Organizing your apps	326
Books, Newspapers, and Magazines	329
iBooks for your iPhone	330
Newspapers and magazines	330
CHAPTER 16: When Good iPhones Go Bad	333
iPhone Issues	334
But first	334
Recharge your iPhone	335
Restart your iPhone	336
Reset your iPhone	336
Remove your content	337
Reset your settings and content	337
Restore your iPhone	338
Renew your iPhone with Recovery mode	339

Problems with Calling or Networks	340
Sync, Computer, or iTunes Issues	342
More Help on the Apple Website	343
If Nothing We Suggest Helps	346
Dude, Where's My Stuff?	347
PART 6: THE PART OF TENS	349
CHAPTER 17: Ten Appetizing Apps	351
Shazam	352
TurboScan	353
TripCase	354
Evernote	356
Bill Atkinson PhotoCard	357
IMDb	358
Tunity	359
iTunes U	360
Waze	361
WebMD	362
CHAPTER 18: Ten Apps Worth Paying For	365
Akinator the Genie	365
Comics	366
OldBooth	368
Action Movie FX	369
WordsWorth Pro	370
iTeleport	372
Baseball Statistics	373
Dark Sky	374
Wallet	375
Heads Up!	376
CHAPTER 19: Ten Helpful Hints, Tips, and Shortcuts	379
Do the Slide for Accuracy and Punctuation	379
Autocorrect Is Your Friend	380
Auto apostrophes are good for you	381
Make rejection work for you	381
The Way-Cool Big Red Audio Scrubber Tip	383
Tricks with Links and Phone Numbers	384
Share the Love . . . and the Links	385
Choosing a Home Page for Safari	385
Storing Files	386
Create Ringtones for Free in GarageBand	387
Getting Apps Out of the Multitasking Screen	389
Taking a Snapshot of the Screen	390
INDEX	391

Introduction

Precious few products ever come close to generating the kind of buzz seen with the iPhone. Its messianic arrival receives front-page treatment in newspapers and top billing on network and cable TV shows year after year. People line up days in advance just to ensure landing one of the first units. Years from now, people will still insist, “I was there on day one.”

But we trust you didn’t pick up this book to read yet another account about how this year’s iPhone launch was an epochal event. We trust you *did* buy the book to find out how to get the very most out of your remarkable device. Our goal is to deliver that information in an informed but light and breezy fashion. We expect you to have fun using your iPhone, and we hope you have fun spending time with us.

About This Book

Let’s get one thing out of the way right from the get-go. We think you’re pretty darn smart for buying a *For Dummies* book. That says to us that you have the confidence and intelligence to know what you don’t know. The *For Dummies* franchise is built around the core notion that all of us feel insecure about certain topics when tackling them for the first time, especially when those topics have to do with technology.

As with most Apple products, every iPhone to date is beautifully designed and intuitive to use. And though our editors may not want us to reveal this dirty little secret (especially on the first page, for goodness’ sake), the truth is you’ll get pretty far just by exploring the iPhone’s many functions and features on your own, without the help of this (or any other) book.

Okay, now that we spilled the beans, we’ll tell you why you *shouldn’t* run back to the bookstore and request a refund: This book is chock-full of useful tips, advice, and other nuggets that will make your iPhone experience all the more pleasurable. So keep this book nearby and consult it often.

But before you do that, let us tell you a bit about how we go about our business. *iPhone For Dummies*, 10th Edition, makes generous use of numbered steps, bullet lists, and pictures. Web addresses look like this: www.boblevitus.com. For those reading the e-book version, links are live so you can click them.

We also include sidebars with information that is not required reading (not that any of this book is) but that we hope will provide a richer understanding of certain subjects. Overall, we aim to keep technical jargon to a minimum, under the guiding principle that with rare exceptions you need not know what any of it really means.

Foolish Assumptions

Although we know what happens when you make assumptions, we've made a few anyway. First, we assume that you, gentle reader, know nothing about using an iPhone or iOS — beyond knowing what an iPhone is, that you want to use iOS, that you want to understand your iPhone and its operating system without digesting an incomprehensible technical manual, and that you made the right choice by selecting this particular book.

And so, we do our best to explain each new concept in full and loving detail. Perhaps that's foolish, but . . . oh, well.

One last thing: We also assume that you can read. If you can't, please ignore this paragraph.

Icons Used in This Book

Little round pictures (icons) appear in the left margin throughout this book. Consider these icons miniature road signs, telling you something extra about the topic at hand or hammering a point home.

Here's what the five icons used in this book look like and mean.



TIP

This text contains the juicy morsels, shortcuts, and recommendations that might make the task at hand faster or easier.



REMEMBER

This icon emphasizes the stuff we think you ought to retain. You may even jot down a note to yourself in the iPhone's Reminders app.



TECHNICAL
STUFF

Put on your propeller beanie hat and pocket protector; this text includes truly geeky stuff. You can safely ignore this material, but we wouldn't have bothered to write it if it weren't interesting or informative.



WARNING

You wouldn't intentionally run a stop sign, would you? In the same fashion, ignoring warnings may be hazardous to your iPhone and (by extension) your wallet. There, you now know how these warning icons work, for you have just received your very first warning!



NEW

Denotes a feature that's new in iOS 10, new in iTunes 12.5, or new in the latest and greatest iPhones, the iPhone 7 and iPhone 7 Plus. What do we mean by *new*? Mostly that it wasn't available last year and wasn't covered in previous editions of this book.

Beyond the Book

For details about significant updates or changes that occur between editions of this book, go to www.dummies.com, search for *iPhone For Dummies*, and open the Download tab on this book's dedicated page.

In addition, the cheat sheet for this book has tips for mastering multitouch; a list of things you can do during a phone call; managing contacts; and where to find additional help if your iPhone is acting contrary. To get to the cheat sheet, go to www.dummies.com, and then type *iPhone For Dummies* Cheat sheet in the Search box.

Where to Go from Here

Where to turn to next? Why straight to Chapter 1, of course (without passing Go).

In all seriousness, we wrote this book for you, so please let us know what you think. If we screwed up, confused you, left something out, or — heaven forbid — made you angry, drop us a note. And if we hit you with one pun too many, it helps to know that as well.

Because writers are people too (believe it or not), we also encourage positive feedback if you think it's warranted. So kindly send email to Ed at baigdummies@gmail.com and to Bob at iPhoneLeVitus@boblevitus.com. We'll do our best to respond to reasonably polite email in a timely fashion.

Most of all, we want to thank you for buying our book. Please enjoy it along with your new iPhone.

1

Meet Your iPhone

IN THIS PART . . .

Get a big-picture overview of the iPhone and a quick tour of its hardware and software.

Activate the phone, turn it on and off, unlock and lock it, and master its multitouch interface.

Synchronize your data — contacts, appointments, movies, songs, podcasts, and such — between your computer, your iPhone, iCloud, and other iDevices.

Make and receive calls on the iPhone — even video calls — use visual voicemail, select a ringtone, and ignore, juggle, and merge calls.

- » Looking at the big picture
- » Touring the outside of the iPhone
- » Checking out the iPhone's apps

Chapter 1

Unveiling the iPhone

Congratulations. You've selected one of the most incredible handheld devices we've ever seen. Of course, the iPhone is one heck of a wireless telephone, but it's actually *four* handheld devices in one. At least it's four devices right out of the box. Add some iPhone apps, and your iPhone becomes a PDA, an e-book reader, a handheld gaming device, a memory jogger, an exercise assistant, and ever so much more. We discuss optional apps — how to obtain, install, and delete them — throughout the book and particularly in Chapters 15, 17, and 18.

For now, we focus on the four awesome handheld devices your iPhone is the day you take it out of the box. In addition to being an excellent cellular telephone, the iPhone is a gorgeous widescreen video player, a fantastic 8- or 12-megapixel camera/camcorder, as well as a tiny-yet-powerful Internet communications device.

In this chapter, we offer a gentle introduction to all four devices that make up your iPhone, plus overviews of its revolutionary hardware and software features.

The Big Picture

The iPhone has many best-of-class features, but perhaps its most unusual feature is the lack of a physical keyboard or stylus. Instead, it has a super-high-resolution (326 pixels per inch for all but Plus models, which have an astonishing 401 pixels per inch) touchscreen that you operate using a pointing device you're already intimately familiar with: your finger.

WHAT'S IN THE BOX?

Somehow we think you've already opened the elegant box that the iPhone came in. But if you didn't, here's what you can expect to find inside:

- **EarPods:** Use them for music, videos, and, yes, phone calls. iPhone 7 and 7 Plus EarPods have a Lightning connector; all other models have standard 3.5mm head-phone plugs.
- **Lightning-to-USB cable:** Use this handy cable to sync or charge your iPhone. You can plug the USB connector into your PC or Macintosh to sync or into the included USB power adapter. By the way, if you prefer to have your iPhone standing up on your desk while you charge or sync it, as we do, check out one of the optional charging/syncing docks available from Apple and others.
- **USB power adapter:** Use this adapter to recharge your iPhone from a standard AC power outlet.
- **Some Apple logo decals:** Of course.
- **A quick start guide:** Not much to it. You see the names of the buttons; how to turn on the phone; and where to learn more and get support. We save you the time of looking; you can learn more at <http://www.apple.com/iphone> and get help at www.apple.com/support/iphone. You're welcome.
- **iPhone info sheet:** Here's where you find safety warnings, legalese, warranty information, and regulatory and compliance gobbledygook, among other things.
- **SIM eject tool:** Just kidding. Apple once put a SIM eject tool in the box but hasn't in many years. No worries — just use a straightened paper clip or safety pin if you need to remove your SIM card. (See Chapter 16 for more on the SIM card.)
- **iPhone:** You were starting to worry. Yes, the iPhone itself is also in the box.

And what a display it is. We venture that you've never seen a more beautiful screen on a handheld device in your life.

The iPhone's built-in sensors also still knock our socks off. An accelerometer detects when you rotate the device from portrait to landscape mode and adjusts what's on the display accordingly. A proximity sensor detects when the iPhone gets near your face, so it can turn off the display to save power and prevent accidental touches by your cheek. A light sensor adjusts the display's brightness in response to the current ambient lighting situation. The iPhone even has a gyroscope for advanced motion sensing and GPS sensors so your phone can determine where in the world you are. Our favorite example of motion sensing is that our iPhones rarely ask if we want to join a Wi-Fi network when we're in a moving car. That's a smart smartphone.

In this section, we take a brief look at some of the iPhone's features, broken down by product category.

The iPhone as a phone and a digital camera or camcorder

On the phone side, the iPhone synchronizes with the contacts and calendars on your Mac or PC, as well as contacts and events on iCloud, Google, Yahoo!, and Facebook. It includes a full-featured QWERTY soft, or virtual, keyboard, which makes typing text easier than ever before — for some folks. Granted, the virtual keyboard takes a bit of time to get used to. But we think that many of you eventually will be whizzing along at a much faster pace than you thought possible on a mobile keyboard of this type.

The 12-megapixel camera (iPhone 6s and newer) is now paired with iOS 10's improved Camera and Photos apps, so taking and managing digital photos and videos on your iPhone is a pleasure rather than the nightmare it can be on other phones. Plus, you can automatically synchronize iPhone photos and videos with the digital photo library on your Mac or PC.

The iPhone 6s Plus has better cameras than the iPhone SE or iPhone 6s, and the iPhone 7 models have the best cameras yet. Of course, both iPhone 7 models include all the features of the previous generation (iPhone 6s and 6s Plus) camera, including autofocus with focus pixels to help prevent out-of-focus pictures. But the 6 Plus and both iPhone 7 models have one of the coolest features we've seen on any camera-in-a-phone: optical image stabilization, which uses data from the processor, gyroscope, and motion coprocessor to determine camera motion when you're shooting. It then provides precise lens movement to compensate for your shaky hands or low light. The iPhone 7 models shoot better low-light photos than we've seen from any previous iPhone, and the iPhone 7 Plus, which has two lenses and true optical zoom, shoots the best pictures and videos yet.

Finally, don't miss the Live Photos feature (all current iPhone models), which captures a bit of video before and after the still image. This brings images to life when viewed and may be the coolest iPhone camera feature since, well, since last year's optical image stabilization.



Before iOS 10, if you chose to edit a live photo with the Photos app, you destroyed its “liveness” and turned it into a still image. With iOS 10, you can edit and adjust live photos without turning them into stills. Yea!

Another of our favorite phone accouterments is visual voicemail. (Try saying that three times fast.) This feature lets you see a list of voicemail messages and choose

which ones to listen to or delete without being forced to deal with every message in your voice mailbox in sequential order. Now, *that's* handy!

Finally, all iPhone models include Siri, an intelligent voice-controlled assistant that understands what you tell him or her (most of the time). We say “him or her” because you can (since iOS 7) choose the optional man’s voice for Siri (see Chapter 5). Regardless of which gender you choose, Siri can figure out what you mean and determine which (if any) iPhone app should be used to find the right answer. And, like a real personal assistant, Siri replies in a natural sounding human voice. Furthermore, he or she has become even smarter in iOS 10 with “proactive assistance,” which provides the most relevant information and suggestions at a particular moment. One last thing: Both flavors — male and female — take dictation!

If you’ve tried voice control before, forget everything you’ve learned and give Siri a try. We think you’ll be as impressed as we are (as long as you have a good Internet connection when you try it — Siri can be close to useless if your connection is slow) — and are in a relatively quiet environment.

We’ve mentioned just the highlights of the iPhone’s superb set of features. But because we still have the entire book ahead of us, we’ll put the extended coverage on hold for now (pun intended).

The iPhone as an iPod

We agree with the late Steve Jobs on this one: The iPhone is a better iPod than any iPod Apple has ever made. (Okay, we can quibble about the iPod touch and the iPad, as well as wanting more storage, but you know what we mean.) You can enjoy all your existing iPod media content — music, audiobooks, audio and video podcasts, iTunes U courses, music videos, television shows, and movies — on the iPhone’s gorgeous high-resolution color display, which is bigger, brighter, and richer than any iPod display before it.

Bottom line: If you can get the content — be it video, audio, or whatever — into iTunes on your Mac or PC, you can synchronize it and watch or listen to it on your iPhone.

The iPhone as an Internet communications device

But wait — there’s more! Not only is the iPhone a great phone and a stellar media player, but it’s also a full-featured Internet communications device with — we’re

about to drop a bit of industry jargon on you — a rich HTML email client that’s compatible with most POP and IMAP mail services, with support for Microsoft Exchange ActiveSync. (For more on this topic, see Chapter 12.) Also on board is Safari, a world-class web browser that, unlike on most other phones, makes web surfing fun and easy.

Another cool Internet feature is Maps. By using GPS, Maps can determine your location, let you view maps and satellite imagery, and obtain driving directions and traffic information for much of the United States. You can also find businesses such as gas stations, pizza joints, hospitals, and Apple Stores with just a few taps. And iOS 10 adds information on public transit for even more cities. Finally, the Compass app not only displays your current GPS coordinates but also orients Maps to show the direction you’re facing.

You might also enjoy using Stocks, an included app that delivers near real-time stock quotes and charts any time and any place, or Weather, another included app that obtains and displays the weather forecast for as many cities as you like.

The Internet experience on an iPhone is far superior to the Internet experience on any other handheld device we’ve seen, except the iPad. (Technically, we’d call a full-sized iPad a “two-hands-held device” because it’s difficult to hold in one hand for more than a few minutes. But we digress.)

Technical specifications

One last thing before we proceed. Here’s a list of everything you need before you can actually *use* your iPhone:

- » An iPhone
- » In the United States, a wireless contract with AT&T, Verizon, Sprint, one of the smaller carriers, such as C Spire or Cricket, or a contract-free T-Mobile or other service
- » An Apple ID
- » Internet access (required) — broadband wireless Internet access recommended

In addition, we think you’ll find that some tasks are faster and easier if you perform them on a computer using iTunes instead of on your iPhone’s much smaller screen — although you don’t technically *need* a computer to use your iPhone. And some tasks, such as reordering Home screens, can *only* be accomplished in iTunes on a computer.

If you decide to introduce your iPhone to your computer (and we recommend it for anyone who has a computer), here's what's required for syncing with iTunes:

- » **For Macs:** A Mac with a USB 2.0 or 3.0 port, OS X v10.9 or later, and iTunes 12.5 or later
- » **For Windows:** A PC with a USB 2.0 or 3.0 port; Windows 7 or later; and iTunes 12.5 or later (free download at www.itunes.com/download)

A Quick Tour Outside

The iPhone is a harmonious combination of hardware and software. In this section, we take a brief look at what's on the outside. In the next section, we peek at the software.

On the top and side

The top of iPhone 6 and 7 models is as smooth as a baby's bottom, as shown in Figure 1-1. If you have one of the iPhone 6 models, your sleep/wake button is on the side. For all models, the SIM card tray is on one side, and the ring/silent switch and volume buttons are on the other side. We describe these elements more fully in the following list:



- » **Microphone:** Used for FaceTime calls and noise suppression during phone calls.
- » **SIM card tray:** The SIM card tray is where you remove or replace the SIM card inside your iPhone.

A SIM (Subscriber Identity Module) card is a removable smart card used to identify mobile phones. Users can change phones by moving the SIM card from one phone to another — kind of. The iPhone uses a nano-SIM.
- » **Sleep/wake button:** This button is used to lock or unlock your iPhone and to turn your iPhone on or off. When your iPhone is locked, you can still receive calls and text messages, but nothing happens if you touch its screen. When your iPhone is turned off, all incoming calls go directly to voicemail.
- » **Ring/silent switch:** This switch, which is on the left side of your iPhone, lets you quickly swap ring mode and silent mode. When the switch is set to ring mode — the up position, with no orange showing on the switch — your iPhone plays all sounds through the speaker on the bottom. When the



REMEMBER



TIP

switch is set to silent mode — the down position, with orange visible on the switch — your iPhone doesn't make a sound when you receive a call or when an alert pops up on the screen.

Silent mode is overridden, however, by alarms you set in the built-in Clock app, iPod audio, and selecting sounds such as ringtones and alert sounds in the Settings app.

If your phone is set to ring mode and you want to silence it quickly, press the sleep/wake button on the top of the iPhone or press one of the volume buttons.

- » **Volume buttons:** Two volume buttons are just below the ring/silent switch. The upper button increases the volume; the lower one decreases it. You use the volume buttons to raise or lower the loudness of the ringer, alerts, sound effects, songs, and movies. And during phone calls, the buttons adjust the voice loudness of the person you're speaking with, regardless of whether you're listening through the receiver, the speakerphone, or a headset.

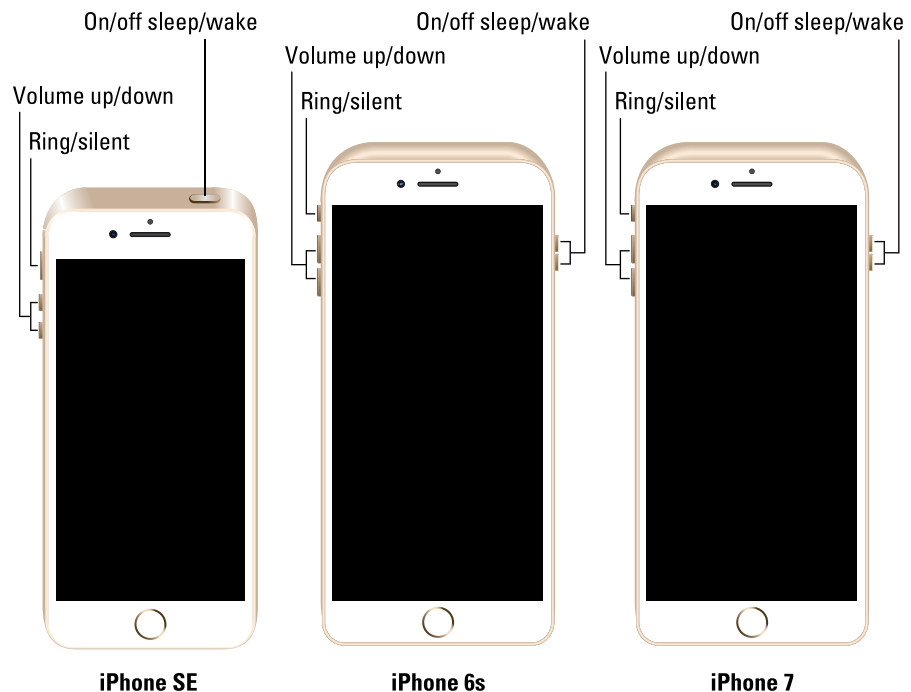
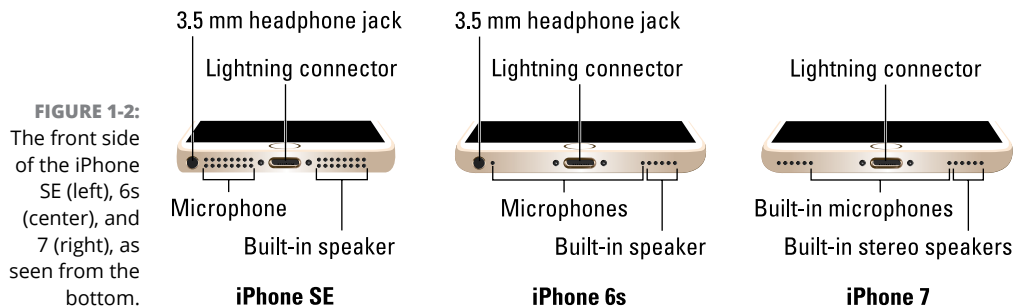


FIGURE 1-1:
The rear side of the iPhone SE (left), 6s (center), and 7 (right), as seen from the top.

On the bottom

On the bottom of your iPhone, you find a microphone, the Lightning connector, the speaker (or speakers), and the headset jack (all but iPhone 7 models), as shown in Figure 1-2:

» **Headset jack (iPhone SE and 6):** The headset jack lets you plug in the included iPhone headset, which looks a lot like EarPods but with an elliptical shape.



TECHNICAL
STUFF

» **Microphone:** The microphone lets callers hear your voice when you're not using a headset.

The iPhone sports three microphones (top front, top back, and bottom). The top ones are used for FaceTime calls and also work with the main mic (located on the bottom) to suppress unwanted and distracting background sounds on phone calls using dual-mic noise suppression or beam-forming technology.

» **Lightning connector:** The Lightning connector has three purposes for most iPhones and four for iPhone 7 models. One, you can use it to recharge your iPhone's battery. Simply connect one end of the included Lightning-connector-to-USB cable to the iPhone and the other end to the USB power adapter. Two, you can use the port to synchronize. Connect one end of the cable to the port on your iPhone and the other end to a USB port on your Mac or PC. Three, you can use the Lightning or dock connector port to connect your iPhone to other devices, such as a camera or television using an adapter such as the Camera Connection Kit or one of Apple's A/V adapter cables. And four (iPhone 7 models only), you use it to connect EarPods or the included 3.5mm headphone jack adapter so you can listen to audio or talk on the phone without holding a slab of glass and metal in front of your face.

Little-known fact: The EarPods with Lightning connector that come with iPhone 7 and 7 Plus will work with any iOS device with a Lightning connector.



NEW

- » **Speaker:** The speaker is used by the iPhone's built-in speakerphone and plays audio — music or video soundtracks — if no headset is plugged in. It also plays the ringtone you hear when you receive a call. iPhone 7 models have stereo speakers.

On the front

On the front of your iPhone, you find the following (labeled in Figure 1-3):



WARNING



TIP

- » **Camera:** The camera on the front of the iPhone is tuned for FaceTime, so it has just the right field of view and focal length to focus on your face at arm's length, which presents you in the best possible light.
- » **Receiver:** The receiver is the speaker that the iPhone uses for telephone calls. It naturally sits close to your ear whenever you hold your iPhone in the “talking on the phone” position.

You should be the only one who hears sound coming from the receiver. If you have the volume set above about 50 percent and you're in a location with little or no background noise, someone standing nearby may be able to hear the sound, too. So be careful.

If you require privacy during phone calls, use the included Apple headset (or any compatible third-party wired or wireless headset — as discussed in Chapter 14).

- » **Status bar:** The status bar displays important information, as you discover in a page or two.
- » **Touchscreen:** You find out how to use the iPhone's gorgeous high-resolution color touchscreen in Chapter 2. All we have to say at this time is try not to drool all over it.
- » **Home button and Touch ID sensor:** No matter what you're doing, you can press the Home button at any time to display the Home screen, which is the screen shown in Figure 1-3. The iPhone's Touch ID sensor can use your fingerprint to unlock the phone (see Chapter 2).
- » **App icons:** Each icon on the (first) Home screen launches an included iPhone app or one you've acquired from the App Store.

On the back

On the back of your iPhone is a camera lens. It's the little circle in the top-left corner. The iPhone also has one or more little LEDs next to the camera lens for use as a flash for still photos, as a floodlight for videos, and as a flashlight (turn it on and off in Control Center). For more on using the camera and shooting videos, see Chapters 9 and 10, respectively; for more on the flashlight and Control Center, see Chapter 5.



FIGURE 1-3:
The iPhones
are a study
in elegant
simplicity.

Photo courtesy of Apple, Inc.

Finally, all current iPhone models have a third microphone on the back (refer to Figure 1-1).

Status bar

The status bar, which is at the top of every Home screen and displayed by many (if not most) apps, displays tiny icons that provide a variety of information about the current state of your iPhone:



» **Cell signal:** The strength of the cellular signal. The cell signal icon tells you whether you're within range of your wireless telephone carrier's cellular network and therefore can make and receive calls. The more filled circles you see (five is the highest), the stronger the cellular signal. If you're out of range, the circles are replaced with the words *No Service*. And if your iPhone is looking for a cellular signal, the circles are replaced with *Searching*.

If your screen shows only one or two filled circles, try moving around a little bit. Even walking a few feet can sometimes mean the difference between no service and three or four filled circles.



» **Airplane mode:** All wireless features of your iPhone — the cellular, 4G, 3G, GPRS (General Packet Radio Service), and EDGE networks, Wi-Fi, and Bluetooth — are turned off. You're allowed to use your iPod on a plane after the captain gives the word. But you can't use your cellphone except when the plane is in the gate area before takeoff or after landing. Fortunately, your iPhone offers an airplane mode, which turns off all wireless features of your iPhone and makes it possible to enjoy music or video during your flight.

Some flights now offer on-board Wi-Fi. If you're on such a flight, you can turn on Wi-Fi even when airplane mode is enabled. Just don't turn it on until the captain says it's okay.



TIP

LTE

» **LTE:** Your wireless carrier's high-speed LTE network is available.

4G

» **4G:** Your wireless carrier's high-speed UMTS network is available.

3G

» **3G:** Your wireless carrier's 3G UMTS or EV-DO data network is available and your iPhone can connect to the Internet via 3G.

E

» **EDGE:** Your wireless carrier's slower EDGE (Enhanced Data Rate for GSM Evolution) network is available and you can use it to connect to the Internet.

GPRS

» **GPRS/1xRTT:** Your wireless carrier's slower GPRS data network is available and your iPhone can use it to connect to the Internet.



» **Wi-Fi:** Your iPhone is connected to the Internet over a Wi-Fi network. The more semicircular lines you see (up to three), the stronger the Wi-Fi signal. If your screen displays only one or two semicircles of Wi-Fi strength, try moving around a bit. If you don't see the Wi-Fi icon in the status bar, Internet access is not currently available.



TECHNICAL
STUFF

Wireless (that is, cellular) carriers may offer one of four data networks. The fastest are the so-called 4th generation networks such as LTE and 4G UMTS; the next fastest is 3G; and the slowest are EDGE and GPRS. The device looks for the fastest available network. If it can't find one, it looks for a slower network.

Wi-Fi networks, however, are even faster than any cellular data network. So all iPhones will connect to a Wi-Fi network if one is available, even if a 4G, 3G, GPRS, or EDGE network is also available.

Last but not least, if you *don't* see one of these icons — LTE, 4G, 3G, GPRS, EDGE, or Wi-Fi — you don't currently have Internet access.

Wi-Fi



VPN



» **Wi-Fi call:** Your iPhone is making a call over Wi-Fi.

» **Do Not Disturb:** The Do Not Disturb feature (see Chapter 4) is enabled.

» **Personal Hotspot:** The iPhone is providing a personal hotspot connection to another iPhone or another device.

» **Syncing:** Your iPhone is syncing with iTunes.

» **Network activity:** Some network activity is occurring, such as over-the-air synchronization, sending or receiving email, or loading a web page. Some third-party apps use this icon to indicate network or other activity.

» **Call forwarding:** Call forwarding is enabled on your iPhone.

» **VPN:** Your iPhone is currently connected to a virtual private network (VPN).

» **TTY:** Your iPhone is set up to work with a teletype (TTY) machine, which is used by those who are hearing or speech impaired. You need an optional Apple iPhone TTY Adapter (suggested retail price \$19) to connect your iPhone to a TTY machine.

» **Portrait orientation lock:** The iPhone screen is locked in portrait orientation. Swipe up from the bottom of the screen to reveal Control Center and then tap the portrait orientation lock icon to lock your screen in portrait orientation.

» **Alarm:** You've set one or more alarms in the Clock app.

» **Location Services:** An application is using Location Services, a topic we discuss in Chapter 13.

» **Bluetooth:** The icon displays the current state of your iPhone's Bluetooth connection. If the icon is blue, Bluetooth is on and a device (such as a wireless headset or car kit) is connected. If the icon is gray, Bluetooth is turned on but no device is connected. If you don't see a Bluetooth icon, Bluetooth is turned off. Chapter 14 goes into more detail about Bluetooth.

» **Bluetooth battery:** A tiny battery icon next to the Bluetooth icon displays the battery level of some Bluetooth devices.

» **Battery:** This battery icon displays the level of your battery's charge. The icon is completely filled with green or white when your battery is fully charged and then empties as your battery becomes depleted. You see a lightning bolt next to the icon when your iPhone is recharging.

Home Sweet Home Screen

The first page of your Home screen offers a bevy of icons, each representing a different bundled app or function. Because the rest of the book covers each and every one of these babies in full and loving detail, we merely provide brief descriptions here.

To get to the first Home screen, press the Home button. If your iPhone is asleep when you press the button, the Unlock screen appears. Once unlocked, you'll see whichever page of icons was on the screen when it went to sleep. If that screen happens to have been the first Home screen, you're golden. If it wasn't, merely press the Home button again to summon your iPhone's first (main) Home screen.



TIP

Three steps let you rearrange icons on your iPhone:

1. **Press and hold down on any icon until all icons begin to jiggle.**
2. **Drag the icons around until you're happy with their positions.**
3. **Press the Home button to save your arrangement and stop the jiggling.**

The first Home screen

If you haven't rearranged your icons, you should see the following apps on your first Home screen, starting at the top left:

- » **Mail:** This app lets you send and receive email with most POP3 and IMAP email systems and, if you work for a company that grants permission, Microsoft Exchange accounts, too.
- » **Calendar:** No matter what calendar program you prefer on your Mac or PC (as long as it's Calendar, Microsoft Entourage, Outlook, or Exchange, or the online calendars from Google or Yahoo!), you can synchronize events and alerts between your computer and your iPhone. Create an event on one, and it's automatically synchronized with the other the next time they're synced. Neat stuff.
- » **Photos:** This app is the iPhone's terrific photo manager. You can view pictures that you took with the iPhone's built-in cameras, transferred from your computer, received through email, saved from Safari, or acquired as part of your Photo Stream. You can zoom in or out, create slideshows, email photos to friends, and much more. Other phones may let you take pictures; the iPhone lets you enjoy them in many ways.
- » **Camera:** Use this app when you want to shoot a picture or video with one of the iPhone's built-in cameras.

- » **Maps:** This app is among our favorites. View street maps or satellite imagery of locations around the globe, or ask for driving, walking, or public transportation directions, traffic conditions, or even the location of a nearby pizza joint.
- » **Clock:** This program lets you see the current time in as many cities as you like, set one or more alarms for yourself, and use your iPhone as a stopwatch or a countdown timer.
- » **Weather:** This app monitors the six-day weather forecast for as many cities as you like.
- » **News:** Apple's next-generation News app is designed to deliver the news you want to read in a beautiful, uncluttered format. You read more about News in Chapter 15.
- » **Wallet:** This app stores Apple Pay credit cards as well as gift cards, coupons, tickets, boarding passes, and other passes, all in a single convenient location.
- » **Notes:** This program lets you type notes while you're out and about. New in iOS 10 are finger-sketching tools, checklists, and support for images in notes. You can send the notes to yourself or anyone else through email or save them on your iPhone until you need them. And now your notes can be synced with your other devices via iCloud if you so desire.
- » **Reminders:** This app may be the only to-do list you'll ever need. It integrates with Calendar, Outlook, and iCloud, so to-do items and reminders sync automatically with your other devices, both mobile and desktop. You'll read much more about this great app and its shiny location-based reminders, but you have to wait until Chapter 7.
- » **Stocks:** This app lets you monitor your favorite stocks, which are updated in near real-time.
- » **Videos:** This handy app is the repository for your movies, TV shows, music videos, video podcasts, and some iTunes U courseware. You add videos via iTunes on your Mac or PC or by purchasing them from the iTunes Store with the iTunes app on your iPhone. Check out Chapter 10 to find out more.
- » **iBooks:** Tap here to purchase and read iBooks.
- » **iTunes Store:** Tap here to access the iTunes Store, where you can browse, preview, and purchase songs, albums, movies, and more.
- » **App Store:** This icon enables you to connect to and search the iTunes App Store for iPhone apps you can purchase or download for free over a Wi-Fi or cellular data network connection.
- » **Home:** This app lets you control HomeKit-compatible lights and appliances.



NEW

- » **Health:** This app gathers info from fitness devices and other health apps to provide a clear and current overview of your health on an easy-to-read dashboard.
- » **Settings:** Use this app to adjust your iPhone's settings. If you're a Mac user, think System Preferences; if you're a Windows person, think Control Panel.

The second Home screen

You probably won't find the icons we're about to describe on your Home screen — at least not on the first (main) one. These apps usually appear on the *second* Home screen (which you find out about in Chapter 2). If you just can't wait to see them, swipe your finger across the screen from right to left and they'll appear like magic.

Inside the Extras Folder

In the Extras folder you find these icons:

- » **Compass:** The Compass app is kind of like having a magnetic needle compass inside your iPhone, but better.
- » **Tips:** This app provides tips for using your iPhone and iOS 10.
- » **Voice Memos:** This handy little app turns your iPhone into a convenient handheld recording device.
- » **Contacts:** This app stores contact information, which can be synced with iCloud, macOS Contacts, Yahoo! Address Book, Google Contacts, and many more.
- » **Find Friends:** This app shows a map with the locations of friends who have consented to being tracked by Find My Friends.
- » **Find iPhone:** This app displays a map with the last known locations of your family's iPhones (assuming it's enabled on each misplaced phone before it was misplaced).

Outside the Extras Folder

In addition to the Extras folder, you find several additional icons on the second Home screen:

- » **FaceTime:** This app is used to make FaceTime video or voice calls to others using Apple devices.



- » **Calculator:** The Calculator app lets you perform addition, subtraction, multiplication, and division. Give the phone a quarter turn, however, and you'll find a nifty scientific calculator that does all that and much more.
- » **Podcasts:** Podcasts used to be included in the Music app but was moved to this stand-alone app in iOS 7. Use it to manage and consume podcasts on your iPhone.
- » **Watch:** This app is used to manage features on your Apple Watch. It's useless unless you have an Apple Watch.
- » **iCloud Drive:** This new app displays all documents saved to iCloud either in a single, searchable location if you enabled it when you first set up your iPhone or in Settings → iCloud → iCloud Drive.

The dock (all Home screens)

Finally, four icons at the bottom of the Home screen are in a special area known as the *dock*. When you switch Home screens (see Chapter 2), all the icons above the dock change. The four items on the dock, which follow, remain available on all Home screens:

- » **Phone:** Tap this app icon to use the iPhone as a phone. What a concept!
- » **Safari:** Safari is your web browser. If you're a Mac user, you know that already. If you're a Windows user who hasn't discovered the wonderful Safari for Windows, think Internet Explorer on steroids.
- » **Messages:** The Messages app lets you exchange text messages (SMS) and multimedia messages (MMS) with almost any other cellphone user. The app also lets you exchange Apple-exclusive iMessages with anyone using any Apple device with iOS 5 or higher (iDevice) or a Mac running Mountain Lion (OS X 10.8) or higher, as described in Chapter 6. We've used a lot of mobile phones in our day, and this app is as good as it gets.
- » **Music:** This icon unleashes all the audio power of an iPod right on your phone.



TIP



NEW

If the four apps on the dock aren't the ones that you use most, move different apps to the dock, as described in Chapter 2.

New in iOS 10 is the capability to delete most of the preinstalled apps. See Chapter 15 for details.

Okay, then. Now that you and your iPhone have been properly introduced, it's time to turn it on and actually use it. Onward!

- » Mastering multitouch
- » Multitasking with your iPhone
- » Spotlighting search
- » Keeping alert through notifications

Chapter 2

iPhone Basic Training

If you were caught up in the initial iPhone frenzy of 2007, you may have plotted for months about how to land one. After all, the iPhone quickly emerged as the ultimate fashion phone. And the chic device hosted a bevy of cool features.

Owning the hippest and most-hyped handset on the planet came at a premium cost compared with rival devices. To snag the very first version, you may have saved your pennies or said, “The budget be damned.”

That’s ancient history now. Almost a decade later, the iPhone has gone mainstream and you get more bang for your buck. A lot more bang.

We can list a bunch of prices here, but pricing for the wireless industry, and accordingly the iPhone, is in a state of flux. You used to be able to buy an iPhone for a subsidized and relatively low upfront price that was tied to a two-year contract with your carrier. As of this writing, however, such contracts are no longer the norm. Instead, wireless companies are pushing installment pricing options, in which you can choose to put little or no money down but are then obligated to pay for the device over typically a two-year term. In some cases you lease the phone; in others, you buy the phone outright.

The entry-level iPhone SE (at the time of this writing) started at \$399 or cost \$16.63 on up with carrier financing. The highest capacity 256GB iPhone 7 Plus from a carrier such as AT&T cost \$969.99 or \$32.34 a month.

Of course you still must pay for cellular and data coverage and data from a wireless carrier.

For existing iPhone customers, the upgrade price for a new model may depend on how far you're into your previous contract, how prompt you are at paying your bill, and other factors. And as they say in the fine print, taxes and fees are extra.

You may also get a nice trade-in deal on your existing phone, from Apple or other retailers.

Activating the iPhone

You will typically activate the iPhone where you bought the thing, just as you do with other cellphones. However, if you buy your iPhone from Apple's online store, the folks there will ship it to you and you activate it through iTunes, just like the old days, or through iCloud. If you're already a customer upgrading from an earlier iPhone or a different phone, you can convert your plan during the ordering process. You also choose your desired monthly bucket of voice minutes and SMS (Short Message Service) or text messages as well as your allotment of wireless data minutes right in the store.

As mentioned, we aren't going to go through all the wireless options here. Suffice to say that plans vary by wireless carrier and are subject to change. At the time this book was written, ironclad two-year contracts were rapidly becoming far less, well, ironclad. Of course, you're still obligated to pay what you owe your carrier. Indeed, the carriers all are moving away from contracts to installment pricing.

Unlimited data plans are also in a state of flux. Verizon and AT&T used to offer unlimited data but now typically charge based on usage, though those of you who signed up for an unlimited data plan previously are grandfathered.



WARNING

Many "unlimited" plans are subject to data-speed throttling after a customer reaches a certain threshold of data, though such levels are being raised in the consumer's favor. For example, AT&T announced that customers wouldn't be subjected to reduced data speeds and potential latencies until they consumed 22GB a month. In the past, such penalties might be imposed at around 5GB per month.



WARNING

If you plan on tapping into the faster 4G LTE (Long Term Evolution) networks that the iPhone 5 and later models are capable of making nice with, you may end up consuming more data and ultimately paying more.

You may also have to fork over extra coin for a plan that includes *tethering*, or the capability to use your iPhone as a broadband modem for other devices you might carry, such as laptops and netbooks.



TIP

iPhones are available also from smaller regional carriers such as C Spire and U.S. Cellular.

Three prerequisites for enjoying the iPhone have been in place since the original release and remain — at least for most U.S. customers:

- » One, unless you're already in the fold, there's the aforementioned business of becoming an AT&T, Verizon, Sprint, or T-Mobile subscriber or a customer of any other company that subsequently sells the devices.
- » Two, you may have to free yourself from any wireless contract that you've already entered into. As we've pointed out, such contractual obligations are getting liberalized and ironclad two-year contracts are disappearing in favor of installment pricing. Heck, your new wireless company may even pay any early termination fees due your old carrier.



TIP

A number of retailers will at least give you a credit for your old iPhone that you can use toward a new model. The amount of the credit depends largely on the condition of the device. You must pay off the phone over a set period, again typically two years. But at least you're shifting to the latest models.

Under its own trade-in program, Apple won't give you cash for your old phone but will issue a gift card that you can use in the store. As of this writing, you can get a card valued at up to \$250 if you trade in an iPhone 6 Plus. You can even get a \$50 gift card for trading in a now ancient iPhone 4. Prices vary depending on the condition of the phone you're trading in. Keep in mind that you may get cash or a better trade-in deal elsewhere.

Apple has its own in-store upgrade program, based on a 24-month installment. As this book was going to press, you could get a 32GB iPhone 7 for \$32.41 a month, a 128GB model for \$36.58, and a 256GB model for \$40.75. Pricing for the 7 Plus under the Apple upgrade program is \$37.41, \$41.58, and \$45.75, respectively. You get to choose your own carrier. AppleCare warranty protection is included.

- » Three, make sure you download the freshest version of iTunes software for syncing with your PC or Mac. Apple doesn't supply the software in the box, so head to www.apple.com/itunes if you need to fetch a copy, or launch your current version of iTunes and then choose iTunes ⇨ Check for Updates (Mac) or Help ⇨ Check for Updates (Windows).

The uninitiated might not know that iTunes is the nifty Apple jukebox software that iPod, iPad, PC, and Mac owners use to manage music, videos, and more. iTunes is at the core of the iPhone as well because it has a built-in iPod, under what is called the Music app instead. You employ iTunes to synchronize a bunch of stuff on your computer and iPhone, including apps, photos, podcasts, videos, ringtones, and (of course) music — that is, unless you eschew your computer directly and manage all this stuff through iCloud.

Although iTunes is no longer required for the initial configuration of your iPhone, we recommend fetching it anyway, even if you don't intend to use it for syncing with a PC or Mac. We just happen to be fans of the software.

Turning the iPhone On and Off

Apple has taken the time to nearly fully charge your iPhone, so you'll get some measure of instant gratification. After taking the phone out of the box, press and hold down the sleep/wake button. On the iPhone SE, the sleep/wake button resides on the top-right edge of iPhones. On the iPhone 6, 6 Plus, 6s, 6s Plus, 7, and 7 Plus, the button is on the right edge. (Refer to Chapter 1 for the location of all buttons.) If the phone has been activated — and at least in the Apple Stores, a salesperson will happily handle this for you — the famous Apple logo appears on your screen.

Soon, the word *hello* and its foreign language equivalents (*hola*, *bonjour*, *ciao*, and so on) take turns greeting you on a screen with a gray background.

If the phone is shipped to you from the Apple Store, you get a Connect to iTunes screen so that the device can connect to your provider's servers and perform the activation. Or you can go computer-free through iCloud. Slide your finger to the right to continue the setup, and off you go. Even if the phone is activated in the store, you have several decisions to make: Do you want to set up the device as a new iPhone, restore the phone from an iCloud backup (see the next chapter), or restore it from an iTunes backup?

Over the several screens that appear, you get to choose your language (English by default) and country or region. You then choose a Wi-Fi network, if available, or proceed using your cellular connection.

Next, you decide whether to enable Location Services. Agreeing to this step means the iPhone knows where you are, which is useful for Maps and other apps that rely on your whereabouts.

You are asked to kindly sign in with an Apple ID (if you already have one) or create one. Apple ID is the credential used to set up your iCloud and iTunes Store accounts, which include such things as the iBooks Store, Game Center, and Apple Music.

As part of the setup, you're also asked to agree to the Terms and Conditions for iOS, iCloud, Game Center, and the Apple Privacy Policy. Apple says it is important that you read this stuff and who are we to disagree? We'll just leave it there.

After getting past all the policy mumbo-jumbo, you're next asked whether you want to use iCloud to access your music, photos, contacts, calendars, and more on all your devices automatically. The decision is up to you, but for what it is worth, your humble authors use iCloud because sharing all that data across all the other gear that we own is darn handy.

We also take advantage of the Find My iPhone feature and think you should too. Seems like a no-brainer to us: Why wouldn't you want to turn on a tool that can possibly help you retrieve a lost or stolen phone? (For more on Find My iPhone, check out Chapter 14.)

You also get to choose or verify the phone number and email addresses that folks might use to get in touch with you, via FaceTime video calling (see Chapter 4) or iMessage (see Chapter 6).

The next request differs by phone and has to do with security, something no one should take lightly. You're given the option to create a passcode to prevent anyone from getting to the contents of your device without knowing that code.

But if you have the iPhone 5s or later instead, you're asked whether you want to set up Touch ID, Apple's name for a nifty fingerprint authentication system. This feature is worth a deeper dive.

Pointing a finger at Touch ID

Apple wants you to give the iPhone the finger. But only in a good way.

Setting up passcode safeguards is a good idea, and it's something we also touch on in Chapter 14 on Settings. But we also know that passcodes can be a hassle at times, such as when you're holding an umbrella in one hand and tapping a passcode with the other. Apple has said in the past that about half the folks with an iPhone don't even bother with passcodes, and we and the company think that's unfortunate because you don't want to let just anybody get at your personal information.

Enter the iPhones with Touch ID, a fingerprint scanner cleverly embedded in the Home button. With a gentle press of any designated finger, you bypass your passcode.

What's more, you can use your own digit (not the numerical kind) to authenticate iTunes and App Store purchases. (Go to Settings under Touch ID & Passcode to make sure that the iTunes & App Store switch is turned on.)

The 6, 6 Plus, 6s, 6s Plus, SE, 7, and 7 Plus afford you another benefit, the ability to purchase stuff at retail (and online) by using a payment technology known as Apple Pay. By holding the phone in a store near a compatible contactless reader

and keeping your finger against the Touch ID button, you can complete a purchase securely. Apple has forged partnerships with leading credit card companies, banks, and merchants, with more partners added all the time. Check out Chapter 7 for more on this feature.

Apple has also opened up Touch ID to third-party app developers.

You won't have to use your fingerprint as a shortcut to enter web account names or passwords. A feature known as iCloud Keychain keeps your credit cards and passwords encrypted and saved on your iPhone and other approved devices, and handles the autofill chores on many of the websites you might visit.

To set up Touch ID, you must first let your iPhone get chummy with at least one of your fingers, though the system can handle up to five individual fingers, yours or anyone else's with whom you share the iPhone.

The phone instructs you to press and lift your finger against the Home button repeatedly and from different orientations. Red lines fill an animated drawing of a generic fingerprint on the screen, giving you a sense of how far along you are. The process doesn't take long, and if all goes smoothly, the iPhone will soon enough declare your efforts to be a success.



WARNING

What could go wrong? Well, you will have to make sure your designated digit is dry. The phone needs to see your entire fingerprint, so don't try this with a bandaged finger or one that has open wounds.

To add fingers after the initial setup, tap Settings ⇨ Touch ID & Passcode. Type your passcode, and then tap Add a Fingerprint. Then repeat the setup drill we just described.

Whether you choose to set up fingerprint authentication now, later, or not at all, you need to establish an old-fashioned passcode. You can go with a four-digit numeric code, a longer custom numeric code, or a longer alphanumeric code. In fact, if you do opt to go with Touch ID, you must set up a passcode as a backup should the iPhone fail to recognize your paw three times in a row. Hey, it happens. Maybe you're sweating profusely, or you have a cut in the wrong place, or you're wearing gloves.

In our experience, Touch ID has worked mostly like a charm from the beginning, but we recommend giving your pinky a try if you run into trouble, what with the small surface area of the phone and all. Apple improved Touch ID technology with its latest models, making it even faster. In any case, after we became accustomed to using Touch ID, going back and typing passcodes seemed antiquated. However, you still need to type a passcode when you first power up your phone after it has been turned off.

Continuing the setup

Your iPhone setup continues. You get to determine whether you want to call on Siri, your loyal loquacious iPhone genie. We tell you all about Siri in Chapter 5, so we'll skip the details here.

Apple makes another couple of requests at this stage. Apple would love for you to have your iPhone automatically send the company daily diagnostic and usage data, including your location. Armed with such information, Apple says it can better improve the company's products and services. We think the request is harmless. In addition, you can also assist app developers by permitting Apple to share with them crash data and statistics on how you use their apps. If you find either prospect unappealing, just say no — or to be more precise, choose Don't Send or Don't Share, respectively.

Thanks to the extra screen real estate on the 4.7-inch iPhone 6, 6s, and 7, and the 5.5-inch 6 Plus, 6s Plus, and 7 Plus (compared to the 4-inch SE), Apple includes another step to the setup process: You can choose a zoomed view (with larger text and controls) or a standard view that fits more items on the screen. Don't worry too much about this setting at this stage. You can always change the Display Zoom setting later in Settings. (If you do, you must restart your phone.)

From then on, you're pretty much good to go.

If you want to give your phone a quick nap, you can put it to sleep by pressing and quickly letting go of the sleep/wake button. To turn the device completely off, press and hold down the sleep/wake button until a translucent Slide to Power Off button appears at the top of the screen. Drag the button to the right. Tap Cancel (X) if you change your mind.

Locking the iPhone

Carrying a naked cellphone in your pocket is asking for trouble. Unless the phone has some locking mechanism, you may inadvertently dial a phone number. Try explaining to your boss why he or she got a call from you during your 4 a.m. jog. Fortunately, Apple makes it a cinch to lock the iPhone so this pocket-dialing scenario won't happen to you.

In fact, you don't need to do anything to lock the iPhone; it happens automatically, as long as you don't touch the screen for one minute. (You can change this duration in iPhone Settings, a topic in Chapter 14.)

TRAINING YOUR DIGITS

We've already told you how to train your digits to use Touch ID. Well, your fingers play a prominent role throughout your iPhone experience, tapping, flicking, pinching, and dragging. Fortunately, these gestures are not challenging, so you'll be mastering many of the iPhone's features in no time:

- **Tap:** Tapping serves multiple purposes, as becomes evident throughout this book. You can tap an icon to open an app from the Home screen. Tap to start playing a song or to choose the photo album you want to look through. Sometimes you'll double-tap (tapping twice in rapid succession), which has the effect of zooming in (or out) of web pages, maps, and emails.
- **Flick:** A flick of the finger on the screen itself lets you quickly scroll through lists of songs, emails, and picture thumbnails. Tap the screen to stop scrolling, or merely wait for the list to stop scrolling.
- **Pinch/spread:** On a web page or picture, pinch your fingers together to shrink the image, or spread your fingers apart to enlarge the image. Pinching and spreading (or what we call *unpinching*) are cool gestures that are easy to master and sure to wow an unfamiliar audience.
- **Drag:** Slowly press your finger against the touchscreen and then, without lifting your finger, move it. You might drag to move around a map that's too large for the iPhone's display area.

A gesture called *reachability* helps owners of the larger-display iPhones. By gently double-tapping (but not double-pressing) the Home button, the top portion of the screen shifts toward the bottom of the display so that you can tap icons and items that were previously out of reach. The purpose of this gesture is to help you use these phones with one hand.

Can't wait? To lock the iPhone immediately, press the sleep/wake button. To unlock it, you can press the sleep/wake button again. Or press the Home button on the front of the screen. Either way, press the Home button again to open your phone, a change that arrived with iOS 10. Prior to iOS 10, the words *Slide to Unlock* appeared near the bottom of the screen and to unlock the device, you dragged your finger to the right and then, in some cases, also entered a passcode, another topic reserved for Chapter 14. If you set up the iPhone to use Touch ID, you can merely press your finger against the Home button to unlock it.

The iOS 10 software upgrade brought another feature to the most recent iPhones: the capability to wake up the screen merely by raising the phone. The raise-to-wake feature, which you can turn on or off inside Settings, requires an iPhone with an M9 coprocessor or later, which as of this writing means the iPhone 6s,