TidBITS Publishing Inc.

Take Control of   v1.0

Your iPhone Apps

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Read Me First

Welcome to *Take Control of Your iPhone Apps,* version 1.0, published in November 2009 by TidBITS Publishing Inc. This book was written by Jeff Carlson and edited by Tonya Engst.

This book gives you all the information you need to take advantage of what I consider to be the most important and interesting of the iPhone's built-in apps, a surprisingly deep collection of software that has overturned the notion of what a "smartphone" can be.

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UPDATES

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BASICS

In reading this book, you may get stuck if you don't know certain fundamental facts about operating the iPhone or if you don't understand Take Control syntax for things like working with menus or finding items in the Finder. Please note the following:

- **Home screen:** Where I describe going to the Home screen, I'm referring to the environment used to launch apps, accessed by pressing the Home button located just below the screen. The "Home

screen" can include several screens worth of application icons, so on occasion I mention going to the initial Home screen, which is the screen that corresponds to the left-most navigation dot at the bottom of the Home interface. (From any Home screen, press the Home button again to get to the initial Home screen.)

- **Finding settings:** I sometimes refer to preferences in the Settings app that you may want to adjust. To open Settings, press the Home button to go to the Home screen, and then tap the Settings icon. When the Settings app opens, tap the name of the pane or application whose settings you want to adjust. I refer to these panes using an abbreviated notation such as "go to Settings > Photos," which brings up the preferences for the Photos app.

- **Tap, swipe, and rotate:** The iPhone is an incredibly tactile device. I often mention tapping an interface item, such as "tap the camera button," but there are also times when a double-tap is required, which is a swift succession of two taps on the screen. *Swiping* refers to moving a finger across the screen in a specified direction. And *rotate* involves turning the entire iPhone or iPod touch 90 degrees, which shifts from portrait (tall) to landscape (wide) orientation.

- **iPhone versus iPod touch:** Although the title of this ebook is *Take Control of Your iPhone Apps*, nearly all of the information here applies equally to the iPod touch as well as the iPhone. Because the iPod touch lacks a cellular modem or camera, the sections specific to the Phone app and the Camera app won't apply to the iPod touch. I note important differences between the two—and between iPhone models—where appropriate throughout the book.

URLs not working? *In Snow Leopard's Preview, longer URL links may appear to be broken. To avoid this Preview bug, try clicking the last character in the URL.*

Introduction

I was conflicted about the introduction of the iPhone. On one hand, Apple had finally made a cell phone that people would *want* to use instead of feel forced to put up with. It exhibited Apple characteristics such as an obsessive level of attention to detail, intuitive controls, and ease of use. Its touchscreen was large and beautiful, and it didn't require a stylus that would break or disappear at some point. And the operating system could be upgraded, so you weren't stuck with outdated software the day you bought the device.

But on the other hand, it was expensive ($600 for the first 8 GB model) and I figured my Palm Treo at the time could do most of what the iPhone offered, even if the Palm OS was starting to get creaky, the screen was small, and the Web browser almost unusable. I didn't *need* an iPhone, even if I really *wanted* one.

That sentiment lasted about two months before I finally gave in and bought my own iPhone. That purchase (made just before Apple knocked the price down to $400, darn it) turned out to be one of the best technology acquisitions I've ever made—and believe me there's a lot of competition in that category. I use my iPhone constantly: reading and replying to email, looking up information in Safari, checking in with my wife (on her iPhone) via text messages, reading articles I've saved for later, playing games, capturing and publishing photos, and much, much more.

All of those tasks rely on software, which is the iPhone's hiding-in-plain-sight secret. For years, the software running cell phones has been an afterthought (and it shows). The iPhone and iPod touch feature impressive hardware, but it's the software that makes the difference.

This ebook is about how to take control of the core apps included with the iPhone OS (plus one free downloadable app, Remote). Not every app is included here—some are either straightforward (like the Weather app) or far less interesting than others (like the Stocks app)—but at least 90 percent of your interaction with the built-in apps on an iPhone or iPod touch is covered here.

iPhone Apps Quick Start

This ebook begins with a look at a few important shared iPhone OS features and then continues with sections that explore what I consider to be the most important apps provided by Apple. Feel free to jump into the ebook at whatever location interests you the most, since most of the sections are independent.

Learn about key shared features:

- Find out how to Sync Essential Information (p. 8), such as contact and calendar data.

- Learn about Location Services, the feature that helps your device determine its location, in Mark a Spot with Location Services (p. 14).

Use your apps:

- Organize your schedule using the Calendar app (p. 17).

- Create and manage contact information, and place and receive phone calls on the iPhone, in Phone and Contacts (p. 23).

- View Web pages, set up AutoFill for frequently used forms, manage bookmarks, create Web Clips, and browse safely using Safari (p. 35).

- Set up email accounts, and check and send messages using Mail (p. 46).

- Send and receive short text and media (MMS) messages on the iPhone using the Messages app (p. 62).

- Learn how to use Camera (p. 68) to take photos and videos with an iPhone, and how to View Your Photos and Videos (p. 75) on an iPhone or iPod touch.

- Never get lost again! (Battery life permitting.) Discover your location, find nearby businesses and other destinations, and get directions using the Maps and Compass apps (p. 84).

- Play your music, videos, and other media using the iPod app (p. 97).

- Control iTunes media playback on a computer, or control an Apple TV, using the Remote app (p. 111).

Shared
iPhone OS Features

When Steve Jobs presented the keynote address at Macworld Expo in 2007, he declared that Apple was releasing "three revolutionary products": a widescreen iPod, a mobile phone, and an Internet communication device. And, in typical Jobs keynote fashion, after sufficient buildup he revealed that those features were all coming in one device: the iPhone.

Although the iPhone and iPod touch run scores of applications, the iPhone OS is very much a unified system with shared functions that overlap. Take a photo and attach it to an email message, for example, or make your geographic location available to the Maps app and others. This chapter covers syncing information with the computer and using Location Services, two features on which several applications rely. Throughout the book, I also point out areas where some apps share specific information with each other.

Complete your library: To keep this book relatively economical in size and scope, I don't cover every aspect of the features in this section. However, Ted Landau's Take Control of iPhone OS 3 *has more information about both topics in this section, and Michael E. Cohen's* Take Control of Syncing in Leopard *and* Take Control of Syncing in Snow Leopard *tackle all manner of syncing between an iPhone or iPod touch and a Mac.*

SYNC ESSENTIAL INFORMATION

Synchronizing data turns out to be difficult business, as years of attempts by Apple and other companies have proven. However, as more of our important data has become digital, synchronizing it—between handheld devices and desktop computers alike—has become a crucial function. You not only want a copy of your contacts, calendars, notes, and email accounts handy wherever you are, you want the most current versions of that data. The iPhone and iPod touch support two basic

techniques for syncing essential information, which I compare below in **Table 1**. I also cover each in turn, next.

Table 1: Pick a Syncing Method		
Method	**Pros**	**Cons**
iTunes	• Free. • As your essential data syncs, your media—songs, podcasts, movies, apps, and so on—sync too. • Backups and software updates can occur when you sync. • You can sync all contacts or events, or you can sync only specific groups.	• Your device and computer must be in the same place and connected with the device's USB sync cable. • You must remember to connect.
Over-the-air (MobileMe, Microsoft Exchange)	• Works even if the device and computer are not in the same location. • Works automatically.	• You must pay for a MobileMe subscription. • Your iPhone battery may run down slightly faster. • Exchange requires Exchange Server 2007 (i.e., ask your company's system administrator to see if you can get set up). • If you sync Address Book, you must sync all contacts. • Doesn't sync media. • No backup is made.

Note: If you use Microsoft Entourage 2008 to manage your schedule, see the following document for instructions on setting up Entourage syncing: http://support.apple.com/kb/HT1670.

Sync via iTunes

With the device connected, go to iTunes and click its name in the sidebar. Click the Info tab, and in the appropriate section, check your desired sync option (for example, under Calendars check "Sync iCal calendars.") You can choose to sync all items or, by selecting the "Selected *[data type]*" radio button, choose which calendars or contact groups are transferred.

Syncing notes and mail accounts is slightly different from syncing contacts and calendars:

- Notes created in the Notes app on the device are synchronized and stored in the Mail program under Mac OS X or in Microsoft Outlook under Windows. iTunes provides just the option to enable or disable Notes syncing.

- Syncing mail *accounts* doesn't actually transfer any email messages. The control in iTunes lets you specify which of your email accounts to sync, and then transfers the account information between the device and the computer. See Set Up Mail for more information.

Note: You can configure media syncing on the various media-related tabs that appear in iTunes when you select your device in the sidebar. Later in this book, you can learn how to sync iPod-related media (audio and video) in Sync Your Media, p. 97. and find steps for how to Sync Photos from Your Computer, p. 74.

Sync via MobileMe

MobileMe subscribers can take advantage of over-the-air syncing, which updates changes to events (and contacts and email) almost immediately, instead of syncing only when connected to the computer via USB. Setting up MobileMe syncing happens on the iPhone or iPod touch, not on the computer (presumably you've already configured your Mac to sync with MobileMe; if not open the MobileMe pane in System Preferences and configure the options in the Sync view).

Wait! *Before setting up MobileMe sync, I highly recommend that you back up your calendar and contact data, just in case something gets mangled in the process. I know, that doesn't instill a lot of confidence, but as I said, syncing can be tricky business. It's much easier to delete garbled information and revert to your backup than try to untangle a mess later. In iCal, choose File > Export > iCal Archive. In Address Book, choose File > Export > Address Book Archive.*

1. Go to the Settings app and tap the Mail, Contacts, Calendars button.

2. What to do next depends on your situation:

   • If your MobileMe account appears under Accounts, tap it and skip to Step 3.

   • Otherwise, add your account:

     1. Tap the Add Account button.

     2. From the list of available services, tap the MobileMe button.

     3. Enter your MobileMe sign-in information in the fields.

     4. Tap the Save button. Your device connects to the MobileMe server to register itself under your account.

3. On the next screen, enable the data types to sync (**Figure 1**).
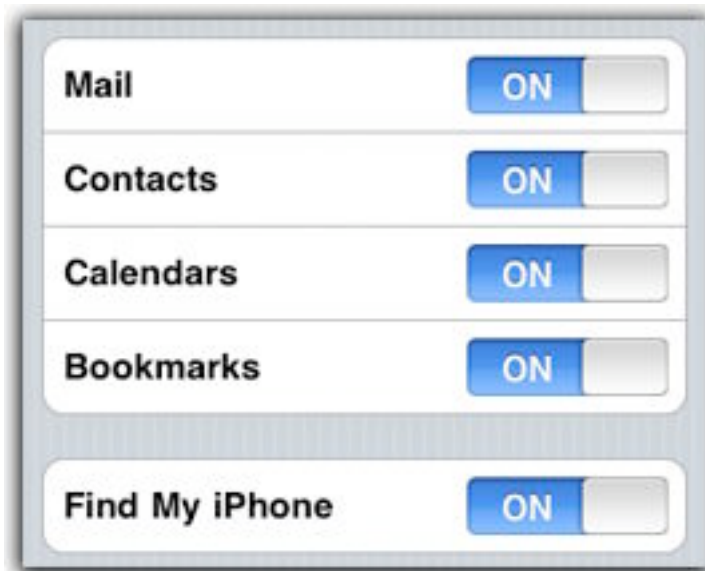
Figure 1: Enabling MobileMe services syncs the data over the air.

Remember the Find My iPhone feature: *While you're at this screen, turn on the Find My iPhone feature, which is disabled by default. With it enabled, you can go to* http://www.me.com/ *and view your iPhone's location on a map, instruct it to play a chime and message to help you locate it, lock its keypad remotely, or securely wipe its data if you believe the phone has been stolen. This feature alone, introduced in iPhone OS 3.0, swelled Apple's ranks of MobileMe subscribers.*

4. Tap the Done button to finish configuring the device for MobileMe.

After a few minutes, your data appears in the appropriate app—Mail, Contacts, Calendar, or Safari. It's continually synchronized between the iPhone or iPod touch, computer, and online at me.com (and on any other computers or devices you've set up).

What If I Have More than One MobileMe Account?
It's possible to add more than one MobileMe account to an iPhone, but you can sync only one account's calendars, contacts, and bookmarks at a time. However, you can keep multiple Mail accounts active, although only one of them can have messages pushed to the device. If you try to activate a second set of MobileMe calendars, for example, you're given the option of keeping the existing calendar data (severing its link to the sync servers), or deleting the data in favor of the new account's calendars.

Sync via iTunes *and* MobileMe

Before iPhone OS 3.0, you could sync using iTunes or MobileMe, but not both. Now you can mix and match your data to better suit your needs.

For example, suppose you've already set up MobileMe calendar syncing and you don't mind synchronizing all your calendars with the iPhone, but you want to sync only business contacts with your computer. In this case, make sure that the Contacts option in Settings > Mail, Contacts, Calendars > *[your MobileMe account]* is off. Then, attach your iPhone to your Mac, select it in the iTunes sidebar, go to the Info tab, and check "Sync Address Book contacts." Next, select "Selected groups," and then choose a group. Lastly, click the Sync button to apply the changes to the iPhone.

Another use for this technique is to correct an ongoing frustration. On the Macintosh, iCal creates a calendar called Birthdays that gets its information from the Birthday field of contacts in Address Book. But that calendar isn't transferred to the iPhone if you're using MobileMe sync. To correct this oversight, check "Sync iCal calendars" on the Info tab in iPhones and set just the Birthdays calendar to be transferred (**Figure 2**).

Figure 2: Syncing the elusive Birthdays calendar.

Now, events from the other calendars are still updated over the air as soon as changes are made, and the Birthdays calendar is updated when you sync with iTunes.

Tip: To display the Birthday field for a card in Address Book, choose Card > Birthday. You can activate the Birthday calendar in the General pane of iCal's preferences; the calendar will appear under Subscriptions in the iCal sidebar.

Choose a Sync Date Range

Do you frequently need to look up details from past events? To minimize the amount of data that's synchronized (and therefore provide faster syncing), the iPhone doesn't normally store all of your events. You can change the range, however:

1. Go to Settings > Mail, Contacts, Calendars.

2. Under the Calendars heading (scroll to the bottom of the screen), tap the Sync button.

3. Set how many past events are synced: 2 weeks, 1 month, 3 months, or 6 months. Or, choose All Events to store everything from your computer calendar.

MARK A SPOT WITH LOCATION SERVICES

A desktop computer tends to stay in one spot, but your iPhone probably goes everywhere you do. The network and GPS hardware built into the iPhone 3G and iPhone 3GS enable the device to discover its location and use that information in many ways. Some are obvious: In the Maps app, you can search for nearby businesses without having to manually enter a starting point; the Camera app can stamp the location into the metadata of every photo you capture, which can then be read by iPhoto or other applications and plotted on a map. And there are novel uses: Apps like Wikitude (http://itunes.com/apps/wikitude, free) determine your location and then activate the iPhone's camera; as you hold the iPhone in front of you, nearby points of interest appear on the screen as if you were wearing a pair of virtual-reality goggles.

The software that enables this merger of iPhone and location data is called Location Services. It provides the information to apps that request it, *but not without your approval*—after all, you don't want just anyone to know your whereabouts whenever your phone is on. The first time an app wants to use location data, you're asked to approve the exchange (**Figure 3**).
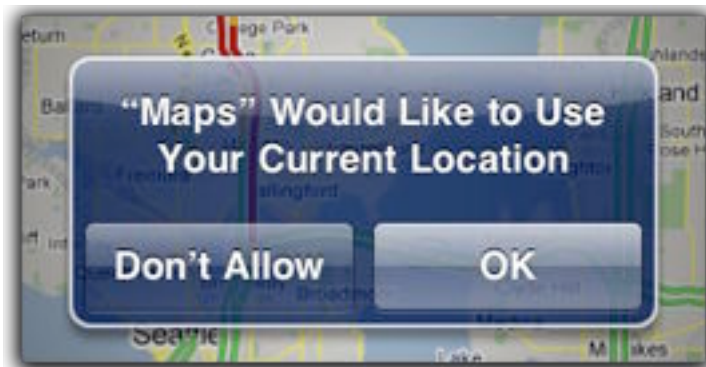
Figure 3: Choose whether an app can use your location data.

All iPhone and iPod touch models can benefit from being location-aware, even those that don't include GPS hardware. Location Services combines data from three sources:

- **GPS:** The GPS chip in the iPhone 3G and iPhone 3GS can pinpoint your location to as close as a few feet, but its accuracy depends on how well it can pick up information from a minimum of two GPS satellites combined with the other methods here, or three or more satellites for highest accuracy.

- **Cellular:** The iPhone also determines its location based on the strength of nearby cellular towers providing phone and wireless data service.

- **Wi-Fi:** The iPhone and iPod touch can determine its location based on nearby Wi-Fi networks. This method isn't as accurate as the others, but does bring location capabilities to the iPod touch.

Original iPhone vs. iPhone 3G and iPhone 3GS

The first-generation iPhone didn't include a GPS receiver, but it can still do a decent job of narrowing down your location (as can an iPod touch that's connected to a Wi-Fi network). The secret ingredient is a service provided by Skyhook Wireless, a company that records the locations of millions of wireless networks. Since a Wi-Fi network typically stays in one spot, that network provides a geographic location. When my original iPhone is connected to my home AirPort network, the iPhone checks the network ID against Skyhook's data and rightly guesses that I'm within AirPort range of my house. (See the *TidBITS* article "iPhone and iPod touch Become Self-Aware" for more information on how it works: http://db.tidbits.com/article/9404.)

Using data from Skyhook and by also determining your location based on the locations of nearby cellular towers, the Maps app can give you a pretty accurate sense of where you are.

Reset Location Services Warnings

If you accidentally tapped Don't Allow when an app asked to use your location, or you decided that you don't want to share that information with an app you earlier approved, you can reset the Location Services

warnings. However, the control is a blunt instrument: you can only reset *all* Location Services notices, which means you'll have to re-allow apps which you've already approved.

Go to Settings > General > Reset and tap the Reset Location Warnings button to clear the slate.

Turn Off Location Services

You can disable Location Services if it's something you don't think you'll use, or if you're concerned about sharing private information. Keep in mind that some features will no longer work, such as the Find My iPhone feature of MobileMe (although you can still send text alert messages, lock the device, or wipe it) or the capability to pinpoint your location in the Maps app.

To disable the feature, go to Settings > General and tap the Location Services switch to Off.

Calendar

After forgetting innumerable obligations, it's gotten to the point that I don't even try to remember events. Everything goes into iCal on my Mac and onto the Calendar app on my iPhone, so I can quickly consult my schedule wherever I am.

VIEW EVENTS

The difficulty with using any handheld device is trying to see as much information as possible on a small screen. Even the iPhone's comparatively large screen can't show everything, so the Calendar app displays events in three views. Tap one of the following buttons to switch views (**Figure 4**):
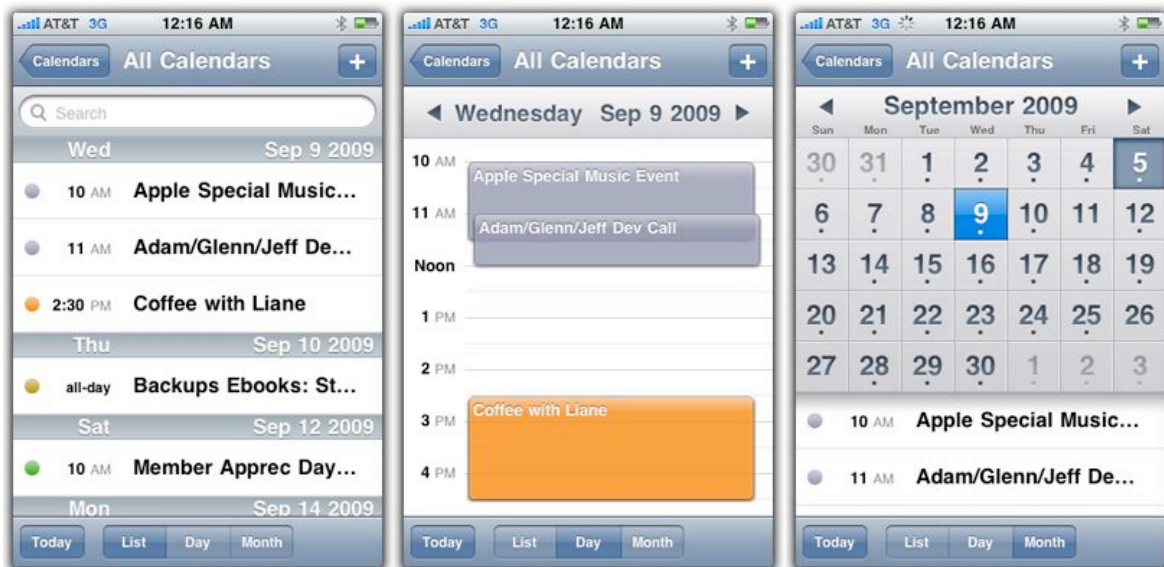
Figure 4: The Calendar's three views: List, Day, and Month.

- **List:** All events appear in a scrolling list.

- **Day:** Events occupy blocks according to their time and duration.

- **Month:** A dot on a day indicates one or more events; the selected day's events appear in the area below the calendar.

Choose Which Calendar to View

From any view, tap the Calendars button at upper-left to view a list of calendars on the device (**Figure 5**). Normally all calendars are visible, but you can view just the contents of one calendar by tapping it, or you can view a calendar group such as All on My iPhone.

Figure 5: View all calendar events together, or tap a single calendar to view only its events.

View Event Details

Simply tap an event in any view to bring up details about the event.

Search for Events

When you know the name of an event but not its date, switch to the List view and perform a text search. Enter a term in the Search field to reveal events that contain that word (**Figure 6**). (The search applies only to Title and Location fields, however, and not notes.) Tap a search result to display the event's details, where you'll also find a Show in Calendar button that takes you to the Day view when tapped.
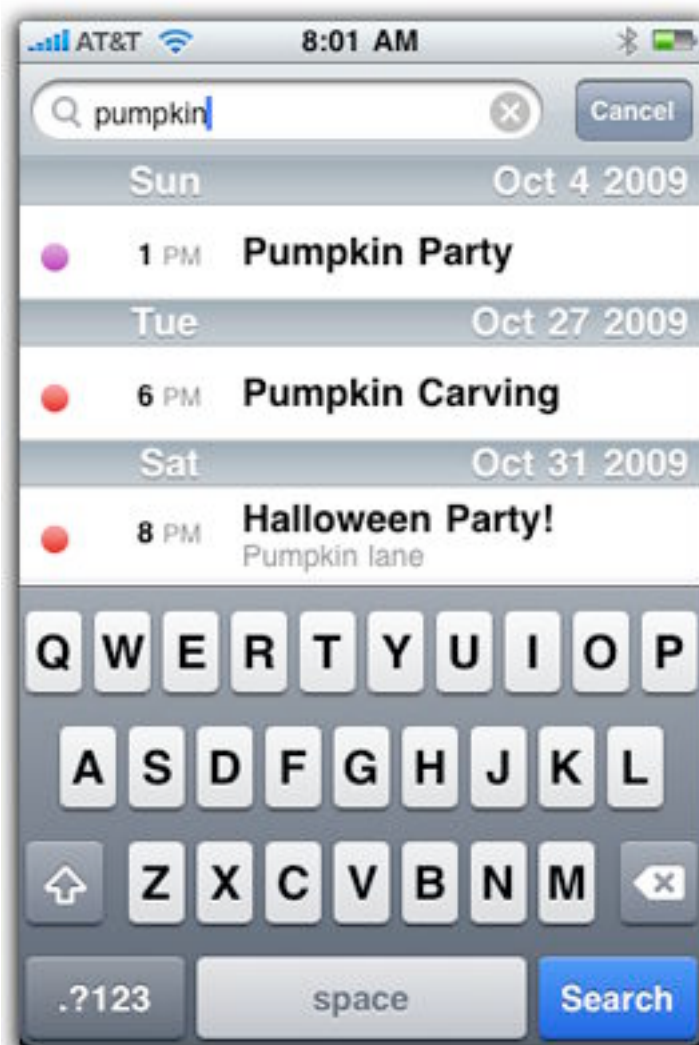
Figure 6: The Search field finds matches in event Title and Location fields.

CREATE A NEW EVENT

Creating a new event in Calendar is fairly straightforward, but you don't have as many options as when you create an event on the computer. Here's the process, with the rough patches (and highlights) clearly marked. Although the number of steps looks daunting, you don't have to enter every bit of information. (**Figure 7** shows the screen with most options filled in.)

Figure 7: Enter information for a new event.

1. In any calendar view, tap the Add Event (+) button.

2. Tap the Title button and enter a title and, optionally, a location, then tap Done.

Location? *The Location field isn't tied into the iPhone's Location Services, although that would be helpful. It's just a note field that displays with the title on any view so you can see where the event takes place. As such, you can put anything there—flight numbers, the name of the person you're going to meet, and so on.*

3. Set a time and date by tapping the Start & End button (labeled as Starts/Ends) and entering that information. If the event doesn't have a specific time range, enable the All-day option. Tap Done.

Tip: You can speed up the date and time selection by first selecting the date you want in the calendar, and then tapping the [+] button. That date is used, and the time is set to the current time.

4. If the event occurs on a regular basis, tap the Repeat field and then select a repeating iteration (such as Every Day or Every 2 Weeks). Tap Done. A new button appears, End Repeat, that lets you specify when the event should stop repeating.

Custom repeat? *The iPhone doesn't provide custom repeating options such as "every second Saturday of each month," as can be found in desktop software. If you specify a custom schedule on your computer, though, the iPhone honors it correctly. However, you can't further customize the schedule (if, say, you need to change it to the third Saturday of each month) on the iPhone.*

5. If you want to be reminded of the event, tap the Alert button and choose how long before the event you wish to be reminded. Tap Done. With one alert activated, Calendar offers to let you set a follow-up reminder using the Second Alert button that appears.

Calendar Alarms vs. Clock Alarms
When I used a Palm handheld, I often created events just to have an alarm (a frequent afternoon entry: "Wake up"). Although you can do that in the Calendar app, the Clock app is better suited to the job: Tap the Timer button and set a duration before the alarm goes off, then tap the Start button. The Clock app also ignores the iPhone's physical mute switch, so you'll hear the alarm even if you put the device into silent mode; Calendar alarms remain inaudible.

6. Tap the Calendar button to specify the calendar to which the event belongs, then tap Done.

    Warning! *The only time you can associate an event with a calendar is when you first create the event; there's no option to make the event belong to a different calendar when editing it later. You can change the calendar later on the computer.*

Tip: To set which calendar is used for new events created on the iPhone, go to Settings > Mail, Contacts, Calendars > Default Calendar and tap on the calendar you want to use.

7. If you want to add any general notes about the event, tap the Notes button, type what you want, and then tap Done.

8. When you've entered the event's information, tap the Done button to add it.

Time Zone Support

In Settings > Mail, Contacts, Calendars > Time Zone Support, you can set the time zone and enable Time Zone Support to display events from other time zones correctly in yours. For example, if you're giving a demo at 1:00 PM EST in New York next week, and you live in Seattle, the event shows in the Calendar app as 10:00 AM PST until you're in the EST time zone. If that is too confusing, turn off Time Zone Support and all events will stay put.

The Time Zone button specifies which time zone should be used for new events created in Calendar. You can't assign a custom time zone to an individual event when you create it.

EDIT AN EVENT

When your schedule changes, you can edit your events (keeping in mind the limitations I mentioned above, such as the inability to specify a different calendar). Tap an event to view its details, then tap the Edit button. Tap any of the buttons to change the information. Or, tap the Delete Event button to remove the event. If the event is repeating, you're given the option to save the changes for just that event only or for future events, as well. (The same applies when deleting an event.)

Phone and Contacts

Looking at all that it can do—taking photos, playing games, running all sorts of applications—it's easy to forget the "phone" in iPhone. Even if you ignore all the other features, the iPhone's Phone app stands above nearly every cellular phone out there. It's driven me crazy for years that placing and receiving phone calls has been such a chore on cheap devices; honestly, if the iPhone offered just the Phone app, I'd still buy it.

iPod touch owners can't make cellular calls, but they do benefit from some of the iPhone's technology. (Apps such as Skype, http://itunes.com/apps/skype, enable Internet-based Voice-over-IP calls for iPhone and iPod touch owners, however.)

The Contacts app lets you keep track of the people and businesses in your life, so you always have their information at hand.

ADD AND MANAGE CONTACTS

Before getting an iPhone, my wife never stored contact numbers in her mobile phone—it was too much of a hassle to enter the information. She (gasp!) dialed the numbers from memory, as crazy as that sounds.

You probably have a lot of contact information stored on your computer already, which can be synced to the iPhone or iPod touch in the same manner as calendars (see Sync Essential Information). Since I've covered the mechanics of syncing, let's jump directly into how to add contacts on the device itself.

Create a New Contact

To make a brand new contact, open the Phone app and tap the Contacts button, or open the Contacts app, and do the following:

Adding a contact to a group! *If you have any groups set up on your iPhone, to make a new contact appear in a group, tap the Groups button in the main contact list and choose the group you want before you create the contact. If you skip this step and later want to move the contact into a group, you can do so in Address Book, on your Mac.*

1. Tap the ➕ button to bring up the New Contact screen (**Figure 8**).
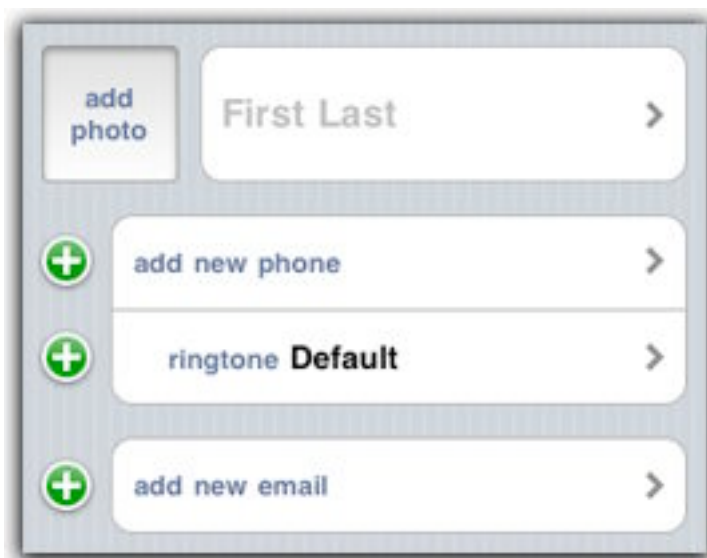
Figure 8: The New Contact screen includes several standard fields, with the option of adding others.

2. Tap the First Last field to enter the contact's name and company name. Tap Save to return to the New Contact screen.

    To include a picture of the new contact: *Tap the Add Photo field. On the iPhone, you can next tap the Take Photo button to capture a picture right there, or tap Choose Existing Photo to use an image from your Photos library.*

3. Enter other pertinent information. For example, tap the Add New Phone field to enter a phone number, and then tap a label (such as Mobile or Work).

    On the iPhone, you can also tap the Ringtone field to pick a custom sound to play when that person calls you.

    Tip: When entering phone numbers, tap the +*# button to include those keys in the number, as well as a pause to allow the other end of a connection time to process an entry. This proves helpful when you need to dial an extension through an automated phone tree system, for example. Let the iPhone enter the extension for you.

    Tip: When adding phone numbers, email addresses, and URLs, you can specify custom labels other than the standard Home or Work. Tap the label field, which reveals several suggested labels like Headquarters and Sales. At the bottom of the list, you can also tap Add Custom Label and create your own.

4. To enter information in fields that don't normally appear, tap Add Field. In the Add Field screen, you'll find options such as Nickname, Job Title, Birthday, and Note. The Date option also includes a label field so you can specify that a date is an anniversary, for example, or any other custom label. Add Field is also where you can enter text in a Note field.

5. Tap Done to finish creating the contact.

Add a Contact from Other Apps

The iPhone OS opens the Contacts database to other programs, which makes adding new contacts and updating existing ones easy. Here are a few examples:

- If you receive a vCard (.vcf) attachment in a message in the Mail app, tap it to view its details, then tap the Create New Contact or Add to Existing Contact button.

- When viewing info about a location in Maps, tap Add to Contacts.

- In the Phone app's Keypad screen, tap the ⊞ button to add the current number.

- Also in the Phone app, viewing information about a recent incoming call or voicemail offers the Create New Contact and Add to Existing Contact buttons (these buttons appear only if the data isn't already in your Contacts list).

Make a Contact a Favorite

On the iPhone, you can build a list of favorite contacts as a modern-day "speed dial" list for frequently called numbers. There are two methods for doing this:

- Tap the Favorites button to view the list and then tap the ⊞ button. Choose a contact and then tap the phone number you want to add.

- When you're viewing a contact's information, tap the Add to Favorites button.

To reorder the contacts in the Favorites list, tap the Edit button and then drag the thumb tab at the right edge of a contact's name. The edit mode on this screen also allows you to remove items: tap the ⊖ button and then the Delete button. Doing so removes the contact only from the list, not from the Contacts database.

Locate a Contact

I currently have 719 entries in my Contacts database, so it's unrealistic for me to swipe, swipe, swipe to scroll through the list (unless I'm asking for a repetitive strain injury—which, for the record, I'm not). Instead, drag your finger down the alphabet at the right edge of the screen to jump to specific letters (**Figure 9**, next page).
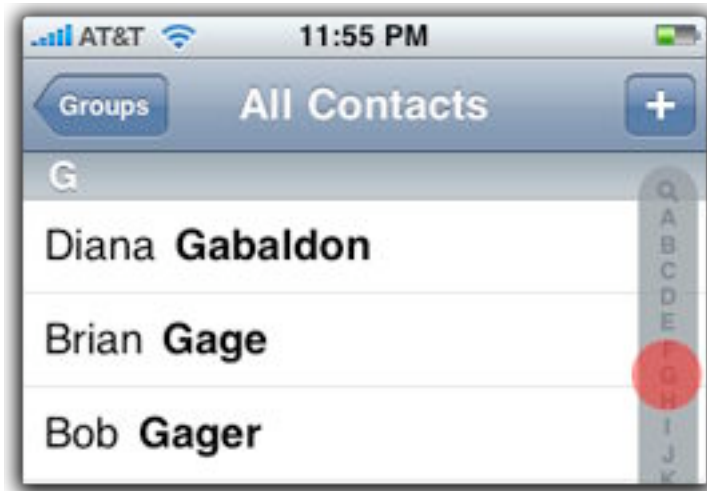
Figure 9: The red dot indicates my finger position when dragging along the alphabet column.

You can also enter text into the Search field at the top of the list (**Figure 10**)—tap the status bar to jump to the top of the list. Matches appear from *most* contact fields (for example, the Notes field is ignored).
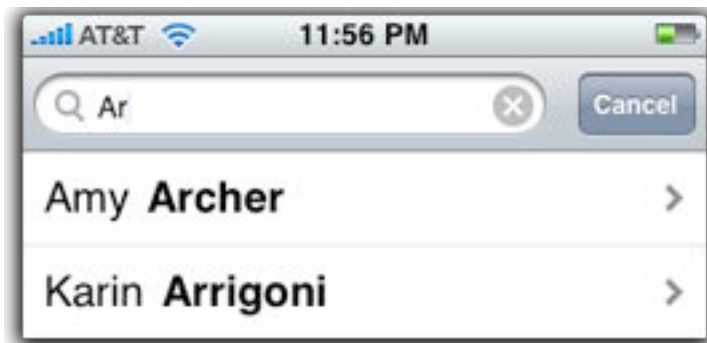
Figure 10: A list of results appears as soon as you start typing.

Tip: Don't forget: You can also find a contact by performing a Spotlight search from the Home screen. Swipe right at the first Home screen or press the Home button once, pause, and press it again. Enter a contact's name or other information in the search field.

Edit a Contact

When looking at a contact's information, tap the Edit button to change any of the fields. The standard ⊖ button appears next to each one; tap it and then tap Delete to remove the item. Or, tap the item itself, such as a phone number, to change it. If you want to delete the entire contact, scroll to the bottom and tap the Delete Contact button.

Deleting Many Contacts at Once

Unfortunately, there's no way to remove many contacts at once on the iPhone or iPod touch. On the other hand, I know many people who use down time—waiting in line, sitting on a bus, waiting for something to finish—to cull their contacts, one by one. Think of it as a Zen exercise and before you realize it, all your old contacts will be deleted. (Or, you could delete the entries on your computer and then sync the device if you want to skip the personal growth lesson.)

Tip: Tap a contact's address field to open that location in the Maps app (see Maps and Compass).

MAKE PHONE CALLS

I think one of the reasons for the iPhone's phenomenal success is that finally—finally!—someone Got It Right. The engineers at Apple clearly sat down and said, "There must be a way to handle phone calls that doesn't make us want to throw the phones into the nearest body of water." The Phone app above all does one thing well: it makes the options for placing calls and handling them easy to understand.

Tip: Did you forget your own phone number? (You probably don't call yourself, so it's understandable that this info would slip your mind.) Swipe down in the Contacts screen to reveal your number, located just above the Search field.

Initiate a Call

To place an outgoing phone call, do one of the following:

- **Locate a Contact:** Bring up the Contacts list and tap the name of the person you want to call (**Figure 11**, next page). Tap a number to dial it immediately.

Figure 11: Tap one of the numbers to call the contact.

* **Dial directly:** If you have just a phone number, tap the Keypad button and tap out the number you're calling (**Figure 12**). The iPhone doesn't dial the number until you tap the Call button, so you can tap the Backspace button to correct any typos.
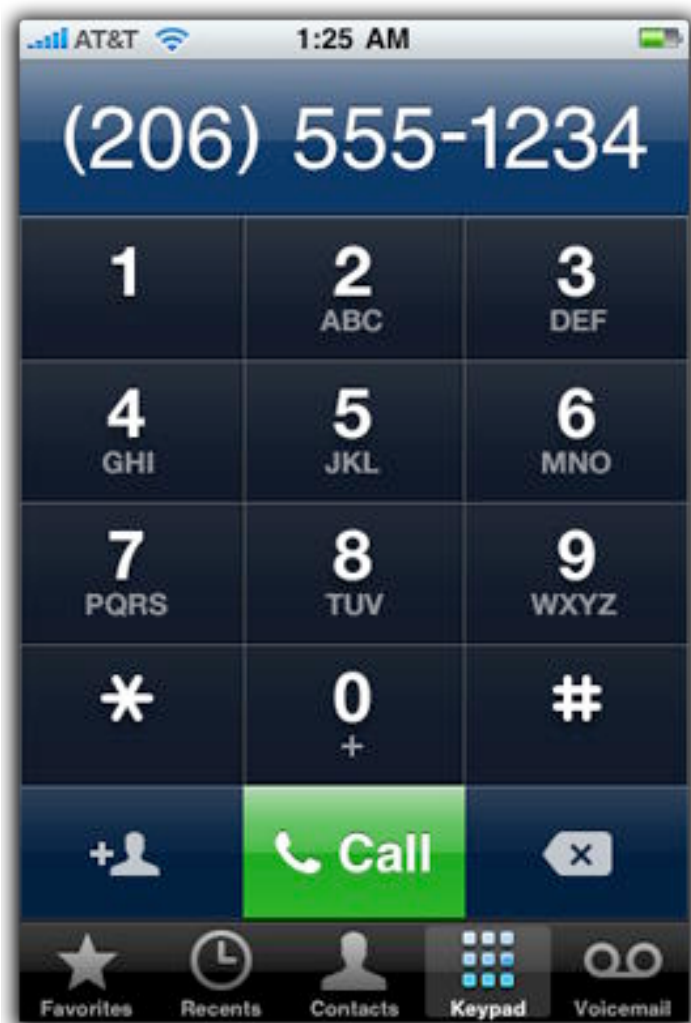
Figure 12: Dial numbers the old-fashioned way by tapping digits.

- **Voice Control (iPhone 3GS only):** Press and hold the Home button for 2 seconds until the Voice Control screen appears. After the tone, say "Call" or "Dial" and speak the name of a person you wish to call. If multiple numbers are found, you'll be prompted to speak the label of the number you want. You can also speak just the numbers to dial. Voice Control also works by pressing and holding the center control on the included headphones.

Faster voice control: If you know which number to call, speed up Voice Control by saying something like, "Call Kim Carlson mobile."

Receive a Call

This part isn't complicated: When a call comes in, tap the Answer button to accept the call. You can also tap the Decline button to send the caller to your voicemail.

What's not obvious are two shortcuts I use frequently. If you're not in a position to answer a call, press the power button on the top of the phone once to turn off the ringer. Better yet, press the button twice to send the caller directly to voicemail.

Handle Calls in Progress

While you're participating in a phone call, you can still use other functions of the iPhone, including running applications, but applications that rely on an Internet connection may or may not work:

- The iPhone 3G and iPhone 3GS can also use Internet functions such as email and Web browsing in the middle of a call when connected to a 3G network, but not when they are connected to an Edge network. Look for an E or 3G icon next to the carrier name.

- The original iPhone can access the Internet or be on a call, but not both, because it offers only Edge Internet access.

A green bar at the top of the screen indicates that you're on the phone (**Figure 13**); tap it to return to the Phone app.
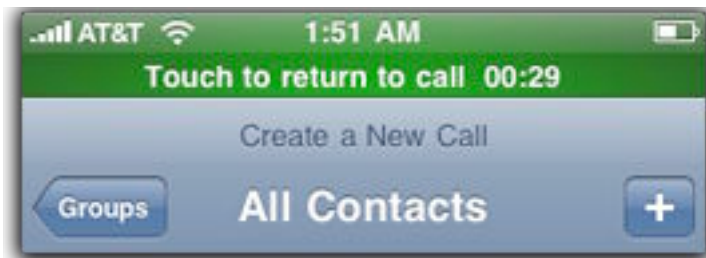
Figure 13: The green bar appears on every screen when a call is in progress.

During a call, you can also use the Phone app's large buttons to do the following:

• **Keypad:** Tap this button to display the keypad for entering numbers, such as when interacting with automated phone systems.

• **Mute:** Silence your portion of the call so that others on the line can't hear you. I think of this as the Sneeze button. You can still listen to what's being said on the call.

• **Speaker:** Tap this button to enable the speaker for hands-free conversation.

• **Hold:** Unlike the Mute button, the Hold button disables *both* the microphone and speaker, without disconnecting the call.

• **Add Call:** Tap this button to add someone else to the conversation. After tapping it, the first caller is put on hold while you locate the other caller in your Contacts list or dial the number. After you've established a connection, you'll have two active conversations, only one of which you can interact with at a time. To start a conference call with both callers, tap the Merge button.

During the conference call, tap the ⊙ button to view a list of participants. On the Conference screen (**Figure 14**, next page), you can tap the ⊙ button (which turns into an End Call button that you must tap again) to disconnect a person, or tap the Private button to mute the other participants and speak only to that person. Tap the Back button to return to the main calling screen.

Figure 14: View a list of conference call participants.

- **Handle an Incoming Call:** If a call comes in while you're already on the phone, tap the Hold Call + Answer button to accept the new call and put the current call on hold. You can also opt to not answer and send the caller to voicemail by tapping Ignore. Or, tap End Call + Answer to end the current call and accept the incoming one.

A use for the Contacts app: It turns out the Contacts app isn't completely redundant on the iPhone. When you're in the middle of a call, use Contacts to look up information about another person; the Phone app doesn't let you access contacts during a call.

View Information about a Call

Tap the Recents button to view a list of calls you've made and received, including calls you missed, marked in red. If a number matches an entry in your Contacts database, that person's name is displayed instead of the number.

Tap the ⊙ button to view information about the call, including the time and duration (**Figure 15**).

Figure 15: View a contact's recent call history.

CHECK YOUR VISUAL VOICEMAIL

Apple and AT&T developed a feature appreciated by anyone who's spent grueling amounts of time navigating a phone tree for voicemail. Visual Voicemail presents your messages as items in a list that can be played by simply tapping one. Tap the Voicemail button to view messages.

If Visual Voicemail isn't working: Dial your own phone number to use the annoying but ultimately functional phone tree version.

Record a Greeting

If you want a custom greeting to play when callers reach your voicemail, tap the Greeting button. On the next screen, choose the Custom option and tap the Record button to record your message.

Tap the Play button to review the message, and if it sounds good, tap Save to return to the Voicemail screen.

Listen to Your Messages

New messages appear with a blue dot in the Voicemail list. For a new message, tap the contact name or number to play it back. To replay messages you've previously heard, tap a message to select it, and then tap the ▶ button. The button becomes a pause button, as you can see in **Figure 16**, on the next page.

Here's how to handle your listening experience:

- If the caller is droning on: Skip ahead by dragging the slider.

- Make a callback: Tap the handy Call Back button.

- Remove the message: Tap Delete to remove the message.
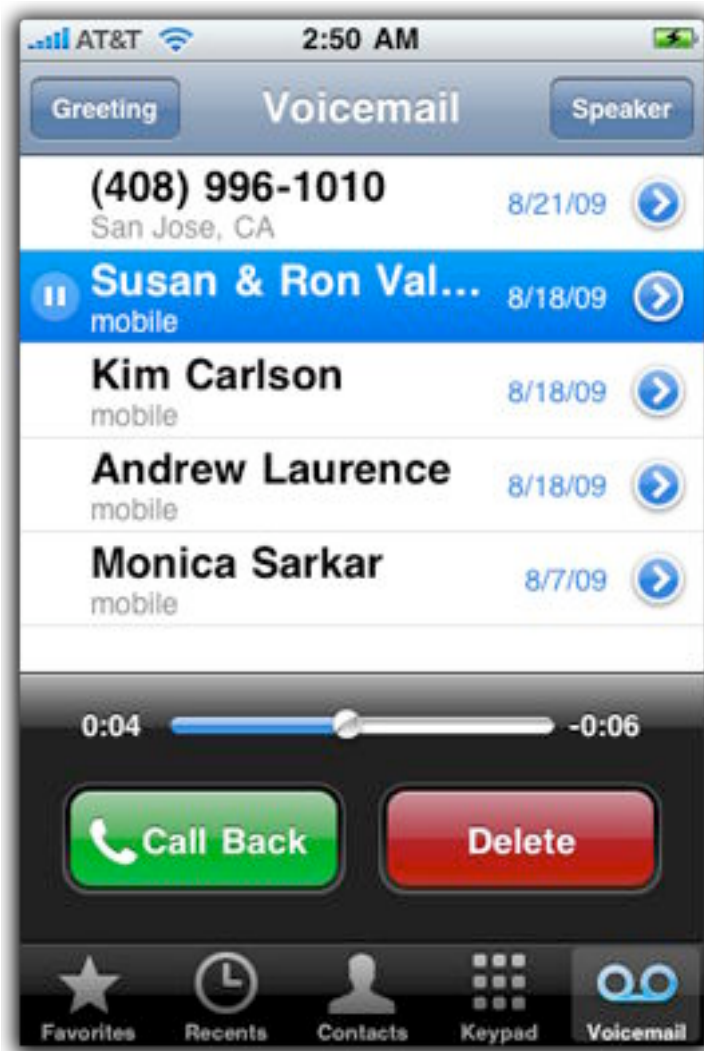
Figure 16: Why listen to playback options? Simply tap a message to hear it.

Safari

Until the iPhone, the idea of viewing Web pages on a phone was laughable—or maybe "painful" is a better word. Rarely would you see the page as a desktop browser would display it, which meant that half your time was spent trying to differentiate between content, navigation, and advertising (wait, that sounds like a lot of Web pages in any browser…). So when Apple demonstrated that Web pages actually looked like *Web pages* on the iPhone, I imagine a lot of people (myself included) felt as if they'd been unshackled from bad design.

Safari on the iPhone (which is sometimes called *Mobile Safari* to differentiate it from the Mac Web browser) is still more limited than what you'll find in a browser under Mac OS X or Windows, but at least it's not painful.

VIEW WEB PAGES

Open the Safari app and tap the address bar (the field at the top) to type a URL. As you type, sites you may have recently visited or which are in your bookmarks (more on those in Create and Manage Bookmarks) appear as suggestions below the field (**Figure 17**); tap one to go immediately to that address. Or, after typing a URL, tap the Go button to load the page.


Figure 17: Tap the suggestion below the address field to minimize the amount of typing you need to do.

Type less, surf more: You don't need to type http:// before every address, and in most cases you can also omit www. and .com. Typing apple/support, for example, loads http://www.apple.com/support/.

Tip: As you can see in **Figure 17** (previous page), Safari rotates the display when the iPhone is held horizontally. I prefer this orientation for most Web pages, because it makes the text more readable, and because the iPhone is more comfortable in my hand.

*Go mobile: Many sites recognize that you're viewing them from an iPhone and display content that has been modified for better viewing on a handheld (**Figure 18**); Safari, like other Web browsers, identifies itself to Web servers. If that doesn't happen automatically, try putting m or mobile in place of www in the site's URL, such as mobile.nytimes.com.*
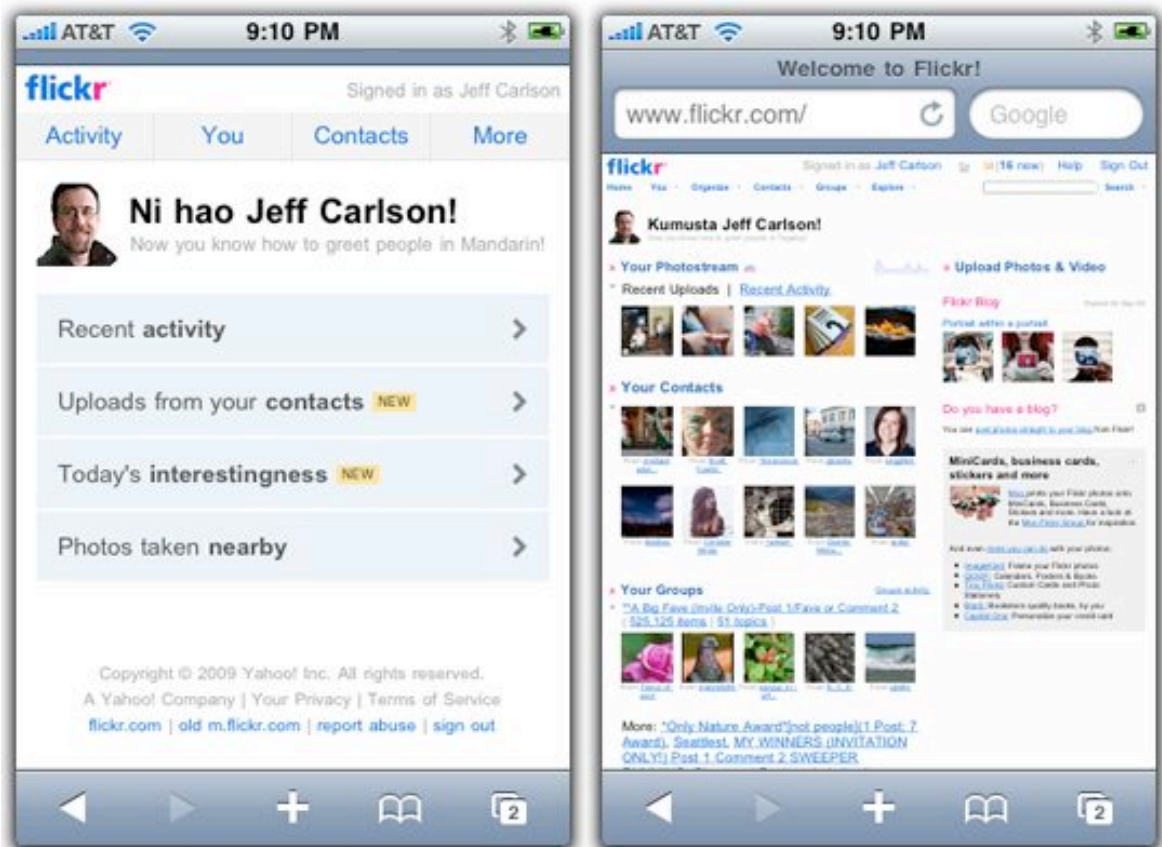
Figure 18: Flickr's server sees that you're using an iPhone and provides a version optimized for Safari (left). Compare that with the regular site as it appears in Safari (right).

Navigate a Web Page

You're probably familiar with the basics of viewing content on the iPhone—swipe to scroll, pinch and expand to zoom, and so on—so I'm going to jump to the best navigation technique in Safari: *double-tap*.

Typically, double-tapping zooms (see View Your Photos and Videos regarding photos, for example), but Safari is smart. It analyzes the structure of the page's code and makes a good guess about which content you want to view better. The result is that double-tapping an article, for instance, usually zooms the page so that the article's body text is visible while ads and other material are pushed off-screen.

Tip: To jump to the beginning of the page without scrolling manually, tap the bar at the top of the screen.

Also worth mentioning is the Reload button, the circular arrow at the right edge of the address field, because it doesn't really resemble other buttons in the Safari interface. Tap it to reload the contents of the current page.

Open Another Web Page

Safari can have up to eight Web pages open at a time, which is good for keeping track of several items at once. Open a new page using one of two methods:

- Tap the ⬚ button in the lower-right corner (which also displays the number of open pages when there are more than one), then tap the New Page button that appears in the toolbar.

- Tap and hold a link on a Web page to bring up a pop-up menu with options. Tap the Open in New Page button.

Load Now, Read Later with Instapaper

When I come across something I want to read later, instead of loading it in a new Safari window, I use Instapaper (http://itunes.com/apps/instapaper, free or $4.99 for a pro version). It's a great free service that not only collects your reading material in one place, but also converts the material to plain text so you can read it without distractions. Pages loaded into Instapaper are also stored on the iPhone, so you can read them when you're in an area without Internet access (like on an airplane).

No Flash

One notable difference between Safari on the iPhone and desktop Web browsers is the lack of support for Adobe's Flash technology. The common wisdom is that Flash is too resource-intensive for the iPhone, and would unacceptably drain the battery charge. Also, according to Apple, Web plug-ins like Flash account for most browser crashes under Mac OS X, and since the iPhone is built upon Mac OS X, I can imagine that Apple doesn't want a third-party technology disrupting the user's experience with the iPhone. I suspect that Flash will appear on the iPhone at some point, but Apple is in no hurry, and neither am I.

Safari and WebKit

When you tap a URL in many third-party applications, it appears to take you to the Web via Safari, but in fact you're still in the same app. The program is using *WebKit,* which is Safari's underlying Web engine, to display the Web site without switching to the Safari app. If you're viewing a Web page and you don't see the familiar Safari controls, you're probably in another app. Most such apps include a button that lets you open the page in Safari.

Perform a Web Search

Enter something into the search field to the right of the address field to perform a search using Google (as opposed to first loading the Google home page and searching there).

You can also use Yahoo as your search engine of choice. In the Settings app, go to Safari > Search Engine and choose Yahoo.

Search the Contents of a Page

Unfortunately, you can't search the contents of a Web page— at least, not using Safari's features. However, you can do it by adding a bookmarklet, a clever bit of JavaScript code that is loaded like a Web page. Here's how to set it up:

1. In Safari on your computer (not on the iPhone), go to http://www.lifeclever.com/17-powerful-bookmarklets-for-your-iphone/.

2. Locate the "Find in this page" link, and drag it to Safari's Bookmarks Bar. (Don't click the link; just add it to your bookmarks.)

3. Make sure bookmark syncing is enabled (see Sync Bookmarks, two pages ahead), and then sync the iPhone to your computer.

4. In Safari on the iPhone, choose the bookmark from the Bookmarks list. You can then perform a text search and view the highlighted results, just as you do in the desktop version of Safari.

As you'll see at that Web site, there are all sorts of clever bookmarklets that add functions to the mobile Safari app.

URLs not working? *In Snow Leopard's Preview, longer URL links may appear to be broken. To avoid this Preview bug, try clicking the last character in the URL.*

AutoFill Web Forms

iPhone OS 3.0 brought a welcome change to Safari: the capability to automatically fill Web forms. I have more Web site passwords than I can remember (mostly because using one password for all sites isn't a good idea), and on my Mac I rely on AutoFill.

To get AutoFill working on your iPhone, follow these steps:

1. Go to Settings > Safari and tap the AutoFill button to configure Safari's two AutoFill controls. The Use Contact Info option pulls data from your record in the Phone/Contacts app to fill in forms asking for your name, address, and other basic information. Tap the My Info button to specify which record to use.

2. Enable the Names & Passwords option to store login and password information.

Warning! *If you've enabled Names & Passwords, you should turn on the Auto-Lock and Passcode Lock options in Settings > General. If your iPhone is stolen, you don't want the thief to be able to log in to Web sites as you.*

Save AutoFill Information

When you encounter a form—whether you are logging in to a site or submitting your contact information—tap one of the form fields. Safari zooms in on the field and brings up the onscreen keyboard. Enter your information and tap the Next button to jump to the next field (or just tap the field itself if it's visible). When you're done, tap the Go button to submit the form.

When Safari asks if you'd like to save the password, tap one of the options in **Figure 19**.

Figure 19: Choose Yes to let Safari remember the site's form data. If the information is sensitive (such as a bank password), you may want to choose Never for this Website for extra security.

The next time you visit that site and need to enter form information, the fields are automatically filled in. If that doesn't happen, tap a field to select it and then tap the AutoFill button.

Remove Saved AutoFill Data

Unlike Safari under Mac OS X or Windows, the version on the iPhone doesn't offer the capability to selectively edit or remove AutoFill entries. Instead, you must nuke all saved form data: Go to Settings > Safari > AutoFill and tap the Clear All button to discard the entries.

View Your Browsing History

Safari keeps track of your browsing history, enabling you to go back to pages you viewed on the iPhone earlier. Tap the Bookmarks (📖) button, and then tap the History entry; if you've previously navigated to other bookmark folders (see the next section), you may need to tap the back button in the upper left corner of the screen to get back to the main level of the Bookmarks screen.

CREATE AND MANAGE BOOKMARKS

I'll admit that I've never been one to cultivate an extensive collection of Web bookmarks—it seems like too much trouble. However, what I like about bookmarks on the iPhone is that storing bookmarks for some sites ensures that their addresses appear quickly when I start typing them in the address field.

Sync Bookmarks

To sync bookmarks between the desktop and iPhone versions of Safari, in iTunes, select the device, click the Info tab, and enable the Sync Safari Bookmarks option listed under Web Browser. MobileMe subscribers may instead sync bookmarks over the air.

Add a Bookmark

While you're viewing a page you want to save as a bookmark, tap the plus (➕) button and then tap the Add Bookmark button. The page's title is used as the bookmark title, but you can edit the text if you prefer (**Figure 20**, next page). If you don't want the bookmark to appear at the top level of the Bookmarks list, tap the 📖 button and choose a folder in the list hierarchy. Tap Save to create the bookmark.
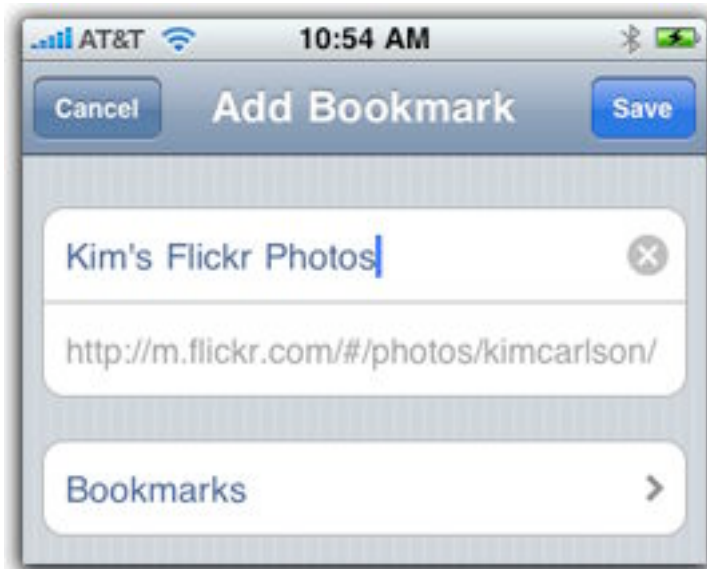
Figure 20: The button at the bottom is the name of the top-level Bookmarks list. Tap it to reveal the folder hierarchy and save the new bookmark to a different location.

Manage Bookmarks

When viewing the Bookmarks list, tap the Edit button, which adds three items to the interface: a delete button (⊖); an icon for grabbing and re-arranging items in the list (≡); and a New Folder button.

When you're in this view, you can't open any of the folders, nor can you move a bookmark into an existing folder.

Tip: I access some iPhone-specific sites using bookmarks, such as the iPhone-optimized version of the New York Times Web site (http://mobile.nytimes.com/),which I find easier to read than the standalone New York Times app. I maintain an iPhone bookmarks folder at the top level of my bookmarks for easy access.

CREATE WEB CLIPS

Following the success of Apple's App Store, the original purpose of Web clips is destined to become just a footnote, but in the early days of the iPhone the only way to run non-Apple applications was via the Web. The apps did their best to behave like real programs, but you interacted with them in Safari. (To be clear, they *were* real programs, but they ran on Web servers instead of natively on the iPhone itself the way apps do

now.) Instead of looking for an app site in a list of bookmarks, you could create a *Web clip*, a button on the Home screen that opened the site directly in Safari.

Web clips are still in the iPhone OS, but are now regarded as a convenient way to access your favorite sites. To create a Web clip of the current page showing in Safari, tap the plus (➕) button and then tap Add to Home Screen. Give the Web clip a custom name, and then tap the Add button.

USE SAFARI'S SECURITY SETTINGS

Most of the Safari preferences in the Settings app deal with security and privacy, since Safari is the iPhone's largest portal to the outside world. Although you may never need to access them, it's good to know what they do in case Safari seems to be unstable or you want to maintain a greater level of privacy than what's offered initially. Here's a rundown of what you'll find in Settings > Safari that I haven't already discussed (**Figure 21**).

Figure 21: The Web is increasingly used to distribute malware, so Safari includes several security features.

Web Content Controls

The first block of settings concerns features that extend the display of Web content:

- **Fraud Warning:** If you try to load a Web site that is known to be possibly malicious, a warning appears.

- **JavaScript:** Once a tiny add-on to Web pages, JavaScript is now used extensively to provide interactivity and special features.

- **Plug-ins:** These include hooks that allow QuickTime movies and other approved content to play within the browser.

- **Block Pop-ups:** Unless you like annoying ads to appear in new browser windows, keep this setting turned on. Granted, some legitimate sites load content in new windows (such as the Bill Pay section of my bank), but I'm happy to not use that site and avoid intrusive ads.

- **Accept Cookies:** Leaving this option set to "From visited" helps ensure that Safari stores only *cookies* (small bits of code that track your visit and save some preferences) from sites you've loaded. Tap the button to choose the other options, Never and Always.

- **Databases:** If you see this option, it means an app or site is using local database storage for HTML5 features. Tapping an entry (such as a Gmail account) displays how much data is used and what the maximum size of the database can be. (This option is purely informative; there's no action you can take.)

Privacy Controls

A second block of settings removes information stored on the iPhone from sites you've viewed. Although usually associated with keeping your data private (mostly from someone else who would pick up your iPhone and poke around, such as a thief), these commands are also useful for troubleshooting Safari problems. However, note that there's no granular control—all of the stored data is erased.

- **Clear History:** Tap this option to erase your browsing history.

- **Clear Cookies:** Tap this option to clear out any cookies that sites have placed on your computer.

- **Clear Cache:** Safari stores Web pages and settings temporarily in a cache so that subsequent visits will be faster. However, sometimes the cached version of a site (or element on the site, like a graphic) may be displayed instead of the most current live version. Tap this option to jettison those temporary files.

Note: The other option in Safari's settings, Developer, displays a debug console at the top of every page, which is used by Web developers to help investigate problems while building sites.

Mail

I once did some consulting for a woman who didn't want to carry her laptop on frequent business trips. When I asked how she was receiving her incoming email, she surprised me: her assistant printed all new messages and shipped them overnight to the woman's hotel via FedEx. I've never personally encountered a more expensive per-message method for receiving email.

Technology has come a long way since then (the solution was a Palm handheld with a modem attachment), but the desire hasn't: Some people don't want to tote a laptop everywhere. However, they are willing to carry their phone at all times. With the iPhone or iPod touch, you can stay connected to your email using the Mail app.

SET UP MAIL

How you set up email access depends largely on how you currently receive messages on your computer. If your employer or Internet Service Provider has already created your email account, your options are already set (well, mostly—see Route around the POP). You can sync the account information (but not the email messages) from your computer if you're using Mail on the Mac or using Outlook 2007, Outlook 2003, or Outlook Express under Windows.

If you're starting with a new account, the Mail app can automatically configure settings for Microsoft Exchange 2007, MobileMe, Gmail, Yahoo Mail, and AOL.

Sync Accounts with Your Computer

In iTunes, select your iPhone in the sidebar and click the Info tab. Supported mail accounts appear in the Mail Accounts section (**Figure 22**, next page). Enable the "Sync selected Mail accounts" checkbox and select one or more accounts to use. Then click the Apply button.
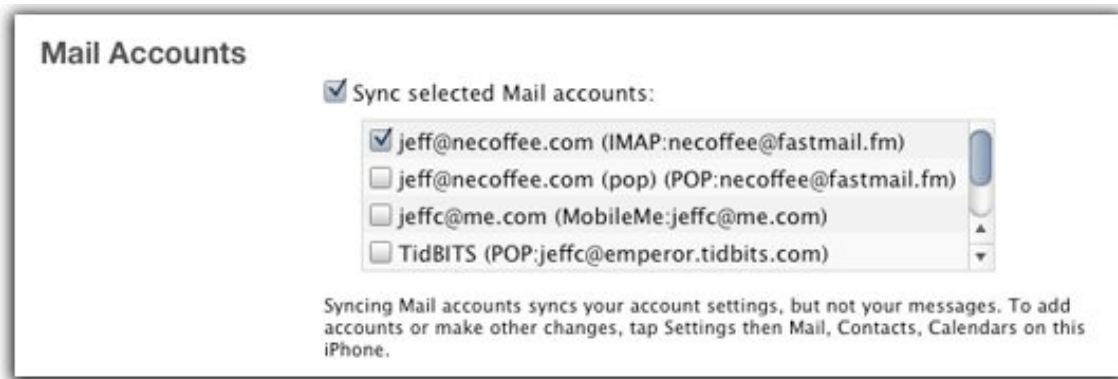
Figure 22: iTunes lists your Mail accounts for synchronization.

Remember, syncing with iTunes doesn't transfer messages between the iPhone and the computer; only the account settings are kept in sync.

Set Up an Account on the iPhone

If you're not tied to one particular computer, or if you want to maintain a separate email account on your iPhone (such as a personal account so as not to comingle work and personal messages on your work computer), you can set up an account on the iPhone itself.

1. Open the Mail app:

   - If no accounts are currently set up, you'll see a list of account types: Microsoft Exchange 2007, MobileMe, Gmail, Yahoo Mail, AOL and Other.

   - If you've synced an account previously, you need to take a different route to get to the Add Account screen: In the Settings app, tap the Mail, Contacts, Calendars button and then tap the Add Account button under the Accounts heading.

Tip: A mail account created on the iPhone is not synced to iTunes.

2. Tap the name of the account type (such as Gmail) you're setting up. Or, tap Other and then tap the Add Mail Account button to create an account from a different ISP.

3. Enter your name, the email address, and your password. For all options except Other, the Mail app connects to the service and, if possible, downloads all remaining settings.

Setting up a Microsoft Exchange account? *For Microsoft Exchange accounts, the auto-discovery option must be enabled in Exchange Server 2007 to allow the iPhone to retrieve all of an account's settings.*

4. For other accounts, choose a protocol (see Protocol Fight: POP3 vs. IMAP, next page) and fill in the rest of the information provided by your ISP.

5. Tap Save to finish setting up the account. The Inbox for the account appears; or, if you already had an account set up, you'll see the settings screen.

If you've just set up a MobileMe account, you're given the option to enable all of the MobileMe services (Mail, Contacts, Calendars, and Bookmarks, **Figure 23**).

Figure 23: Since Mail is a core component of MobileMe, it's included with the service's other components.

Turn On Find My iPhone
If you just set up a MobileMe account, take this opportunity to also turn on the Find My iPhone feature, which is disabled by default. Read Sync via MobileMe for more information.

Protocol Fight: POP3 vs. IMAP

It's important to be aware of the two public protocols used for handling email, especially when you're setting up syncing with a mobile device. The main difference between them lies in how incoming messages are stored.

POP (Post Office Protocol) is based on the idea that all of your email resides in one place—such as a desktop computer. When your email client contacts the server on which your incoming mail is stored, it downloads the messages and either deletes the copies on the server or leaves them alone for some set amount of time before deleting them. Once downloaded, you can view the messages in that email software.

IMAP (Internet Mail Access Protocol) is more suited to mobile interaction. The email client contacts the server and displays the messages stored there, letting you read their contents without first downloading them to the device.

IMAP is much better suited to the iPhone, because most likely you have another device—a desktop or laptop computer—where you also view and respond to email. With IMAP, you're tracking only one set of messages: the ones on the server, no matter which device you're using.

POP, on the other hand, can quickly lead to duplicated messages. If the iPhone downloads new messages and then deletes them from the server, you can't easily get the messages onto your computer (remember, iTunes synchronizes only the account information, not the messages themselves). If you set your account to delete read messages on a schedule (such as every 30 days or so), you end up with copies on the iPhone and on the computer—each message is downloaded separately to the iPhone and to the computer. If you file a message into another folder, it's also inaccessible to other computers.

CHECK AND READ EMAIL

I can't honestly say the iPhone is a *great* way to read email, especially if you deal with a large volume of messages. It doesn't filter spam or employ rules to mark and file messages automatically. But it is easy to use and, more importantly, incredibly convenient.

Tip: If you are using Gmail, you may prefer to use Google's mobile Gmail Web app (http://m.gmail.com/) or the free App Gmail app.

Specify How to Check for New Mail

Most email applications contact your account's mail server on a set time schedule, such as every 10 minutes, check to see if any new mail has arrived since the last connection, and then download the messages to your Inbox. In addition to that "fetch" approach, the Mail app can accept messages that are "pushed" to it from a server, an option available to some types of accounts.

Push

Accounts belonging to MobileMe, Microsoft Exchange, and Yahoo can deliver new messages as soon as they arrive at the server. All you need to do is enable the option:

1. Open the Settings app and tap the Mail, Contacts, Calendars button.

2. Tap the Fetch New Data button to view the options (**Figure 24**).

Figure 24: Data can be pushed from a service such as MobileMe or fetched from the device.

3. Make sure the Push switch is set to On.

Warning! *If you're traveling to another country, be sure to turn off push notifications before you arrive. Data roaming charges can be amazingly expensive, so a near-constant stream of email arriving while you're not using the iPhone can add up to a large bill.*

The Fetch New Data options don't apply solely to email—calendar and contacts edits are also pushed as they change. However, you may not want everything pushed to you. In my case, I don't need to know when every piece of email arrives, but I do want my calendar updated as soon as changes are made:

1. Tap the Advanced button at the bottom of the Fetch New Data screen to view your list of accounts. Where applicable, accounts with separate options for push services are listed twice; for example, MobileMe has one item for Contacts and Calendars and a second item for Mail.

2. Tap one of the buttons; in my example, tap the Mail option.

3. On the next screen, tap the Fetch button to select it instead of Push. Use the back button in the upper-left corner of the screen to navigate back to the previous screen and apply the change.

Now, email will update only according to the Fetch schedule.

Fetch

To set a schedule for when accounts check for new messages, go to the Fetch New Data screen as described above. Tap a time increments or choose Manually to check for email only when you open the Mail app.

Tip: If push service isn't available, accounts set to push will use the fetch settings.

Check Mail

Regardless of your push or fetch settings, the Mail app checks for new mail when you launch it. You can also press the ⟳ button at any time to manually check for mail in all accounts. Tap an account name to view its mailboxes (**Figure 25**, next page). If you've set up custom mailboxes (displayed as folders), they appear here, too; you may also see mailboxes you had no hand in creating, such as Gmail's Spam folder.

Figure 25: When you view an account, a number indicates how many unread messages are in each mailbox.

Tap a mailbox, such as the Inbox, to view a list of your messages (**Figure 26**). A blue dot tells you a message is unread, and a preview gives you a sense of its contents.
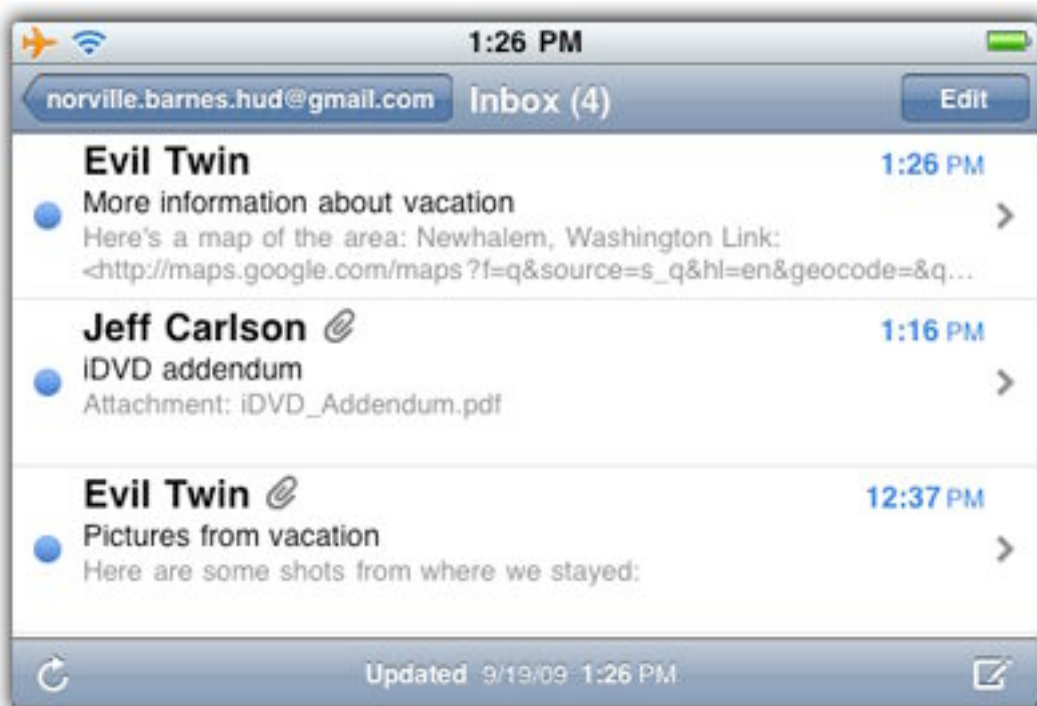
Figure 26: Two of the messages in the Inbox include attachments, indicated by the paperclip icon.

Tip: If you're having trouble accessing email from your service provider, Apple created a handy form to fill out and use when talking to the ISP: http://support.apple.com/kb/HT1277.

Tap, Tap, Tap… One thing that continues to annoy me about Mail is the lack of a combined Inbox view. Since I receive email from several accounts, I can't simply view all of my unread messages. Instead, I need to tap the back button *four* times (if I'm reading a message) to return to the Accounts list.

Configure Mailbox Viewing Options

Several preferences for viewing your email are found in the Settings app. Go to Settings > Mail, Contacts, Calendars, scroll down to the Mail options, and adjust either of the following settings:

- **Show:** A mailbox displays 50 recent messages, but you can limit that number to 25 or view as many as 200. Tap the Show button and then choose 25, 50, 75, 100, or 200 Recent Messages. If you need to view more than that in a mailbox, scroll to the bottom of the message list and tap the Load More Messages button; 25 more messages are added each time you tap that button.

  (If you need to view even more messages, perhaps it's time to rethink your email strategy. My colleague Joe Kissell wrote an excellent—and award-winning!—article series for *Macworld*: http://www.macworld.com/article/139510/2009/03/ empty_your_inbox.html.)

- **Preview:** Tap this option to include up to five lines of text. Keep in mind that the more text you view, the fewer messages appear on the screen at a time.

Read Mail

Tap a message to view its contents (**Figure 27**, next page). Once you're viewing a message, you can take additional actions:

- **View images and attachments:** Tap an attachment to download and view it. HTML-formatted messages with embedded images show those images inline, while file attachments (such as PDFs) require that you tap the attachment again to open it.

  Touch and hold an image in a message to bring up two options: Save Image, which adds it to the Camera Roll in your Photos Library, and Copy, which copies the image to the clipboard (see Camera and Photos).

Figure 27: The arrow and dotted line around the attachment indicate that it hasn't yet been downloaded.

Images in HTML Messages

The Mail app can display messages formatted using HTML, but you may not want to view all the images that typically appear with the text. (Yes, I'm an email purist: Don't junk up a simple message with pictures, fonts, and other foofaraw.) Embedded images pose at least two kinds of risk. If you display any images that are embedded in a spam message, the spammer knows your email address is legitimate, and may resell your name to other spammers as a confirmed address and send you even more spam. On the security side, image handling has been a point of weakness for computer exploits (in fact, the original iPhone OS was hacked—or "jailbroken"—using such an exploit). To turn off automatic loading of images, go to Settings > Mail, Contacts, Calendars, and in the Mail options turn off the Load Remote Images preference.

- **Manage contact info:** Tap any recipient (such as the person in the From field) to display more information. If the person is not already in your contacts list, you can create a new contact; or, add the email address to an existing contact.

- **Show email addresses:** Tap the Details link to reveal addresses in the To and CC fields, which Mail initially hides to conserve screen space. The link becomes Hide when expanded.

- **Mark as Unread:** Tapping the Details button exposes a control that I like to use: Mark as Unread. Since the Inbox on my computer serves as a to-do list for me, I can read my messages on the iPhone and mark

55

actionable ones as unread. When I get back to the computer, I notice the unread messages first and can follow up on their contents.

- **Move between messages:** Tap the navigation arrows in the upper-right corner to read the previous or next message in the mailbox.

- **Handle URLs efficiently:** As you would expect, tapping a URL in a message opens its Web page in Safari. If you tap and hold a link, however, Mail brings up a dialog with options to open the link or copy it to the clipboard (which is easier than positioning the cursor and highlighting the URL to copy it).

Tip: Perhaps I'm easily amused, but I love that if someone sends me a link to a Google map, tapping the link displays the location in the Maps app (consult Maps and Compass).

File or Delete Mail

At one point last year I liberated myself: When the Inbox on my Mac reached 700 messages, I vowed to keep my Inbox as small as possible and not let the email pile up. Now, filing and deleting messages keeps my Inbox down to fewer than 10 emails on average, and I can even file and delete on the iPhone—because my accounts use IMAP (see Protocol Fight: POP3 vs. IMAP), filing them in the Mail app also files them on the server, so I don't see them in my Inbox when I get back to my computer.

File or Delete a Single Message

When you're viewing a message, tap the ⬆ button and then choose a mailbox to receive it. To delete a message, tap the 🗑 (which doesn't actually delete the message, but moves it to the Trash mailbox).

Tip: Swipe left-to-right on any message in a mailbox list to display the Delete button, then tap the button to remove the message.

Messages you delete head straight to the Trash! *If you'd like to confirm the action and not risk throwing away a selected message with an accidental tap, go to Settings > Mail, Contacts, Calendars and enable the Ask Before Deleting option.*

File or Delete Multiple Messages

The Mail app doesn't offer built-in spam filtering, so too often I'll see messages that I know I don't want to open. Take the following steps to select more than one message and delete them or move them to a mailbox:

1. Go to the screen that lists a mailbox's messages (such as the Inbox).

2. Tap the Edit button.

3. Tap the button to the left of each message you want to move or delete (**Figure 28**).

Figure 28: Select multiple messages and either delete them or move them to a new folder.

4. Tap the Delete button to send the selected messages to the Trash, or tap the Move button and choose a destination mailbox.

Search for Mail

When you're viewing a mailbox, drag down to reveal the Search field. Enter text to find and then specify where in the messages to look: the From field, the To field, the Subject field, or all three. The search feature can also check for matches on the server by tapping the Continue Search on Server link that appears.

Unfortunately, the Mail app does not search within the bodies of messages, making this an almost-but-not-quite-there feature for me.

COMPOSE AND REPLY TO MESSAGES

One thing I find myself doing more often than I expected with my iPhone is dashing off quick email messages that I would have otherwise forgotten to do by the time I returned to my computer. I'm also able to reply to urgent matters if they come up, whether I'm on the bus or casually checking email in the evening.

Create a New Message

To create a new message from scratch, follow these steps:

1. From any screen in the Mail app, tap the [✏️] button.

   If you have multiple accounts set up and you're viewing a mailbox or a message in one, that account is used as the From address.

Otherwise, the account in which you last created a message is used. If you want to send the message from a different account, tap the "Cc/Bcc, From" field, select the From field, and choose an account.

2. Type an email address or contact name in the To field; possible matches appear as you type, so you may need to type only a few letters and then choose a match.

   To add more recipients, tap the ⊕ button. You can also tap the "Cc/Bcc, From" field to view each of those fields individually and enter addresses (**Figure 30**).
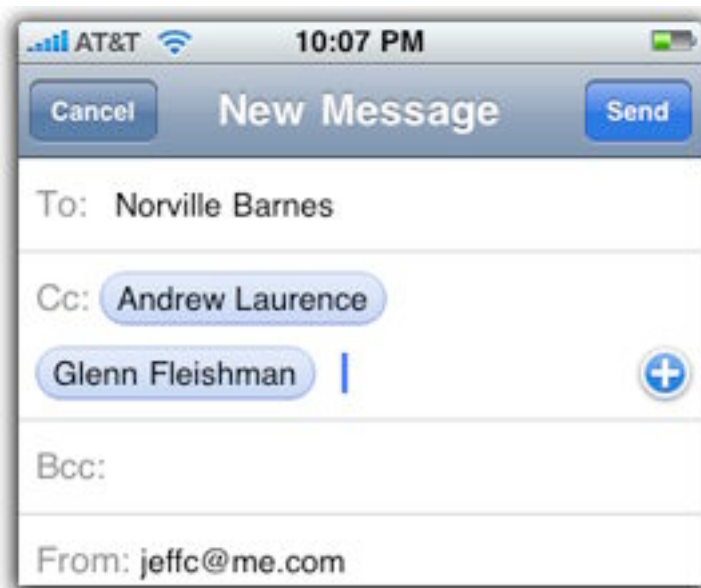
Figure 30: Email addresses found in the Contacts list display with the recipient's name.

3. Tap the Subject line and type a subject.

4. Tap the body field and enter your message.

5. If you want to save your message and send it later, tap the Cancel button and then tap Save. The Mail app puts the message in the Drafts folder. (If you're using IMAP as the protocol for the account, the message gets synchronized to your desktop email client for working on later.)

5. When you're ready to send the message, tap the Send button to deliver the mail.

Email outside Mail: *Just as many third-party apps use WebKit to display Web pages without opening Safari, many apps are also capable of composing and sending email messages directly using underlying technology from the Mail app.*

What about attachments? *You can't attach files to outgoing email messages—or rather, that's the wrong way of looking at the problem. The iPhone approach is to start with something you'd like to share, such as a picture in the Photos app, and use email as the delivery mechanism. That creates a new outgoing message around the attachment.*

Forward or Reply to a Message

When you are viewing an email message, tap the button and choose whether you want to send a reply or forward the message. In either case, you can specify recipients and enter text just as described above.

Tip: Select a range of text and then tap the button to include just that section as quoted material instead of the entire message.

Use TextExpander for Boilerplate Replies

My main email domain is similar to that of another company's, so I end up receiving a fair bit of misdirected email. I have a polite block of boilerplate text to use as a reply, but on the iPhone, that text would be ridiculous to type, so instead I use SmileOnMyMac's TextExpander iPhone app (http://itunes.com/apps/textexpander, $4.99). On my Mac, TextExpander lets me create snippets of text that are entered when I type a trigger word—in this case, necreply brings up the boilerplate text.

That type of direct interaction isn't possible between apps on the iPhone, but TextExpander on the iPhone can use snippets created by TextExpander on the Mac. I tap out my trigger within the TextExpander app, copy the boilerplate text, and then paste it into the email reply.

Create Fallback Outgoing Mail Servers

Sending outbound messages can be a source of frustration on a mobile device, particularly on Wi-Fi networks; most commonly, a network blocks outbound SMTP (Simple Mail Transfer Protocol) traffic and uses its mail server by default. (This is less common for iPhone users, as the phone uses the cellular provider's infrastructure.)

If you can't contact your regular mail server, you can specify other outgoing SMTP servers (such as one offered by your home ISP) that Mail will use if the primary SMTP server for your account is unsuccessful:

1. Go to Settings > Mail, Contacts, Calendars and tap the name of the account you're using.

2. Under Outgoing Mail Server, tap SMTP.

3. Tap the Add Server button and enter the server information in the Host Name field. When you tap the Save button, Mail verifies the server information and returns to the SMTP screen.

4. To enable the new server, tap its name under Other SMTP Servers.

5. In the screen for the new server, you can turn it On or Off, enable user authentication, SSL, or specify a port number. (The default port number for SMTP is 25; if you can't reach the server on port 25, try port 587.)

Messages

I'm conflicted when it comes to the Messages app. On one hand, it's often very convenient to send someone a short text note—in fact, my wife and I use text messages frequently during the day to check in on one another or ask short questions that don't warrant a phone call. But on the other hand, text messaging is one of the great boondoggles of the modern age, with cellular companies charging ridiculous sums of money to transport a few bits from one location to another.

What keeps me from switching fully to alternatives such as Twitter or AIM (AOL Instant Messenger) is the convenience of text and multimedia messaging: the other person doesn't need to be online and connected; your message just pops up on their phone when it arrives.

iPod touch owners can't use the Messages app, but they can download apps such as SMS Touch (http://www.thisistech.com/?page_id=492, $2.99), which uses email to send outgoing messages that appear on friends' phones.

SEND AND RECEIVE TEXT MESSAGES

The Messages app isn't terribly complicated, since the whole idea is to send and receive short messages. But it does include a few tricks here and there.

1. Tap the New Message (▢) button.

2. Start typing the name of a person from your Contacts list to find their mobile number, and then tap the one you want. Or, enter a person's mobile phone number.

Tip: The Messages app can also send one message to multiple recipients. Tap the ⊕ button to add another contact.

3. Tap the text field and enter the text you want to send, and then tap the Send button to fling it into the ether. Your text appears as a talk bubble (**Figure 31**).

Figure 31: The Messages app looks like an iChat conversation.

When the other person replies, the reply appears below your message. If you're not in the Messages app when the reply comes in, it appears as a dialog over the top of whatever you're doing (**Figure 32**). Tap the Reply button to open the Messages app and compose a reply, or tap Close to ignore the message.

Figure 32: Messages appear over the top of running applications or the Home screen.

The next time you want to send a message to that person, tap the name in the list of messages that appears on the app's main screen.

Tip: Sometimes you need to communicate more than what's offered by short bursts of text. Scroll to the top of a conversation and tap the Call button to dial the other person's phone and talk to them. If they're in your Contacts list, you can also tap the Contact Info button to view their information (such as another phone number if they don't answer the first one you called).

Tip: If a message includes a phone number, email address, or Web address, the iPhone underlines it and makes it a link. Tapping the link takes action on it: dialing the phone, creating a new outgoing email message, or opening the Web page in Safari.

EDIT MESSAGES

The Messages app keeps the 50 most recent text messages in memory, so you can refer back to older conversations. To display older messages, scroll to the top (tap the status bar to jump there immediately) and tap the Load Earlier Messages button.

Using the Edit feature, you can cull or pass along specific messages. In a conversation, tap the Edit button. Tap to select one or more messages and then tap the Delete or Forward button (**Figure 33**, next page). If you want to quickly clear all messages in a conversation, tap the Clear All button that appears at the top of the screen.

Immediate deletion! Unlike most occurrences of Delete commands on the iPhone, tapping Delete to remove text messages deletes them right away, with no confirmation dialog.

Figure 33: Pass along specific SMS messages by selecting them and tapping the Forward button (or you can delete them).

Tip: Tap and hold on a message to select all of its text. Then, tap the Copy command that appears to copy the text to the clipboard.

When you're viewing the main Messages list, tapping the Edit button gives you the option to remove an entire conversation: tap the ⊖ button and then tap Delete.

SEND MEDIA FILES

In addition to straight text, the Messages app is capable of sending media using MMS (Multimedia Messaging Service). This is a quicker way to share media than uploading it to a Web site or sending it as an email attachment.

Send an MMS Message

To send a photo or video, tap the camera button to the left of the text field, which provides two options:

• Tap Take Photo or Video (iPhone 3GS) or just Take Photo (earlier models) to use the iPhone's camera to capture an image or video clip.

• Tap Choose Existing to select a photo or video from a photo album (see Camera and Photos).

Note: According to Apple, your photo or video clip may be compressed to meet file size requirements imposed by your cellular carrier.

The item appears as part of an outgoing message, where you can also add a text note before tapping Send (**Figure 34**).

Figure 34: Media files get sent alongside text messages.

Tip: You can send multiple media files in the same outgoing MMS message.

View and Save an MMS Message

When someone sends a multimedia message to you, tap the item to view it full-screen. Photos can be saved to the Photos app by tapping the button and then tapping the Save Image button.

Camera and Photos

Building a camera into a cell phone is an old idea, but the pictures that come out of most phones are truly wretched. Sure, you captured the moment, but will you be able to tell the overexposed blobs apart when you finally view the photos on a computer?

The iPhone doesn't boast the best cell phone camera on the market, but it's adequate: the iPhone and iPhone 3G use a serviceable 2-megapixel sensor, while the iPhone 3GS boasts a 3-megapixel sensor and better focus and exposure controls. But the iPhone does have always-on Internet access, which makes the device perfect for taking quick snaps and uploading them directly to a MobileMe gallery or sending pictures to other sharing services via email. (In fact, in August 2009, photos from the iPhone accounted for the highest percentage of uploaded images to Flickr, surpassing the Canon Rebel XTi—a DSLR camera.)

The iPod touch, alas, does not include a camera. However, it and the iPhone benefit from the great large screen—my mother-in-law bought an iPod touch expressly to show off photos of her grandchildren, and she only occasionally uses the other features. (If you own an iPod touch, skip ahead to Sync Photos from Your Computer, p. 74, or View Your Photos and Videos, p. 75.)

TAKE A PHOTO

From the Home screen, tap the Camera button. The camera's virtual shutter opens and displays a preview of what the camera sees on the screen (**Figure 35**, next page).

Figure 35: The iPhone's large screen is your viewfinder.

Mapping manners: The first time you use Camera, the Location Services feature of the iPhone asks for your permission to tag photos with the location where photos are taken. Tap OK or Don't Allow. (See Mark a Spot with Location Services for more information.)

Orient the iPhone vertically or horizontally (the shutter button's icon rotates to indicate whether the photo will end up tall or wide).

Take a Photo with an iPhone or iPhone 3G

The first two iPhone models don't offer any options for controlling the picture settings. Simply frame your shot and press the shutter button to capture the image.

Your photo appears onscreen for a few seconds, and then it appears as an extremely small thumbnail at the lower right (or lower left if you captured a vertical picture). Tap the thumbnail to access the shot and the rest of the Camera Roll (the iPhone's album of photos it's taken).

Take a Photo with an iPhone 3GS

Apple dramatically improved the camera in the iPhone 3GS, not just the hardware (capturing more image data and performing better in low-light conditions), but especially the software. When Camera is active, it

attempts to set its focus on the center of the screen every few seconds—a large white square indicates where it's scanning.

Set a Focus Point and Exposure Source

Tap anywhere on the screen to emphasize a person or object in that area. A smaller target box appears and the iPhone attempts to focus in that area.

It also uses that area as the basis for setting its exposure compensation (**Figure 36**). If a person is in shadow in the foreground, for example, tap that area—the entire image is brightened to get the more detail out of the area. (The downside of exposure compensation is that lighter areas, like a background sky, tend to get *blown out,* so they appear too bright or even white in the photo.)
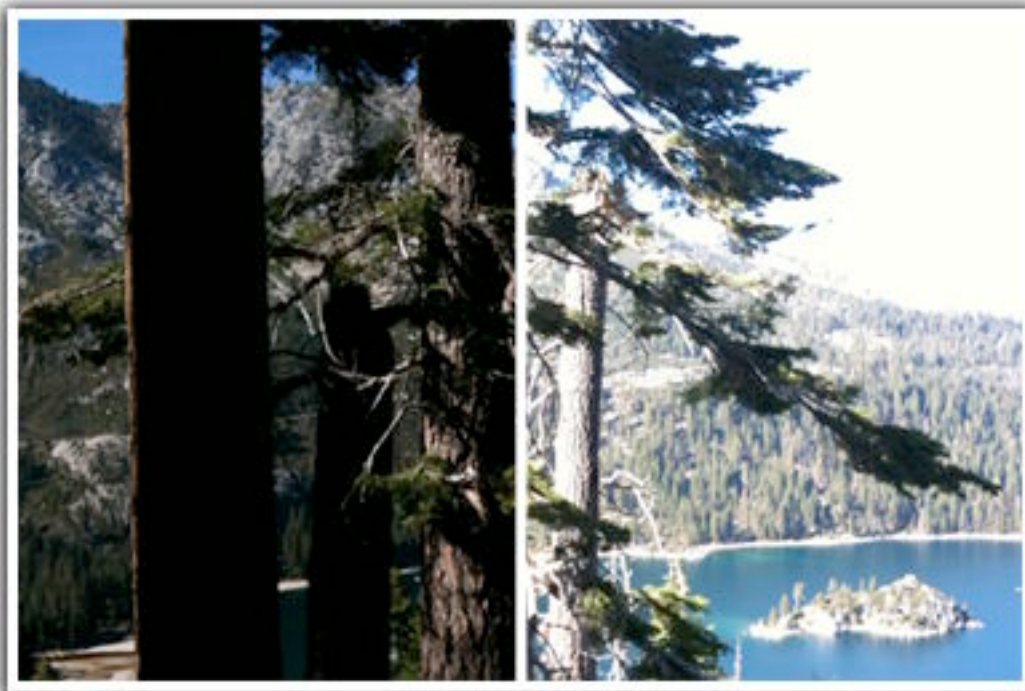
Figure 36: The photo on the left was shot with the target box positioned on the sky, which preserves the blue but renders the trees in the foreground dark. The photo on the right is taken from the same position, but with the target on the trees, blowing out the sky to white.

Tip: If you reframe the picture before taking the shot, the camera doesn't stay tracked to the object you chose by tapping—it simply retains the same focus and exposure settings as when you tapped. If you move the iPhone such that the object you selected becomes out of focus, after a few seconds the camera attempts to focus on the center of the image again.

The Best iPhone Camera Tip Ever
The iPhone doesn't capture a photo until you *release* the shutter button, so do this: press and hold the button as you frame your shot. You can still set a focus area on the iPhone 3GS with the button held down. When you're ready to take the picture, release the button. This technique minimizes camera movement because you don't have to both press and release the button with your finger.

Take a Macro Photo
The iPhone 3GS lens can accommodate a much shallower depth of field, enabling you to focus on objects as close as 10 cm. Tap the area of the screen on which you want to focus; you needn't switch to a special mode.

Tip: The macro capability of the iPhone 3GS camera enables you to capture documents and barcodes for apps such as JotNot (http://itunes.com/apps/jotnotscanner, $4.99) and Barcodes (http://itunes.com/apps/barcodes, free). See the *TidBITS* article "Tag, You're in 2D!" (2009-10-01).

Strategies for Steady Shooting

Whether you're taking photos with an iPhone or a high-end Nikon D3S, one of the biggest obstacles is keeping the camera steady to get a clear image. Here are some strategies for capturing sharper photos:

- Hold the iPhone with both hands.

- If possible, brace your elbows against your body, or lean against a solid object such as a wall or doorway.

- Press and hold the shutter button while framing your shot, then release when you want to take the picture (see The Best iPhone Camera Tip Ever, above).

- Although you're more likely to use the iPhone for snapshots, you might consider buying a tripod for it, such as the Joby Gorillamobile (http://joby.com/gorillamobile/), which includes a suction cup that attaches to the back of the iPhone. It's also good for holding the device when watching a movie on a train or airplane.

Set the Camera as Your Instant-On App

If you frequently grab the iPhone to take photos, set the Camera app to launch when you double-press the Home button. You must still use the Slide to Unlock slider to wake the phone, but then you can double-press the Home button to go straight to the Camera. Open the Settings application, go to General > Home and tap Camera in the list of options. If you listen to music often, set the iPod Controls switch to Off, because with it on, a double-press of the Home button brings up playback controls while music is playing.

Additional Photo Apps

Developers have been quick to take advantage of the iPhone's camera, releasing apps that do everything from simulating old cameras to shooting time-lapse video. Here are a few:

- Best Camera (http://itunes.com/app/bestcamera, $2.99): "The best camera is the one you have with you," and this app lets you take shots, apply filters, and upload images.

- CameraBag (http://itunes.com/app/camerabag, $1.99): This clever utility gives your photos the signature looks of Holga, Polaroid, and film shot in the 1960s and 1970s.

- TimeLapse (http://itunes.com/app/timelapse, $1.99): Set the iPhone to take a shot every few seconds or minutes. Then, put them together on your computer to create a time-lapse movie.

- Dark-room (http://itunes.com/app/dark-room, $0.99): Apply common image adjustments such as brightness, contrast, saturation, and more.

- Panorama (http://itunes.com/app/panorama, $9.99): Take several shots and stitch them together to make a panorama.

URLs not working? *In Snow Leopard's Preview, longer URL links may appear to be broken. To avoid this Preview bug, try clicking the last character in the URL.*

RECORD VIDEO (iPHONE 3GS)

I own an old DV camcorder, and a Flip MinoHD pocket camcorder, and yet lately neither get as much use as the video recording function of my iPhone 3GS. It's always with me, and I've resigned myself to the fact that I'd rather capture a moment in relatively low resolution (640 by 480 pixels) than miss it because my higher-resolution cameras are at home.

1. In the Camera app, tap the mode switch to activate the video recording mode (**Figure 37**). You can tap a section of the screen to focus on a particular area and provide a baseline for exposure.

Figure 37: Switch between the photo and video modes using the switch to the right (video mode is enabled here).

2. When you're ready to begin capturing, tap the Record button (●), which replaces the shutter button); it lights up red to indicate the video is being recorded.

Note: When shooting video, there's a lag of about 1 second between pressing the Record button and the start of video capture.

3. Tap the Record button again to stop recording.

Horizontal or Vertical?
Nearly all video playback devices assume a wide orientation, but the Camera app can record video in its vertical position, too—and most importantly, the Mac recognizes the correct orientation when you view the movie on the computer. But try to stick with horizontal, widescreen recording when you can. iMovie adds black bars to the left and right of the image to fit it onto the screen, as does YouTube if you upload the video directly (MobileMe displays the orientation correctly).

iMovie Can't Help with Shaky iPhone Video
Unfortunately, the image stabilization feature in iMovie '09 can't help shaky iPhone video footage. The CMOS (Complementary Metal–Oxide–Semiconductor) image sensor in the iPhone employs a "rolling shutter," which means each frame is recorded from top to bottom instead of exposing all pixels at once. For photos, that isn't a problem, but in video it produces wobbly footage when the camera moves—think of everything in your scene being made of jelly. The stabilization algorithms used by iMovie actually add more problems to this type of footage, leading to the whole scene having an unnatural shimmy.

SYNC PHOTOS FROM YOUR COMPUTER

Using iTunes, you can copy portable versions of your favorite photos to the iPhone or iPod touch for viewing in the Photos app. Here's how:

1. Open iTunes and connect your device.

2. Select the iPhone or iPod touch in the sidebar (look under the Devices heading).

3. Click the Photos tab.

4. From the pop-up menu labeled "Sync photos from," choose one of the following options:

   • Your photo application: iPhoto or Aperture on the Mac, or Adobe Photoshop Elements under Windows.

   • A folder on your hard disk: select the Choose folder item and navigate to a folder containing photos.

5. Choose All photos and albums to include all available photos, or choose Selected albums and enable the albums you want to add. (If you're using a folder as a source, this option becomes "Selected folders," referring to sub-folders within the source folder you chose.)

Tip: Videos don't get transferred to the Photos app. To add a movie to your device, it must be shared to iTunes first. See Prepare and Transfer a Movie.

VIEW YOUR PHOTOS AND VIDEOS

Launch the Photos app to view photos and videos you've captured with the iPhone's camera (in the Camera Roll album) as well as those synchronized with your computer (see Sync Photos from Your Computer, just previously.)

The Camera Roll is also available from within the Camera app: Tap the thumbnail preview icon to view the last image taken, then tap the Camera Roll button at the top-left corner of the screen. (The Camera app isn't available on the iPod touch because it lacks a camera.) This route doesn't give you access to other photo albums; for that, you need to exit the Camera app and launch the Photos app.

View Individual Photos or Movies

In the Photos app, tap an album name to see a grid of image thumbnails. To view a single photo or movie, tap its icon. You can rotate the device to match a photo's vertical or horizontal orientation—the app resizes images to best fit within the screen (**Figure 38**, next page).
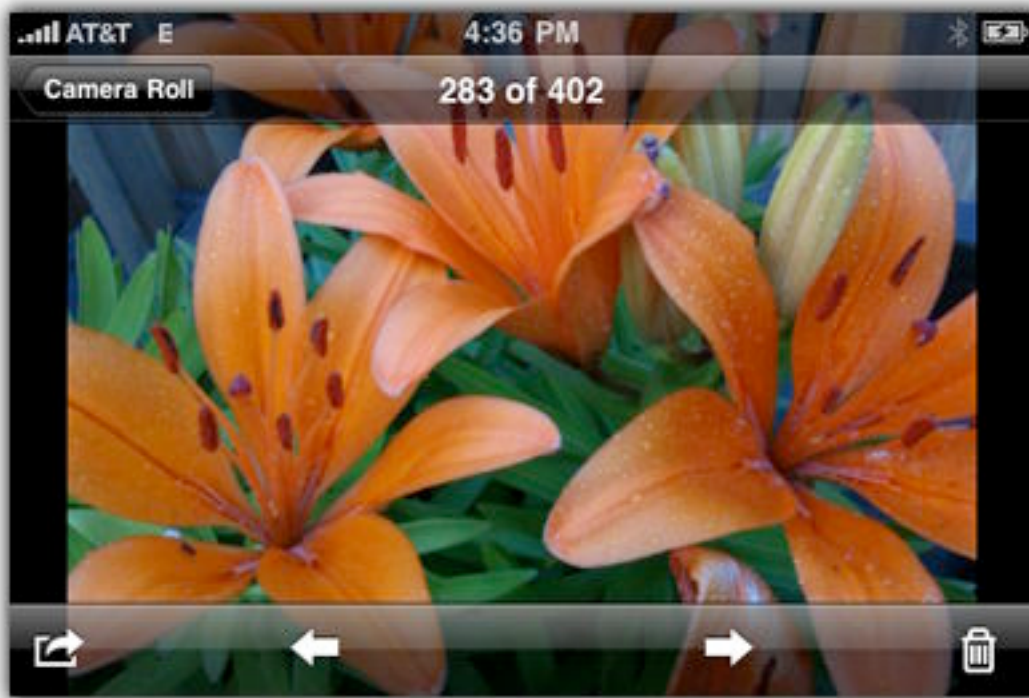
Figure 38: Viewing photos in the horizontal orientation.

To play a movie, tap the Play button that appears in the center (▶), or, if the onscreen controls are visible, tap the Play button (▶) in the toolbar.

While you're pondering the beauty of the photo or movie you chose, take note of the actions you can take:

- Tap once to make the onscreen controls appear or disappear.

- Go to the previous or next item by swiping left (previous) or right (next) with one finger.

- If you'd rather not swipe, tap the Previous (◀) and Next (▶) buttons to display another photo.

- Double-tap the screen to zoom in on a portion of a photo; you can then drag with one finger to make other areas of the photo visible. Double-tap again to view the entire image within the screen.

- Expand two fingers to zoom in (even further than the amount provided by the double-tap), or pinch to zoom out.

- Tap the Trash button (🗑) to delete an item from the Camera Roll (photos you've transferred from your computer can't be deleted here); tap the Delete Photo or Delete Video button to confirm your choice, or tap Cancel.

- Tap the ⬀ button for more options (described in Share Photos and Videos, later).

Play a Slideshow

When she gets older, my daughter will never believe that people carried printed photos with them in their wallets. Why haul that paper when you can store hundreds of photos on an iPhone or iPod touch (or whatever portable technology is available in the future) and view them in a slideshow?

In the Photos app, tap an album to open it and then tap the Play button (▶). The slideshow plays automatically. To stop playback, tap the screen to reveal the photo viewing controls.

Tip: When you tap the screen during a slideshow, the show stops. You must manually advance the photos by swiping or by tapping the Next (or Previous) arrow; you can't restart the slideshow without beginning again at the first photo.

The slideshow's appearance depends on the following settings found in the Photos portion of the Settings app:

- **Play Each Slide For:** Choose the length of time each photo remains onscreen—2, 3, 5, 10, or 20 seconds. (3 seconds is the default.)

- **Transition:** Five visual styles are available for switching between photos: Cube, Dissolve, Ripple, Wipe Across, and Wipe Down. (Dissolve is the default.)

- **Repeat:** Turn this option on to replay the slideshow from the beginning automatically.

- **Shuffle:** Enable this option to display the photos in a random order.

Note: If you play a slideshow of the Camera Roll on an iPhone 3GS that includes video, the slideshow pauses at each movie and waits for you to tap the video Play button. After the movie is finished playing, the slideshow resumes.

Delete Multiple Photos or Videos

When you want to delete more than one item from the Camera Roll, there's an easier method than tapping the Trash button for each one. Do the following:

1. In the Photos app, tap the Camera Roll album; if you're in the Camera app, tap the thumbnail icon of the last photo taken, then tap the Camera Roll button.

2. Tap the ⬆️ button.

3. Tap to select the items you want to delete (**Figure 39**); a red checkmark appears on the selected thumbnails.
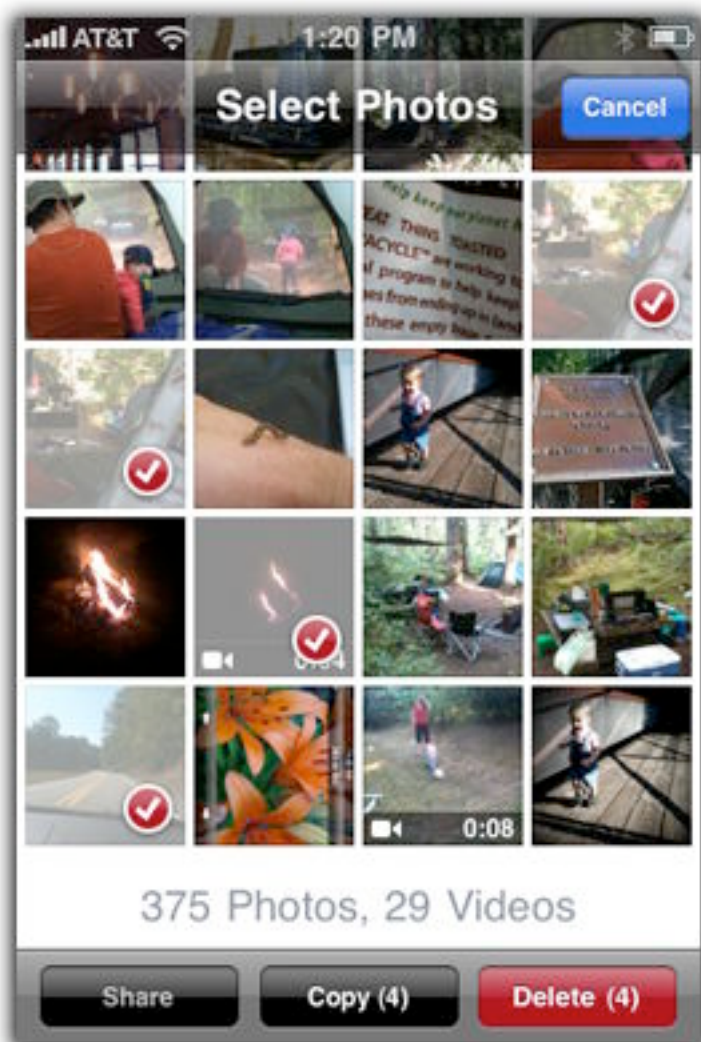
Figure 39: Delete (or copy) several items in a batch.

4. Tap the Delete button (which also shows the number of items selected), then tap the Delete Selected Items button to remove them.

TRIM VIDEO

The video recording feature was designed with the assumption that you want to capture a scene and then share it with others, instead of importing the footage into a video editor and working with it there. Here's how to delete sections at the beginning and end of a clip so you upload only the best part:

1. In the Camera Roll, tap a video to edit. The frame viewer, a strip of thumbnail images from the movie, appears at the top of the screen, with a playhead indicating the current frame of the video.

2. Tap and drag the playhead to jump to any part of the clip (**Figure 40**). It's helpful to get a sense of where you want the new starting or stopping point of the movie.

Figure 40: Drag the playhead (the silver bar in the middle of the frame viewer) to view portions of the movie.

Tip: The entire movie is visible in the frame viewer normally, but if you tap and hold the playhead or one of the trim handles, the viewer zooms to display more frames, pushing the visible edges of the viewer off the screen.

3. Tap and drag the left and right edges of the frame viewer to select the portion of the video you want to keep. A yellow border appears along with a Trim button (**Figure 41**, next page).
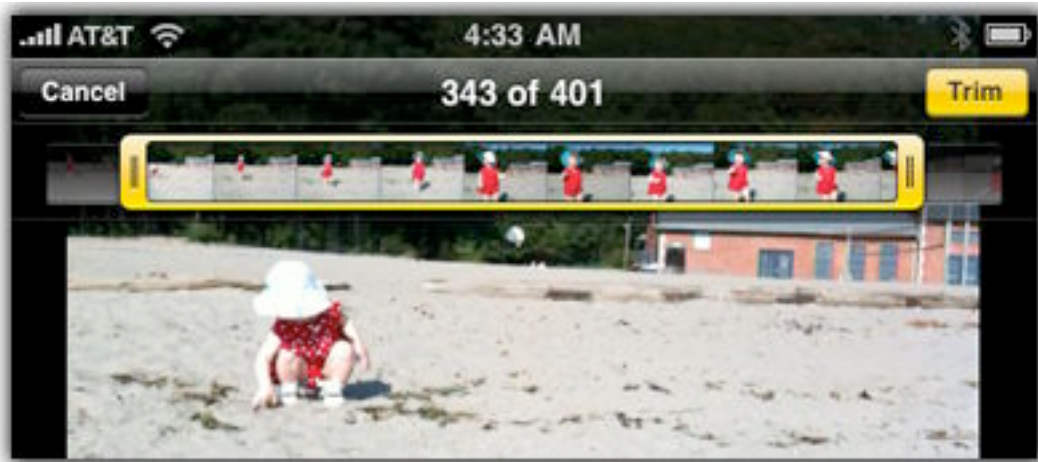
Figure 41: Portions of the video outside the yellow selection are deleted when you tap the Trim button.

> **Tip:** One of my favorite interface enhancements in iPhone 3.0 and later comes into play when reviewing and trimming video. Touch and hold the playhead or one of the edges of the frame viewer, and drag your finger *down* and out of the way. You can then drag the item left and right, but your finger doesn't obscure the viewer. This feature applies to slider controls elsewhere on the iPhone, too.

4. Tap the Trim button to delete the video outside the selection.

5. Two options appear: tap Trim Original to edit the original file, which **permanently deletes** the footage, or tap Save as New Clip to retain the original in case you want to go back to it later.

Hooray! *Under iPhone OS 3.0, tapping the Trim button permanently deleted the video that wasn't selected. The iPhone OS 3.1 update added the capability to save the trimmed clip as a copy.*

SHARE PHOTOS AND VIDEOS

After you've shot a good photo or video, you can share it directly from your iPhone or iPod touch via email or MobileMe.

Share a Photo

When you're viewing a photo or video, tap the ⬀ button to bring up a menu containing the following options:

- **Email Photo:** Tap this button to create a new outgoing email message. Enter a recipient, title, and optional text in the message body and then tap the Send button.

- **Send to MobileMe:** If you're a MobileMe subscriber, tap this button to upload the photo to your MobileMe Gallery. Enter a title and optional description, then tap the name of one of your existing albums. Tap the Publish button to upload the image. When finished, the software provides you with options (**Figure 42**): View on MobileMe, which opens the image in Safari; and Tell a Friend, which creates a new outgoing email message containing a link to the photo on the Web.
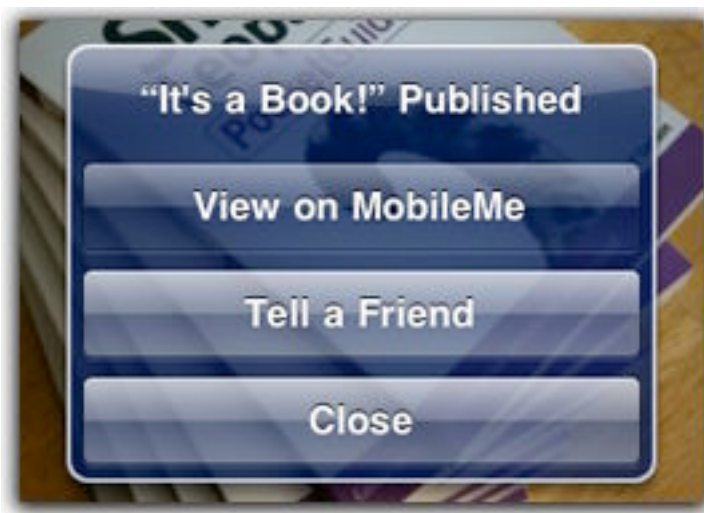
Figure 42: Share the photo directly from the Photos app.

- **Assign to Contact:** Tap this button to use the photo as the image for a person's information in the Contacts app.

- **Use as Wallpaper:** Tap this button to make the photo appear as the background image when you turn on your device.

Note: These are the most convenient options for sharing photos, but they compromise image quality in favor of smaller file sizes. See Share Better-Quality Photos and Video.

Share a Video (iPhone 3GS Only)

The options for sharing a video are slightly different:

- **Email Video:** Tap here to send the video as an attachment in an outgoing email message.

- **Send to MobileMe:** The procedure here is much like the one for sending a photo, which you can read about on the previous page.

- **Send to YouTube:** If you have a YouTube account, you can upload directly to the popular video-sharing service by tapping this button. Enter a title, description, and tags related to the video's content, and then choose one of YouTube's categories. Tap Publish to send the file. When it's finished, you have the option of viewing the video in the YouTube app or sending an email to a friend.

Share Multiple Items

Just as you can delete more than one item at once (see Delete Multiple Photos or Videos), it's possible to also share several items—though only via email. In the Photos app, tap the ⬆ button and then tap the photos or videos you want to send. You can share only photos *or* videos, however, not a mix of the two types.

> **Note:** Sharing multiple items using this technique doesn't retain the original filenames. The photos are titled photo.jpg, photo_2.jpg, and so on.

Share Better-Quality Photos and Video

The built-in sharing features of the Photos app place a higher priority on minimizing network bandwidth than on sharing the best versions of your photos. A perfectly fine video viewed on the iPhone 3GS, for example, looks almost impressionistic when uploaded directly to MobileMe. However, there are ways of sending the original files instead, if you don't mind a little extra work.

Copy and Paste Photos into Mail

When you choose Email Photo after tapping the ⬆ button, the image is reduced in size before sending. Instead, do the following:

1. Touch and hold on a photo in the Photos app (viewing either an album's thumbnails or a single photo) and then tap Copy when the option appears.

2. Switch to the Mail app.

3. Create a new outgoing message.

4. In the body of the message, press and hold until the Paste option appears, and then tap it.

When you send the message, the full-resolution version of the photo is sent as an attachment.

Import Videos to the Computer First

The Copy and Paste trick above doesn't work for video, so you need to take a side trip to your computer to share the best quality movies.

To import a video into iPhoto and then share it from there:

1. Connect the iPhone to your computer.

2. Open iPhoto and import the movie to your iPhoto Library.

3. Select the imported movie and choose File > Export (or press Command-Shift-E).

4. In the dialog that appears, make sure you're in the File Export pane and then choose Original from the Kind pop-up menu.

5. Click Export to save the file to your hard disk.

6. Attach the file to an outgoing email message to send it.

Maps and Compass

I won't tell you how many people asked me if I was going to buy an iPhone 3GS because it includes a built-in compass (but I will point out they were all family members). That wasn't the deciding factor, but it did push me closer to deciding to upgrade from my original iPhone.

You see, as someone who can be charitably described as "directionally challenged," I found the Maps app to be incredibly helpful. Tapping into the vast Google Maps database, I could easily locate an address, get directions, and search my surroundings for nearby restaurants, coffee shops, and other businesses. Now that I own an iPhone 3GS, I can see exactly where I am (thanks to the built-in GPS receiver, also available in the iPhone 3G). Games may be popular, email is incredibly useful, but for me Maps is the iPhone's killer app.

ORIENT YOURSELF WITH THE COMPASS (iPHONE 3GS ONLY)

The Compass app is probably the best looking of all of Apple's built-in applications—certainly better than the plastic compasses I used as a Boy Scout, though they weren't dependent on battery power and could handle rain. After you grant the Compass app permission to use your location, it displays your location coordinates and points toward true or magnetic north (**Figure 43**, next page).

Tip: The Compass app works best when you're holding the iPhone horizontally with the screen facing up.

Figure 43: The Compass app points north and indicates the direction you're facing.

Hold the iPhone with the orienting arrow (at the top of the screen) facing the same direction you are. Your heading (such as "118° SE," or 118 degrees southeast) appears below the arrow.

Tap the *i* button to change the Compass app's only preference, choosing between using true north or magnetic north.

Although the app provides a pretty front end for the compass circuitry in the iPhone, the compass features are available to other applications. Tap the ⊙ button to open the Maps app and reveal your location.

FIND YOURSELF

The point of a map is to find other locations—cities, streets, neighborhoods, addresses—but you can't reach any of those destinations until you find out where you're starting from. *You* may know you're at home, but the iPhone might not know that yet.

Find Your Location

Open the Maps app and tap the ⊕ button in the lower-left corner. The map zooms in and displays a blue sphere representing your current location in the center. That button also enables tracking mode, which keeps your current position in the center of the screen.

The Blue Circle of Accuracy

The blue circle surrounding the blue sphere indicates how accurately the iPhone is reporting its position (**Figure 45**). A larger circle means the iPhone could be anywhere within the area; a sphere with no circle means that the iPhone has locked onto its position using GPS. Usually the circle starts by encompassing a large area and then gets smaller as a more precise reading is found. The original iPhone, which lacks GPS, is less likely to give a precise reading since Maps uses cellular and Wi-Fi data to figure your location (see Original iPhone vs. iPhone 3G and iPhone 3GS, p. 15).
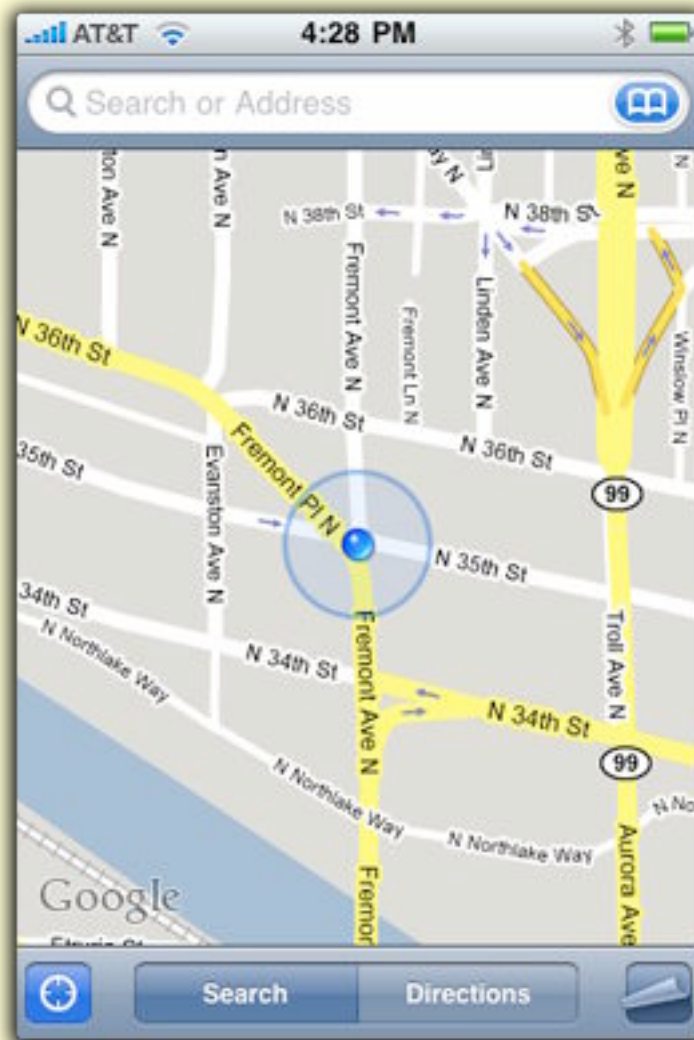
Figure 45: The blue circle indicates that the iPhone is reporting its position within a half-block radius.

Tip: Tap the ⊕ button to quickly zoom back in on your location if you've moved to a different part of the map.

Quick map zoom out: *You're no doubt familiar with standard iPhone gestures: pinch or expand to zoom in or out, and double-tap to zoom in. Here's one you may not be aware of: to quickly zoom out of a map, single-tap anywhere on the screen with two fingers.*

Orient Yourself (iPhone 3GS)

The compass in the iPhone 3GS allows the Maps application to do something immensely useful, especially if you're in an unfamiliar city: show which direction you're facing relative to the map. Tap the ⊕ button again—the map rotates to account for the direction you're facing instead of keeping north at the top of the screen (**Figure 46**).
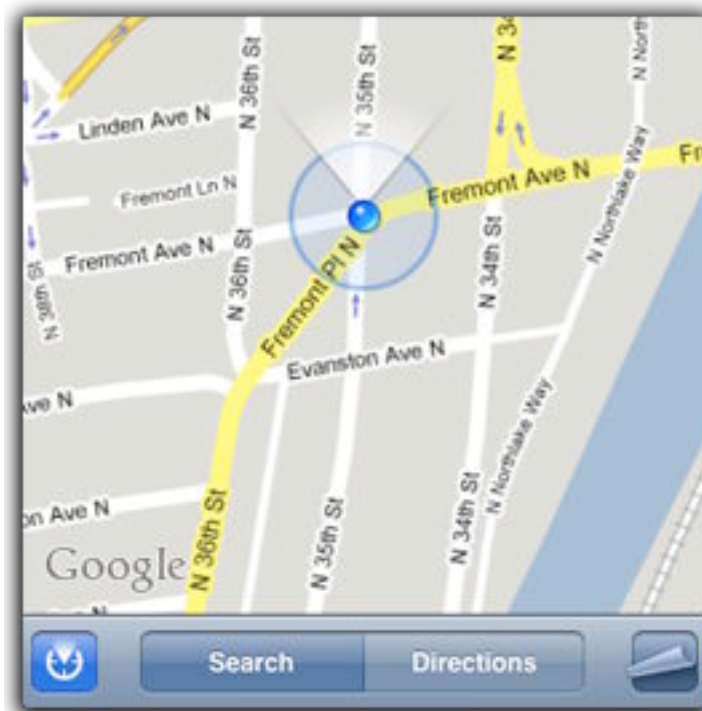
Figure 46: With the compass mode activated, you don't have to figure out which direction you're facing, as with most maps. (You can be the tourist who looks like you know what you're doing.)

Change the Map View

The default Map view is highly readable, with streets and other features drawn in solid colors and labeled appropriately. The Maps app, however, also offers satellite and (where available) Street View versions of its map.

Tap the 📄 button (**Figure 47**) to reveal the following viewing options.
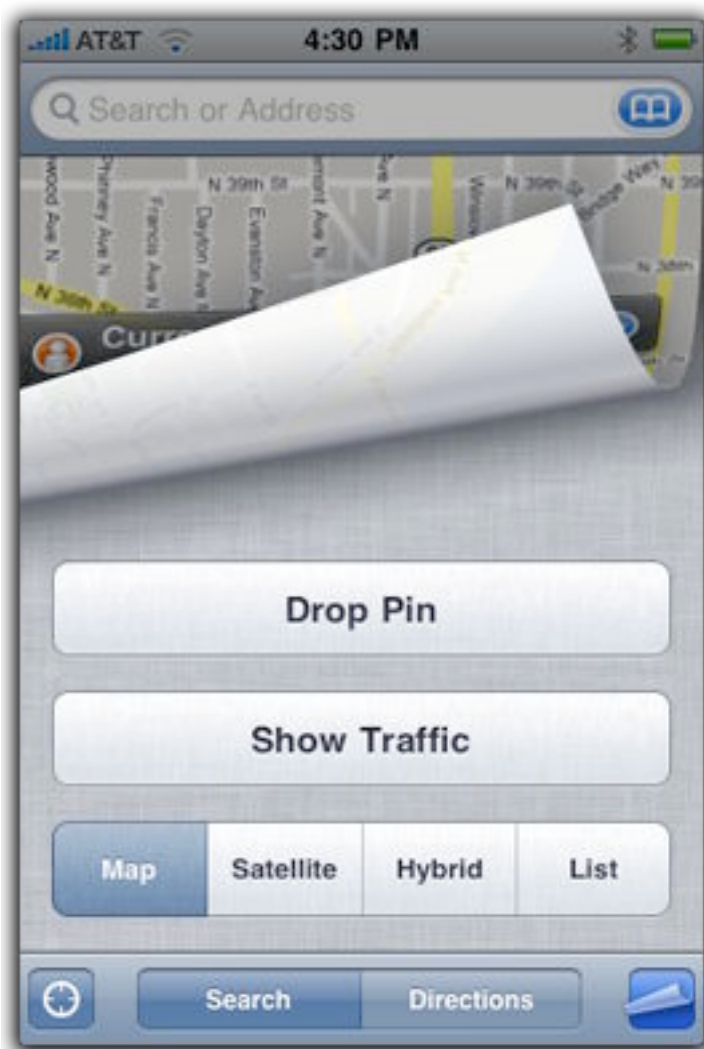
Figure 47: "Pull back" the map to reveal various viewing options.

- **Map:** This default view is much like a paper map you would buy at a gas station; it includes names of streets and other waypoints.

- **Satellite:** Look down from an eye in the sky on photos of the area. Keep in mind that the satellite imagery is not live (and may not even be recent).

Tip: To go one step further than the Satellite view—okay, maybe ten steps further—download the free Google Earth app. It provides satellite imagery, 3D terrain, location photos submitted by users, and other contextual data (http://itunes.com/apps/googleearth).

- **Hybrid:** This view superimposes streets and other map features on top of satellite imagery.

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- **List:** After you perform a search in the Maps app, you can view all results in a list to review them. (See Search for a Location, just ahead.)

- **Show Traffic:** Google's map technology accesses real-time traffic information and displays it as an overlay when you tap this button. Green roads indicate smooth driving, yellow flashing roads contain slowdowns, and red roads are congested and should be avoided. Tap the same button (marked Hide Traffic) to remove the overlay.

- **Drop Pin:** Consult Drop a Pin, later.

> **Tip:** I'm sure this is highly dependent upon where you live, but the Show Traffic feature doesn't apply just to major freeways. Zooming in on my location at home in Seattle displays what appears to be real-time traffic information for nearby main streets. I no longer need to go to all the trouble of *looking out the window* to see if traffic is backed up!

SEARCH FOR A LOCATION

Now that you've found yourself, what are you going to do with yourself? One of the great strengths of the Maps app is the capability to find destinations—not just addresses, but all sorts of criteria. That giant yellow phone directory left on your porch each year for you to trip over? The iPhone is a better, faster, more up-to-date version that fits into your pocket, making it possible to:

- **Enter a search term or address:** Tap the Search field at the top of the screen and type what you're looking for. The app can find results for all kinds of information, including:

  - Start typing a person's or company's name and matches appear from your Contacts list, which you can tap to view on the map.

  - Enter a company name—such as Body Shop or Red Robin—to find matches within the geographic area you're currently viewing.

  - Type a generic term to find related businesses; entering coffee, for example, brings up coffee shops in the area.

- You can be more specific and combine the search term and location, such as coffee Glendale CA.

- **View bookmarked locations and history:** Tap the 📖 button in the search field to bring up a page containing bookmarks you've created (see Add, Share, and Save Locations). Tap the Recents button to view previous searches, or tap the Contacts button to browse your contact list.

Results appear as red pins on their locations on the map (**Figure 48**). When you tap a pin, a label identifies it (tap any other area of the map to make the label go away). To view information about the location, tap the ⊙ button on the label.

Figure 48: The search result appears as a red pin.

If you see a 🔶 button, then Street View is available for that location. Google mounts cameras onto cars that snap photos as they drive, providing a 360-degree view. Tap the button to bring up Street View, which requires that you rotate the phone to its horizontal orientation (**Figure 49**, next page). Drag your finger to rotate the view, or tap an arrow to move ahead in the view. To exit Street View, tap the map in the lower-right corner.

Tip: Double-tap the Street View to zoom in on a portion of the image.

Figure 49: It's slightly disconcerting to find yourself plopped into the middle of traffic, but it lets you get the best view of a location's surroundings. The inset map at lower right indicates which direction your virtual self (i.e., the camera) is pointing.

Get Closer in Street View

Tap once on a building or other structure in Street View and, depending on whether Google has information about it, you can get more information such as street address. This also reveals a Report button: if you see something in the picture that's inappropriate, you can report the content to Google using a Web page in Safari. Click Done to exit the Street View.

Add, Share, and Save Locations

The Info page for a business contains three easily overlooked features that I think are invaluable. Scroll to the bottom of the screen, where you'll see buttons marked Add to Contacts, Share Location, and Add to Bookmarks.

- **Add to Contacts:** Tap this button to create a new record for the business in your Contacts list (because why should you ever have to enter that information by hand when it's so easily available?). What's great about this feature is that a link to the map is created

in the record; on the iPhone it launches the Maps app, and on your computer it opens the map at the Google Maps Web site.

- **Share Location:** Send an email message containing a link to the map and a vCard (.vcf file) with the contact info; the message's recipients should be able to import that vCard into their contact-management software.

- **Add to Bookmarks:** Tapping this option saves the location for later (such as when you need to Get Directions). Enter a name for the bookmark and then tap Save.

Drop a Pin

In addition to searching for locations, you can mark a point by dropping a pin onto the map and moving it around. A dropped pin is especially handy when getting directions, as you'll see shortly.

Tap the ⬜ button to reveal the additional Maps options and then tap the Drop Pin button. If you're viewing your current location, a purple pin lands on the blue sphere; otherwise, the pin appears in the center of the screen (**Figure 50**). To reposition the pin, touch it and drag it to a new location.
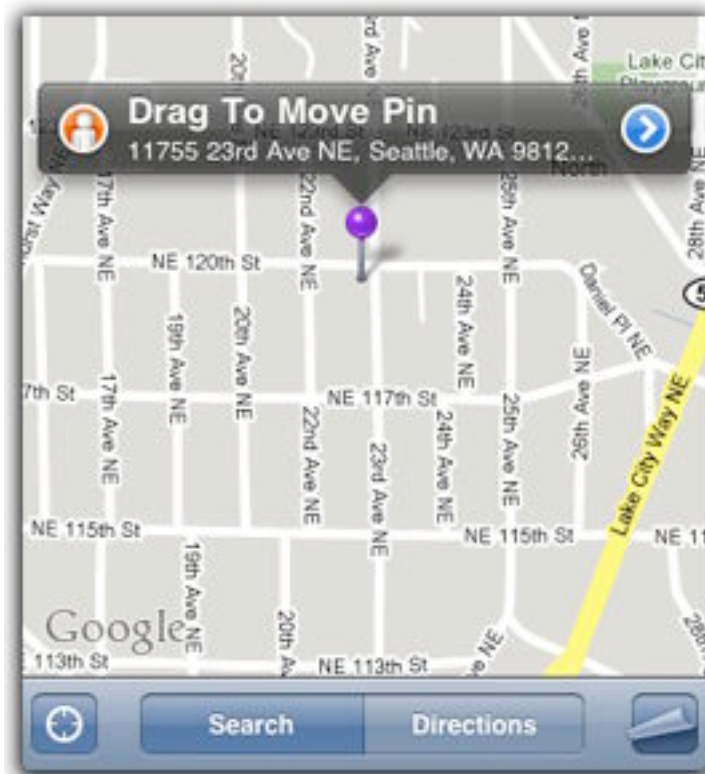
Figure 50: Create your own waypoint with a pin.

To get rid of the pin, tap the ⊙ button and then tap the Remove Pin button. (You can have just one pin on the screen at a time.)

GET DIRECTIONS

How many times have you looked up directions on the computer, printed them out, and left the house without grabbing the page you printed? Thanks to the Maps app, you can use Google's directions *en route* without ever printing a sheet of paper.

Get Directions between Two Points

Tap the Directions button at the bottom of the screen to display two search fields, representing the start and end points of your trip (**Figure 51**).
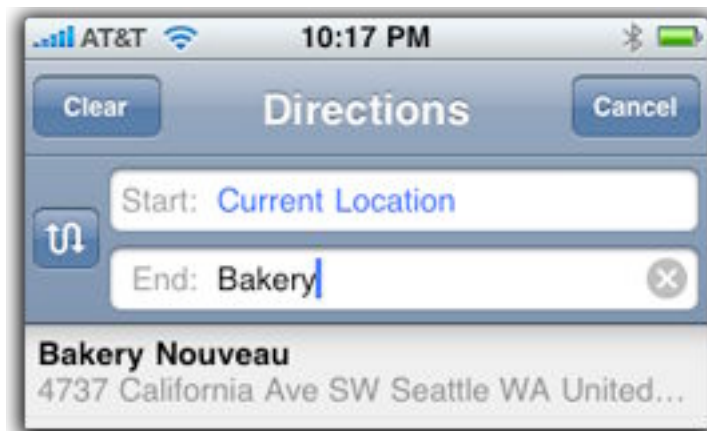
Figure 51: Get directions without entering your location manually.

The fields operate the same as when searching for a location, with the addition of two items: Current Location saves you the trouble of typing where you are now, and Dropped Pin (if one is active) lets you specify a location without first performing a search for it.

Tip: Tap the ↻ button to quickly swap the Start and End locations— this technique is good for returning home from the destination you looked up originally.

Tap the Route button to view a driving route between locations—a green pin indicates the starting point, and a red pin marks the destination (**Figure 52**, next page).
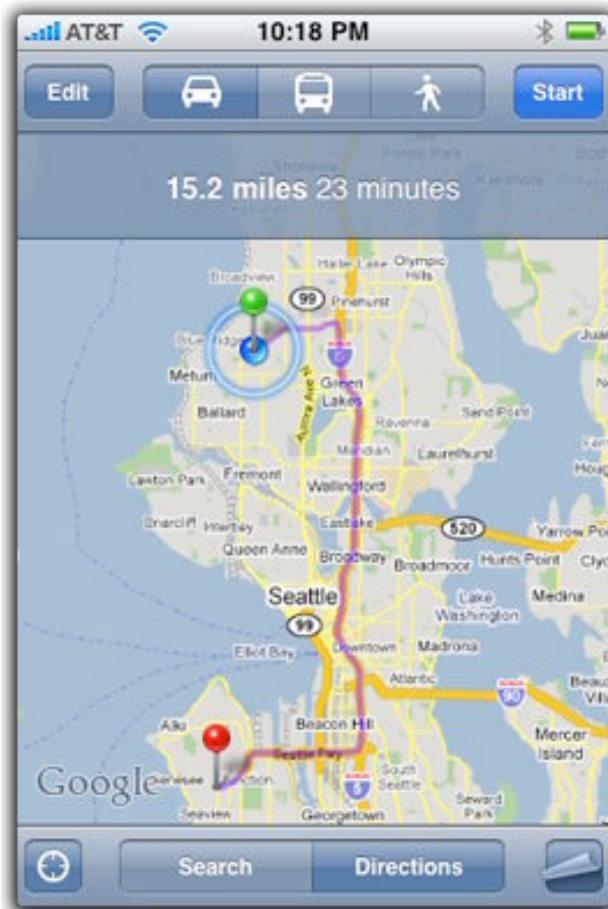
Figure 52: An overview of the travel route is helpful, and it may be all you need to get somewhere.

If available, you can also view public transit and walking directions by tapping the buttons at the top of the route screen.

To change the start or end point, or just start over, tap the Edit button and insert different criteria into the search fields.

Follow the Directions

A squiggly line isn't much help when you're driving, and you certainly don't want to be zooming in and out of the map when your attention should be on the road. Tap the Start button after getting a route to start following the steps. The map zooms in to each waypoint and provides text directions at the top of the screen (**Figure 53**, next page); as you progress, tap the Next arrow button for the next step.

Pay attention! Although following the directions requires little attention, it does distract you from the road. It's better to have someone read the directions and guide you while you drive.

Figure 53: Focus on every turn by following each step.

Tip: Activate the List view (see Change the Map View) to display the directions as a textual list without the map (which is just as useful for me). Tapping an entry takes you back to the Map view.

Step-by-Step Is Not the Same as Turn-by-Turn
The GPS circuitry in the iPhone 3G and iPhone 3GS makes it possible to use the phone as a GPS navigation device. Instead of providing what amounts to a list of steps, programs such as these are real-time interactive navigation systems:

- TomTom app (available for several countries at the iTunes Store and priced from $79.99 to $139.99)

- AT&T Navigator app (http://itunes.apple.com/WebObjects/ MZStore.woa/wa/viewSoftware?id=315659984&mt=8; free download, $9.99 monthly subscription)

iPod

It's almost hard to believe now that the first iPod in 2001 did nothing but play digital music. When Apple introduces new iPhone and iPod touch models, it now has to point out that each multi-function devices "is also an iPod," meaning it can play your music...and movies...and TV shows...and podcasts...and audiobooks.

For the iPod touch: Throughout this chapter I refer to the iPhone's iPod app. If you own an iPod touch, the same features can be found in the Music and Videos apps.

SYNC YOUR MEDIA

Although you can download most forms of media directly to the iPhone or iPod touch, sooner or later you'll probably want to use iTunes on your computer to sync media. You may find that it's much easier to find and download media on your computer's larger screen. Or you might want to sync media—such as photos in an iPhoto library—that can't easily be transferred another way. Other benefits of syncing with iTunes include these: a backup is made automatically, software updates are checked for, and you can rearrange your Home screen icons via the Applications tab when your device is selected.

I'm going to quickly cover the basics of syncing media to your iPhone or iPod touch. When you connect the device to your computer, it appears in iTunes within the sidebar under Devices; click the device name to view sync options (**Figure 54**).

Figure 54: Select a device to view its sync settings. Note that the tab order differs between the iPhone and the iPod touch.

Clicking a category tab exposes its sync controls. Except for Applications, each category includes the option to sync all media—for example, under Music you'll find the option to sync the Entire Music Library. However, even the highest-capacity device may not be able to store all your music and movies, which is why it's worth being selective about what's copied.

In a category tab (I'm using Music as an example), enable the Selected Playlists, Artists, and Genres radio button. From there, mark the items in the subcategory fields that you want to sync (**Figure 55**). When you click the Apply button, the relevant items are copied.
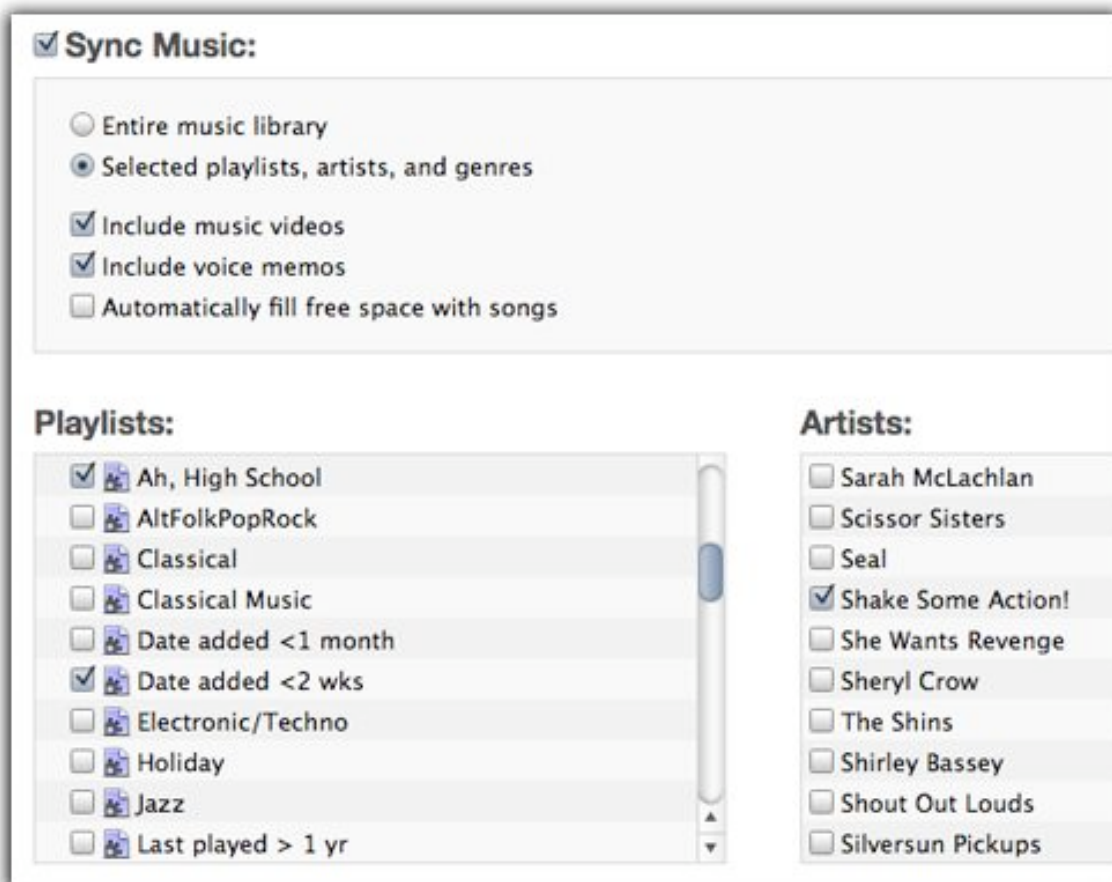
Figure 55: The Artists pane lets you make sure that your favorite bands are always on your iPhone, even if their songs aren't included in a playlist or Smart Playlist.

Tip: Can't bear to think of your iPhone's valuable memory going unused? In the Music tab, enable Automatically Fill Free Space with Songs. iTunes randomly grabs music from your Library to occupy as much memory as it can.

Smart Playlists

A smart playlist grabs media based on criteria that you specify, and it can update its content when material is added or changed. For example, I created a smart playlist called "Music added <1 month," which automatically includes all music added to iTunes within the past 30 days. It's also set to include only music and to ignore songs marked as Classical or Soundtrack genres. With that smart playlist set to sync, I know I'll always have my newest tunes on my iPhone. Follow these steps to create a Smart Playlist in iTunes:

1. Choose New > Smart Playlist.

2. Choose a selector from the first pop-up menu; in **Figure 56**, I've set it to Date Added and then, using the other menus and fields in that row, specified that an item must have been added in the last 30 days.

Figure 56: A Smart Playlist gives you much more control over which items are included in the playlist. The Live Updating option means it will always be up to date, too.

3. Click the + button to add a new selector. Continue doing this until you've included the criteria you want, then click OK.

4. Give the Smart Playlist a name in the sidebar once it's created.

Tip: The ⋯ button creates nested conditionals, which can specify groups of criteria instead of all selectors being applied on an "all" or "any" basis.

(Don't) Manually Manage Music and Videos

The Summary tab includes the option to "Manually manage music and videos," which sounds like a good way to ensure that only the media you want ends up on your iPhone. The problem is that this option was included back in the iPod dark ages when it was unusual for someone to have a library larger than several hundred items. My modest-sized iTunes library currently includes approximately 3,700 items, of which roughly 3,700 are items I don't want to manage by hand. The sync options in iTunes 9 are advanced enough that I think most people won't need to manually drag items between iTunes and the iPhone.

Actually, there is one case where manual media management might be preferable. With the option enabled, click the expansion triangle to the left of the iPhone and select the Music heading. The AutoFill controls appear at the bottom of the iTunes window—the only way they're accessible from an iPod device that isn't an iPod shuffle. Clicking the Settings button presents the option to reserve an amount of space for "disk use," which applies to iPod models that can be mounted on the Desktop. On an iPhone or iPod touch, this option guarantees that your device has a block of free space, which can be helpful if you use a file-management app such as FileMagnet (http://itunes.com/apps/filemagnet) for wirelessly transferring and storing large documents.

Download Media from the iTunes App

Using the iTunes app on your iPhone or iPod touch, you can add new media directly to your device, which is added to your iTunes Media Library the next time you sync with your computer.

As you browse the categories (lists of new releases, Top Tens, and genres), tap a song or video to get a preview (**Figure 57**, next page), or tap the price button to purchase it.
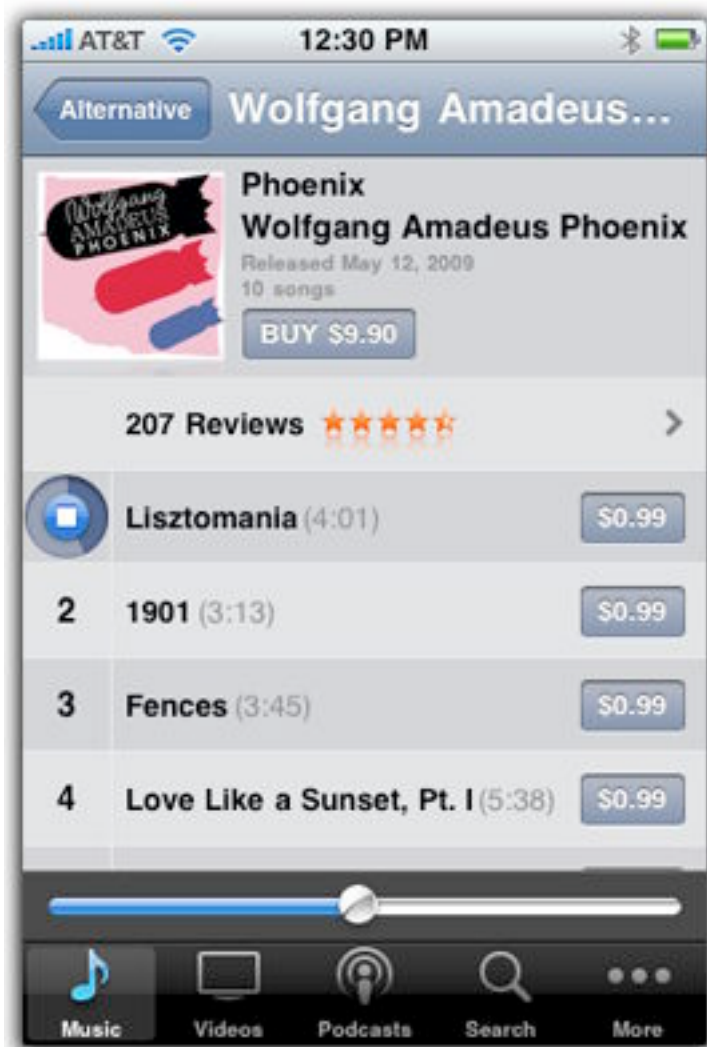
Figure 57: The interface for previewing a song in the iTunes app is brilliant. Without occupying any more screen real estate, you can tell which song is playing and how much of the sample has elapsed, and tap the Stop button to cancel playback.

Tip: It's possible to purchase high-definition (HD) versions of some movies and TV shows, but because the iPhone doesn't support HD playback only a standard definition (SD) version is downloaded. The HD version will be downloaded in iTunes on your computer the next time you sync.

Video Rentals

Speaking of video, it's worth pointing out a syncing anomaly in the iTunes/iPhone ecosystem. When you rent a movie from iTunes, it can exist in only one location. If you rented it on your computer and want to watch it on your iPhone, go to the Movies tab of your device in iTunes and click the Move button in the Rented Movies section. iTunes registers the change with its servers, so you need to be connected to the Internet to make the transfer.

LOCATE YOUR MEDIA

The problem with having thousands of songs and videos available on the iPhone is getting to them easily. The iPod app opens with a view of your playlists, but that's just one route to your media.

Search for Media

Sometimes you know exactly what you're looking for, such as the name of a song, but you don't know the artist or album. In the iPod app, enter the name into the Search field—which may initially be hidden. It's located at the top of the various music lists screens (Playlists, Artists, Songs, Compilations, etc.), so you may need to swipe down to reveal it. Results appear as you type (**Figure 58**); tap a song title to play it, or tap an artist or album to view more songs.

Figure 58: The search interface provides results as you type them.

Browse Your Library

If you don't have a specific song or artist in mind, browse your Library by tapping one of the browse buttons at the bottom of the screen and then scrolling through the lists. Playlists, Artists, and Songs appear by default; tap the More button to view other options such as Albums, Audiobooks, Podcasts, and Videos.

To quickly scroll down a long list, drag along the right edge of the screen.

Genius Mix

If you use the Genius recommendation feature in iTunes, a Genius browse button appears at the bottom of the screen. Tapping it reveals the Genius Mixes that iTunes built based on your Library. Each mix is based on a genre (Rock Mix, Alternative Mix, and so on), and isn't editable. You have to trust Apple's silent DJ algorithms to deliver a good mix. (So far, the mixes have been highly complementary for me.)

Tap a mix to start playing it, or swipe sideways to view other mixes.

Cover Flow

As an alternative to scrolling through media lists, rotate the iPhone or iPod touch to its horizontal orientation to invoke the Cover Flow mode. Swipe left and right to view albums by their cover artwork. To view more information about one, tap it (or tap the *i* button at the lower-right corner) to reveal the track listing (**Figure 59**, next page).
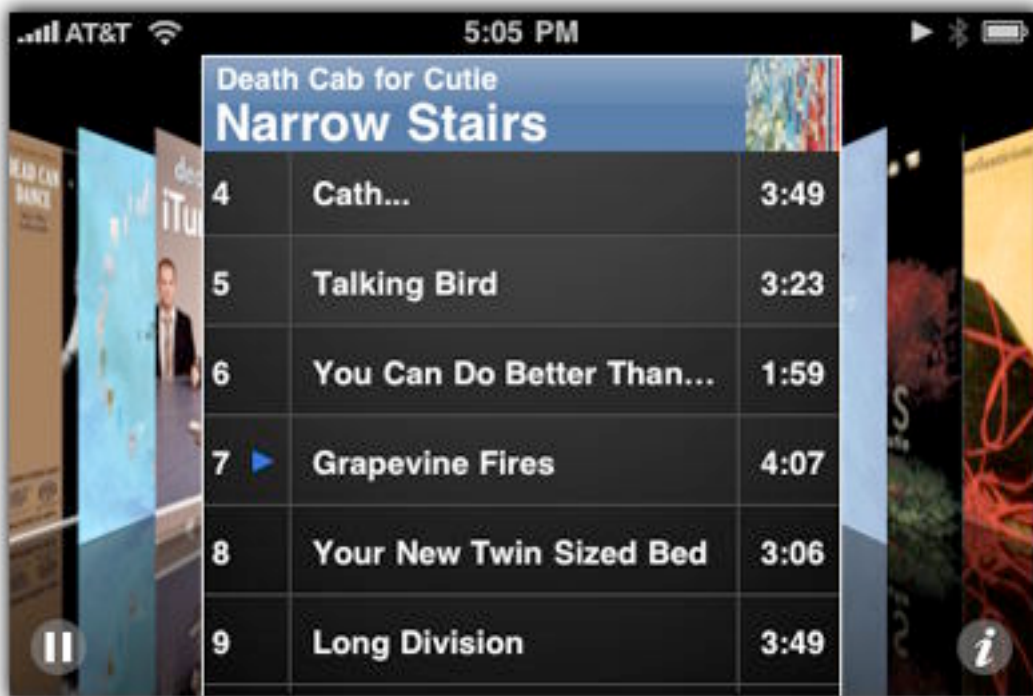
Figure 59: Tap the frontmost cover to reveal that album's tracks.

PLAY YOUR MEDIA

Playing your music or video is straightforward: find song, tap on song, enjoy song. More complicated are the various things you can do in relation to playing media that improve the experience.

Play Music

Playing a song may be as simple as tapping the large Play/Pause button at the bottom of the screen, but the iPod app also offers a lot of control over how the media is played back. Here's a rundown of the controls and playback features, many of which aren't immediately obvious:

• **Previous and Next buttons:** Tap the ⏮ button to go to the beginning of the current song, or tap the ⏭ button to jump to the next song.

Tapping the ◀◀ button twice takes you back to the previous song.

Tap and hold either button to rewind or fast-forward the current song; the longer you hold the button, the faster the action occurs.

- **Scrub playback:** The progress slider at the top of the screen indicates how far along you are in a song. To skip ahead while listening to the playback (called *scrubbing*), drag the playhead along the slider.

    However, the slider is more clever than just that. Tap and drag your finger *down* to adjust the speed of the scrubbing; the rate appears above the slider, such as "Quarter Speed Scrubbing" (**Figure 60**). The farther down the screen you drag your finger, the finer the adjustment, which is helpful when you want to back up just a few seconds in a long track or a podcast.

Figure 60: Scrub in fine increments by first sliding your finger down the screen, then dragging left or right.

- **Loop:** Tap the 🔁 button to loop playback. Tap once to play an album again when it finishes the last track; tap again to replay the current song over and over.

- **Shuffle:** Tap the 🔀 button to play songs in a random order. The shuffle applies to whatever is being played: songs are shuffled within a playlist, within an album, within all albums by a selected artist, etc.

Shake to shuffle: Instead of tapping the Shuffle button, simply give the iPhone or iPod touch a good shake. The accelerometer recognizes the motion and puts the iPod app into shuffle mode; or, if you're already in shuffle mode, it selects a new random song. This also works when you're using the device's playback controls outside of the iPod app (see Control Playback outside the iPod App, two pages ahead). If you want to turn off the feature, go to Settings > iPod and disable the Shake to Shuffle option.

- **Voice control (iPhone 3GS and third-generation iPod touch only):** The voice control feature of the iPhone 3GS extends to the iPod features as well as to dialing phone numbers (see Initiate a Call). Press and hold the Home button until the Voice Control interface appears, and then speak a phrase such as, "play music," "pause music," "next/previous song," or "play *[name of album, artist or playlist]*." You can also say, "what's playing" to get information about the current song, or create a new Genius playlist by saying "Genius" or "play more like this." (For a full list of phrases that Voice Control recognizes, consult http://manuals.info.apple.com/en_US/iPhone_User_Guide.pdf).

Use the Clock App to Set a Sleep Timer

If you enjoy going to sleep to music or an audiobook, a combination of two apps lets you do it with the iPhone.

1. Open the Clock app and tap the Timer button.

2. Set the duration of the timer.

3. Tap the When Timer Ends button and instead of selecting an alarm sound, tap Sleep iPod.

4. Open the iPod app and play your audio.

When the timer expires, playback softly ends. But you'll be asleep by then, right?

Play Podcasts and Audiobooks

In addition to the playback controls mentioned just previously, a few other controls appear when you're listening to podcasts or audiobooks:

- **Change playback speed:** Tap the 1x button to change the audio's speed. The button changes to display the speed: 1x for normal speed, 2x for double speed, and 1/2x for half speed.

- **Jump back 30 seconds:** Tap the 30 button to back up 30 seconds and hear something again without scrubbing.

- **Share link:** Tap the button to send an email message to someone with a link to the item (podcasts only).

Play Videos

Some video-specific controls are included when watching movies, TV shows, or video podcasts:

- **Fill the screen:** Tap to switch between viewing widescreen video in its original aspect ratio (which leaves black bars above and below the image) and filling the screen (which cuts off the left and right edges of the video).

- **Choose a language or subtitles:** If these options are available, tap the button to activate them.

- **Choose a chapter:** If movie chapters are available, tap the button to view them and then tap one to jump to it.

- **Done:** Tap Done when you want to exit the movie player interface and return to browsing your library.

Control Playback outside the iPod App

Unlike watching a movie or playing a game, listening to music is often a background action. Instead of switching to the iPod app whenever you want to do something iPod related—like jump to the next song or pause—use these alternate methods of controlling playback:

- When you're in some app other than the Home screen, double-press the Home button to view playback controls (**Figure 61**, next page). (You can configure this behavior in Settings > General > Home; tap the iPod Controls switch.)
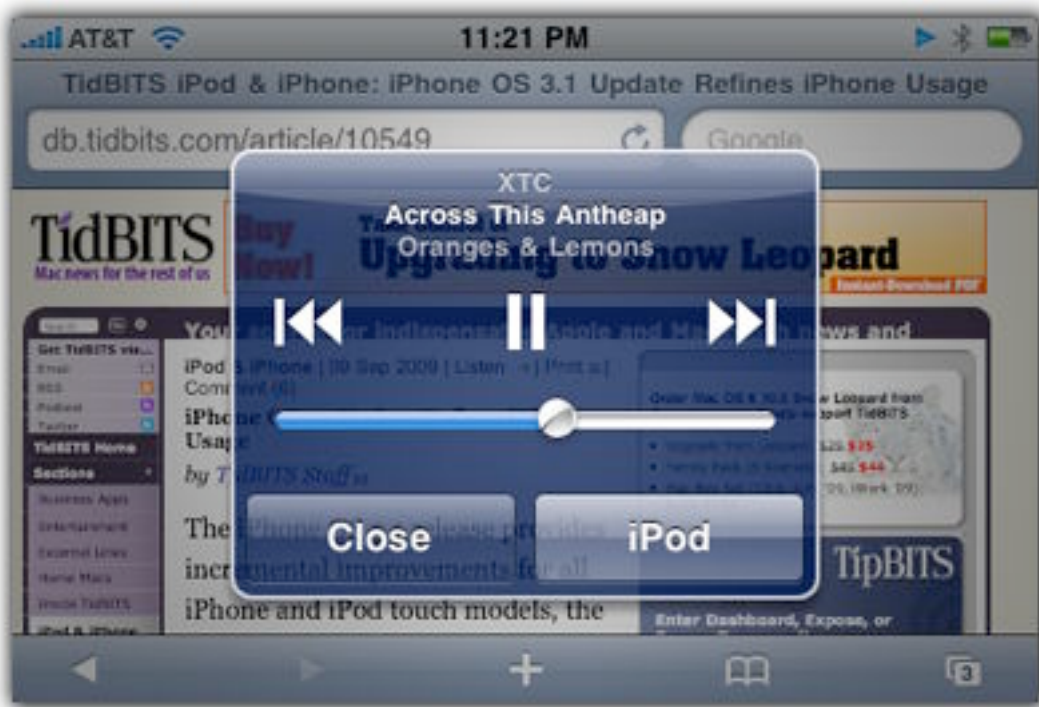
Figure 61: Play or pause, jump to the previous or next song, or change the volume without opening the iPod app (or, tap iPod to switch to the iPod app).

- If your iPhone or iPod touch came with headphones that include remote controls (such as volume), double-press the center button to bring up the playback controls.

- On the iPhone 3GS, press and hold the center headphone control or the button on a Bluetooth headset and use Voice Control to speak playback commands.

Make Playlists

Playlists make it easier to sort through a large iTunes library, and that extends to the iPhone and iPod touch as well. In addition to listening to playlists transferred from your computer, you can create your own playlists in the iPod app.

Genius Playlist

If you've enabled the Genius feature in iTunes, the data it uses to generate recommendations is transferred to the iPhone. I mentioned earlier that iTunes Genius Mixes are available for playback (see Browse Your Library), but you can also create new Genius playlists on the device.

When a song is playing, tap the ⚛ button. The iPod app builds a Genius playlist based on that song (**Figure 62**). Tap the Refresh button to make another list based on the same song, or tap the New button to choose another song from the full song list.

Figure 62: A genius lives inside your iPhone or iPod touch. She's really tiny, but has great taste.

If the Genius recommendation turned out to be especially good, tap the Save button to create a new Genius playlist containing those items. The playlist stays in the list of other playlists (marked with a Genius icon) and is also copied back to iTunes the next time you sync.

On-The-Go Playlist
Before Apple introduced its Genius feature, it created On-The-Go playlists, a way to build a playlist on an iPod (this was before the iPhone's touch-sensitive screen). The feature is still useful for putting

together a set when your computer isn't available, such as when you're the passenger on a long driving trip. Do the following:

1. Tap the Playlists browse button and then tap the On-The-Go item.

2. From your list of songs that appears, tap the items you want to include in the playlist.

3. Tap Done.

The next time you sync with your computer, the On-The-Go playlist is copied to iTunes (and renamed "On-The-Go 2" or another incremental number if previous ones were added) and erased on the iPhone.

To edit an On-The-Go playlist on the device, tap it to view its contents and then tap the Edit button. From there you can delete tracks, drag them to change their order, or add new songs by tapping the ⊕ button.

Remote

Apple's free Remote app (http://itunes.com/apps/remote) isn't included with the iPhone, but it should have been. Its premise is simple: control iTunes remotely using your iPhone or iPod touch. In my house, we listen to music streamed to an AirPort Express—Apple's small wireless base station that includes audio hookups—connected to the stereo. We listen to music from my wife's laptop in the living room or my laptop in my home office upstairs.

Remote lets me change playlists, pause the music, and control other aspects of iTunes without having to go to one of those computers. Remote also lets you control an Apple TV—not just music playback, but also navigating the full interface.

CONNECT TO AN iTUNES LIBRARY

Remote can control as many iTunes libraries as you like (one at a time). However, you must pair the iPhone or iPod touch with iTunes before you're granted access.

Add a Library

When you launch Remote, it looks for any available libraries on the network (Remote requires a Wi-Fi connection). Do the following to pair the device with iTunes or an Apple TV:

1. On the Settings screen, tap the Add Library button.

   Remote displays a screen with a passcode.

2. Get ready to enter the passcode by doing one of the following:

   - In iTunes on your computer, click the name of your iPhone or iPod touch under the Devices heading in the sidebar.

   - On the Apple TV, go to Settings > General > Remotes and then choose your device (it will also say "Click to add").

3. Enter the passcode from Step 1.

Repeat those steps for every device you want to use to control iTunes.

Do you use Remote? If you're actively controlling iTunes using Remote—frequently picking new songs, for example—enable the Stay Connected option on the Settings screen. With Stay Connected enabled, the playback controls in Remote come up quicker when turning the device on or switching from another application. However, your battery will drain faster.

Request a Song Using iTunes DJ

iTunes DJ is a cool feature in iTunes and Remote that encourages several people to influence what gets played. If I owned a coffee shop, I'd run iTunes DJ all the time. Once set up, owners of devices running Remote can optionally vote for songs in the library; when a song gets a vote, it gets pushed higher in the queue.

Set Up iTunes DJ in iTunes

iTunes needs to be configured to accept Remote requests. On your computer, do the following:

1. In iTunes, select the iTunes DJ item under Playlists in the sidebar.

   If you don't see iTunes DJ: open the iTunes preferences and, in the General pane, make sure iTunes DJ is enabled.

2. If this is the first time you've set up iTunes DJ, you'll get a welcome screen. Click Continue.

3. Click the Settings button in the bottom-right corner of the window.

4. Enable the option titled Allow Guests to Request Songs with Remote for iPhone or iPod touch. You can also set the following optional features:

   • Type a welcome message that appears when the iTunes DJ option appears in the Remote app.

   • Choose Restrict Requests to Source and choose a playlist from the pop-up menu to make sure some yahoo doesn't start playing Christmas music at your summer birthday party.

- Mark the Enable Voting checkbox to play songs based on votes. More votes push songs higher up the playlist. If this option is disabled, then any requested song is added to the list.

- Enable the Require Password option to restrict the requests to people with whom you've shared a password.

5. Click OK to activate the iTunes DJ.

6. Choose the iTunes DJ playlist and start playing it. (Requests are ignored if you're playing any other playlist.)

Request Songs

Open the Remote app, which displays the current iTunes DJ playlist, including recently played songs. If voting is enabled in iTunes, tap the heart button to the right of a song to move it up the list (**Figure 63**).
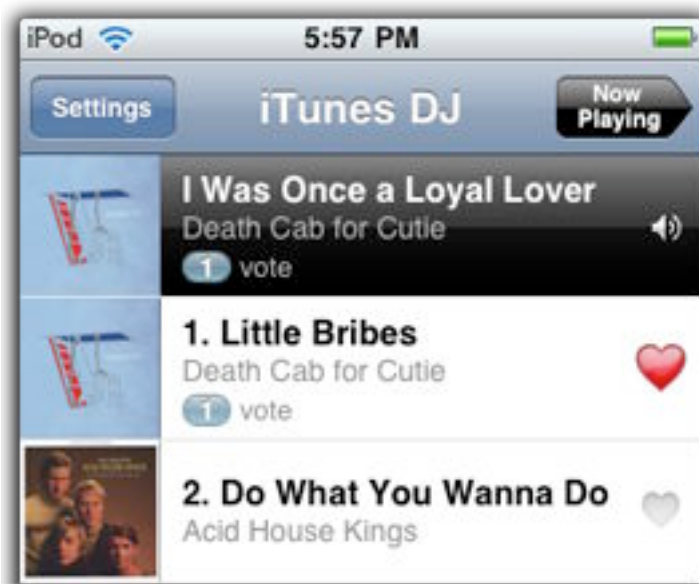
Figure 63: Vote with your heart—or at least with your finger on the heart button—to move a song up the playlist.

To request a song not listed, tap the Request a Song button and navigate through the library to locate a song you want to hear. (The interface is the same as that used by the iPod or Music app. See Locate Your Media for more on selecting music.)

Tip: Instead of browsing through thousands of tracks, let iTunes help you. Tap the ⓘ button or tap a song in the playlist to view Genius recommendations based on that song.

CONTROL PLAYBACK

When Remote is connected to an iTunes library, its uses the same controls for locating and playing music as those employed by the iPod and Music apps. (See Locate Your Media and Play Your Media.)

One difference from playing music stored on your iPhone or iPod touch, however, is Remote's support for choosing which speakers are used. In Remote parlance, a "speaker" is any supported source on your network that can play music.

The speaker control appears in two places within Remote:

- On the Settings screen, tap the On/Off button for any of the sources listed under Speakers.

- On the Now Playing screen, tap once to review additional controls (such as the Genius and Shuffle buttons), then tap the Speakers button located just above the playback controls. Tap a speaker name to enable (designated by a checkmark) or disable it (**Figure 64**).
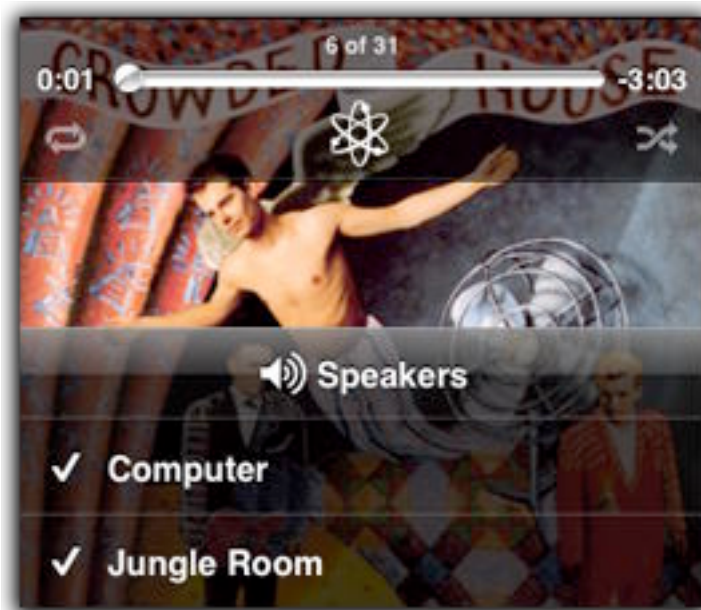
Figure 64: Enable or disable remote speakers from the Now Playing screen.

Note: When you turn a speaker on or off, playback pauses for a few seconds while iTunes synchronizes the music stream.

CONTROL AN APPLE TV

If you own an Apple TV, you can use the Remote app to control media playback as described in this section so far. However, another option appears when you're connected to the Apple TV: Control.

The blank screen operates as a virtual trackpad (**Figure 65**): Drag to move the selection highlight among the Apple TV's menus and tap to select an item. To navigate back one level in the menu hierarchy, tap the Menu button.
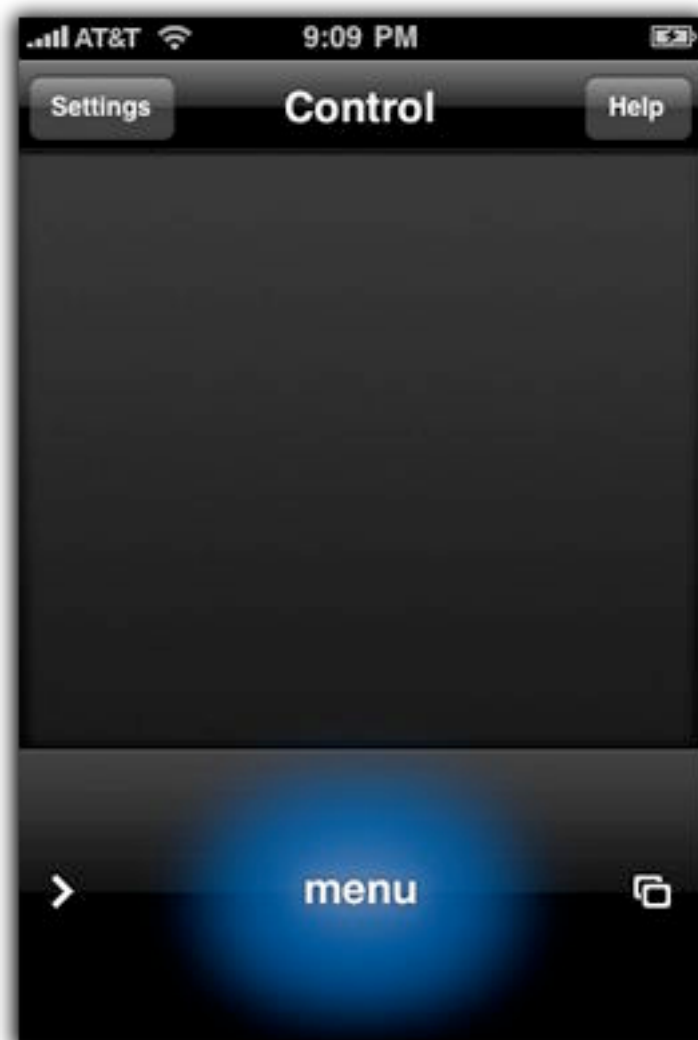
Figure 65: Welcome to the most boring figure in this book! However, what you don't see is that the entire empty field in the center of the screen acts as a trackpad. Here, I'm tapping (illuminated in blue) the Menu button.

If options are available (for example, to mark a TV show as watched), tap the ⊙ button. Tap the ❯ button to reveal the other Remote controls (Playlists, Artists, and so on).

The trackpad enables other non-obvious but helpful controls (**Table 2**).

Table 2: Apple TV Playback Controls		
Media	**Action**	**Gesture**
Video	Play or Pause	Tap once.
	Rewind or fast-forward	Flick left or right, or tap and hold.
	Show chapter markers	Flick down to reveal, then flick left or right to skip.
	Jump back 10 seconds to replay	Drag two fingers to the left.
Audio	Play or Pause	Tap once.
	Rewind or fast-forward	Drag left or right and hold.
	Previous song or next song	Flick left or right.

The Remote app also adds a welcome control to the Apple TV. When you need to enter text, such as performing a search at the iTunes Store, you can use the iPhone's built-in keyboard instead of highlighting individual letters using the Apple TV's minimal remote (**Figure 66**, next page).

Figure 66: If you need any further convincing that Remote is the perfect complement to an Apple TV, I present: *text input*. Use the iPhone's keyboard (left) to enter text on the TV (right).

Learn More

Here are some resources for more information online:

- Apple's iPhone site: http://www.apple.com/support/iphone/

- *Macworld's* App Guide: http://www.macworld.com/appguide/

  Macworld has been on top of the iPhone from the beginning. The App Guide offers professional reviews of third-party apps. Also check out the Macworld App Gems app (http://itunes.com/apps/appgems, $1.99)—yes, it's an iPhone app about iPhone apps!

- Macintouch iPhone FAQ: http://www.macintouch.com/iphone/faq.html

  This Frequently Asked Questions list covers all aspects of the iPhone.

URLs not working? *In Snow Leopard's Preview, longer URL links may appear to be broken. To avoid this Preview bug, try clicking the last character in the URL.*

About This Book

Thank you for purchasing this Take Control book. We hope you find it both useful and enjoyable to read. We welcome your comments at tc-comments@tidbits.com. Keep reading in this section to learn more about the author, the Take Control series, and the publisher.

ABOUT THE AUTHOR

Jeff Carlson gave up an opportunity to intern at a design firm during college because he suspected they really just wanted someone tall to play on their volleyball team. Instead, he worked in the Whitworth College publications office where he got to actually, you know, design stuff. In the intervening years, he's been a designer, editor, and writer: He's the Managing Editor of *TidBITS*, a columnist for the *Seattle Times*, a frequent contributor to *Macworld*, and the author of best-selling books on the Mac, video editing, digital photography, and, in earlier incarnations, Web design and Palm organizers. He consumes almost too much coffee. *Almost*.

To contact Jeff about this book, send him email at jeffc@tidbits.com and please include Take Control of Your iPhone Apps in the subject of the message to help ensure it doesn't get accidentally filtered as spam.

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SHAMELESS PLUG

In addition to working on *TidBITS* and writing articles for various publications, I've created a storefront of miscellaneous items that includes shirt and product designs and photographic prints: Never Enough Coffee.

ABOUT THE PUBLISHER

Publishers Adam and Tonya Engst have been creating Macintosh-related content since they started the online newsletter *TidBITS,* in 1990. In *TidBITS*, you can find the latest Macintosh news, plus read reviews, opinions, and more (http://www.tidbits.com/).

Adam and Tonya are known in the Mac world as writers, editors, and speakers. They are also parents to Tristan, who thinks ebooks about clipper ships and castles would be cool.
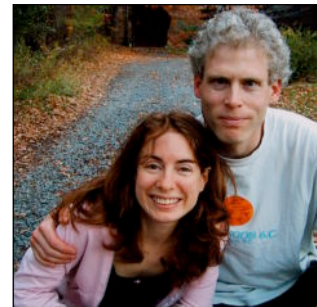
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