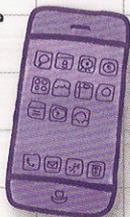


A Brain-Friendly Guide

Covers
iPhone 3.1 SDK

Head First iPhone Development

Master
Objective-C,
Interface
Builder, and
XCode



Design
top-selling
apps



Tap into the iPhone's
GPS and camera



See how Mike
saved his love life
with an iPhone
Twitter app

Mix up a tasty
multi-view
bartending app



O'REILLY®

Dan Pilone & Tracey Pilone

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Table of Contents (the real thing)

Intro

Your brain on iPhone Development. Here *you* are trying to *learn* something, while here your *brain* is doing you a favor by making sure the learning doesn't *stick*. Your brain's thinking, "Better leave room for more important things, like which wild animals to avoid and whether naked snowboarding is a bad idea." So how *do* you trick your brain into thinking that your life depends on knowing enough to develop your own iPhone apps?

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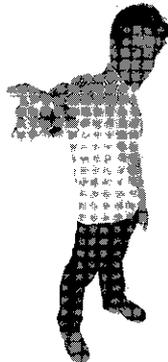
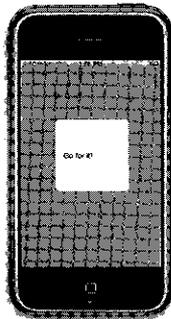
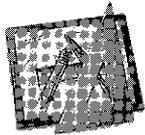
getting started

Going mobile

1

The iPhone changed everything.

It's a **gaming** platform, a personal **organizer**, a full **web browser**, oh yeah, and a **phone**. The iPhone is one of the most exciting devices to come out in some time, and with the opening of the App Store, it's an opportunity for independent developers to compete worldwide with big named software companies. All you need to release your own app are a couple of **software tools**, some **knowledge**, and **enthusiasm**. Apple provides the software and we'll help you the knowledge; we're sure you've got the enthusiasm covered.



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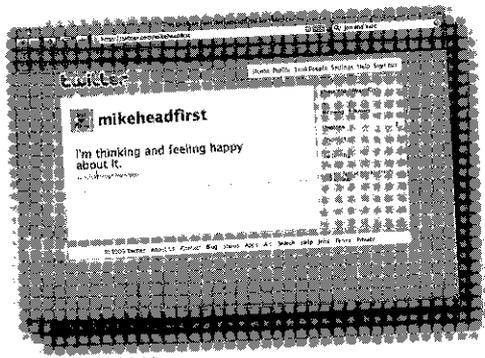
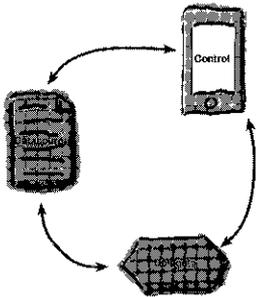
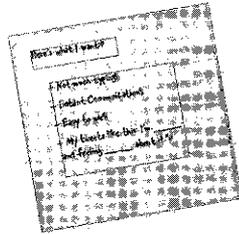
iPhone app patterns

2

Hello @twitter!

Apps have a lot of moving parts.

OK, actually, they don't have any real moving parts, but they do have lots of **UI controls**. A typical iPhone app has more going on than just a button, and now it's time to build one. Working with some of the **more complicated widgets** means you'll need to pay more attention than ever to how you **design** your app as well. In this chapter, you'll learn how to put together a bigger application and some of the **fundamental design patterns** used in the iPhone SDK.



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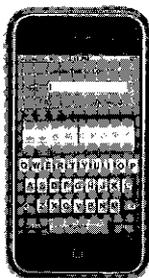
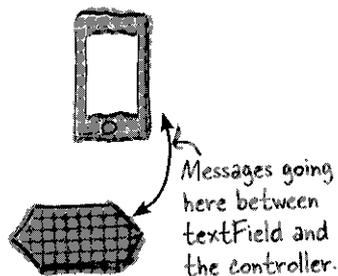
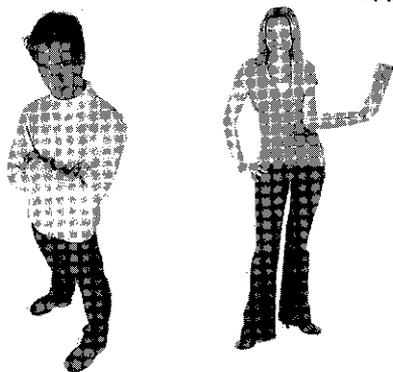
objective-c for the iPhone

Twitter needs variety

3

We did a lot in Chapter 2, but what language was that?

Parts of the code you've been writing might look familiar, but it's time you got a sense of what's really going on under the hood. The **iPhone SDK** comes with great tools that mean that you don't need to write code for everything, but you can't write entire apps without learning something about the underlying language, including **properties**, **message passing**, and **memory management**. Unless you work that out, all your apps will be just default widgets! And you want more than just widgets, right?



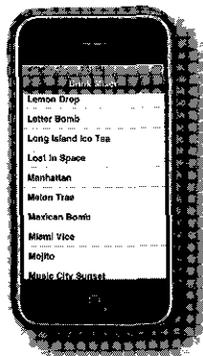
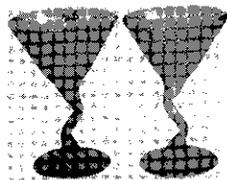
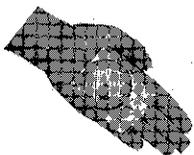
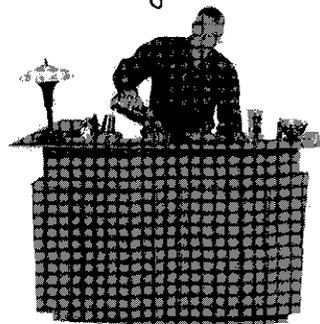
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multiple views

A table with a view**4****Most iPhone apps have more than one view.**

We've written a cool app with one view, but anyone who's used an iPhone knows that most apps aren't like that. Some of the more impressive iPhone apps out there do a great job of moving through complex information by using multiple views. We're going to start with navigation controllers and table views, like the kind you see in your Mail and Contact apps. Only we're going to do it with a twist...

Look, I don't have time for posting to Twitter. I need to know a ton of drink recipes every night. Is there an app for that?



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plists and modal views

5

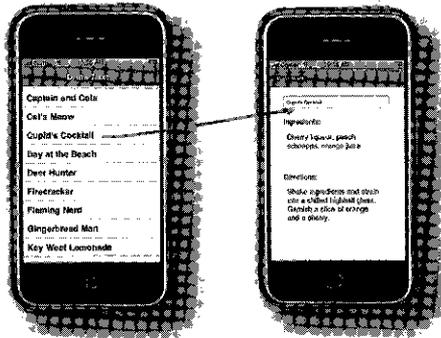
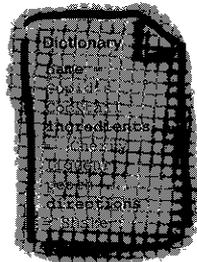
Refining your app

So you have this almost-working app...

That's the story of every app! You get some functionality working, decide to add something else, need to do some **refactoring**, and respond to some **feedback** from the App Store. Developing an app isn't ~~always~~ ever a linear process, but there's a lot to be learned in that process.



Anatomy of a crash

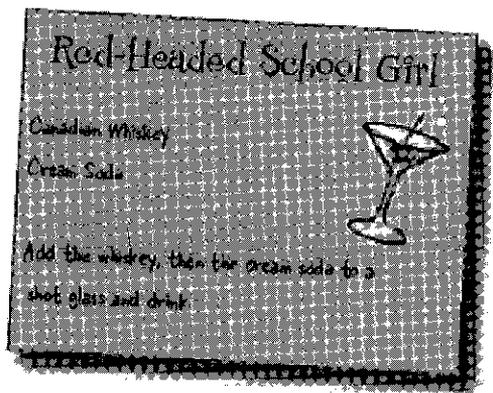
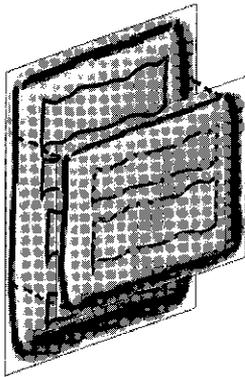


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saving, editing, and sorting data

Everyone's an editor...**6****Displaying data is nice, but adding and editing information**

is what makes an iPhone app really rock. DrinkMixer is great—it uses some **cell customization**, and works with **plist dictionaries** to display data. It's a handy reference application, and you've got a good start on adding new drinks. Now, it's time to give the user the ability to modify the data—**saving, editing, and sorting**—to make it more useful for everyone. In this chapter we'll take a look at **editing patterns** in iPhone apps and how to guide users with the nav controller.



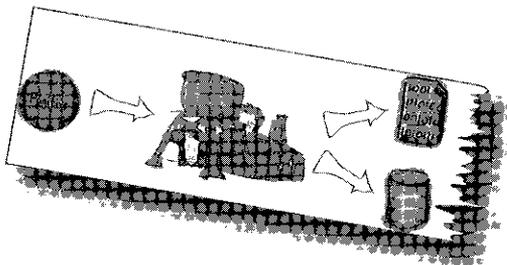
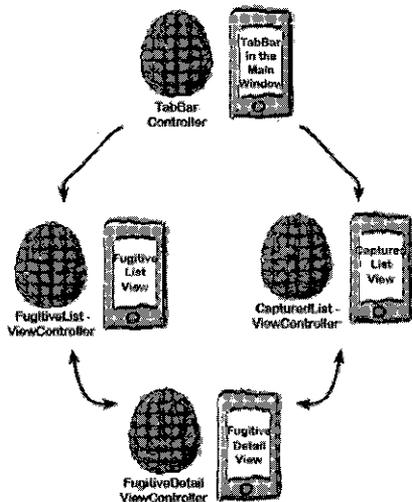
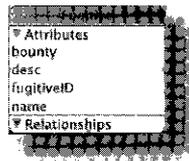
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tab bars and core data

7

Enterprise apps

Enterprise apps mean managing more data in different ways. Companies large and small are a significant market for iPhone apps. A small handheld device with a **custom app** can be huge for companies that have **staff on the go**. Most of these apps are going to manage **lots of data**, and iPhone 3.x has built in Core Data support. Working with that and another new controller, the **tab bar controller**, we're going to build an app for justice!

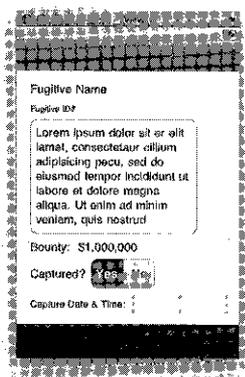
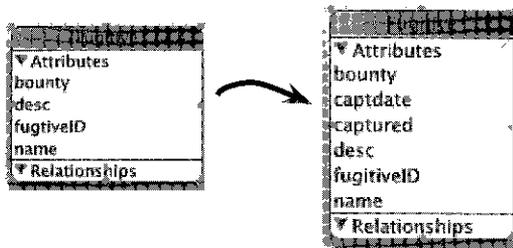
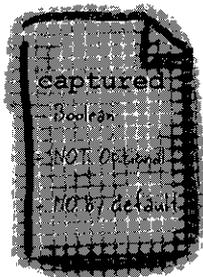


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migrating and optimizing with core data

Things are changing**8**

We have a great app in the works. iBountyHunter successfully loads the data that Bob needs and lets him view the fugitives in an easy way. But what about when **the data has to change**? Bob wants some **new functionality**, and what does that do to the **data model**? In this chapter you'll learn how to handle **changes** to your data model and how to take advantage of more Core Data features.



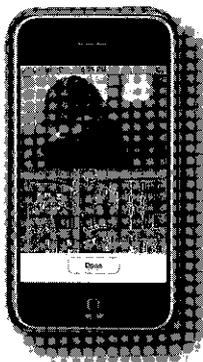
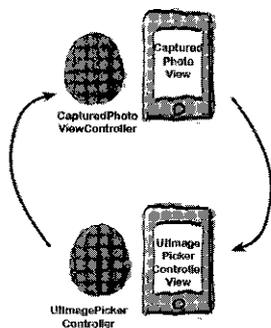
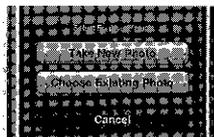
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camera, map kit, and core location

9

Proof in the real world

The iPhone knows where it is and what it sees. As any iPhone user knows, the iPhone goes way beyond just **managing data**: it can also take **pictures**, figure out your **location**, and put that information together for use in your app. The beauty about incorporating these features is that just by tapping into the tools that iPhone gives you, suddenly you can import pictures, locations, and **maps** without much coding at all.



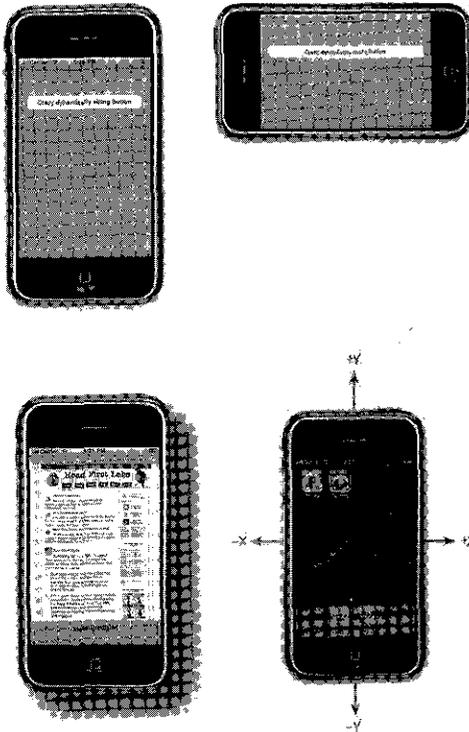
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appendix i, leftovers

The top 6 things (we didn't cover)

Ever feel like something's missing? We know what you mean... Just when you thought you were done, there's more.

We couldn't leave you without a few extra details, things we just couldn't fit into the rest of the book. At least, not if you want to be able to carry this book around without a metallic case and castor wheels on the bottom. So take a peek and see what you (still) might be missing out on.



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appendix ii, preparing your app for distribution

Get ready for the App Store

You want to get your app in the App Store, right? So far, we've basically worked with apps in the simulator, which is fine. But to get things to the next level, you'll need to **install an app** on an actual iPhone or iPod Touch before applying to get it in the App Store. And the only way to do that is to **register** with Apple as a developer. Even then, it's not just a matter of clicking a button in Xcode to get an app you wrote on your personal device. To do that, it's time to **talk with Apple**.

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