



# Learn iOS Programming 2015

Pittsburgh CocoaHeads / SwiftFeet



WiFi: Preciousss / cocoaheads  
(My phone. Be gentle.)

- <http://bit.ly/cocoaheads-learn-ios>

# The Book

Chris Adamson  
@invalidname

Janie Clayton  
@redqueencoder

<http://pragprog.com>



Beta 4 is current

Beta 5 Real Soon Now

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# The Tools



Version 6.1  
(not beta)



Swift  
(moving target)

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As of February 12, 2015. These will change over the next couple of months as newer versions of Xcode, and hence Swift, come out.

# The Procedure

- Each Month here at CocoaHeads
  - review of the previous 4 chapters
  - kick-off for the next 4 chapters
- You all read through and work on the next 4 chapters
- Repeat until we run out of book!
  - <http://bit.ly/cocoaheads-learn-ios>

# Got Questions?

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- Google Group  
<https://groups.google.com/forum/#!forum/cocoaheads-pittsburgh>
- The Project Page  
<http://bit.ly/cocoaheads-learn-ios>  
We'll post the keynotes and hopefully videos too.
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You got questions? We've got blank stares!

ASK US QUESTIONS! This is the value-add. One thing I find when I work through a book or something is I get stuck. Some compiler error. Some thing I just don't understand. I'd much rather spend 5-10 minutes to save you an hour of banging your head against the wall.

Granted, head-banging can be useful, but it has diminishing returns. Think about a problem, and if you don't get it - drop one of us a line. I'm typically around during regular business hours and over the weekends if you have a live question, or drop one of us an email. Don't bug Chris or Janie :-)

# The Realities

- Programming is hard! (let's go shopping!)  
If you have zero programming experience, expect to work
- The tools are moving targets  
#ilyxc hashtag  
Swift undergoing changes that break code
- The book is beta, and is chasing the same targets
- It is a **fun** platform, though
  - <http://bit.ly/cocoaheads-learn-ios>

Anyone who writes books about Apple platforms are insane in the membrane. Apple feels no compunction when they make changes, sometimes blatantly gratuitous, to existing tools, procedures, and with Swift, the fundamental programming language.

# The Book's Approach

- Mix of
  - Programming Language and Tools
  - API
  - Software topics (refactoring, debugging, testing)
- Single sample Twitter app throughout
  - <http://bit.ly/cocoaheads-learn-ios>

This is the approach that Chris and Janie take with the book.

It's not an exhaustive tour of programming interfaces - those were 600 page books way back in 2009! But more of a "here's how the platform works, here's some stuff and how it works, and here's some skills to get you going in your own direction"

# Other Resources

- Big Nerd Ranch iOS Bootcamps
  - Apple's Swift Book
  - Dan Steinberg's Swift Kickstart  
<http://editorscut.com/Books/SwiftKickstart>
  - Apple's Developer Forums  
<http://devforums.apple.com>
  - Erica Sadun  
Blog - <http://ericasadun.com>  
IRC - #swift-lang on [irc.freenode.net](http://irc.freenode.net)
- <http://bit.ly/cocoaheads-learn-ios>



There are lots and lots of resources.

Apple's swift book is the closest we come to a description of the language. You can get it from the app store

I like Dan Steinberg's stuff. His Swift Kickstart is good

The swift folks hang out in apples dev forums

Erica Sadun has been a prolific writer in the ios space. She's got a blog that's chock full of swift fun, and she "moderates" (as close as any irc group can be moderated) the irc channel.



# The Agenda

- <http://bit.ly/cocoaheads-learn-ios>

# The Agenda: February

- Playing Around with Xcode
  - Building Adaptive User Interfaces
  - Programming in Swift for iOS
  - Testing Apps
- 
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# The Agenda: March 12

- Presenting Data in Table Views
  - Waiting for things to happen with closures
  - Doing two things at once with closures
  - Growing the Application
- 
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# The Agenda: April 9

- Navigating between View Controllers
  - Taking Advantage of Large Screens
  - Recognizing Gestures
  - Working with Photos
- 
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# The Agenda: May 14

- Launching, Backgrounding, and Extensions
- Debugging Apps
- Publishing to the App Store
  - Added bonus, source code control!
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# February's Fun

- <http://bit.ly/cocoaheads-learn-ios>

# Suggested Approach for February

- Week 1 - Playing Around with Xcode
  - Week 1 - Building Adaptive User Interfaces
  - Week 2 and 3 - Programming in Swift for iOS
  - Week 4 - Testing Apps
- 
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Chapter 3, "Programming in Swift for iOS" is by far the largest chapter in the book. The first two are kind of short, and very straightforward in getting you oriented to Xcode and the built-in Interface Builder stuff.

Week 4's chapter covers some software engineering practices - how and why to test, and intro to test driven development.

# Two kinds of Nothing

Difference between "nothing" and "no value"

Data field for "fax machine number"

There's a big difference between  
I don't know if this user has a fax number

vs

this user has **no** fax number

BUILD -> data field for fax machine number

BUILD -> big difference

database systems have a NULL value, along with all the joy of that.



# Optionals

```
var a : Int
var x : Int?

...

if let realX = x {
    // use realX because it exists
}
```

# Yay Xcode!

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And now a demo showing playgrounds, a little swift, and IBActions and IBOutlets