

11 Tips and Tricks to Becoming a Better (Mobile) Developer

Michael Crump
Telerik
@mbcrump
michaelcrump.net



After taking a look at this abstract...

Michael Crump

11 Tips & Tricks to be a Better (Mobile) Developer

What do you do to hone your craft as a mobile developer? What goals have you set (if any) to be a better developer in 2015? In this session, I'll show you 11 items that I use to continually improve my skills and effectiveness, both professionally and personally.

Track: [Mobile](#)

Skill Level: Beginner

Slot: 3/11, 10:30 AM | Ballroom A

Tags: [mobile](#), [softskills](#)

What this talk is **not about...**

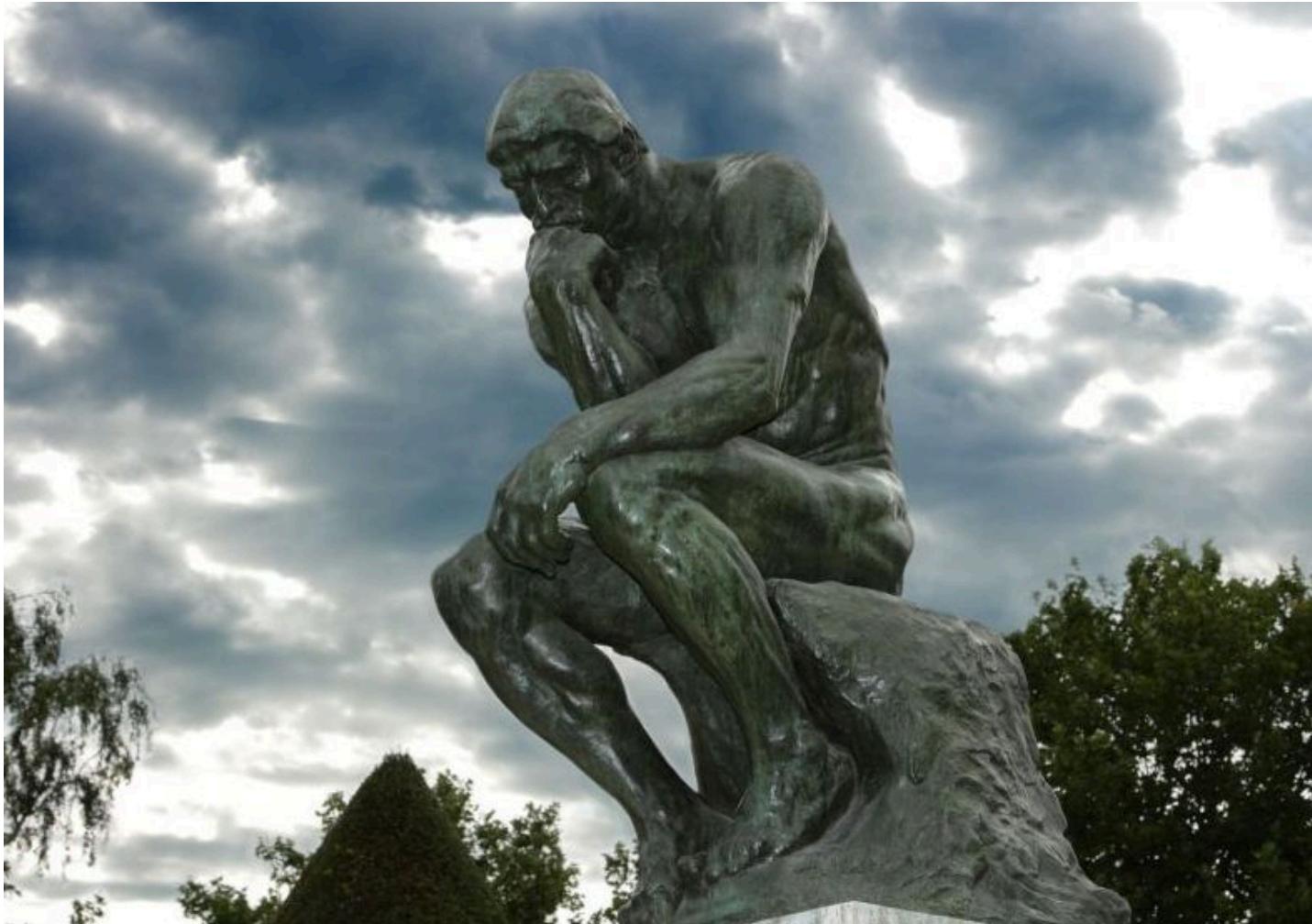
- Learn the basics first
- Don't be afraid to break things
- Take advantage of code analysis tools
- Commenting your code
- Read other developers code
- Mobile Testing
- Bullet Points

What this talk is **about...**

Some *unconventional* ways that I've discovered to become a better mobile developer.



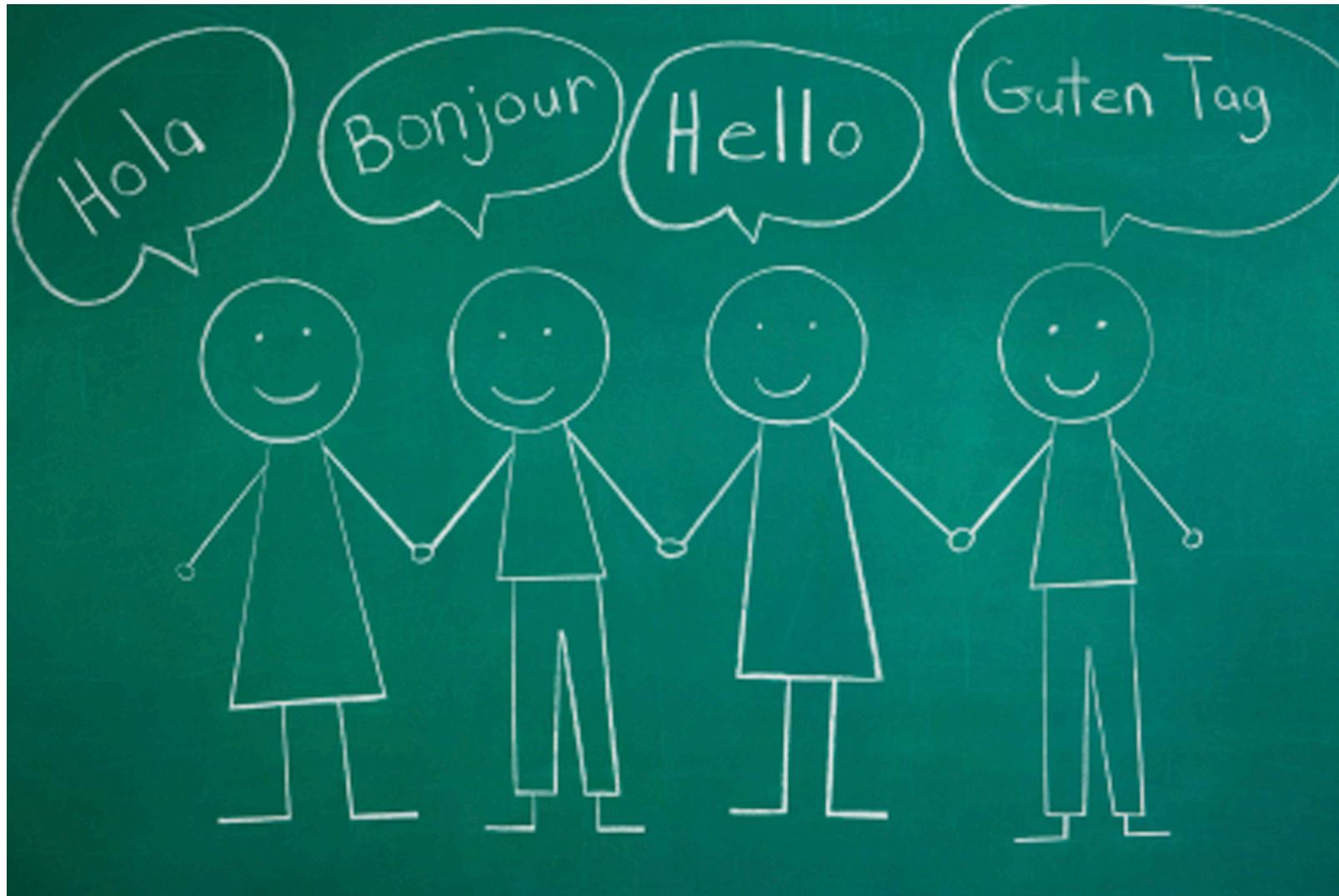
You'll become a Better Thinker



Show your Skills



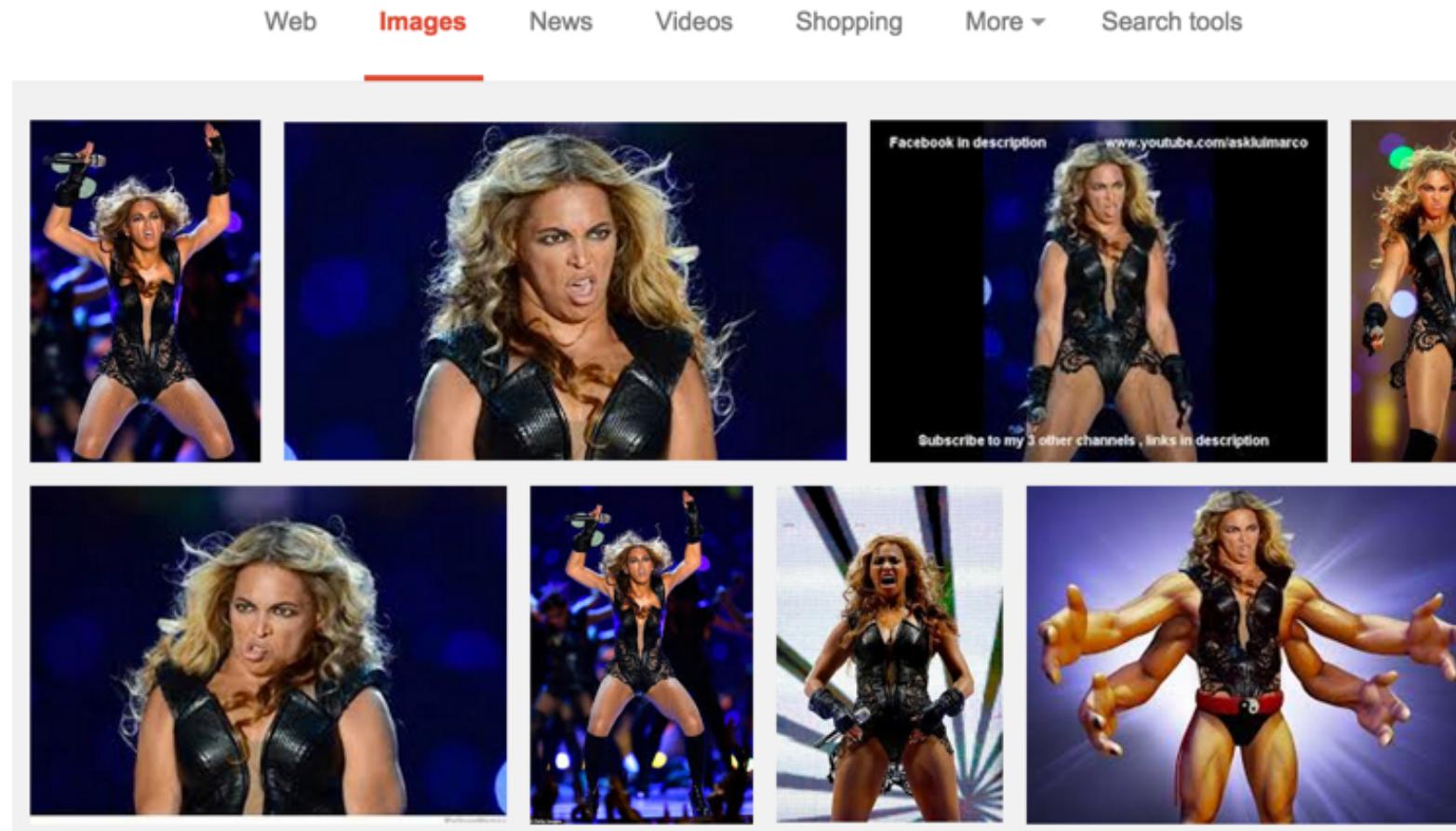
You'll Meet new People



Your Footprint on the Internet



We all what goes on the internet, stays on the internet



Footprint From 2010 Found!



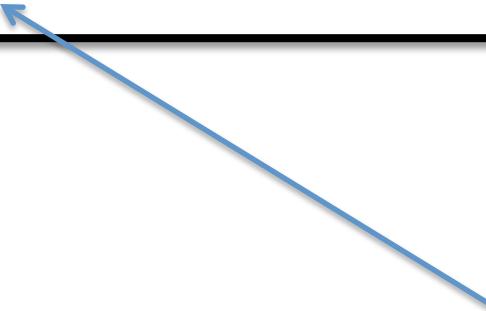
Rich P to me ◊

Hi Michael,

Thank you for getting back to me. Note: I'm kind of an old school guy (winform...) trying to step up to this new stuff (hopefully I have enough brain cells left to get this :).

Here is the link where I saw your info

<http://geekswithblogs.net/mcrump/archive/2010/06/27/getting-started-with-mvvm-general-infolinks.aspx>



Market Yourself as a Professional



Serves as a Personal Journal



Michael Crump @mbcrump · Feb 12

I can't tell you the number of times that I've read my own blog post to remember how to setup #Git in #VS2013. michaelcrump.net/setting-up-git...



...

Pushes you to Learn Things Quickly

$$\pi + 1 \sum_{n=0}^{+\infty} \frac{x^n}{n}$$
$$x = y^2 \quad \partial_z = \sqrt{\sum_{k=1}^{\infty} (z_k - n)}$$
$$f(x) = \int_a^x e^{-\frac{t^2}{2}} dt$$
$$Z = \frac{1}{\sqrt{2\pi}} e^{-\frac{z^2}{2}} \sin \frac{nx}{L}$$
$$E = mc^2 \quad \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + \dots}}}}$$
$$x^2 + 3y^2 - 7x - 8$$
$$x+3=5 \quad (x+a)^n$$
$$M = \sqrt{1-v^2}$$
$$c = 1.37 \pi \phi$$
$$a^2 = c^2 - b^2$$



What do you use it for?

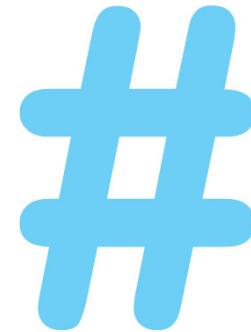
Sharing Knowledge with Friends – Make sure it is accurate



Use Twitter as a Tool?



The Power of Hashtags



News

Results for #iosdev

Save

Top / All

Swift Trends and 8 others follow
NatashaTheRobot @NatashaTheRobot · 39m
Functional Swift Snippet #16: Typed Notification Observers via [@objcio #swift](#)
[#iosdev objc.io/snippets/16.ht...](#)

Tyler Balaban and 2 others follow
Seb Hareng @SebHareng · 41m
How To Create Great iOS App Preview Videos In 5 Steps bit.ly/1vQRa7b by
[@Tapdaq #iosdev #appdev](#)

David McGraw @xmcgraw · 3h
First issue drops at the end of the month! Are you in? [#iosdev #swift](#)
[cards.twitter.com/cards/8z0fh/8c...](#)

iOS Developer Tips @iOS_Dev_Tips · 3h
Building A Notification Center In Swift [iosdevtips.com/15CSYHV](#) [#iosdev](#)

Got a Question, We're Listening

 **Sam Oakley** @Sam_Oakley · Feb 22

iOS dev with an extension, have you encountered this code signing error when debugging on device? [#iosdev stackoverflow.com/questions/2866...](#)

 Stack Exchange

"Signed resources have been added, removed, or modified" when running...

I have an app with an extension. Install and run works fine in the simulator, but after running my app from Xcode to the device once, on subsequent runs I get the following lines in the device log:...

[View on web](#)

  2   1 

Finding Jobs



Shay Friedman
@ironshay

Following the **#angularjs** hashtag is quite amazing - a lot of the tweets are recruiting tweets... big shortage of angular devs out there!

RETWEET FAVORITES

1 2

 NEWS

Sure Enough

Noah Addy and 9 others follow

AngularJS Jobs @angularjobs · Feb 24

Sr. Front End Engineer - Jiff - Palo Alto, CA bit.ly/1agynMs #AngularJS

3 3 2 2 ...

Swift Trends follows

Jobmote.com @jobmote · Feb 24

Remote job: Want to Break Out of the Corporate Grind? at BusyEvent Mobile
[#angularjs](http://buff.ly/1wjYZGI) #and buff.ly/1wjYZGI

4 4 2 2 ...

What About Other Jobs?



 **Naviro** @OzITJobs · Jan 18
iOS developer (Objective-C & Swift), architect iPhone apps for new start-up
naviro.com.au/joblink/317807... #i-Phone #iOSDev #ITJobs #Sydney

1 like

Promoting Apps

Appoco @hi_appoco · Jan 18
Telegram: a superfast, simple, secure messaging app. → appo.co/i/686449807
#iOSdev #AndroidDev

Telegram Messenger

QR code

Telegram

The world's fastest messaging app.
It is free and secure.

Start Messaging >

Expand

Finding Great OSS

 **David Owens** @dvdowns · Jan 15
Before I try to port it to [#Swift](#)/[#SwiftLang](#), has anyone already found something like this? github.com/duowan/Twitter...

 GitHub

duowan/TwitterPaggingViewer
By GitHub @github
A twitter like navigation bar, page viewer. Contribute to TwitterPaggingViewer development by creating an account on GitHub.

[View on web](#)



[Expand](#)

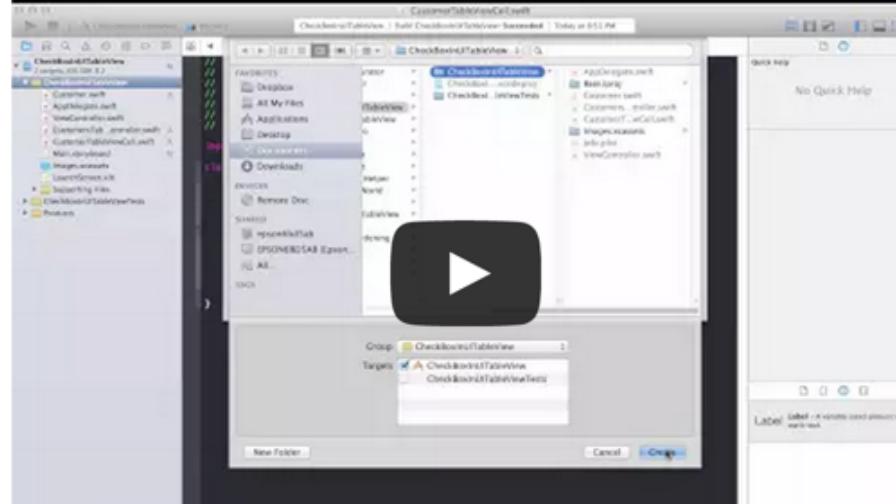


Learning

azamsharp @azamsharp · 6h
Screencast: Creating Custom CheckBoxes in UITableView Control
#AzamSharpYouTube youtube.com/watch?v=9hgFNf... #iosdev #iphonedev
#ios

YouTube

Learning iOS Development Part 77 (Custom CheckBox in UITableView)



The screenshot shows the Xcode interface with a file creation dialog open. The dialog title is "ChecklistTableViewCell.xib". The "Group" dropdown is set to "ChecklistTableViewCell". The "Targets" section has "ChecklistTableViewCell" selected. A large play button is overlaid on the center of the dialog. The background shows the Xcode project browser with various files like "CustomerCell.xib", "CustomerCell.swift", and "CustomerTableViewCell.swift" listed under "ChecklistTableViewCell".

Learning iOS Development Part 77 (Custom CheckBox in UITableView)
In this screencast Mohammad Azam will demonstrate how to add a custom checkbox to a UITableView control.

Staying Connected



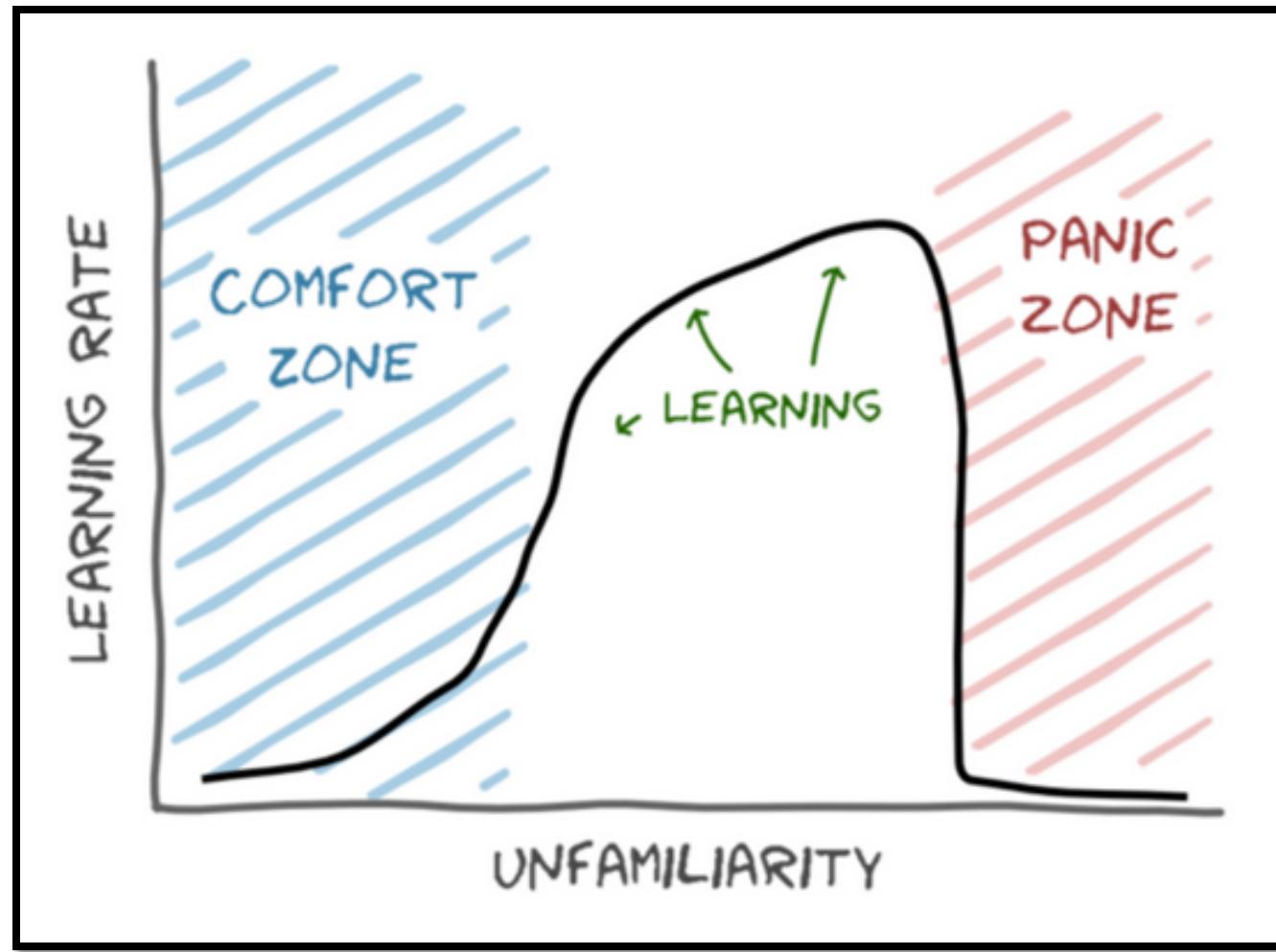
Celeste A. Carter @TweetsByCeleste · Oct 18

@mbcrump @Telerik Thanks so much for all your help!
#ReadyResponder wouldn't exist without you guys!!! #AttHack



...

Get out of your Comfort Zone



Tale of a guy with a dead-end job From Alabama



"It's an entry level job with no exit strategy."

Created a Blog, Twitter account and would speak anywhere ANYONE would have me.

This absolutely terrified me!



Many months past...



Blog generated 10's of views, Twitter account had ~100 followers and only UG's and CC would take me.

Eventually, I landed conferences within my zip code.

Such as this one...



I finally got a job offer and took it



But I had a lot to risk

I had a safety net, great benefits, a
newborn child.

If I can do it, you can too.
Whatever your goal is.

From Socially Awkward



To Asking Apple's SVP for a Selfie



Michael Crump @mbcrump · Jun 5
Just met Craig Federighi from Apple (SVP). #wwdc14 #keynote

◀ ▶ ⚡ 8 ...



A Discussion Forum?

This site is all about **getting answers**. It's not a discussion forum. There's no chit-chat.

Just questions...

...and answers.



Do Swift-based applications work on OS X 10.9/



Will Swift-based applications work on [OS X 10.9 \(Mavericks\)/iOS 7](#) a

14

For example, I have a machine running [OS X 10.8 \(Mountain Lion\)](#), an application I write in Swift will run on it.



[ios](#) [osx](#) [swift](#)

asked Jun 2 '14 at 19:25



Melr

2,329 ● 5 ● 16 ● 4

2 Answers



Swift code can be deployed to OS X 10.9 and iOS 7.0. It will usually versions.

4



answered Jun 3 '14 at 8:25



Greg Parker

4,391 ● 1 ● 7 ● 15

Where do most drop the ball?

They ask these questions...

Questions you *haven't* researched
Product or service recommendations
Not related to software development

They should be asking these questions...

Specific Programming Problems
Questions regarding Algorithms
Software Development Best Practices

Tags Rock!

Do Swift-based applications work on OS X 10.9/



Will Swift-based applications work on [OS X 10.9 \(Mavericks\)/iOS 7](#) a

14

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2,329 ● 5 □ 16 □ 4



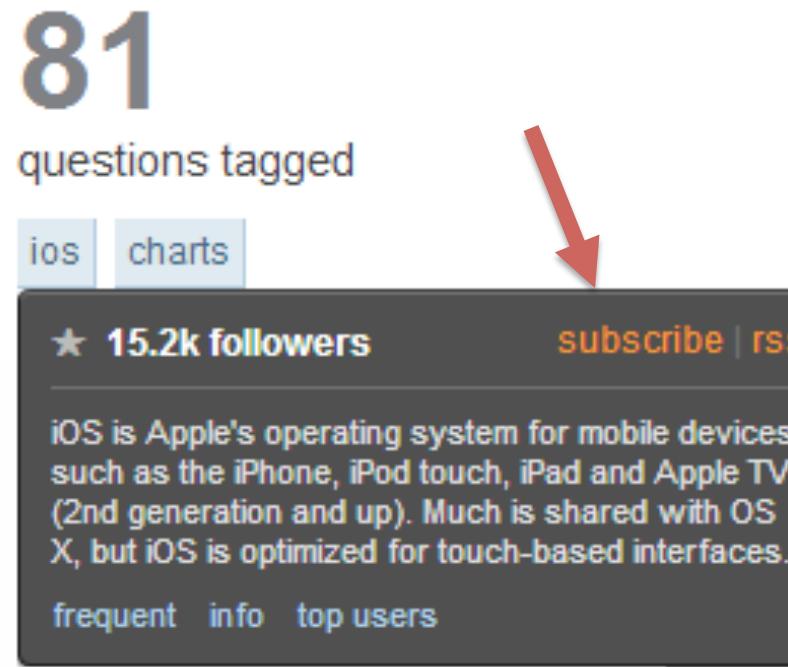
Setup Chains for Tags

<http://stackoverflow.com/questions/tagged/mobile or ios> - returns all questions matching either tag.

<http://stackoverflow.com/questions/tagged/mobile ios> - returns all questions tagged with both mobile and ios.

<http://stackoverflow.com/questions/tagged/mobile or ios or android or windowsdev> - Allows you to chain the ORs to match multiple tags.

Setup Alerts for Tags



Careers Page



Search Jobs

Keywords**Location****Search**

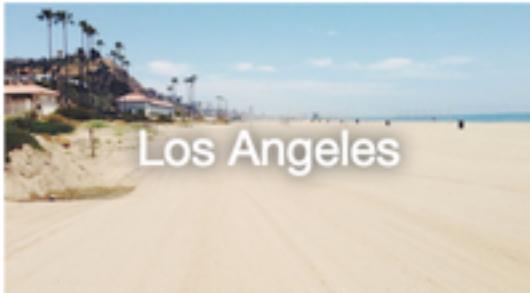
Keywords: [Python](#) - [CoffeeScript](#) - [jQuery](#) - [PHP](#) - [C#](#) - [Ruby](#) - [MongoDB](#) - [ASP.NET](#) - [Java](#)

Locations: [Seattle](#) - [New York](#) - [London](#) - [San Francisco](#) - [Chicago](#) - [Berlin](#) - [Remote](#)

Companies: [GrubHub](#) - [Infusion](#) - [Rally Health](#) - [Idean](#) - [ArcherDX](#)

Currently in Beta

Explore Cities



Los Angeles



Washington D.C.



Austin



Vancouver



Seattle



Utrecht

[Explore all cities...](#)

Atlanta

Enjoy the southern comforts of this city's promising tech culture



Career Salaries ①

Systems Administrator

\$83,593

Web Applications Developer

\$96,398

Web Product Manager

\$108,156

What developers know it for

As the ninth largest city in the U.S. and a top 10 emerging tech hub for 2014, Atlanta's tech culture is now expanding beyond the big-business reputation set by corporations like Coca-Cola, UPS, AT&T, and Turner Broadcasting. Today, Georgia's capital boasts some 350 startups, more than half of which are focused on mobile tech, and a growing coworking community as part of Atlanta Tech Village, all of which comes for a relatively low cost of living, both for individuals and businesses.

What do I use it the MOST for?

Learning



Keep calm to changes in the Mobile Space



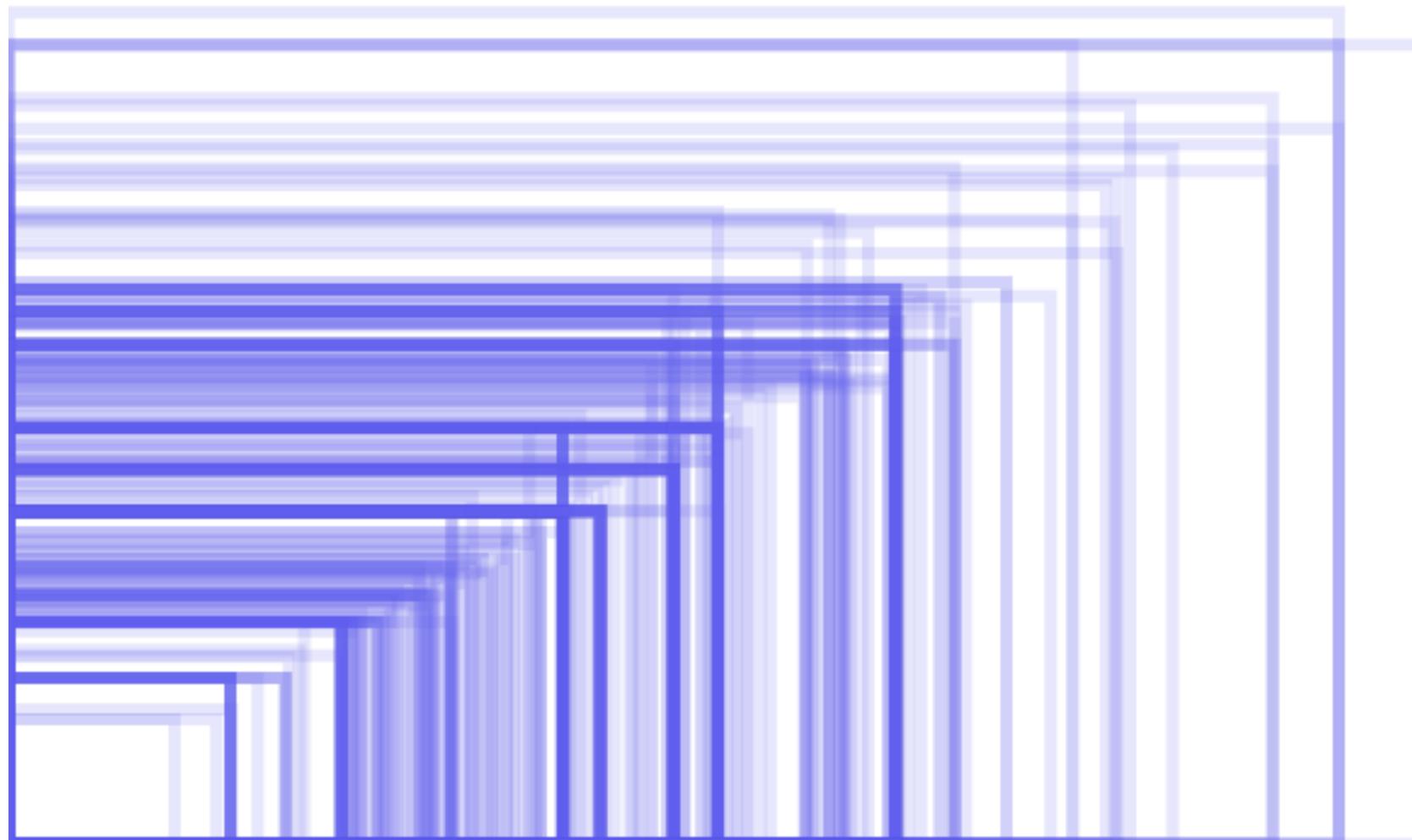
We used to Build for this...



iOS



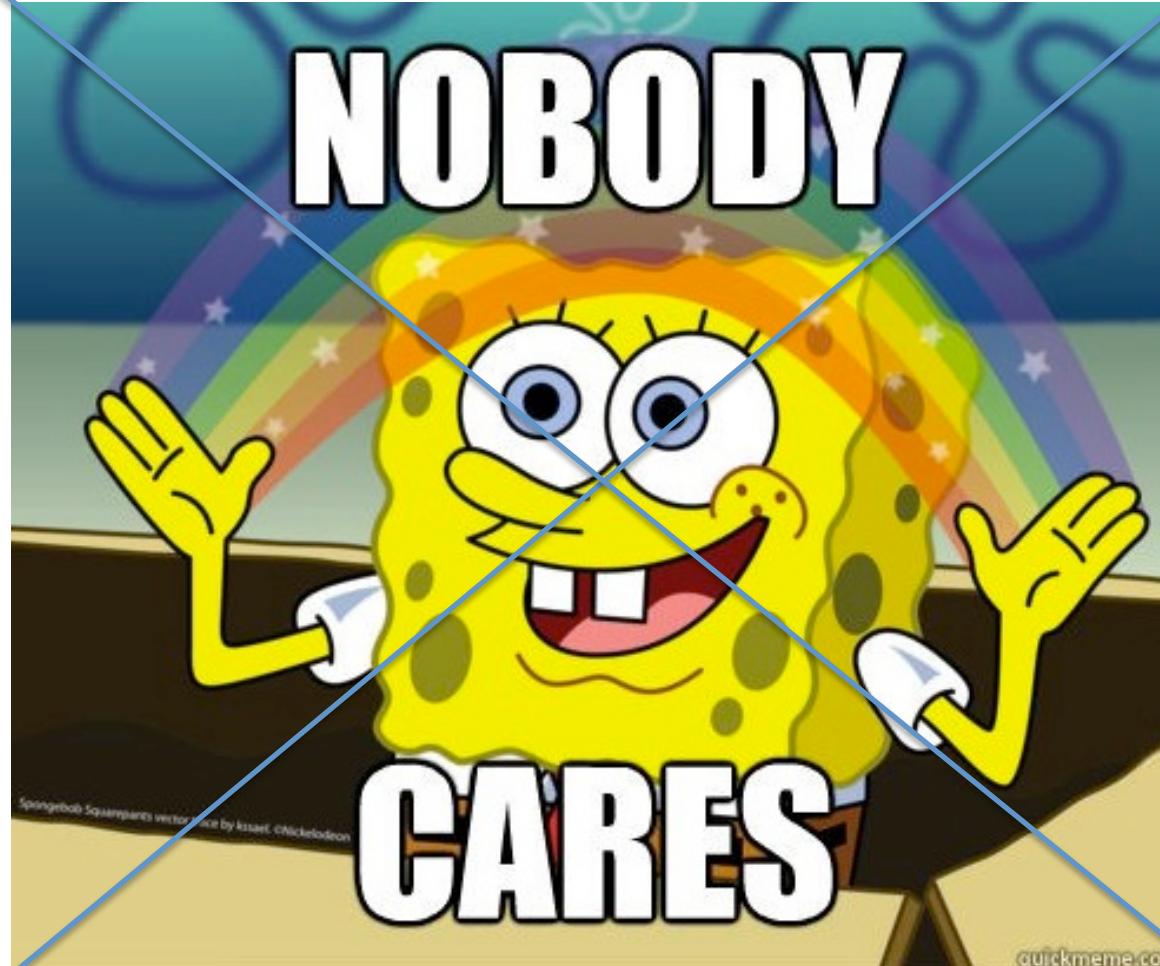
Android



Windows Phone



BlackBerry



And even more...

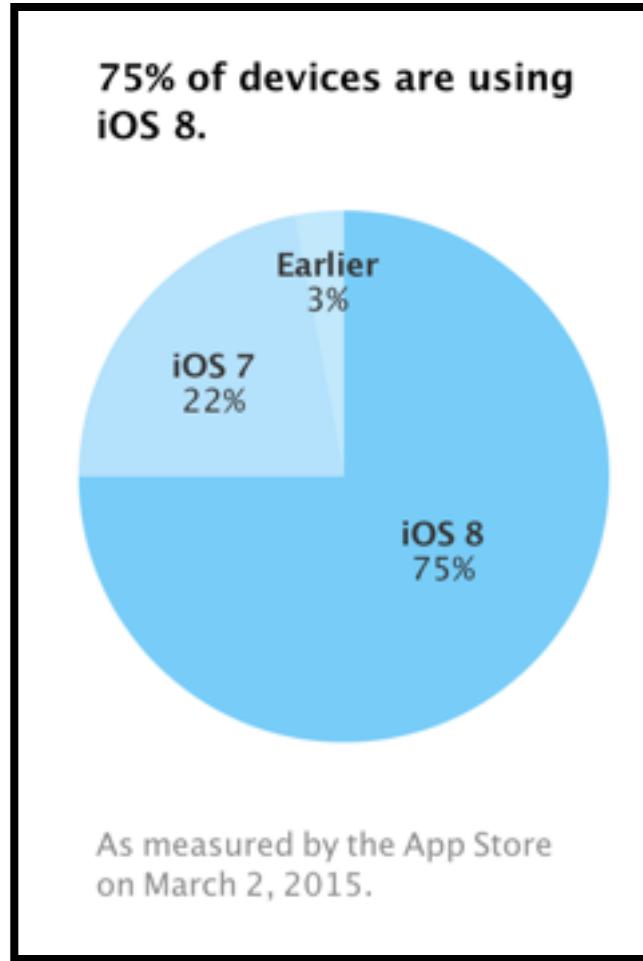


This is enough to make you scream



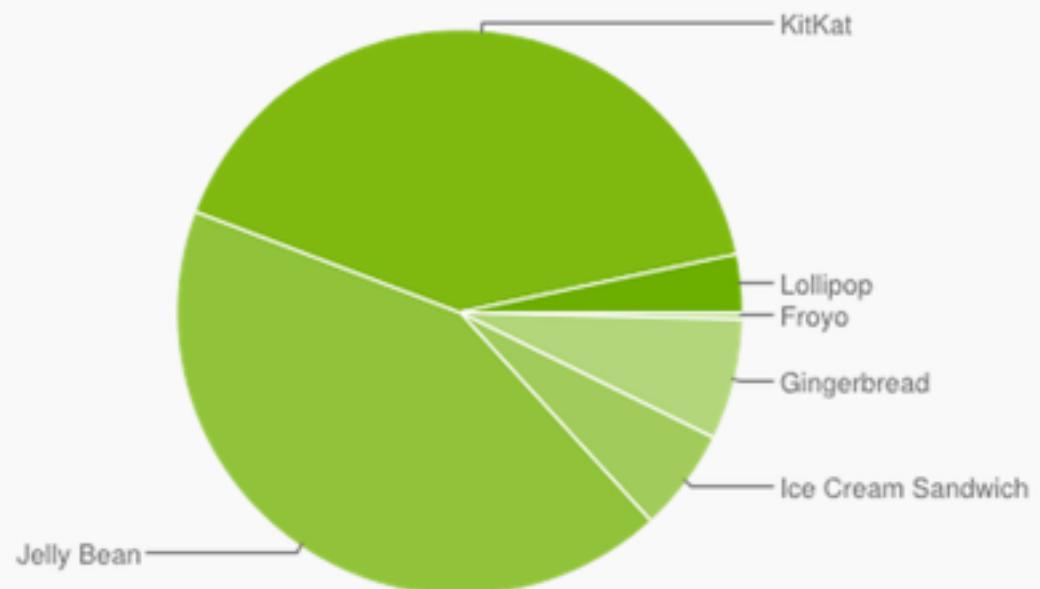
Take a step back and look at your
customers

iOS



Android

Version	Codename	API	Distribution
2.2	Froyo	8	0.4%
2.3.3 - 2.3.7	Gingerbread	10	6.9%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	5.9%
4.1.x	Jelly Bean	16	17.3%
4.2.x		17	19.4%
4.3		18	5.9%
4.4	KitKat	19	40.9%
5.0	Lollipop	21	3.3%



*Data collected during a 7-day period ending on March 2, 2015.
Any versions with less than 0.1% distribution are not shown.*

How should I build it?

These are the most common approaches

Native	Hybrid	Mobile Web
Single platform	Multiple platforms	Multiple platforms
Obj-C, Swift, Java, C#	HTML, JS, CSS	HTML, JS, CSS
High Dev. Cost	Reasonable Dev. Cost	Reasonable Dev. Cost
Native APIs	Native APIs*	Limited APIs
Advanced graphics	Moderate graphics	Limited graphics
App Store Distribution	App Store Distribution	Web Distribution

But we are also seeing other ways...



nativescript.org

Design Patterns

A collection of design patterns:

- Abstract
- Behavioral
- Singleton
- Template
- Interpreter
- Responsibility
- Iterator
- Builder
- Flyweight
- development
- Adapter
- Interaction
- Method
- Class
- Command
- Chain
- Composite
- Proxy
- Structural
- Decorator
- Bridge
- Object
- agile
- Visitor
- Observer
- UNIX
- Facade
- Strategy
- State
- Prototype
- Mediator
- Memento
- Windows
- Creation

The Most Popular Being...

Big Ball of Mud



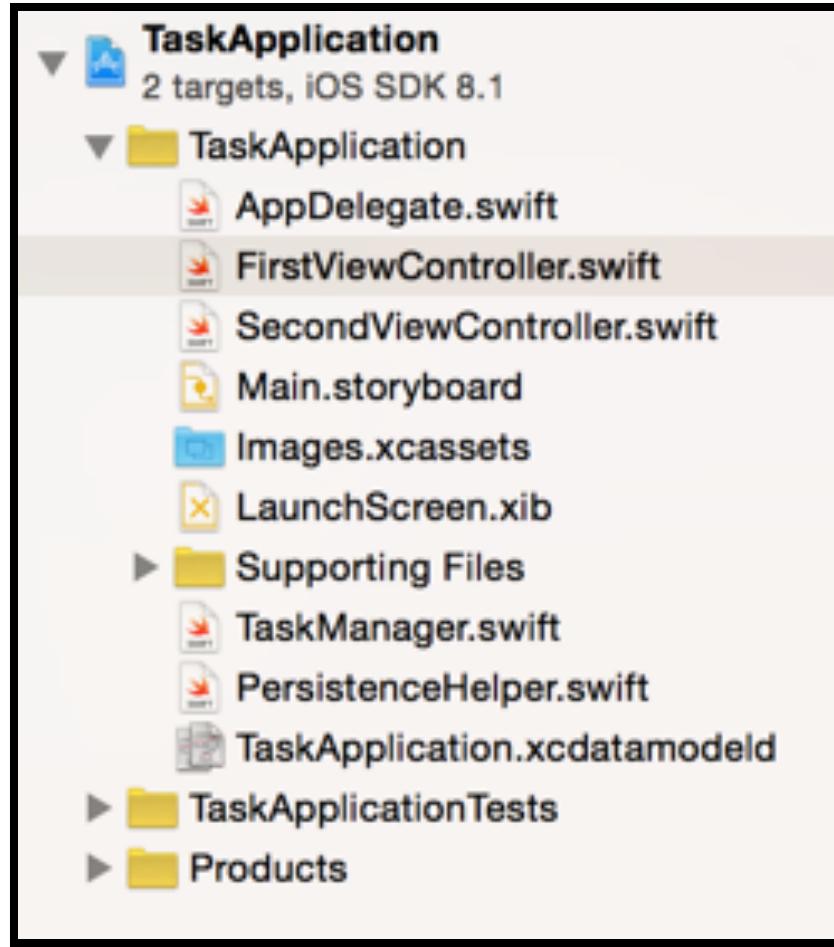
Big Ball of Mud

A Big Ball of Mud is a haphazardly structured, sprawling, sloppy, duct-tape-and-baling-wire, spaghetti-code jungle.

http://en.wikipedia.org/wiki/Big_ball_of_mud

Know at least 1...Well

Apple steers you towards MVC



Android / WP

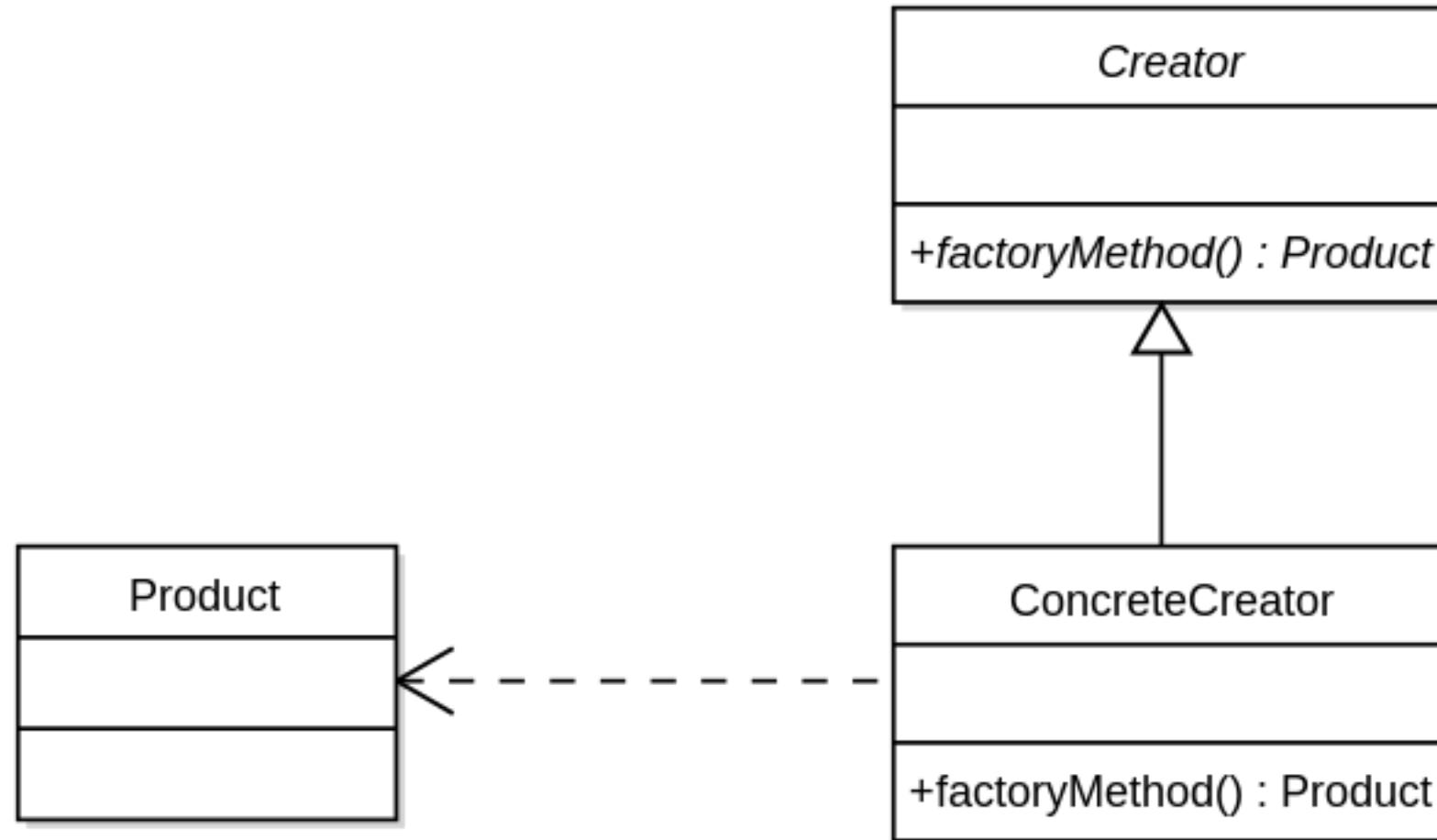


Android - Singleton

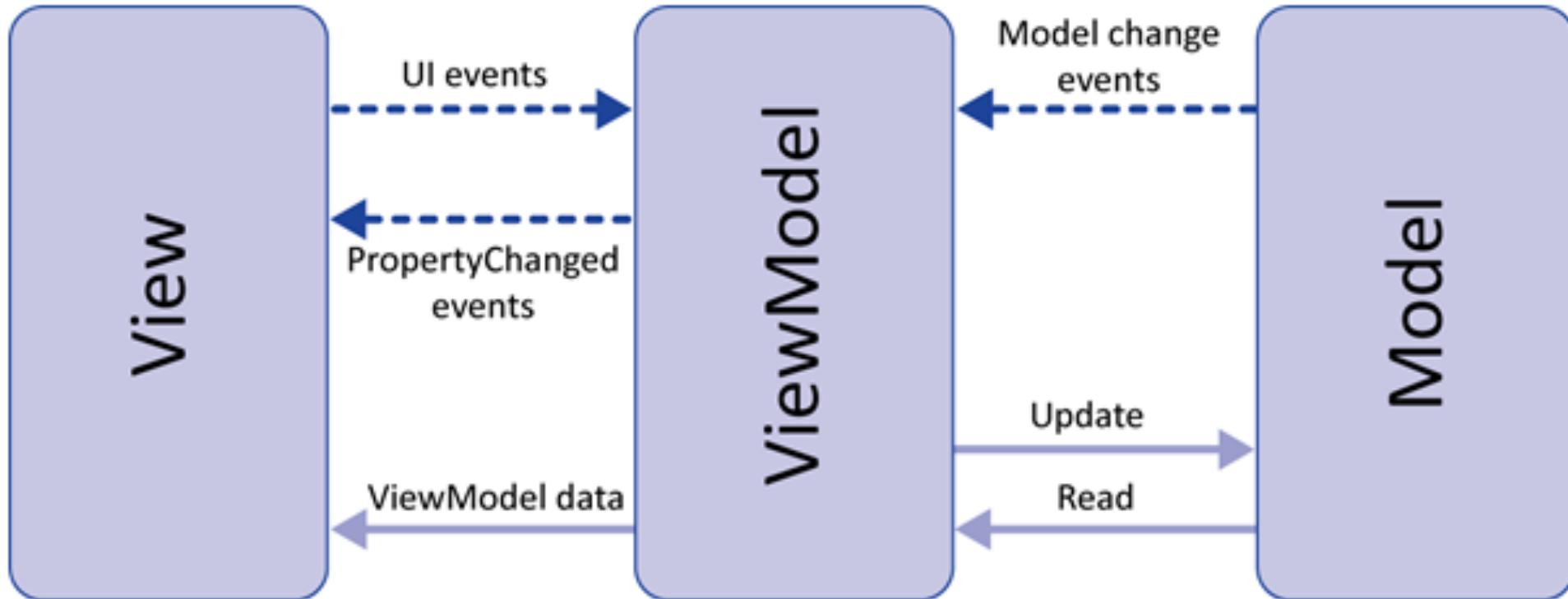
Singleton

- singleton : Singleton
- Singleton()
- + getInstance() : Singleton

Android - Factory



Windows Phone - MVVM



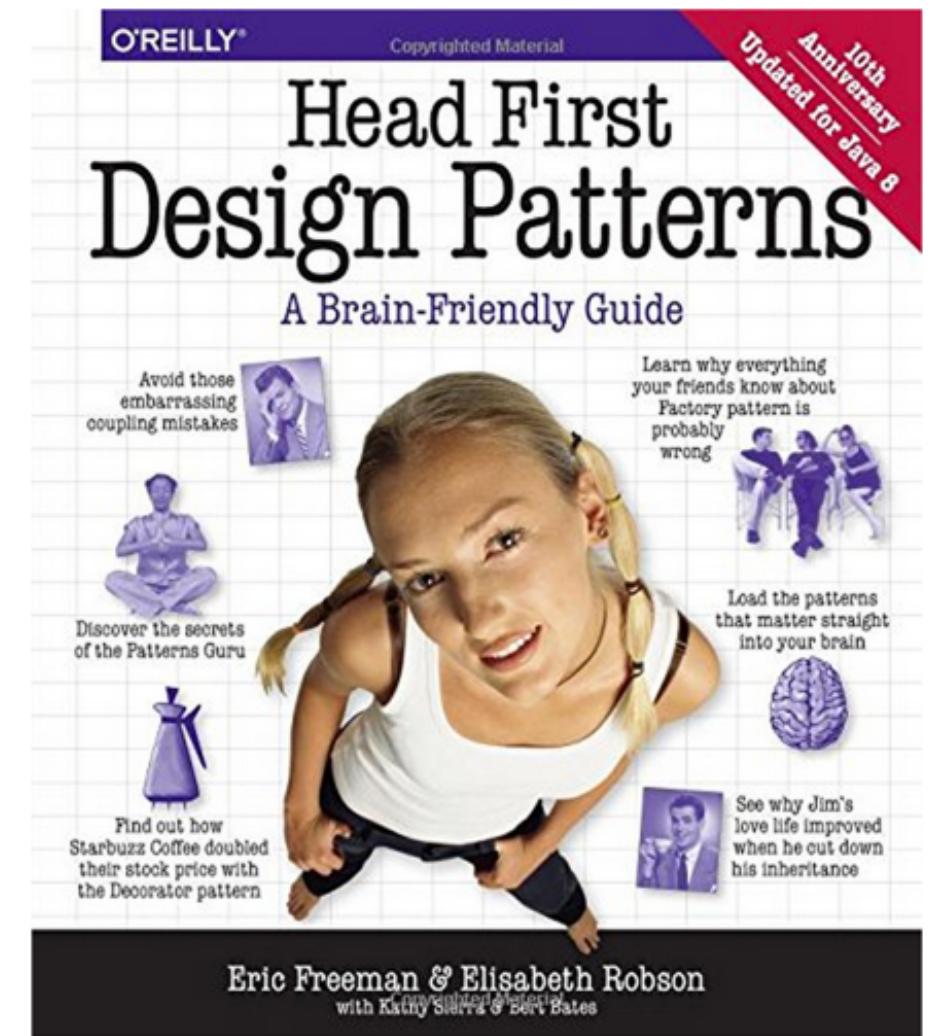
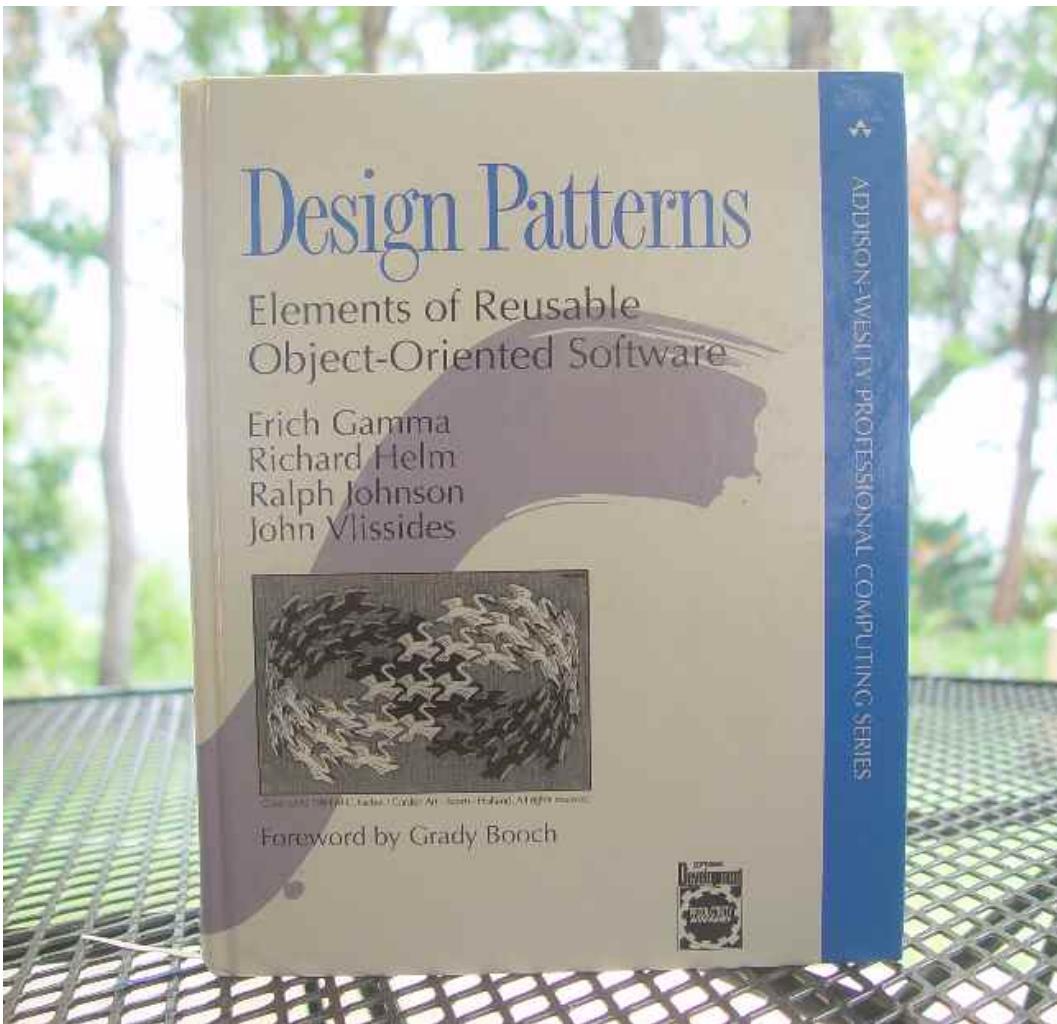
Hybrid-Mobile Apps with JavaScript

- Module Pattern
- Revealing Module Pattern
- Singleton Pattern
- Observer Pattern
- Mediator Pattern
- Prototype Pattern
- Facade Pattern
- Factory Pattern

Don't turn into this person



Find a good book



Be More Awesome than last year.



But what does this mean?

Most People Associate this with...



I've come up with my own

Start with a Small Goal



Release my first iOS App

Submitted it to the App Store

Rejected



But I learned from that experience

Set Reminders



Use Gmail/Whatever to alert you after a couple of months.

This could be for goals...

...Or if you are happy in your current job



Learn a new Mobile Platform



I doubt there is anyone here that only
knows one language.

**We've had to adapt to the changes in our
industry. If you didn't...**



When I was told to learn Objective-C and Java...



Hold up for a second, I only have
experience with...

**“If the only tool you have is a hammer,
you'll treat every problem as a nail”**



In the end, it really helped...

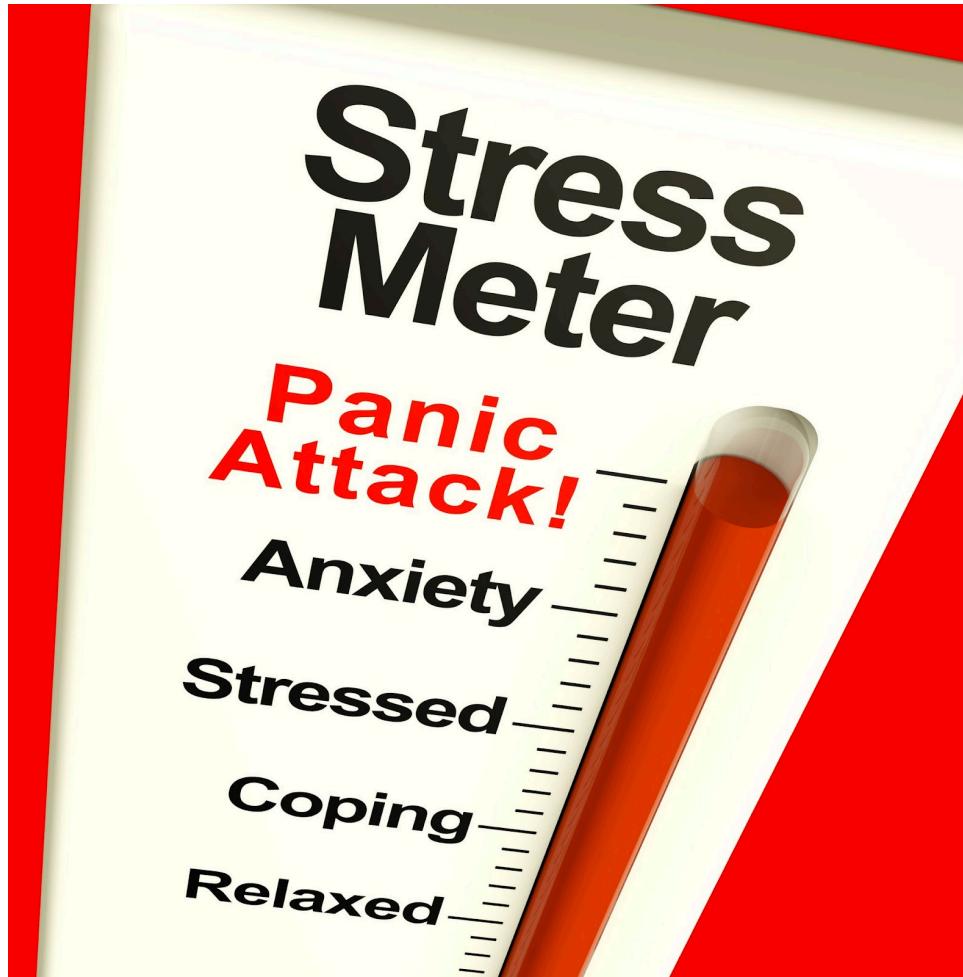
Broaden My Perspective



Build Self-Confidence



I think we're are stressed out



**And we've probably thought of hitting
the road.**



But we always seem to jump back in



How do we deal with this?

Break down barriers...



Know your strength and weaknesses



Accept Compliments and Compliment Yourself



Use Criticism as a Learning Experience

BRACE YOURSELVES



Staying Current



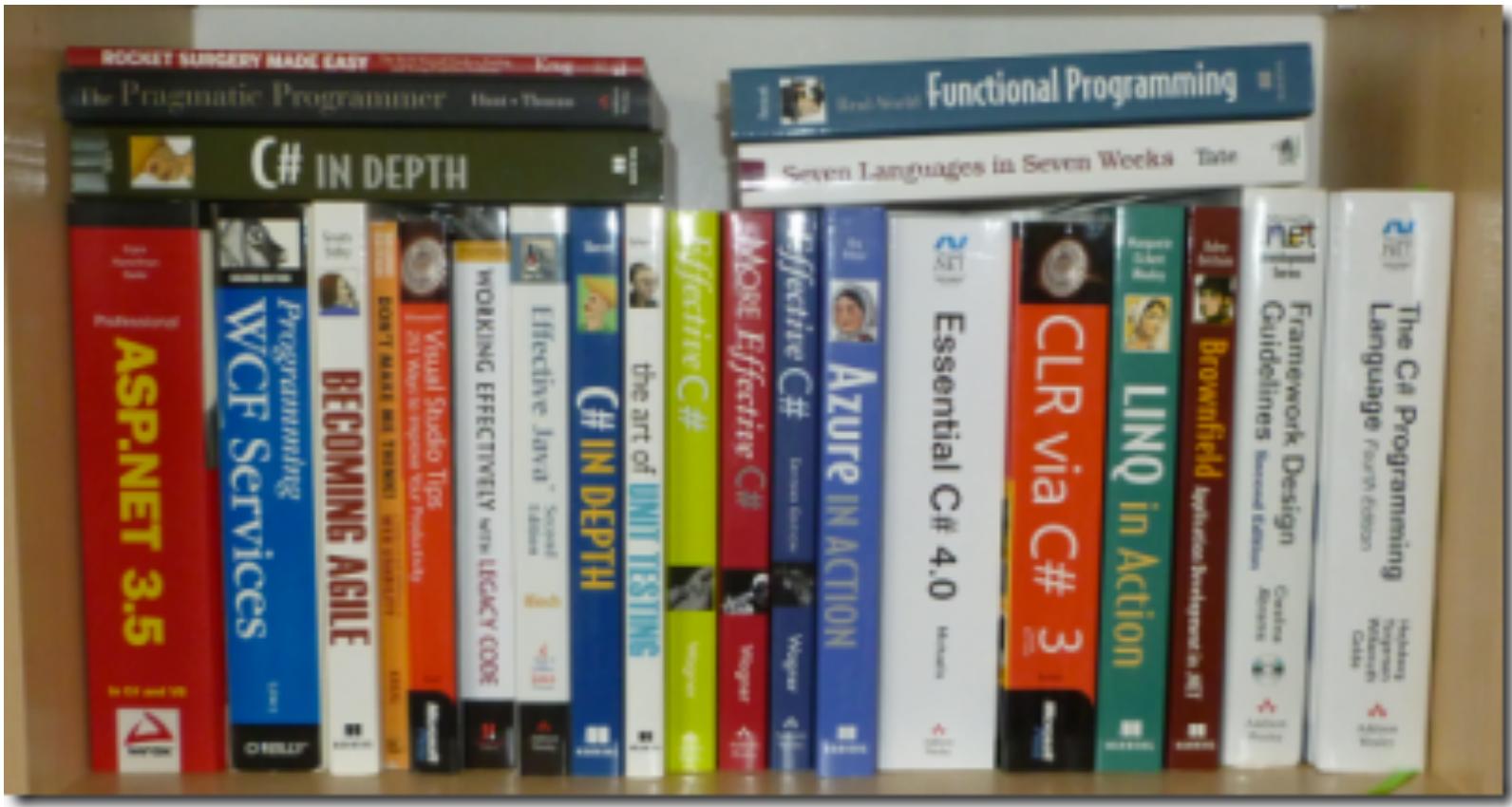
We have a couple of primary ways..

Google

A search bar with a blue outline and a cursor icon at the beginning. On the right side of the bar is a microphone icon with a small '0' inside it.







But I've found that if you really are short on time, then you can cut it down to 2...

High-Quality Newsletters

Mobile Web Weekly

A weekly round-up of the releases, articles, and links that affect Web developers working on the mobile-facing Web

Enter your e-mail address

Subscribe now »

Check out [our latest issue \(46\)](#) for a sample of what we're all about.

Meet your curators



Brian Rinaldi

Community manager at Telerik (formerly of Adobe). Boston resident and editor in chief of [Flippin' Awesome](#)



Holly Schinsky

Developer Advocate with the PhoneGap team at Adobe. Passionate about mobile development and helping developers become more productive.



Peter Cooper recommends

[Google To Bring Mobile-Friendly Factors To Search](#)

Ranking on April 21st — The “mobile-friendliness” of a site will become a ranking factor in mobile search results on Google in April.

SEARCH ENGINE ROUNDTABLE



Brian Rinaldi recommends

[Firefox OS coming to U.S., developed markets in 2016](#)

— Firefox OS is reportedly coming to developed markets but in older form factors like flip phones and sliders.

PCWORLD



Holly Schinsky recommends

[5 Ionic App Development Tips and Tricks](#) — 5 tips and tricks

for developers to consider when building mobile hybrid apps with Ionic.

SITERPOINT

Link Aggregators

Alvin Ashcraft - alvinashcraft.com
The Morning Brew - blog.cwa.me.uk

Avoiding Burnout



Taking a look back at myself

Traveling too much



Working too much

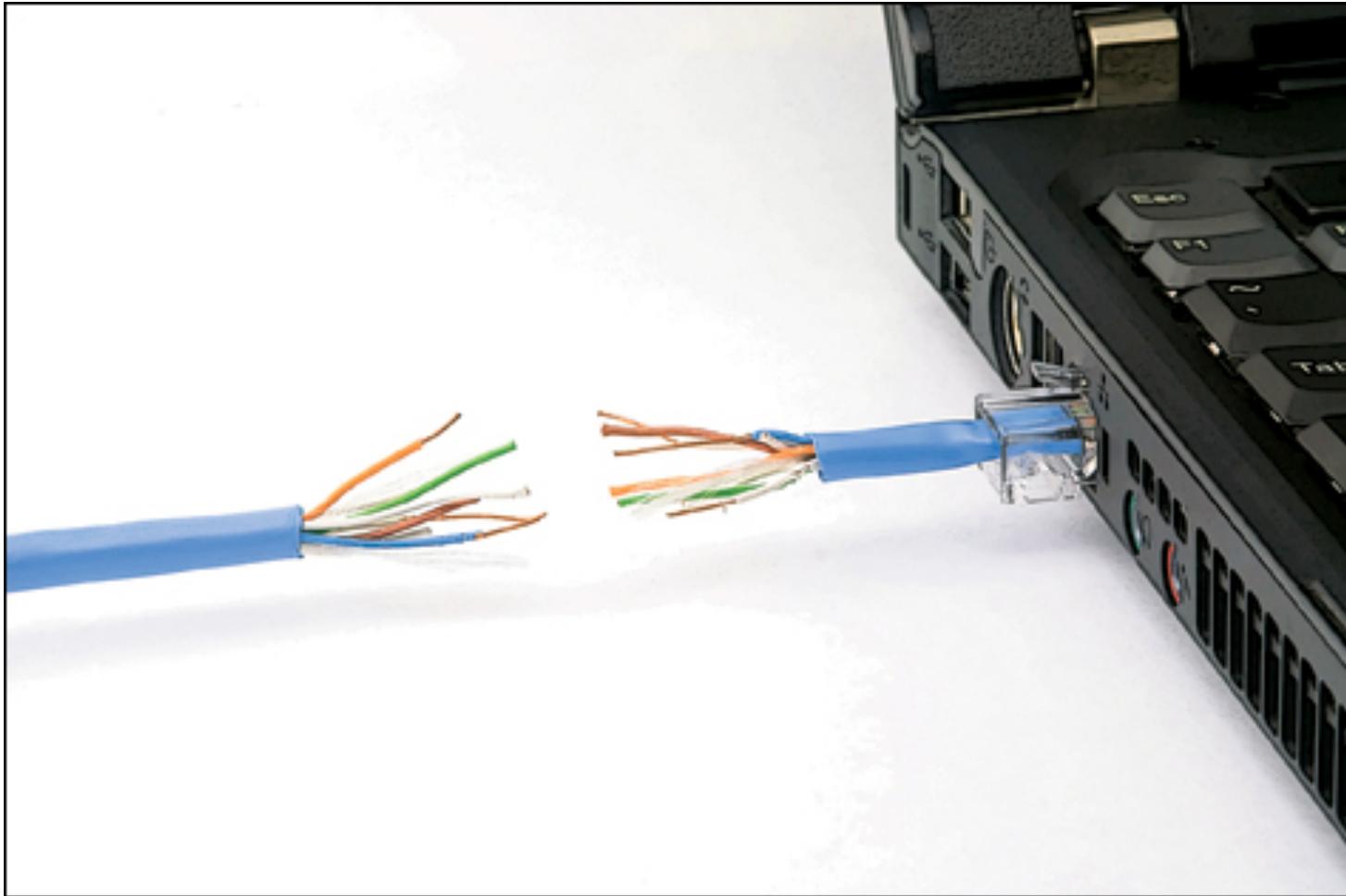


How to combat this?

Forced myself to use my vacation time!



Disconnect



To recap

Blogs

Twitter

Comfort Zone

StackOverflow

**Keep Calm to Changes in
the Mobile Space**

Design Patterns

Be more Awesome

**Learn a New Mobile
Platform**

Build Self-Confidence

Stay Current

Avoiding Burnout

TelerikNext (teleriknext.com)



Thank you!

Michael Crump
Telerik
@mbcrump
michaelcrump.net

