

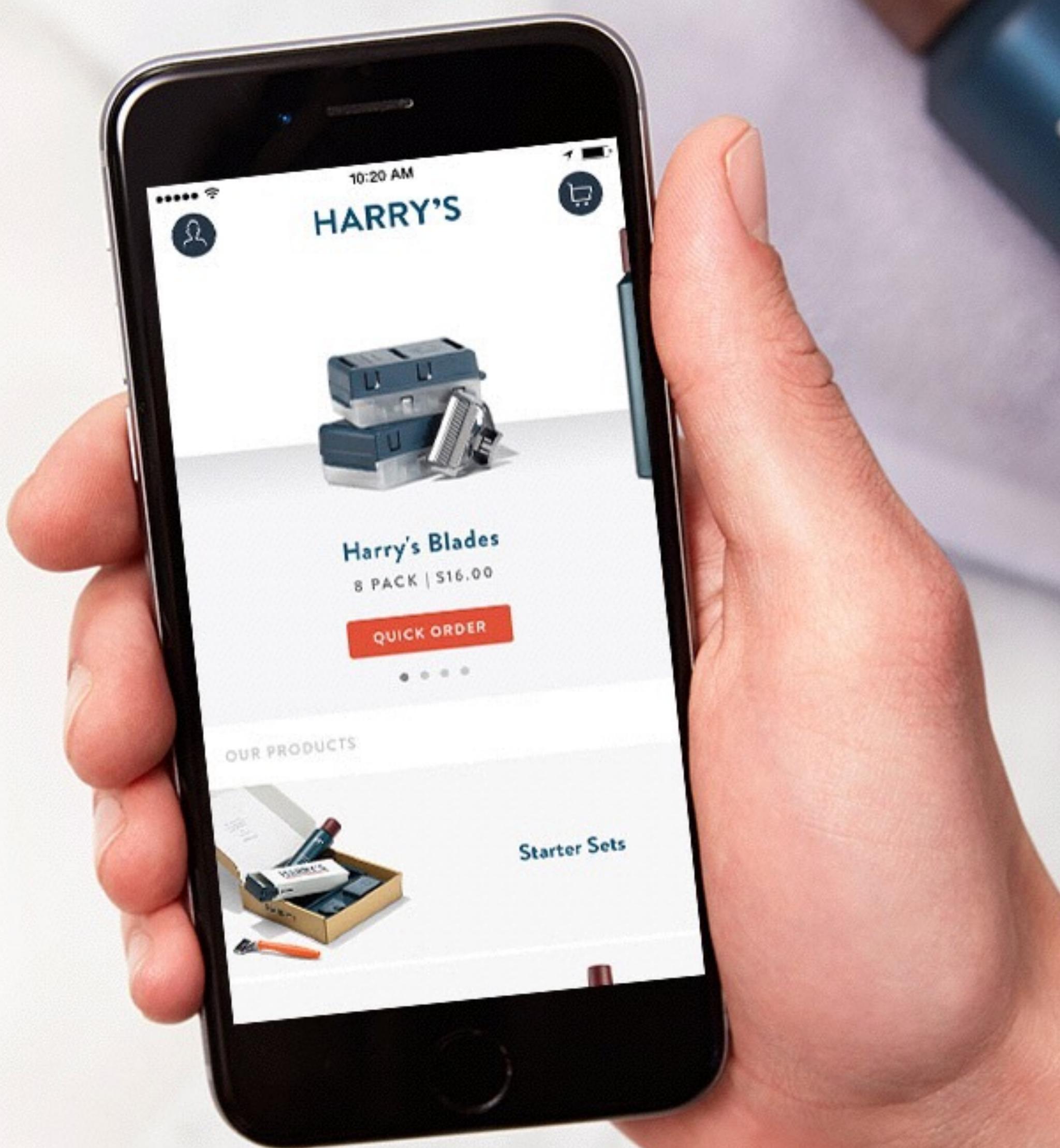
# Writing Swift

by @neilkimmett

HARRY'S









**Neil Kimmitt** 2:02 PM



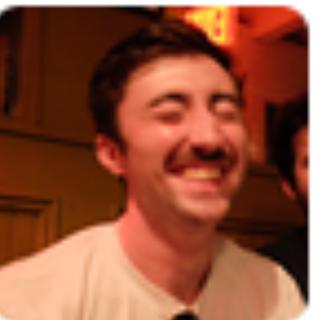
aside: why is there `CGRect.zero` but no `UIEdgeInsets.zero`

2:03 ★ whats that all about



**Soroush Khanlou** 2:03 PM

that's wack



**Neil Kimmett** 2:05 PM

can fix with

```
extension UIEdgeInsets {  
    static var zero: UIEdgeInsets {  
        return UIEdgeInsetsZero  
    }  
}
```

but still

cmon Apple



**Soroush Khanlou** 2:05 PM

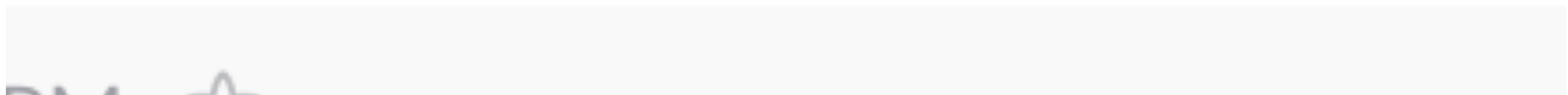
yeah this one's on apple

if you're that kind of person you could make a radar

WPA C07

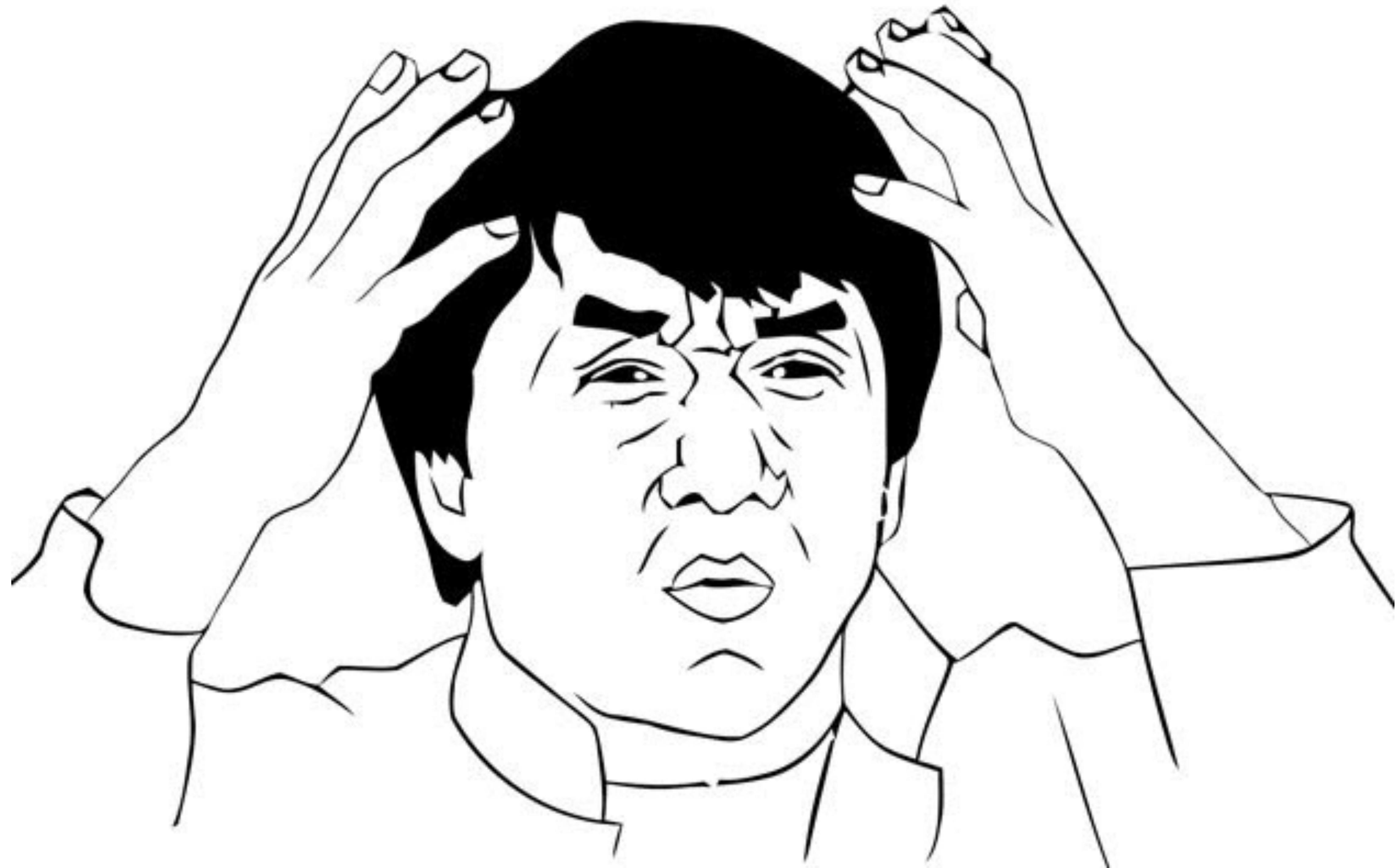
apple

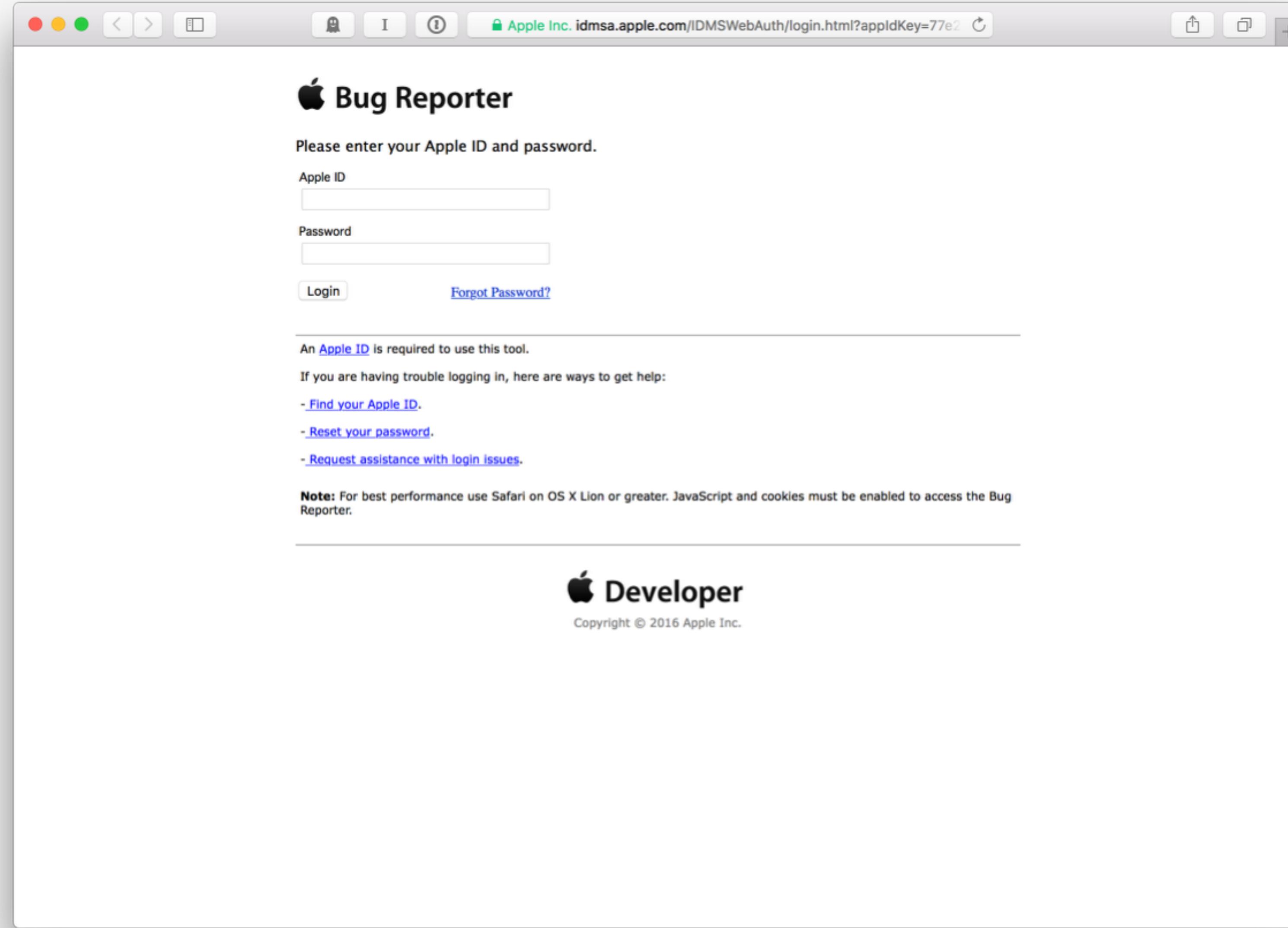
if person you could make a radar



u could make a radar

a radar



A screenshot of a Mac OS X Safari browser window. The title bar shows the URL "Apple Inc. idmsa.apple.com/IDMSWebAuth/login.html?appIdKey=77e2". The main content area is titled "Bug Reporter" with an Apple logo. It instructs the user to "Please enter your Apple ID and password." There are two text input fields: "Apple ID" and "Password". Below the fields are "Login" and "Forgot Password?" buttons. A note below the fields states "An [Apple ID](#) is required to use this tool." Another note says "If you are having trouble logging in, here are ways to get help:" followed by three links: "Find your Apple ID.", "Reset your password.", and "Request assistance with login issues.". A note at the bottom says "Note: For best performance use Safari on OS X Lion or greater. JavaScript and cookies must be enabled to access the Bug Reporter." At the bottom, there is a "Developer" section with the Apple logo and "Copyright © 2016 Apple Inc.".

<http://bugreport.apple.com/>



THAT GIVES ME AN IDEA.

A screenshot of a web browser displaying the Swift.org homepage. The address bar shows the URL [Apple Inc. swift.org](https://swift.org). The page features a sidebar on the left with the Swift logo and a navigation menu. The main content area has a large heading "Welcome to Swift.org" and several paragraphs of text.

**Swift**

ABOUT SWIFT

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GETTING STARTED

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CONTRIBUTING

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PACKAGE MANAGER

CORE LIBRARIES

REPL AND DEBUGGER

**Welcome to Swift.org**

Swift is now open source!

We are excited by this new chapter in the story of Swift. After Apple unveiled the Swift programming language, it quickly became one of the fastest growing languages in history. Swift makes it easy to write software that is incredibly fast and safe by design. Now that Swift is open source, you can help make the best general purpose programming language available everywhere.

For students, learning Swift has been a great introduction to modern programming concepts and best practices. And because it is now open, their Swift skills will be able to be applied to an even broader range of platforms, from mobile devices to the desktop to the cloud.

Welcome to the Swift community. Together we are working to build a better programming language for everyone.

***– The Swift Team***

<https://swift.org>

The screenshot shows the GitHub repository page for `apple/swift`. The page includes the repository name, a star count of 32,093, a fork count of 4,418, and links for Pull requests, Issues, and Gist. Below this, there are tabs for Code, Pull requests (99), Pulse, and Graphs. A section titled "The Swift Programming Language" provides a link to <https://swift.org/>. Key statistics are displayed: 39,327 commits, 21 branches, 36 releases, and 358 contributors. A "Branch: master" dropdown and a "New pull request" button are visible. A green "Clone or download" button is prominent. The main content area lists recent commits from various contributors, such as `swift-ci`, `apinotes`, and `benchmark`, with details like commit messages and timestamps.

Commit Details	Date
swift-ci committed on GitHub Merge pull request #3342 from practicalswift/typo-fixes-20160705	Latest commit be62dd7 a minute ago
.github Add a missing "the" to the pull request template	8 days ago
apinotes [APINotes] NSPointerFunctionsOptions 0-valued members shouldn't be [].	5 days ago
benchmark [gardening] Use "{let,var} c: C" instead of "{let,var} c : C"	4 days ago
bindings/xml Nesting parameter/returns/throws doc comments for closure parameters	3 months ago
cmake [cmake] Refactor check_working_std_regex into its own cmake file Swif...	8 hours ago
docs [docs] LibraryEvolution: add "let vs. var" as a planned proposal.	4 days ago
include Sema: Explicitly set interface type on all AbstractFunctionDecls	4 hours ago
lib Sema: Explicitly set interface type on all AbstractFunctionDecls	4 hours ago
stdlib Merge pull request #3322 from lucianomarisi/chore/sequence-documentati...	2 days ago
test [gardening] Fix recently introduced typo: "acutall" → "actual"	an hour ago
tools Revert "[cmake] Do not set CMAKE_INCLUDE_CURRENT_DIR."	3 days ago
unittests [SourceKit] Remove dependency of SwiftLang on Core	13 days ago
utils [emacs support] add a missing (require 'compile)	3 days ago

<https://github.com/apple/swift>



[swift](#) / [stdlib](#) / [public](#) / [SDK](#) / [CoreGraphics](#) / **CoreGraphics.swift**

[swift](#) / [stdlib](#) / [public](#) / [SDK](#) / [CoreGraphics](#) / **CoreGraphics.swift**

```
12
13 @_exported import CoreGraphics
14 import Darwin
15
16 //=====
17 // CGGeometry
18 //=====
19
20 public extension CGPoint {
21     static var zero: CGPoint {
22         @_transparent // @fragile
23         get { return CGPoint(x: 0, y: 0) }
24     }
25
26     @_transparent // @fragile
27     init(x: Int, y: Int) {
28         self.init(x: CGFloat(x), y: CGFloat(y))
29     }
30
31     @_transparent // @fragile
32     init(x: Double, y: Double) {
33         self.init(x: CGFloat(x), y: CGFloat(y))
34     }
35
36     @available(*, unavailable, renamed="zero")
37     static var zeroPoint: CGPoint {
38         fatalError("can't retrieve unavailable property")
39     }
40 }
41
```

[swift](#) / [stdlib](#) / [public](#) / [SDK](#) / [UIKit](#) / **UIKit.swift**

[swift](#) / [stdlib](#) / [public](#) / [SDK](#) / [UIKit](#) / **UIKit.swift**

```
11 //-----  
12  
13 import Foundation  
14 @_exported import UIKit  
15  
16 //=====  
17 // Equatable types.  
18 //=====  
19 //=====  
20  
21 @_transparent // @fragile  
22 @warn_unused_result  
23 public func == (lhs: UIEdgeInsets, rhs: UIEdgeInsets) -> Bool {  
24     return lhs.top == rhs.top &&  
25         lhs.left == rhs.left &&  
26         lhs.bottom == rhs.bottom &&  
27         lhs.right == rhs.right  
28 }  
29  
30 extension UIEdgeInsets : Equatable {}  
31  
32 @_transparent // @fragile  
33 @warn_unused_result  
34 public func == (lhs: UIOffset, rhs: UIOffset) -> Bool {  
35     return lhs.horizontal == rhs.horizontal &&  
36         lhs.vertical == rhs.vertical  
37 }  
38  
39 extension UIOffset : Equatable {}  
40
```

```
13 import Foundation
14 @_exported import UIKit
15
16 +//=====
17 +// UIGeometry
18 +//=====
19 +
20 +public extension UIEdgeInsets {
21 +    static var zero: UIEdgeInsets {
22 +        @_transparent // @fragile
23 +        get { return UIEdgeInsets(top: 0.0, left: 0.0, bottom: 0.0, right: 0.0) }
24 +    }
25 +}
26 +
27 +public extension UIOffset {
28 +    static var zero: UIOffset {
29 +        @_transparent // @fragile
30 +        get { return UIOffset(horizontal: 0.0, vertical: 0.0) }
31 +    }
32 +}
33
```



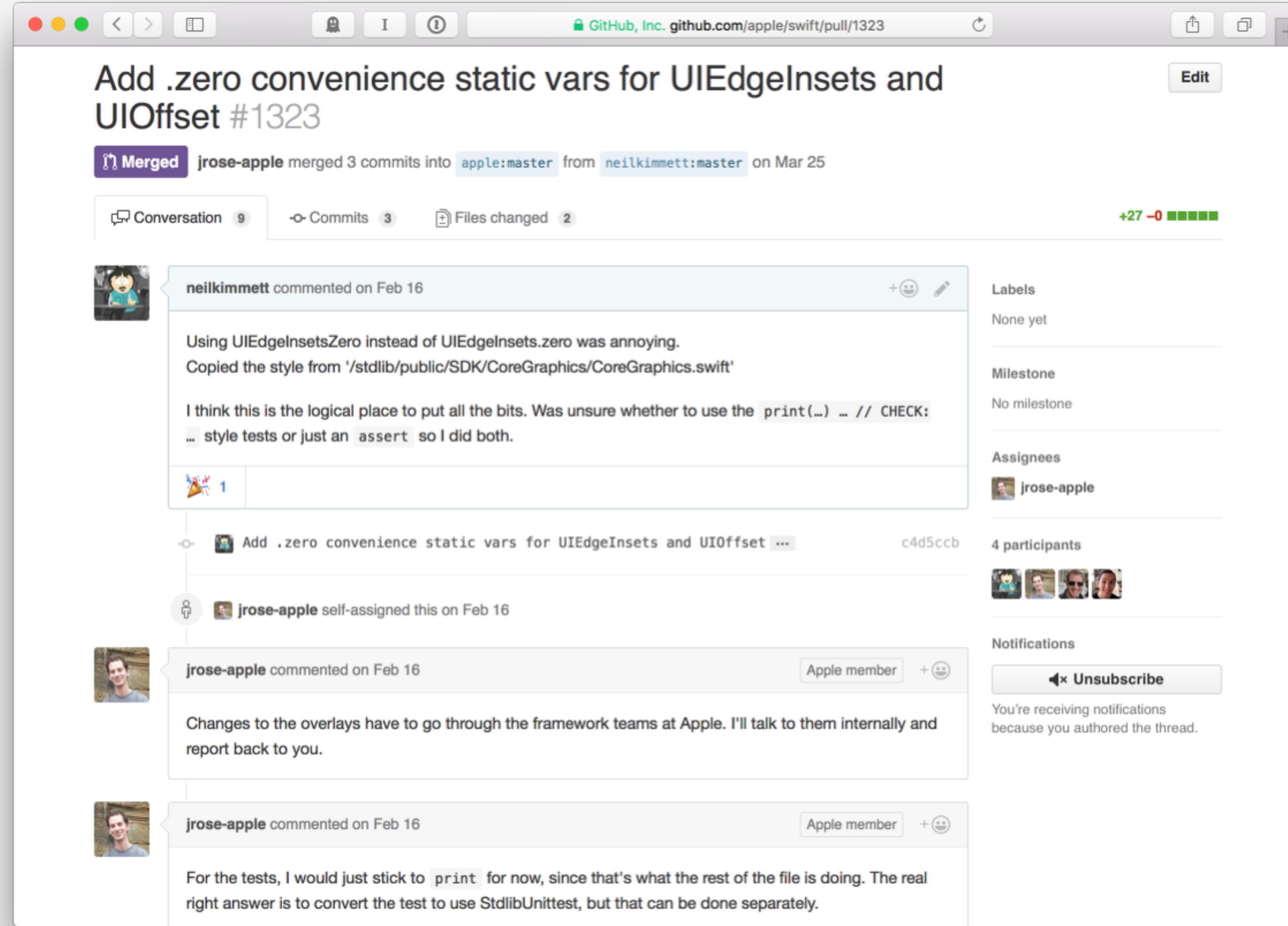


## [swift](#) / [test](#) / [1\\_stdlib](#) / **UIKit.swift**

```
50 var inset1 = UIEdgeInsets(top: 1.0, left: 2.0, bottom: 3.0, right: 4.0)
51 var inset2 = UIEdgeInsets(top: 1.0, left: 2.0, bottom: 3.1, right: 4.0)
52 print("inset1 == inset1: \(inset1 == inset1)")
53 print("inset1 != inset1: \(inset1 != inset1)")
54 print("inset1 == inset2: \(inset1 == inset2)")
55 // CHECK: inset1 == inset1: true
56 // CHECK: inset1 != inset1: false
57 // CHECK: inset1 == inset2: false
58
```

## swift / test / 1\_stdlib / **UIKit.swift**

```
68 +
69 +var inset0 = UIEdgeInsets(top: 0.0, left: 0.0, bottom: 0.0, right: 0.0)
70 +var insetDot0 = UIEdgeInsets.zero
71 +print("inset0 == insetDot0: \(inset0 == insetDot0)")
72 +// CHECK: inset0 == insetDot0: true
73 +
74 +var offset0 = UIOffset(horizontal: 0.0, vertical: 0.0)
75 +var offsetDot0 = UIOffset.zero
76 +print("offset0 == offsetDot0: \(offset0 == offsetDot0)")
77 +// CHECK: offset0 == offsetDot0: true
```

A screenshot of a GitHub pull request page. The title is "Add .zero convenience static vars for UIEdgeInsets and UIOffset #1323". A purple "Merged" button indicates the pull request has been merged into the `apple:master` branch from the `neilkimmett:master` branch on March 25. The conversation tab shows 9 comments, 3 commits, and 2 files changed. The pull request has a +27 -0 score. The right sidebar displays labels (None yet), milestones (No milestone), assignees (jrose-apple), participants (4 participants), and notifications (Unsubscribe).  
**neilkimmett commented on Feb 16**  
Using UIEdgeInsetsZero instead of UIEdgeInsets.zero was annoying.  
Copied the style from '/stdlib/public/SDK/CoreGraphics/CoreGraphics.swift'  
  
I think this is the logical place to put all the bits. Was unsure whether to use the `print(...)` ... // CHECK:  
... style tests or just an `assert` so I did both.  
  
**jrose-apple self-assigned this on Feb 16**  
  
**jrose-apple commented on Feb 16**  
Apple member  
Changes to the overlays have to go through the framework teams at Apple. I'll talk to them internally and report back to you.  
  
**jrose-apple commented on Feb 16**  
Apple member  
For the tests, I would just stick to `print` for now, since that's what the rest of the file is doing. The real right answer is to convert the test to use `StdlibUnittest`, but that can be done separately.

<https://github.com/apple/swift/pull/1323>

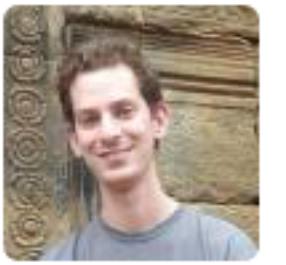


jrose-apple commented on Mar 21

Apple member



Okay, UIKit has approved this change! (Sorry for the turnaround time.) I'll trigger the tests again.



jrose-apple commented on Mar 21

Apple member



@swift-ci Please test

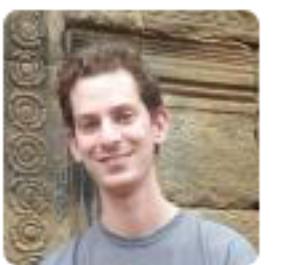


jrose-apple merged commit **d9596ab** into `apple:master` on Mar 25

2 checks passed

[View details](#)

[Revert](#)



jrose-apple commented on Mar 25

Apple member



Thanks, Neil!



```
let scrollView = UIScrollView()  
scrollView.contentInset = UIEdgeInsets.zero
```

UIEdgeInsets zero

# Thanks!

from @neilkimmett

<http://kimmett.me/2016/04/19/ownership-or-my-first-swift-pr-got-merged.html>