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COMCAST

Kayla Kasprak

Software Engineer, iOS

ABOUT ME



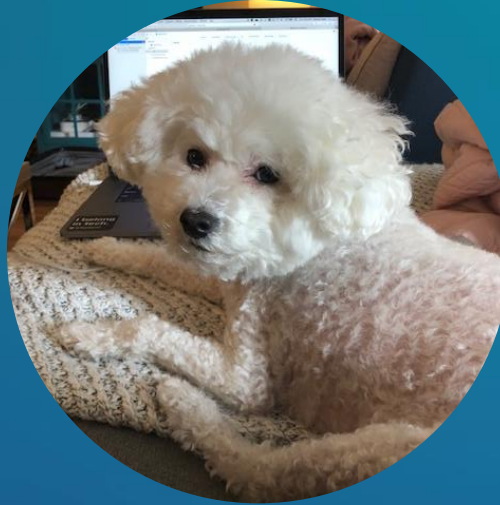
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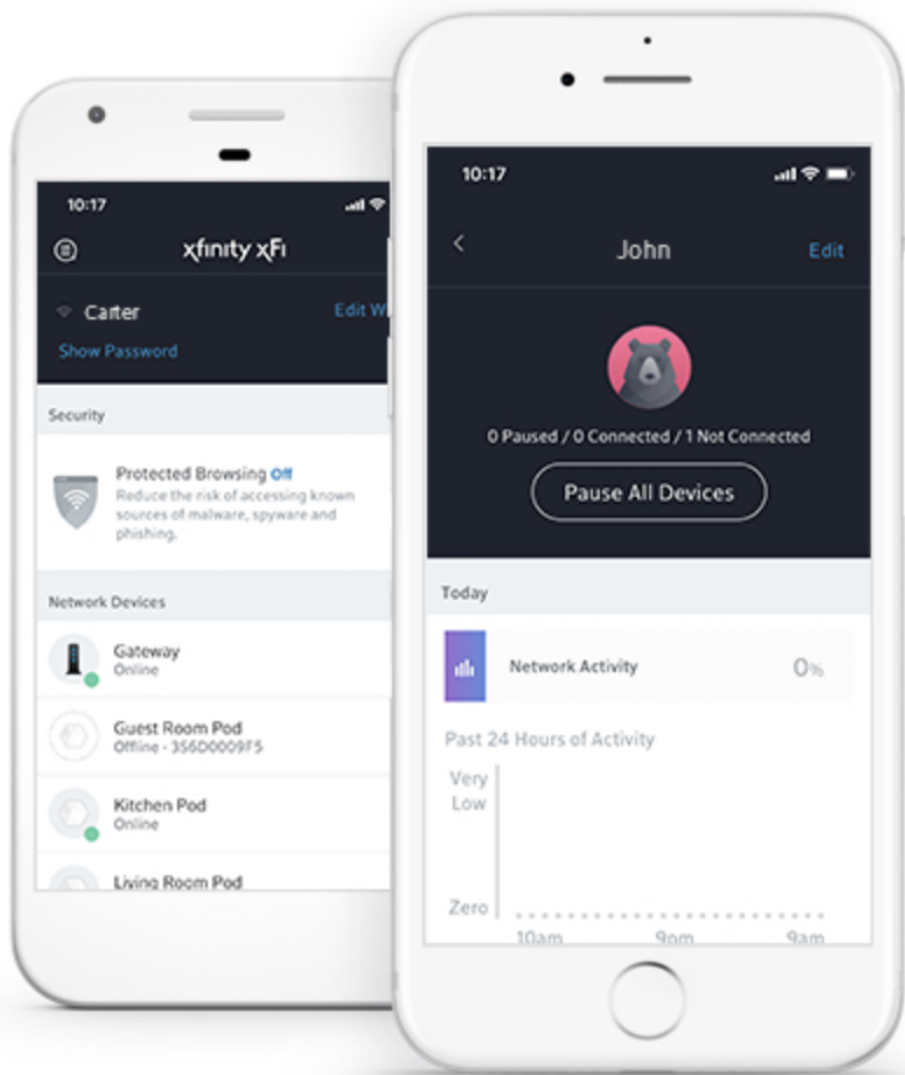


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Recently Watched







EASY WIFI MANAGEMENT

WiFi control on the go

Take control of your home network with these features and more. Simply set rules with our easy-to-use xFi app.

- Pause WiFi access during dinner
- Schedule a bedtime routine
- See what devices are online and set time limits

PERSONALIZATION **CONTROL**

CODE REVIEWS

CREATING AN INCLUSIVE CODE REVIEW CULTURE

CODE REVIEWS

```
38 test/test_heuristics.rb
@@ -22,6 +22,17 @@ def test_no_match
 22 22     assert_equal [], results
 23 23     end
 24 24
 25 + def assert_heuristics(hash)
 26 +   candidates = hash.keys.map { |l| Language[l] }
 27 +
 28 +   hash.each do |language, blobs|
 29 +     Array(blobs).each do |blob|
 30 +       result = Heuristics.call(file_blob(blob), candidates)
 31 +       assert_equal [Language[language]], result, "Failed for #{blob}"
 32 +     end
 33 +   end
 34 + end
 35 +
 25 36   # Candidate languages = ["C++", "Objective-C"]
 26 37   def test_obj_c_by_heuristics
 27 38   # Only calling out '.h' filenames as these are the ones causing issues
 39
 40 @@ -148,17 +159,6 @@ def test_cs_by_heuristics
 148 159   })
 149 160   end
 150 161
 151 - def assert_heuristics(hash)
 152 -   candidates = hash.keys.map { |l| Language[l] }
 153 -
 154 -   hash.each do |language, blobs|
 155 -     Array(blobs).each do |blob|
 156 -       result = Heuristics.call(file_blob(blob), candidates)
 157 -       assert_equal [Language[language]], result, "Failed for #{blob}"
 158 -     end
 159 -   end
 160 - end
```

<https://github.com/octocat/linguist/compare/master...octocat:an-example-comparison-for-docs>

TYPICAL CODE REVIEW PROCESS



1. Jira



2. Swift



3. GitHub



4. Slack

BENEFITS OF EFFECTIVE CODE REVIEWS

- BETTER CODE QUALITY
- LESS CHANCE OF BREAKING THE BUILD
- AWARENESS
- KNOWLEDGE TRANSFER
- RELATIONSHIP BUILDING

Is everyone on your team invited (and expected) to contribute to code reviews?

Is everyone on your team invited (and expected) to contribute to code reviews?

It is proven that diverse teams create better products.

CHALLENGES

- TIME AND EFFORT
- CONTEXT SWITCHING
- MAINTAINABLE CODE
- COMMUNICATION



AS A TEAM



REVIEWERS



SUBMITTERS



AS A TEAM

AS A TEAM



Agree on a set of standards.

AS A TEAM

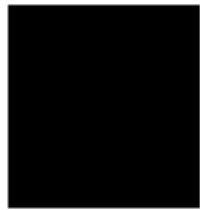


Establish a Service Level Agreement.

AS A TEAM



Automate.



Swiftlint not gonna like



REVIEWERS

TIPS FOR REVIEWERS



Anyone can and should review.



<https://giphy.com/gifs/dog-confused-i-have-no-idea-what-im-doing-xDQ3OqI1BN54c>

Highest academic degree and years of experience are not statistically significant in determining the quality of a code review.

TIPS FOR REVIEWERS



Questions can be more powerful than
statements.

[REDACTED]
It this different from `completion` on `present` call above?

[REDACTED]
yes

It this different from `completion` on `present` call above?

yes





[Redacted]



Easier to read?

```
let leftInset = Styles.isPad ? 40 : (frame.size.width / 2) - (playlistCellWidth / 2) -  
playlistGap  
contentInset = UIEdgeInsets(top: 0, left: leftInset, bottom: 0, right: playlistGap)
```



[Redacted]



yes!

```
106 + attributedText = attributedString
107 + }
108 +
109 + private func setAttributedString() {
```

  + 😊 ...

should this function be named `setupAttributedString` since set sound like a setter and needs an argument ?

  + 😊 ...

Good suggestion - I'll change

TIPS FOR REVIEWERS

Language and tone matter.

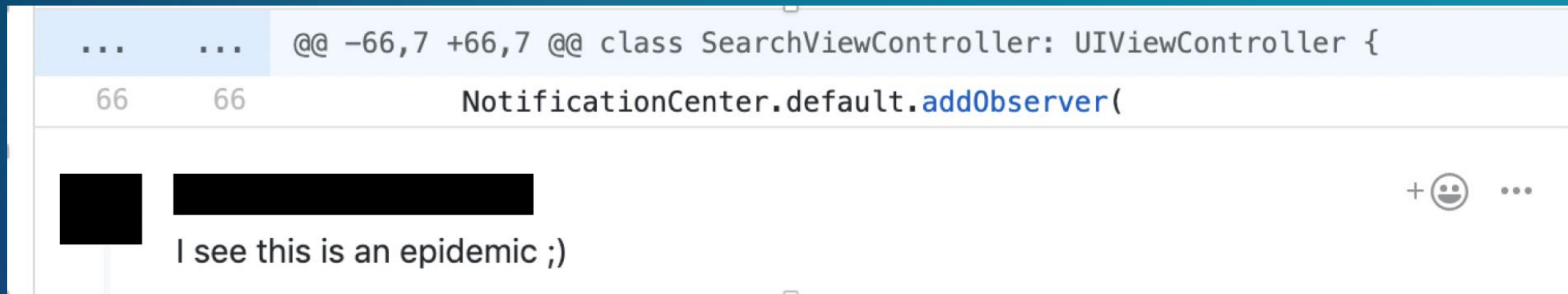
This whole thing could be implemented with `PropertyListDecoder` in 3 lines ;)

Alternative: Have you tried using PLD? It may make this more concise.

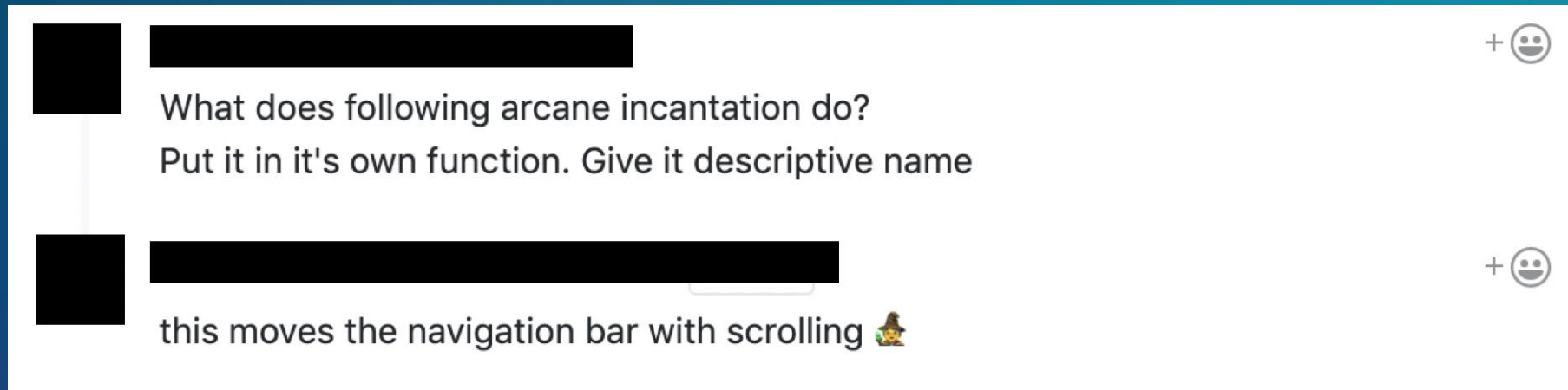
I'm going to be brutal here, sorry ;)

This comment is worse than useless. 1) it doesn't convey any semantic meaning (i.e., what are these variables used for?). 2) It distracts the reader from the more significant code below, i.e., it takes time to read and process the comment.

Alternative: The code should be self documenting wherever possible, and this comment doesn't add much context. Please remove.

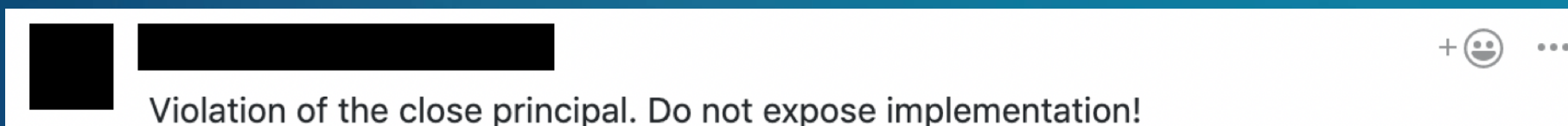


Alternative: Do we have a plan in place to move all instances of this over to the new pattern?



Alternative: Putting this into a function named `adjustNavBar` would make this a bit more readable.

Honestly, chill.



Alternative: This exposes implementation details and is a violation of the open/close principle. Happy to chat more about how to resolve this if you'd like.

this property seems only relevant to the view controller that it was in. Maybe it should stay there since no reason to be available globally ? happy to hear your opinion



TIPS FOR REVIEWERS



Consider the scope of the
changes first.

TIPS FOR REVIEWERS



Be proactive about complex changes.

TIPS FOR REVIEWERS



Link to supporting
documentation/resources.

TIPS FOR REVIEWERS



Give compliments.

added some commits on Mar 27

start playing the video earlier

swfit lint, oh yeah 🙄

✖ b92ff3f

✔ 83f4166

commented on Mar 27

+ 😊 ...

This is a thing of BEAUTY! 🦸

🎉 1

🚀 1



SUBMITTERS

TIPS FOR SUBMITTERS

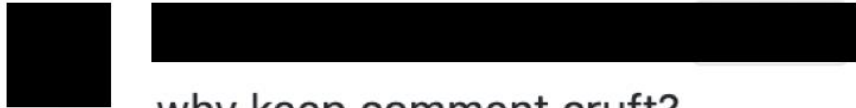


Aim to write code that is easy to read, review, and maintain.

TIPS FOR SUBMITTERS



Respond clearly.



why keep comment cruft?



no reason



Reply...

Resolve conversation



[Redacted Name]



This is fragile, any change to UI would require corresponding change to this code.



[Redacted Name]

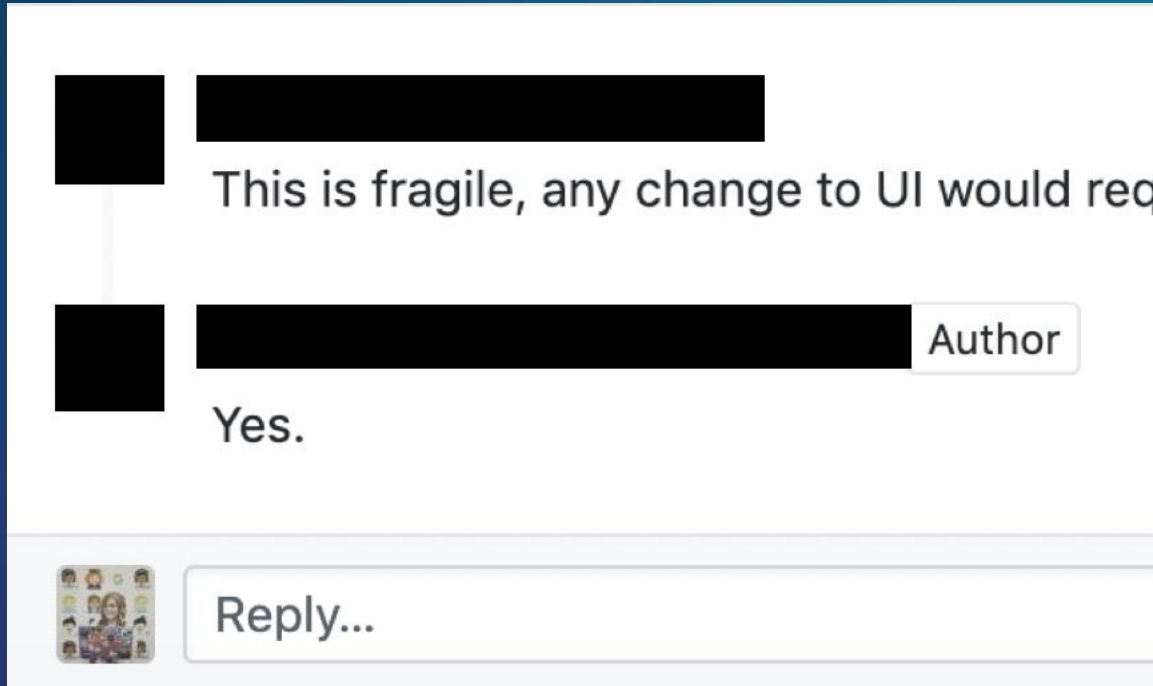
Author



Yes.



Reply...



<https://giphy.com/gifs/reaction-iHe7mA9M9SsyQ>



[Redacted]

Author



[Redacted] great catch! thank you for doing the test... I addressed the issue and pushed my changes



[Redacted] reviewed on Mar 28

[View changes](#)

TIPS FOR SUBMITTERS



Avoid huge commits by submitting incremental changes.



I Am Devloper

@iamdevloper

Follow



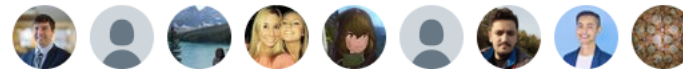
10 lines of code = 10 issues.

500 lines of code = "looks fine."

Code reviews.

1:58 AM - 5 Nov 2013

8,607 Retweets 6,520 Likes



113



8.6K



6.5K

<https://twitter.com/iamdevloper/status/397664295875805184>

TIPS FOR SUBMITTERS



Add your own comments to your PR
before requesting reviews.

TIPS FOR SUBMITTERS



Consider a face-to-face review.

TIPS FOR SUBMITTERS



Get buy-in early.

IN SUMMARY...

Code reviews shouldn't be painful!

REFERENCES

- [1] Hunt, V., Layton, D., & Prince, S. (2015, Feb. 2). Diversity Matters. *McKinsey & Company*. [https://www.mckinsey.com/~media/mckinsey/business%20functions/organization/our%20insights/why%20diver dive%20matters/diversity%20matters.ashx](https://www.mckinsey.com/~media/mckinsey/business%20functions/organization/our%20insights/why%20diver%20dive%20matters/diversity%20matters.ashx)
- [2] Intent HQ (2015, Feb. 3). What is Good Code? A Scientific Definition. <https://blog.intenthq.com/blog/what-is-good-code-a- scientific-definition>
- [3] Kemerer, C. F., & Paulk, M.C. (2009). The Impact of Design and Code Reviews on Software Quality: An Empirical Study Based on PSP Data. *IEEE Transactions on Software Engineering*.
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- [6] Sankarram, S. (2018, Jan. 19). Unlearning Toxic Behaviors in a Code Review Culture. <https://medium.freecodecamp.org/unlearning-toxic- behaviors-in-a-code-review-culture-b7c295452a3c>

THANK YOU!

Please remember to
complete the session
survey in the GHC19
mobile app.



kkasprak



kaylakasprak



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