

To Swift or Not to Swift Paige Fenwick



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Lightning Talks

Outline

- What is Swift?
 - Background and basic overview
- Why should you learn Swift?
 - Advantages
 - Recent changes
- Is this the next big thing?



Background

- Programming Language
- Apple began development in 2011
- Before Swift, Objective C = iOS and X
 OS
- Designed to completely replace Objective C



Reasons to learn

- Safety
- Fast
- Expressive
- Major Changes
 - Open Source
 - Available on the Server



Safety

- Type Safe Language
- Type Inference Language



Safety

```
let vegetable = "red pepper"
     switch vegetable {
3
     case "celery":
4
         let vegetableComment = "Add some raisins and
             make ants on a log."
5
     case "cucumber", "watercress":
         let vegetableComment = "That would make a good
             tea sandwich."
     case let x where x.hasSuffix("pepper"):
8
         let vegetableComment = "Is it a spicy \(x)?"
9
     default:
10
         let vegetableComment = "Everything tastes good
             in soup."
11
    }
```

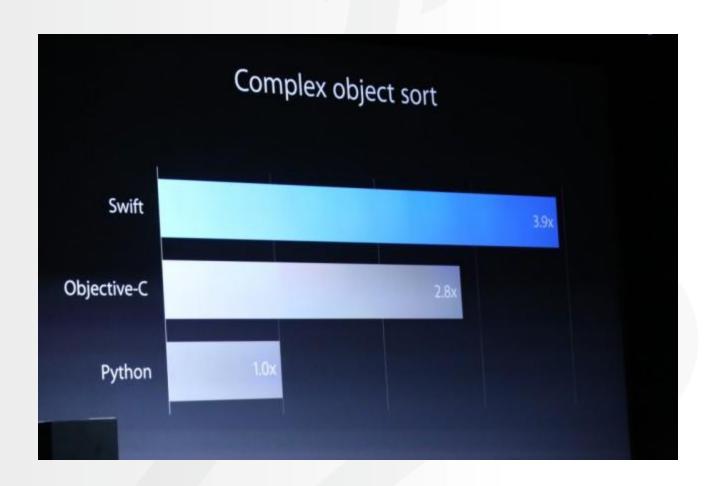


Fast

- Directly compatible with C languages
 - Therefore, comparable performance
- Predictable and consistent performance



Fast





Expressive

- Easy to read and write code
- Modernized Objective C
 - Syntax of C languages
 - Modern features



Open Sourced

- Announced in December, 2015
- Hosted on GitHub
- Anyone is allowed to submit code to project
- Developers find the language more trustworthy now



Open Sourced

- Communities are being established
- Huge developments have come from this
 - Server Side Support
 - Swift 2



Server

- Support cross platform development
- Bringing Swift Server Side
- Use same language for client and server side development
- Use same tools for debugging



Server

- Perfect.org
- Reduce time and learning curve for developers
- Main goal = same language across application ecosystem
- Want to expand across all platforms for one native language



Next Big Thing?

- All of the benefits of Objective C plus added functionality
- Most popular language on GitHub
 - Most starred, most forked, etc.
- Being featured at the latest conferences



Next Big Thing?

- Swift 2 recently released
 - Error handling
 - Availability
 - Syntax Improvements



Should You Learn This?

Yes!



Sources (list them)

- http://www.infoq.com/presentations/swiftserver
- http://www.infoq.com/presentations/swiftopen-source
- https://swift.org/about/#swiftorg-and-opensource
- https://developer.apple.com/swift/
- http://magenic.com/Blog/Post/17/The-history-and-futureof-Swift-Analysis-of-Apple%E2%80%99s-newprogramming-language-from-an-enterprise-ITperspective

