

# Swift **r**evolution

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# Organisers + attendees



# Swift?

That **Awesome** programming language

# **Simplicity, Safety, Performance**

The Beginning -?

# rEvolution start

- "Sat Jul 17 23:50:59 2010 +0000"

== 16:50:59 - San Francisco time

== Sun Jul 18 1:50:59 - Łódź

initial swift test

Swift SVN r3

master → swift-DEVELOPMENT-SNAPSHOT-2016-10-18-a ... osx-passed

 lattner committed on Jul 18, 2010

0 parents commit 18844bc65229786b96b89a9fc7739c0fc897905e

Showing 0 changed files with 0 additions and 0 deletions.

Browse files

Unified Split



# rEvolution start

- "Sat Jul 17 23:50:59 2010 +0000"
- September 9, 2014 - 🐥 Swift 1.0
- September 21, 2015 - 💪🐥 Swift 2.0

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**December 3, 2015**

**Big Bang** •   

**Swift - Open Source**

# Why Swift is revolution?

1. *OPEN*language
2. Learning & Teaching & Coding
3. Tools and Platforms
4. Community - People.  , 

# Open

1. Source code at GitHub
2. Full commit history ~~43,429~~ **43,466 commits**
3. Commit access
4. New open source projects: swift-protobuf
5. Workflow
6. Evolution and discussions

# Learning & **Teaching** & Coding

- simple - clean - nice **Syntax**
- Xcode Playground
- Swift Playgrounds

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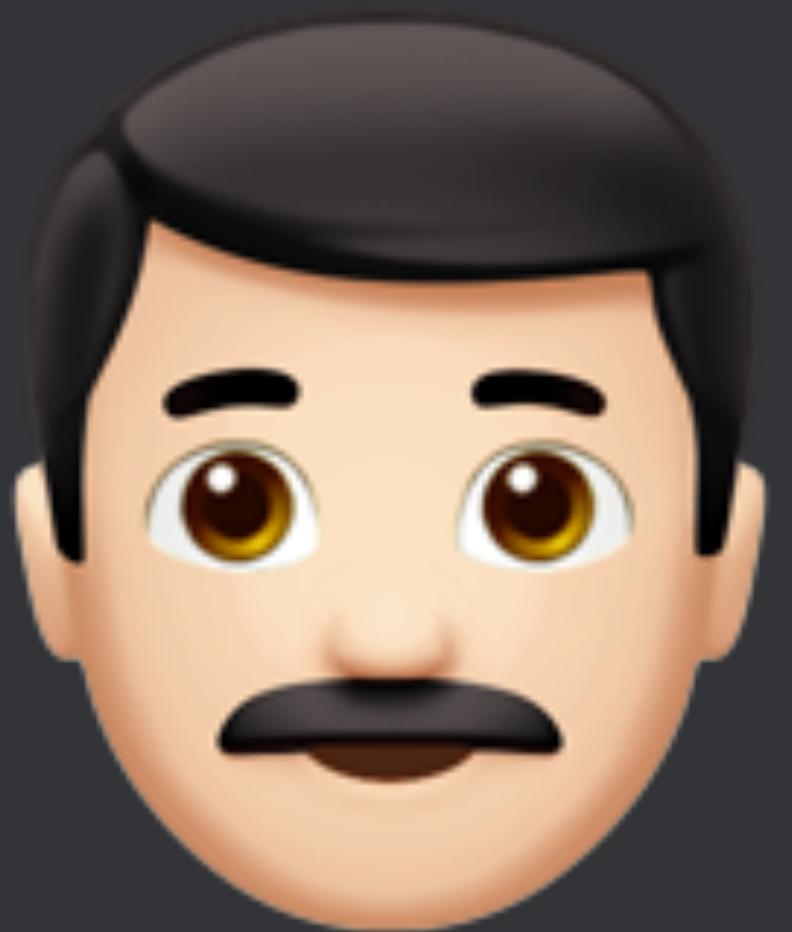
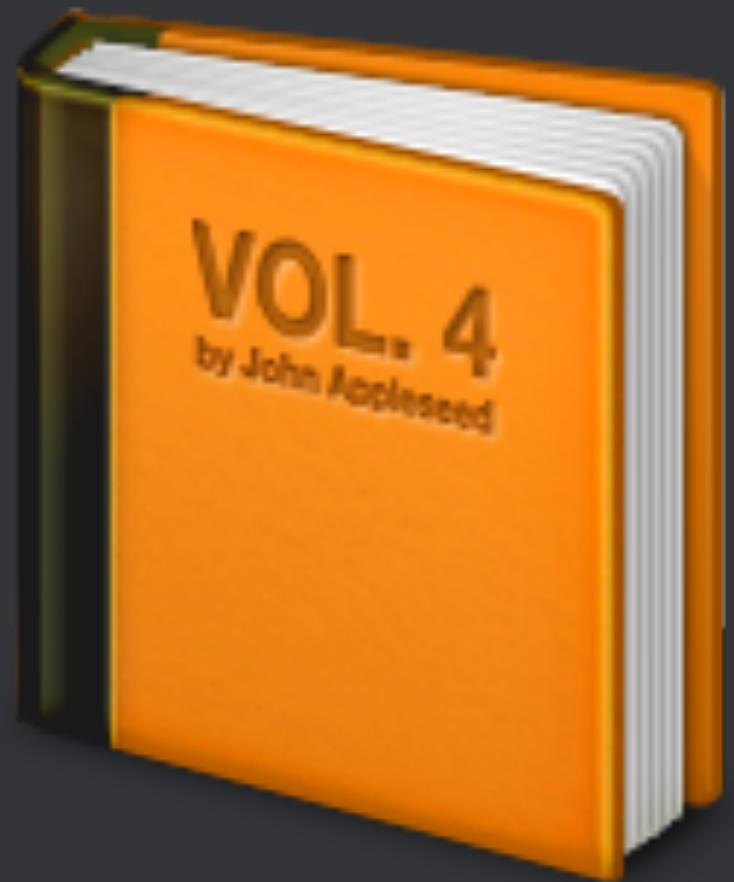
**Great as first programming language!**

# Tools



- Swift compiler + stdlib
- foundation, libdispatch
- XCTest
- Swift Package Manager, llbuild
- CI, , Benchmark
- **More:** playgrounds, protobuf

# Community - People



# Platforms

- iOS and macOS, and all  platforms - 
- Linux - 
- Linux + Web - **IBM + OpenSource community**
- Android - **OpenSource community + "Brian Gesiak"**

# Other

- RaspberryPi, Windows, FreeBSD, PS4,

# Web

- IBM - [developer.ibm.com/swift](http://developer.ibm.com/swift)  
Kitura, Bluemix, Swift Sandbox, Package Catalog
- Hosting: Heroku, Amazon, Digital Ocean, Azure, Docker
- Kitura, Vapor, Perfect, Zewo
- Great performance > nodeJS, java, ruby

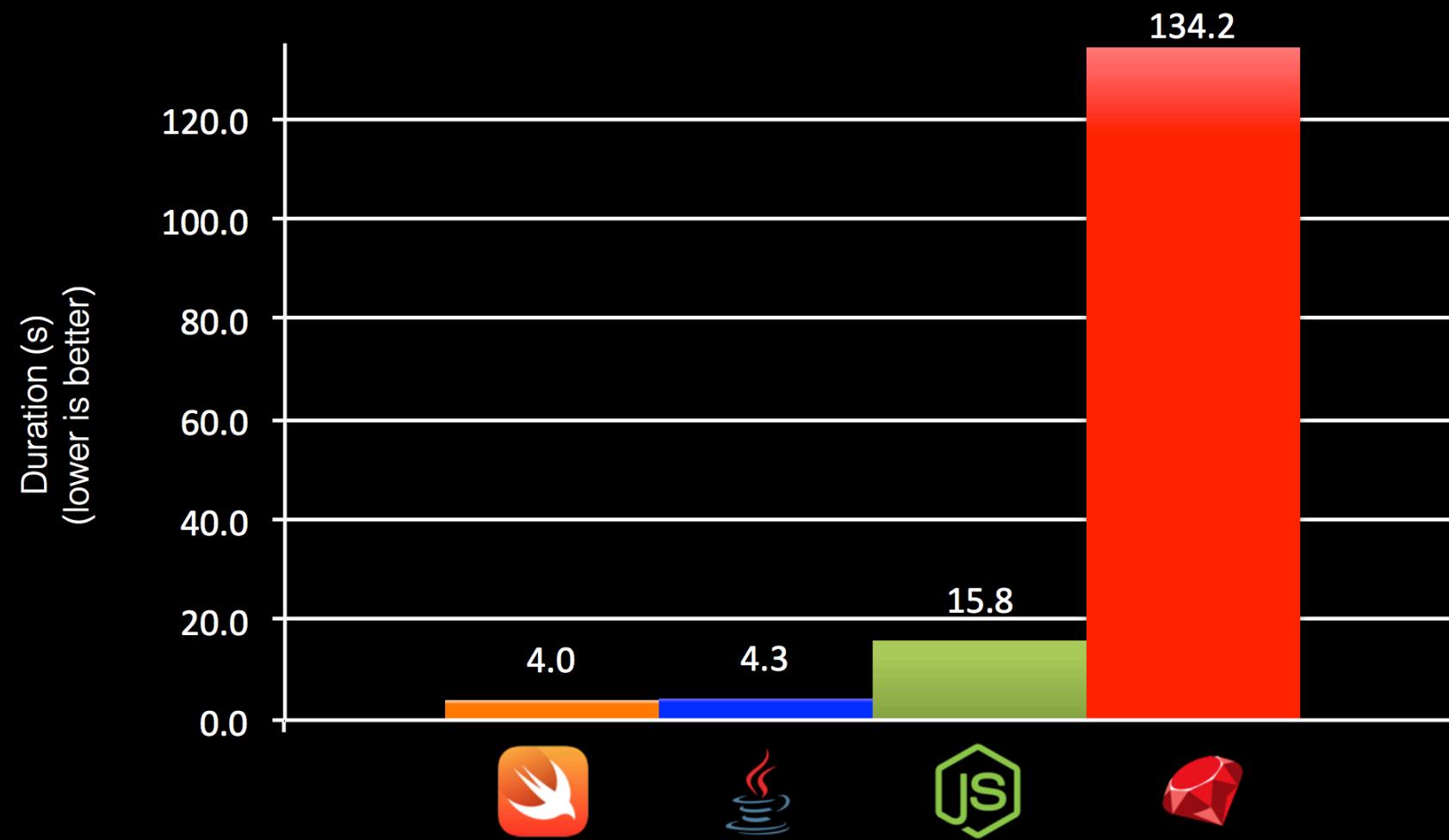
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**Production ready**

# FrenchKit: End to End Application Development with Swift

## Performant Applications



<http://benchmarksgame.alioth.debian.org/u64q/performance.php?test=spectralnorm>

**Swift @ IBM**

# Android

- Merged to Swift repo by 
- Swift stdlib + Foundation is available on Android
- swift-corelibs-libdispatch open PR "#162"

# Android

Requirements: NDK, libiconv + libicu, libc++, libgcc

- swift repo: 100% swift Android executable
- SwiftAndroid: make swift lib and include it to android app.

"How we put an app in the Android Play Store using Swift"

# Android limitations

- Hard to setup
- No java interoperability
- Community driven

Not production ready, Yet

# evolution

Swift is Young and  
Moves fast

**It is not the strongest that  
survive, but the one who are  
willing to adapt**

**— Evolution**

# Evolution

- 3 major release in 2 years
- 144 Accepted proposals. 1,591 commits
- hundred thousand of emails in mailing list

# Swift 3.0

- 90+ proposals
- Syntax, Syntax, (if let - where, open, fileprivate, ...)
- Swifty Foundation, GCD and API
- Removed automatic objc-swift bridging
- C and UnsafePointer
- Swift Package Manager release 

**But 🤔 where is ABI ?**

**Not there yet.**

**We were busy breaking the language 😊**

# Swift 4.0



- 🤷 No Source breaking changes (unless impacts ABI)
- ABI
- Stabilization, Resilience
- Generics, String
- Memory ownership

**What's in **IT** for me?**

**It depends**



# What's in IT for me?

- Shape the language
- New horizons / platforms
- Cross platforms
- Modern, 100% open Language

# Stay up to date with Swift

- Code in Swift. **try? Swift**
- Newsletter:  
"Swift Weekly Brief", "This week in Swift", Server-Side Swift
- Evolutions
- Mailing List  - [lists.swift.org](https://lists.swift.org)

# Thanks

# Questions?

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