Unit 1—Lesson 1: Introduction to Swift and Playgrounds

A little history



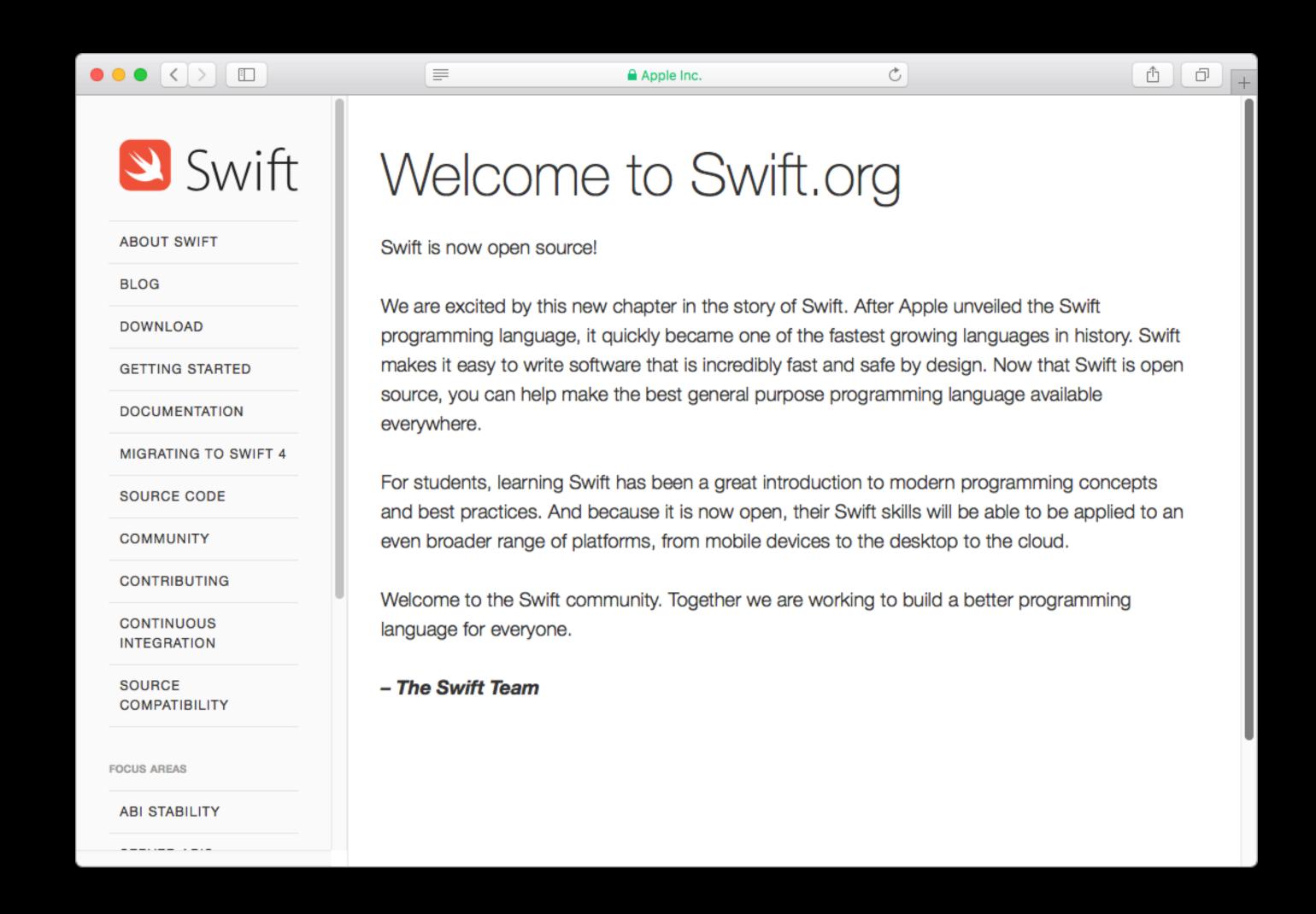
A modern language

SAFE FAST EXPRESSIVE OPEN SOURCE

A safe language

- Explicit object "types"
- Type inference
- Optionals
- Error handling

Open Source



Hello, world

print("Hello, world!")



main.swift

Playgrounds



```
Ready | Today at 8:59 AM
         Message Test
        Date()
 8
 10 struct Message {
       let from: String
       let contents: String
       let date: Date
14 }
16 let messages = [
                                                                                                                         [{from "Sandy", contents "Hey, what's going..
       Message(from: "Sandy", contents: "Hey, what's going on tonight?", date: messageDates[0]),
       Message(from: "Michelle", contents: "Studying for Friday's exam. You guys aren't?", date: messageDates[1]),
       Message(from: "Christian", contents: "Nope. That's what tomorrow is for. Let's get food, I'm hungry!",
           date: messageDates[2]),
       Message(from: "Michelle", contents: "Maybe. What do you want to eat?", date: messageDates[3])
21
22 extension Message: CustomDebugStringConvertible {
       public var debugDescription: String {
            return "[\(date) From: \(from)] \(contents)"
                                                                                                                         (25 times)
26 }
28 debugPrint(messages[0])
                                                                                                                          "[2016-12-07 16:19:56 +0000 From: Sandy]..
30 let dateFormatter = DateFormatter()
                                                                                                                          <NSDateFormatter: 0x610000045880>
31 dateFormatter.doesRelativeDateFormatting = true
                                                                                                                          <NSDateFormatter: 0x610000045880>
32 dateFormatter.dateStyle = .short
                                                                                                                          <NSDateFormatter: 0x610000045880>
33 dateFormatter.timeStyle = .short
                                                                                                                          <NSDateFormatter: 0x610000045880>
35 extension Message: CustomStringConvertible {
       public var description: String {
            return "\(contents)\n \(from) \(dateFormatter.string(from: date))"
                                                                                                                         (4 times)
39 }
ney, what a going on conight:
 Sandy Today, 8:19 AM
Studying for Friday's exam. You guys aren't?
  Michelle Today, 8:28 AM
Nope. That's what tomorrow is for. Let's get food, I'm hungry!
 Christian Today, 8:44 AM
Maybe. What do you want to eat?
  Michelle Today, 8:53 AM
```