



iOS 7 Application Development



Introduction to iOS 7 and SDK

Session 1

Vu Tran Lam

IAD-2013

These are confidential sessions - please refrain from streaming, blogging, or taking pictures

Overview of Course

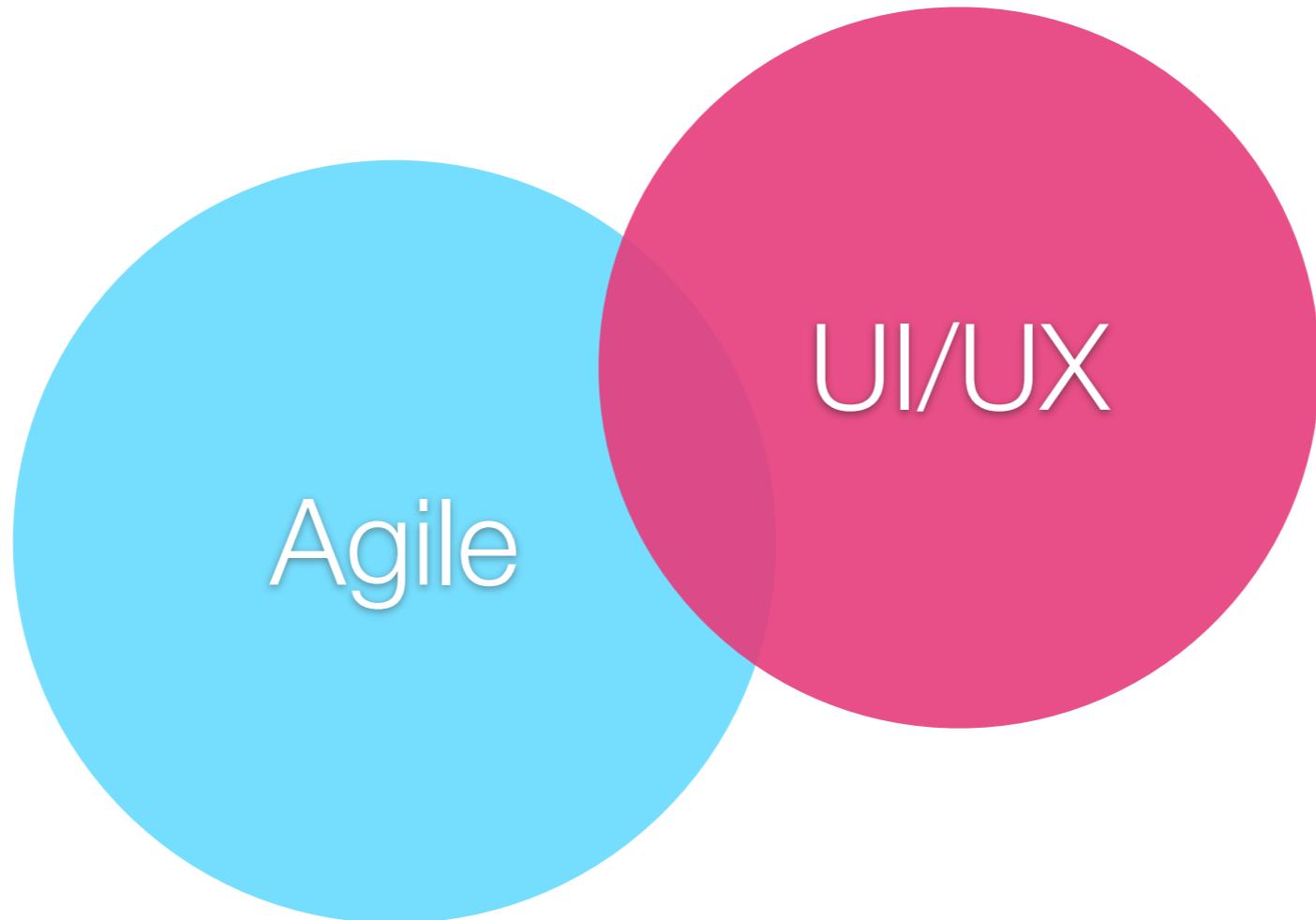
- Course name: IAD-2013
- Duration: 90 hours
- Recommended book: Use Apple documentation
- Required hardware & software:
 - Intel based PC which installed VMware with Mac OS 10.9, Xcode 5
 - iPhone & iPad
- Courseware:
 - Slides: <http://slideshare.com>
 - Demo: <http://github.com>
 - Documentation: <https://developer.apple.com>

Overview of Course

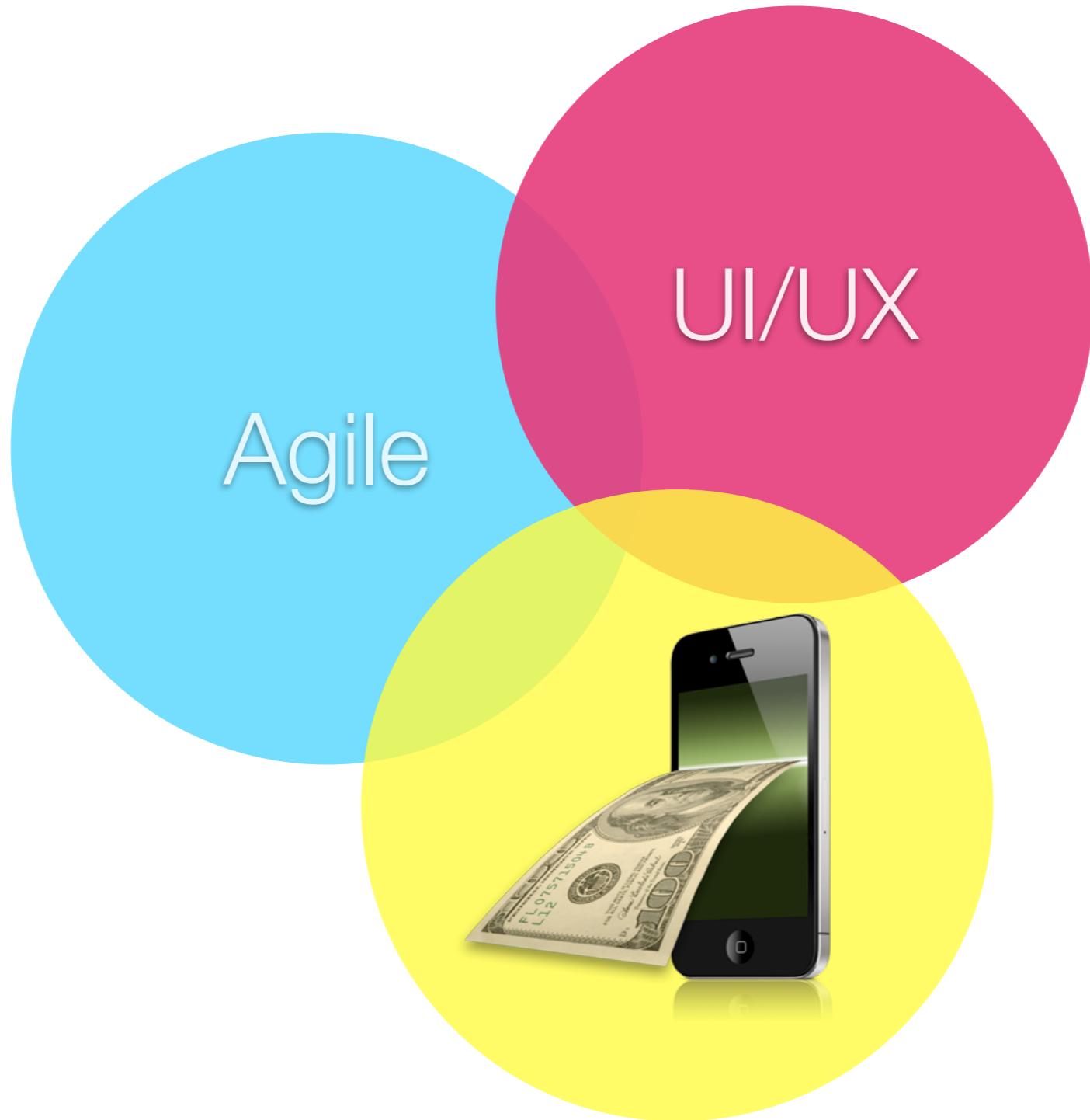


UI/UX

Overview of Course



Overview of Course



Why you are here?



developer

- apple developer**
- facebook developer**
- android developer**
- oracle sql developer**
- sql developer**
- xda developer**
- windows 8 developer preview**
- apple developer program**
- ios developer**
- web developer**

Why you are here?

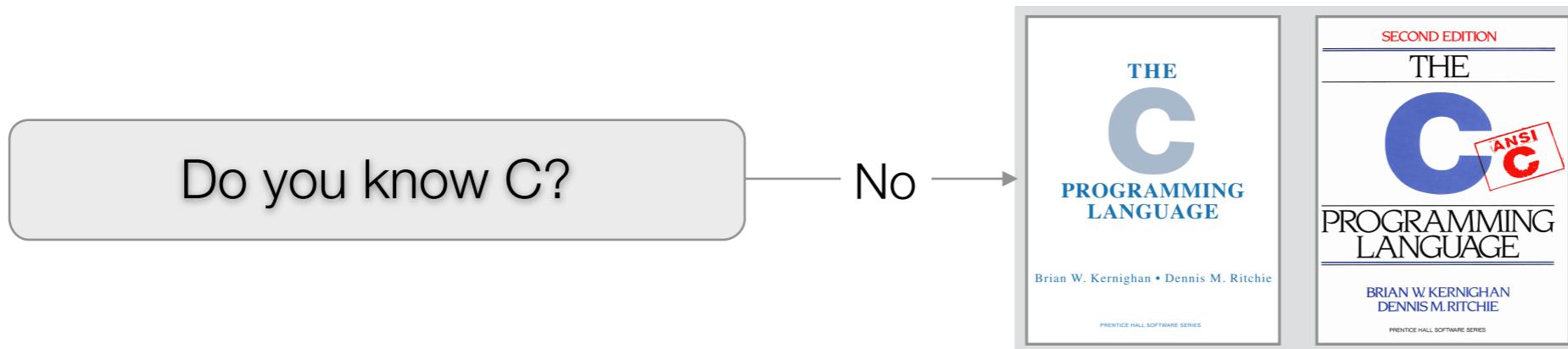
To build iPhone & iPad applications



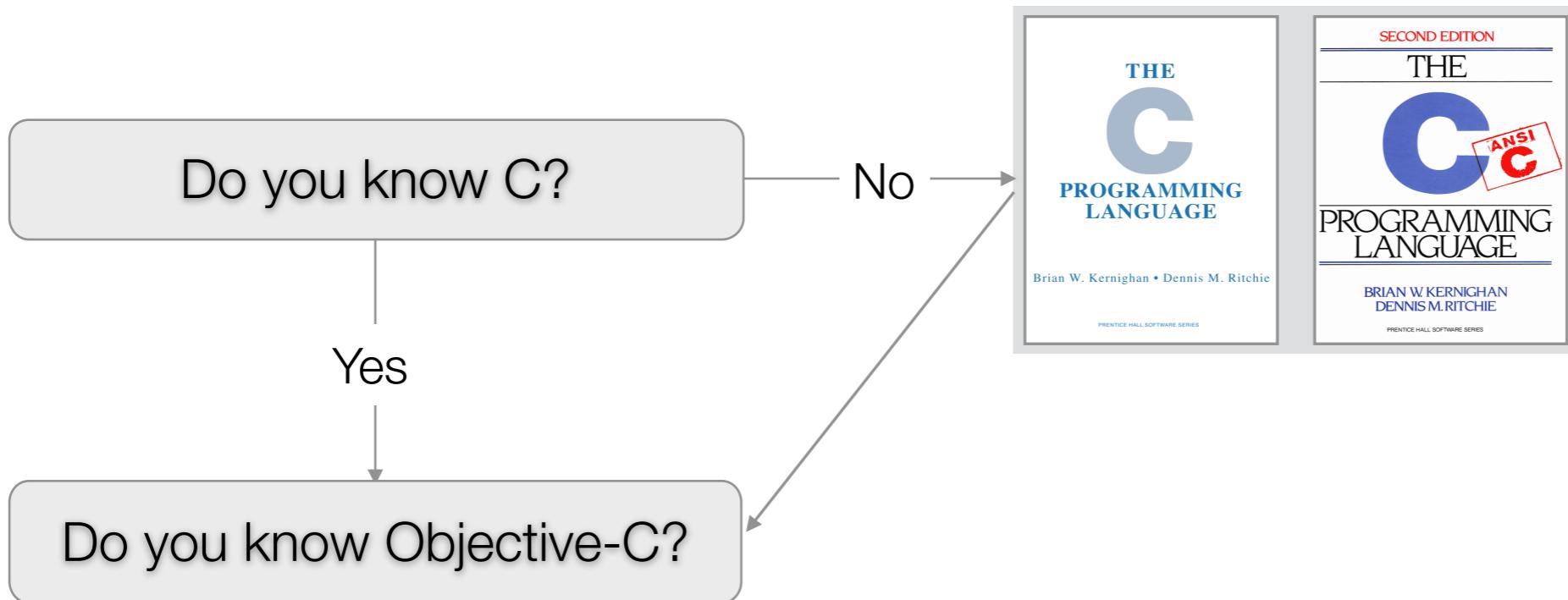
Roadmap to become iOS Developer

Do you know C?

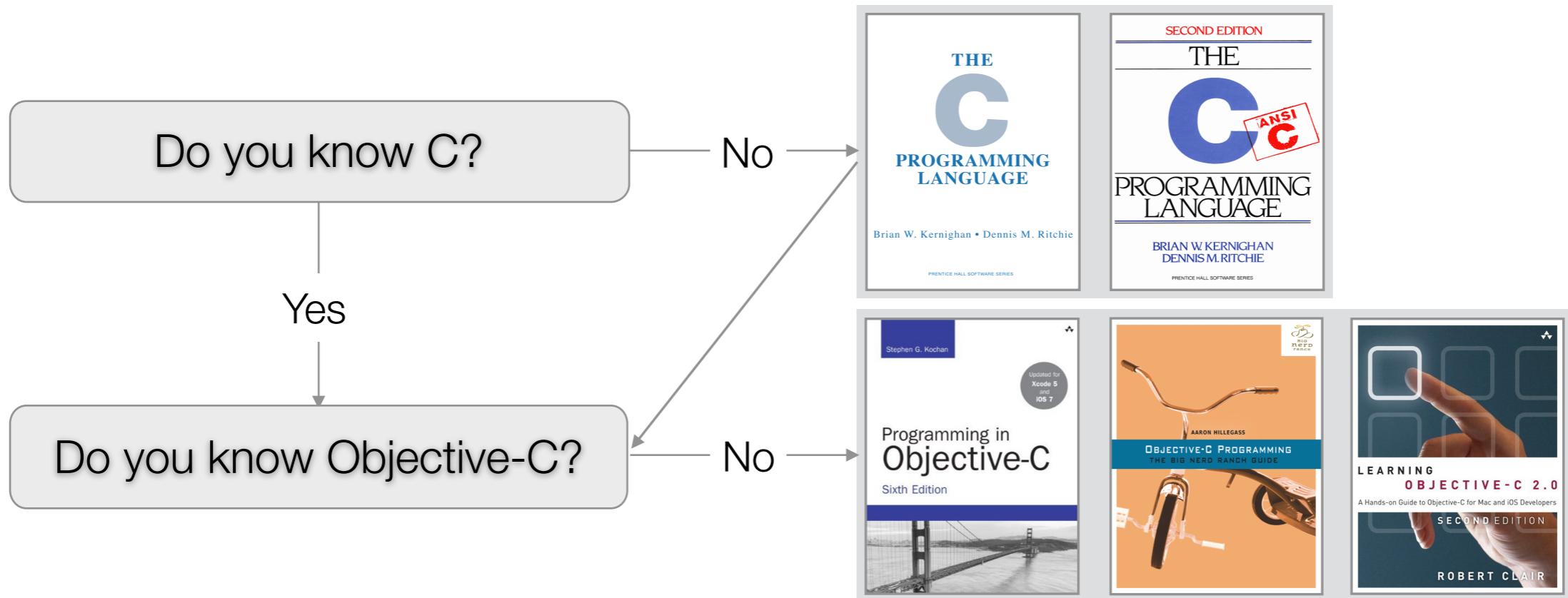
Roadmap to become iOS Developer



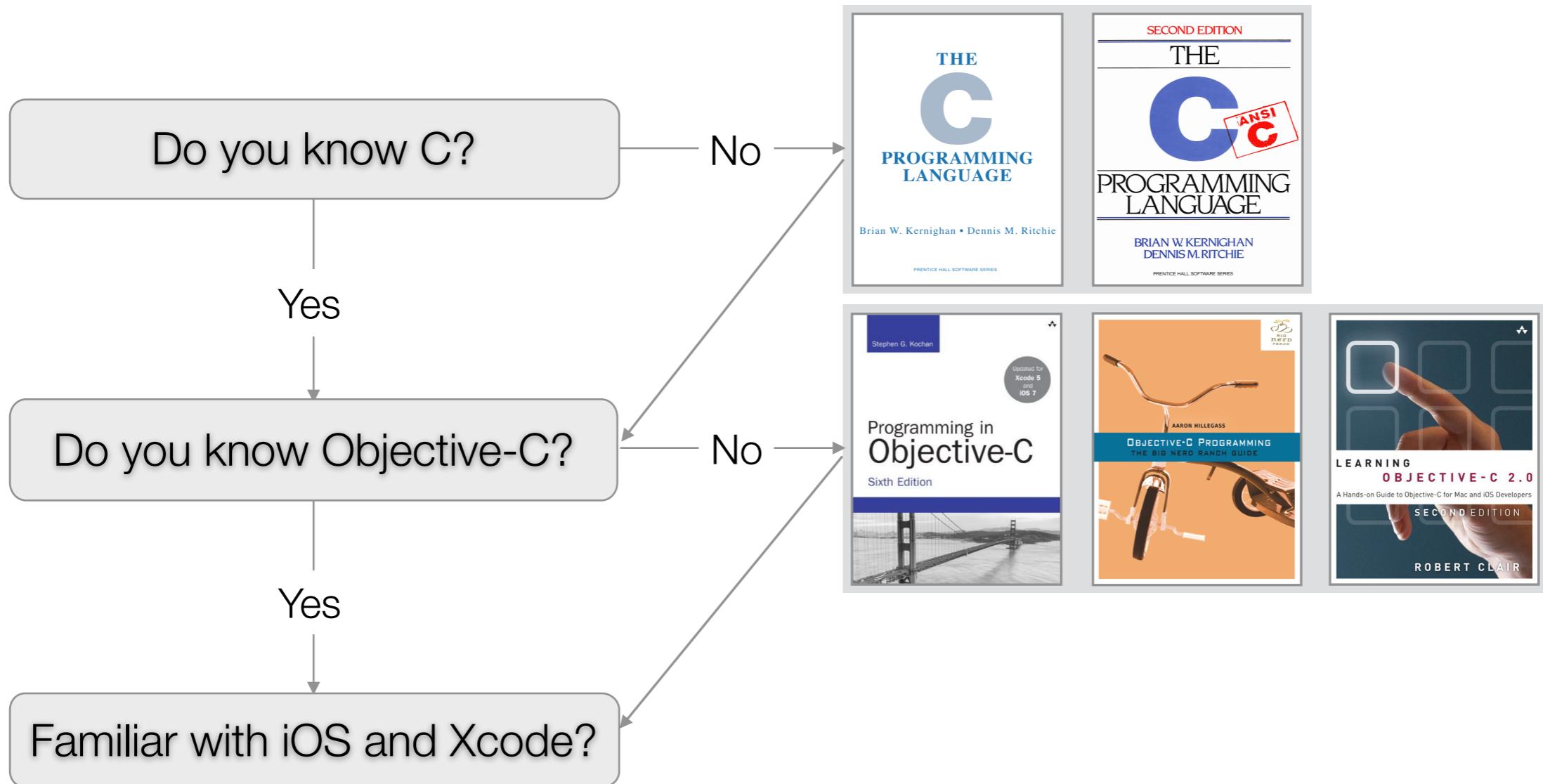
Roadmap to become iOS Developer



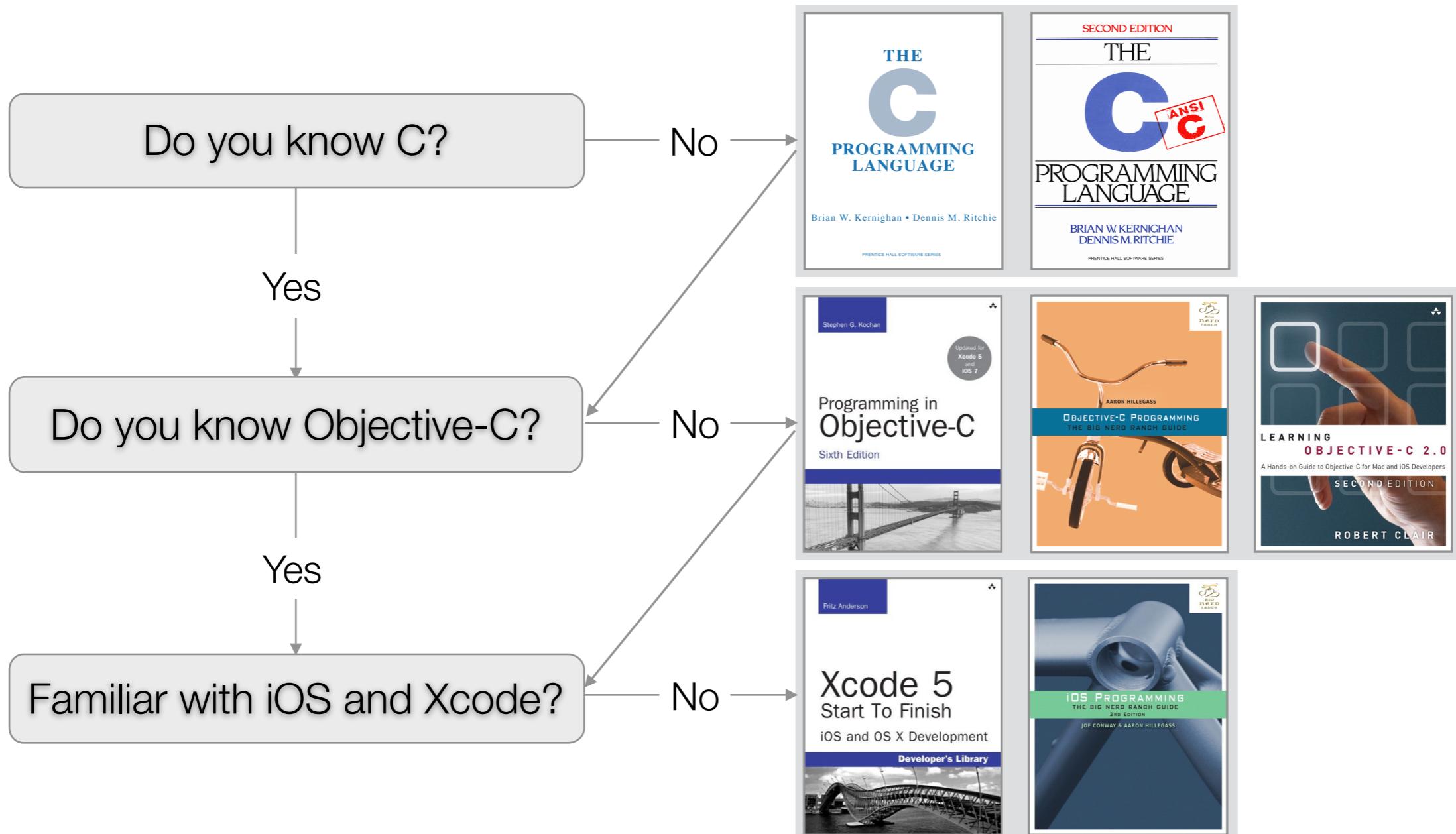
Roadmap to become iOS Developer



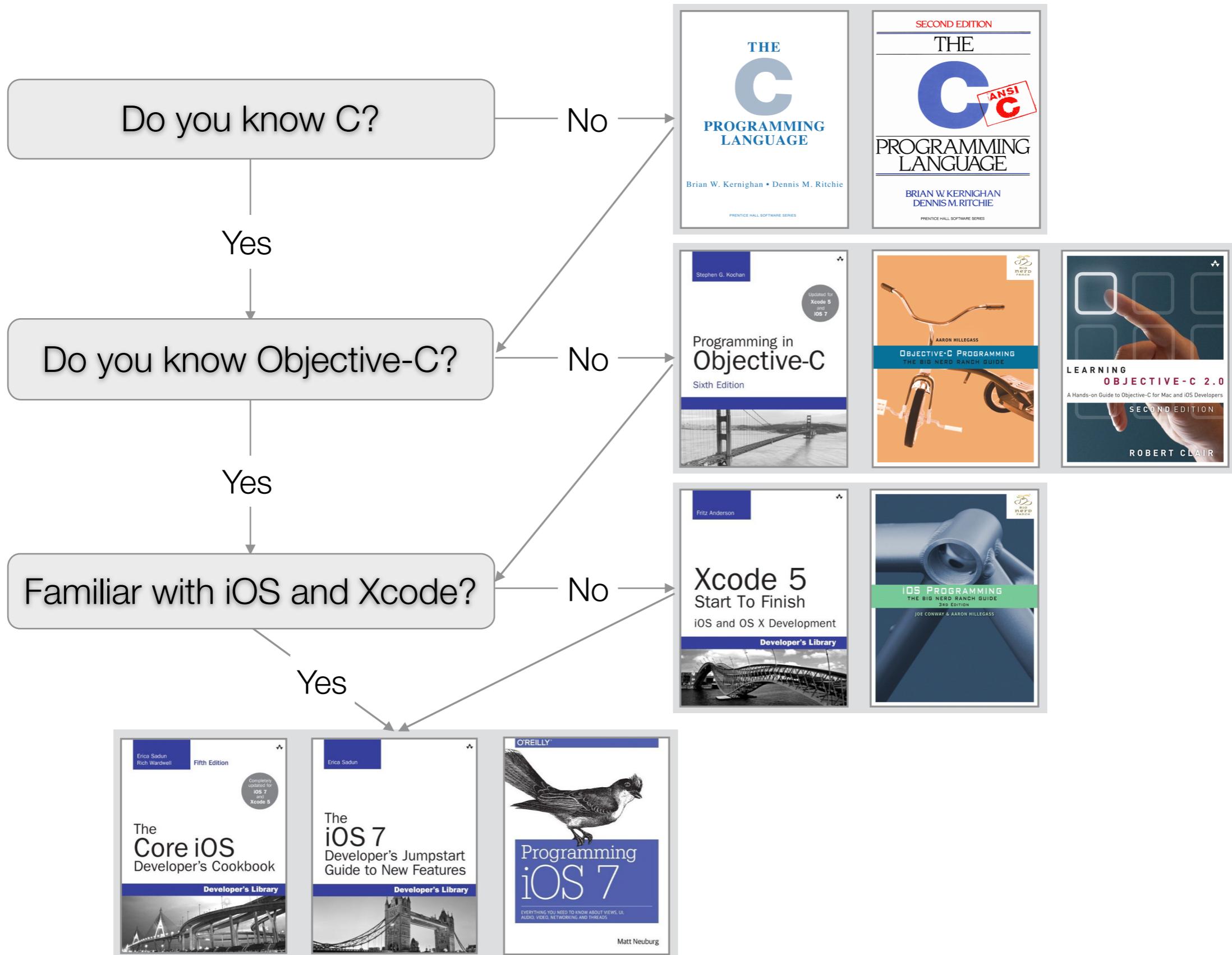
Roadmap to become iOS Developer



Roadmap to become iOS Developer



Roadmap to become iOS Developer



Mobile Development

Mobile Development



iOS SDK

Mobile Development



iOS SDK



Android SDK

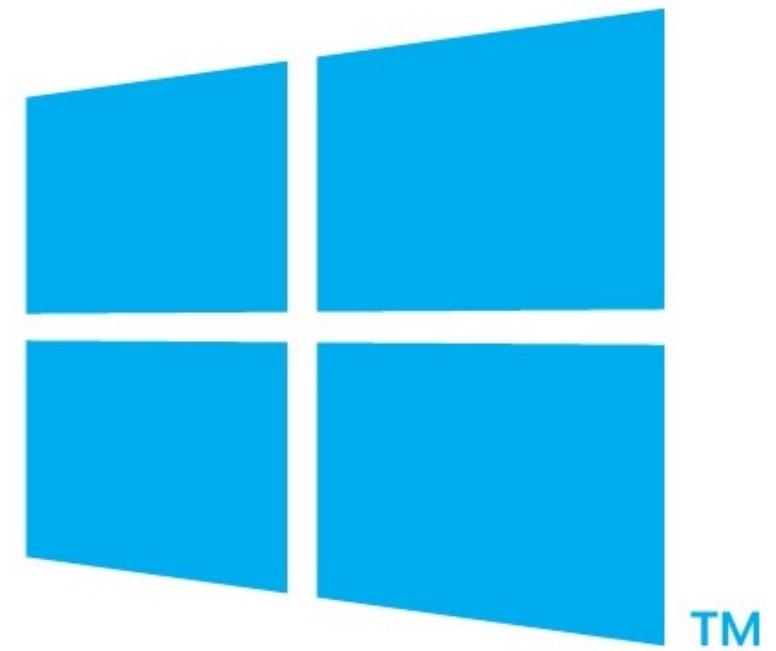
Mobile Development



iOS SDK



Android SDK



Windows Phone SDK

Mobile Development



Samsung Galaxy S4 and Android 4.2

Mobile Development

iPhone 5S-C and iOS 7



Introduction to Mac OS X



The Desktop OS based on Unix which is used for
iMac & MacBook

Apple OS History

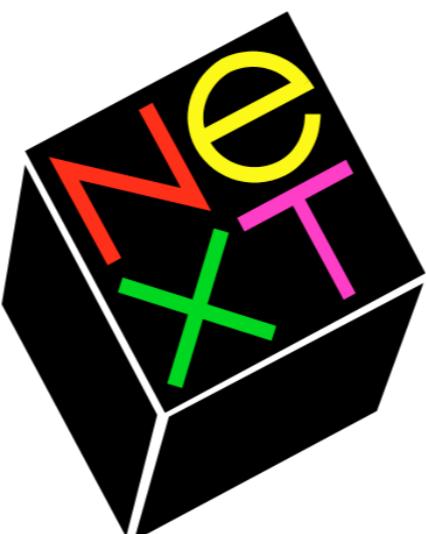
1978	In June of 1978 Apple introduced Apple DOS 3.1, the first OS for Apple computers
1981	Apple introduced System 1
1991	Apple introduced System 9
1995	Apple introduced Mac OS 8
1997	Apple bought NeXT Software Inc. for \$400 million and acquired Steve Jobs as a consultant
1999	Apple introduced Mac OS 9
2001	Apple introduced Mac OS X 10.0 code named Cheetah in 24/03/2001
2001	Apple introduced Mac OS X 10.1 code named Puma in 25/09/2001
2002	Apple introduced Mac OS X 10.2 code named Jaguar in 23/08/2002
2003	Apple introduced Mac OS X 10.3 code named Panther in 25/10/2003
2004	Apple introduced Mac OS X 10.4 code named Tiger at WWDC in 28/06/2004
2007	Apple introduced Mac OS X 10.5 code named Leopard in 26/10/2007
2008	Apple introduced Mac OS X 10.6 code named Snow Leopard at WWDC in 09/06/2008

Mac OS X History

Mac OS X is the first real replacement for the older Mac OS, based on the OPENSTEP (NEXTSTEP) from NeXT.



NeXT Computer Inc. is the company that was set up by Steve Jobs in 1985 and was taken by Apple completely for 400 million dollars in 1997.



Mac OS X Family



Lion
10.7

Mac OS X Family



Lion
10.7



Mountain Lion
10.8

Mac OS X Family



Lion
10.7

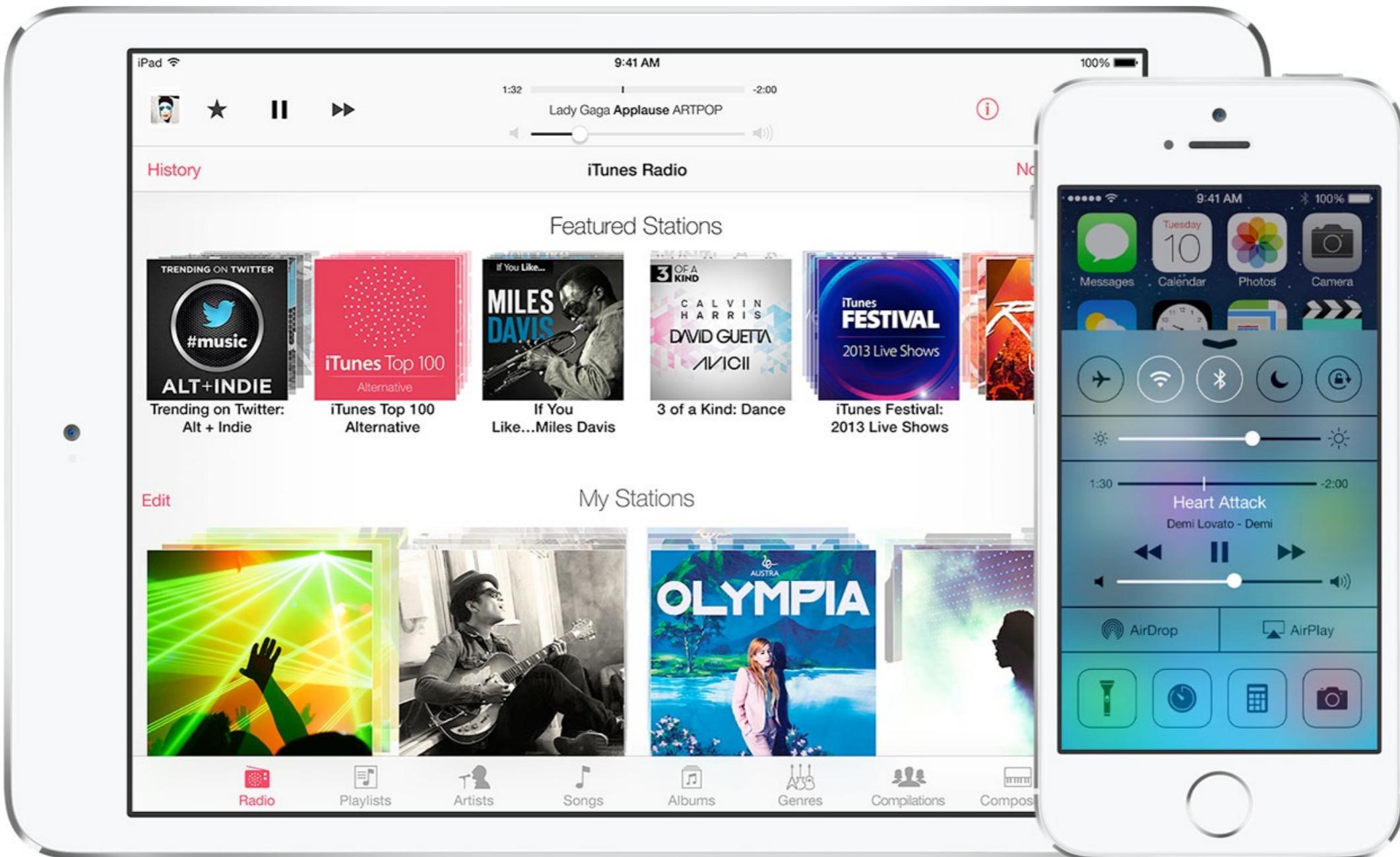


Mountain Lion
10.8



Mavericks
10.9

Introduction to iOS



The World's most advanced OS mobile & the foundation of iPhone, iPad, iPod touch.

iOS Family



iOS Family



iOS Family



iOS Developer Tools



The Xcode Developer Toolset provides everything you need to create great apps for Mac, iPhone, iPad, and iPod touch.

Xcode 5 and iOS 7 SDK

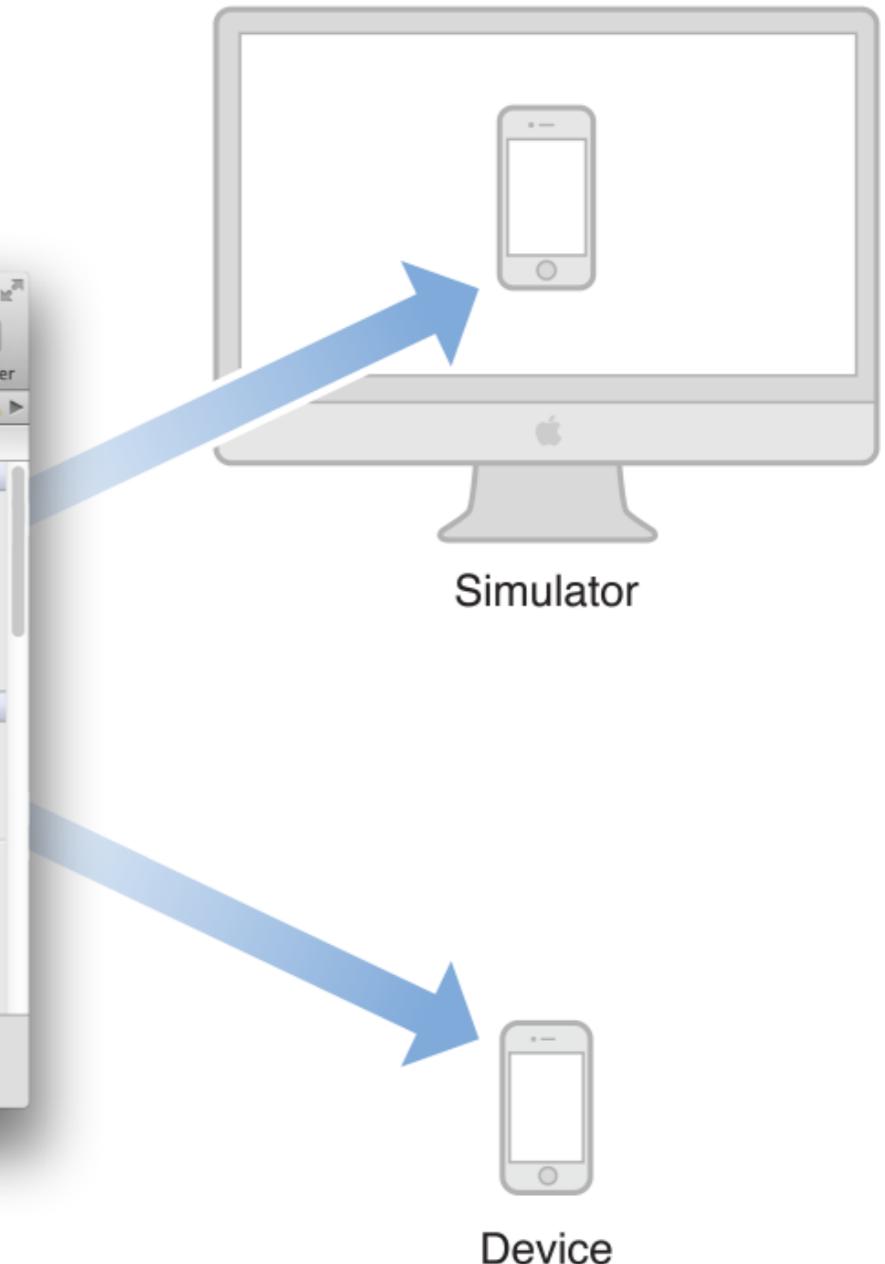
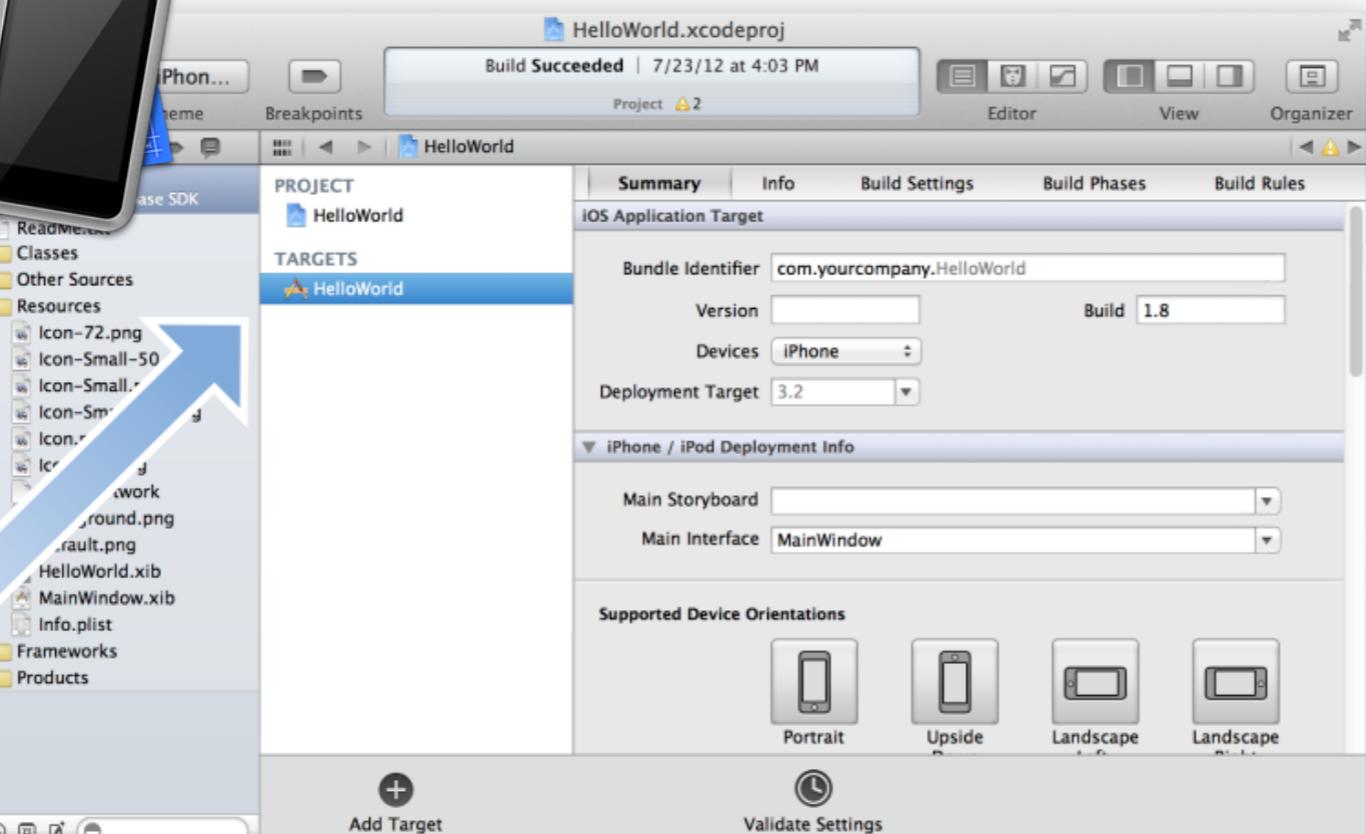
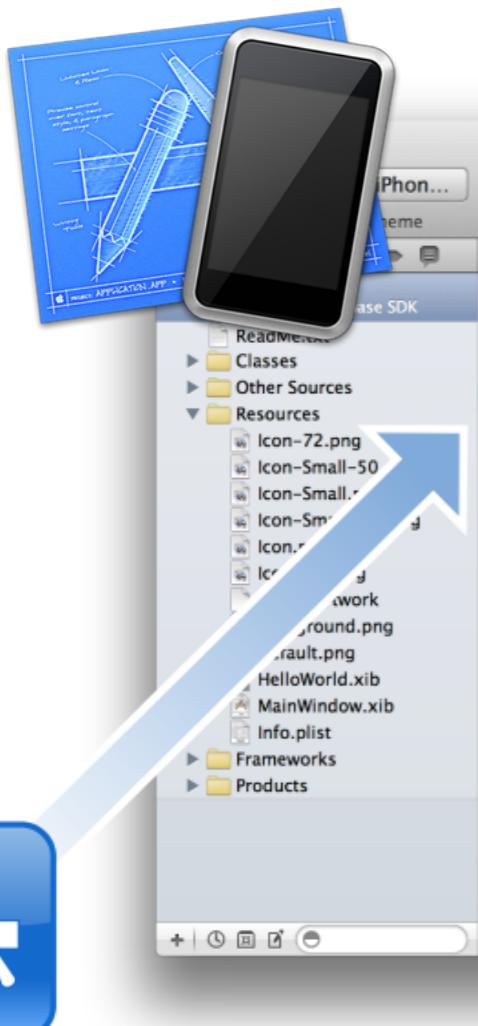


Xcode 5 is the complete toolset for building OS X 10.9 and iOS 7 applications. Xcode 5 has been redesigned to be faster and easier to use.



iOS 7 SDK provides support for developing iOS apps, and it includes the complete set of Xcode tools, compilers, and frameworks for creating apps for iOS and OS X.

iOS Simulator



The iOS Simulator runs your application in much the same way as an actual iOS device.

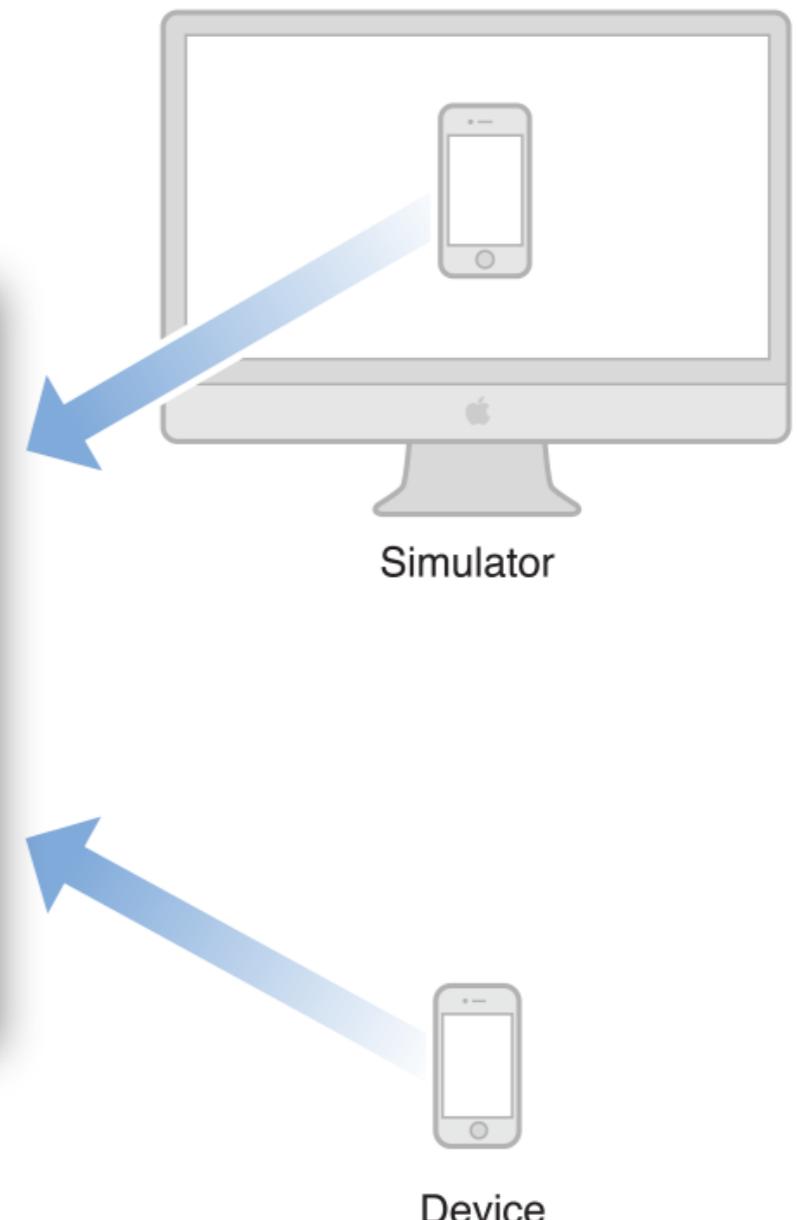
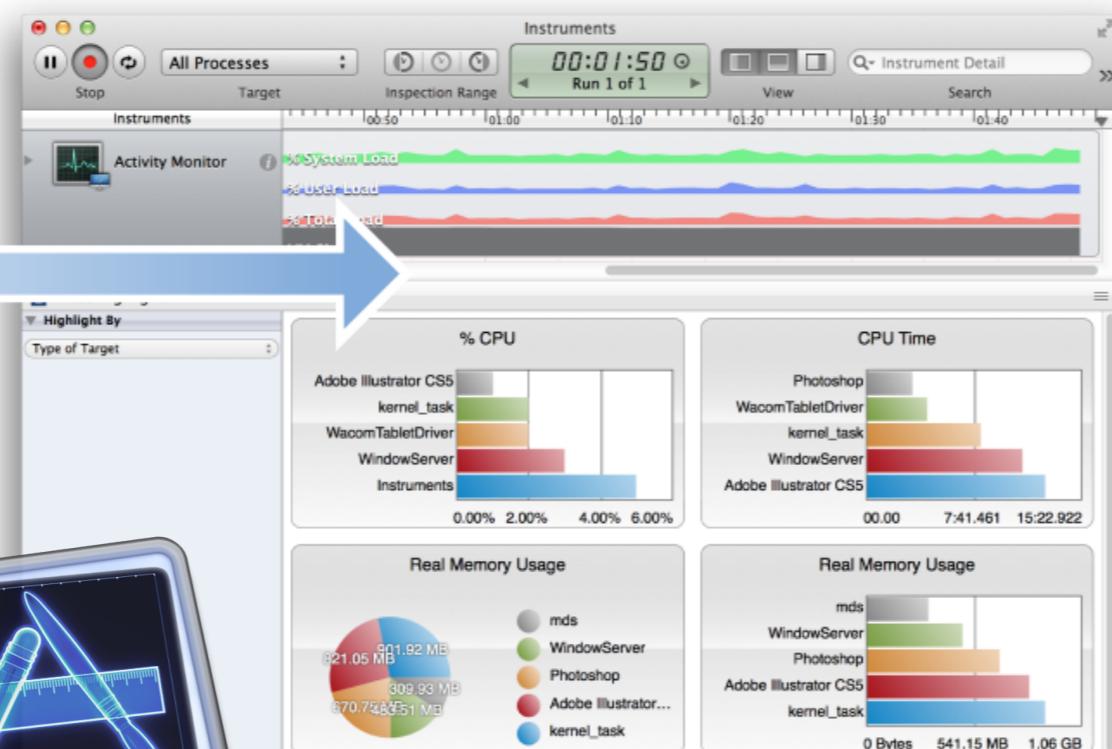
Instruments



Your Application



Instruments



To ensure that you deliver the best user experience, the Instruments lets you analyze the performance of your iOS applications while running in Simulator or on a device.

New Features in iOS 7

New Features in iOS 7



User Interface

New Features in iOS 7



User Interface



Airdrop

New Features in iOS 7



User Interface



Airdrop



Multitasking

New Features in iOS 7



User Interface



Airdrop



Multitasking



Games

New Features in iOS 7



User Interface



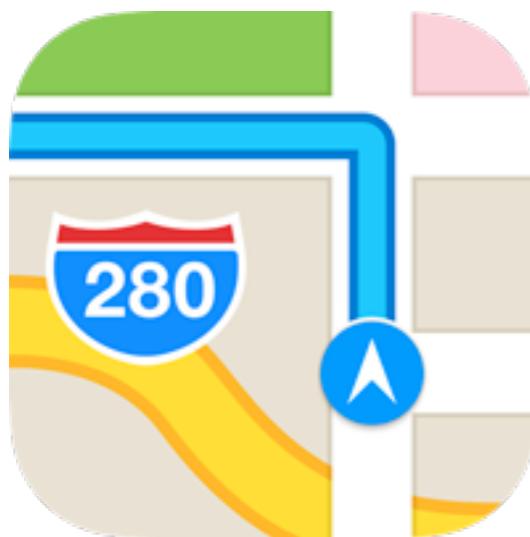
Airdrop



Multitasking



Games



Maps

New Features in iOS 7



User Interface



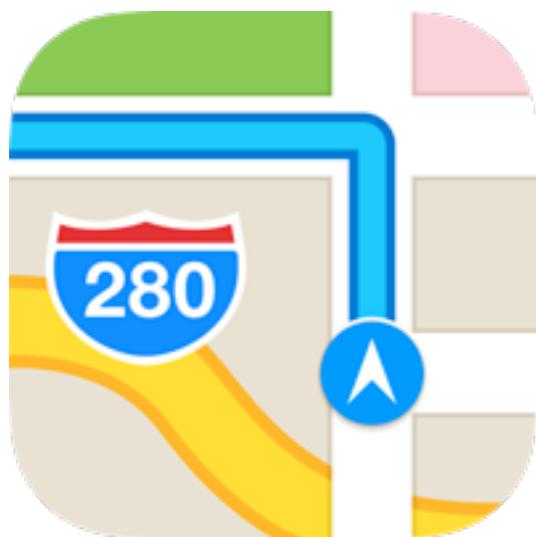
Airdrop



Multitasking



Games



Maps



Camera, Photos
& Video

New Features in iOS 7



User Interface



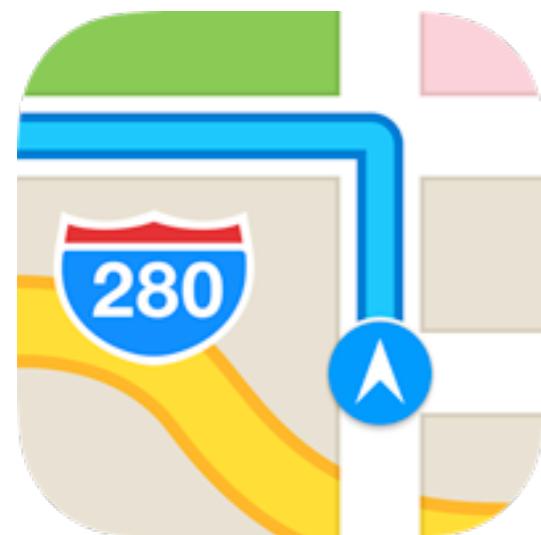
Airdrop



Multitasking



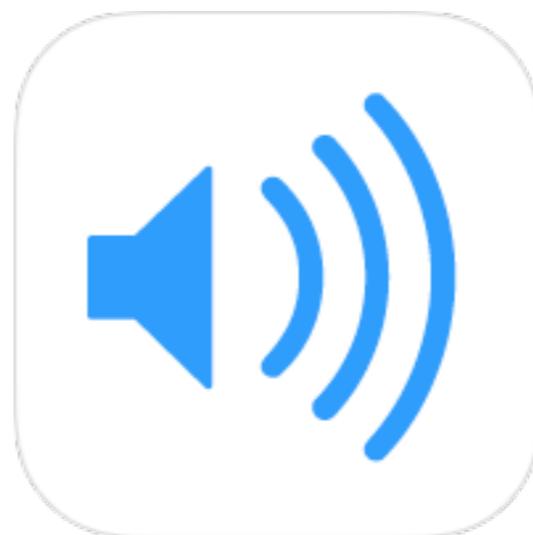
Games



Maps



Camera, Photos
& Video



Inter-App
Audio

New Features in iOS 7



User Interface



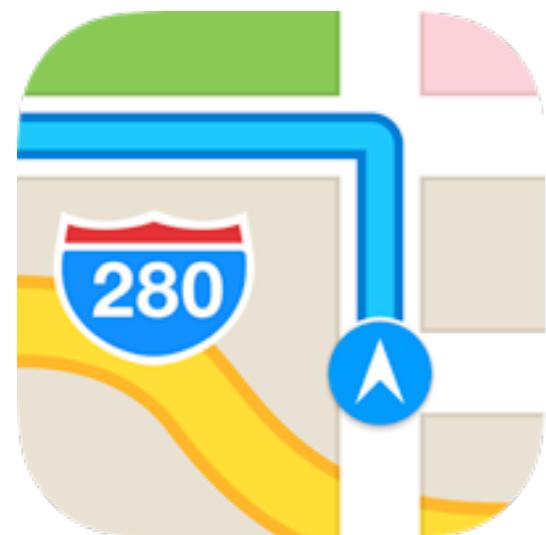
Airdrop



Multitasking



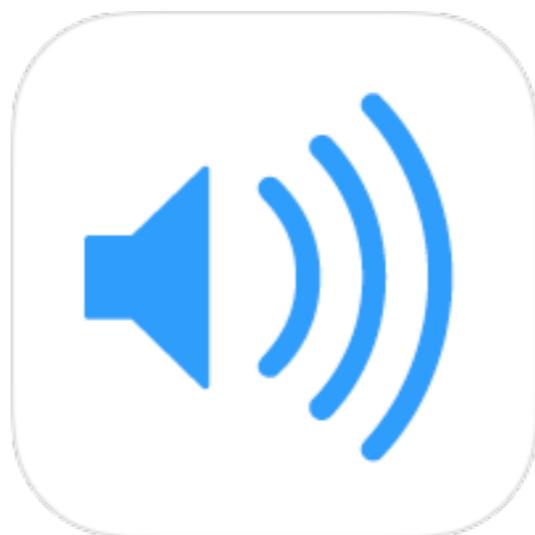
Games



Maps



Camera, Photos
& Video



Inter-App
Audio



Accessories

New Features in iOS 7



User Interface

New Features in iOS 7



User Interface



Control Center

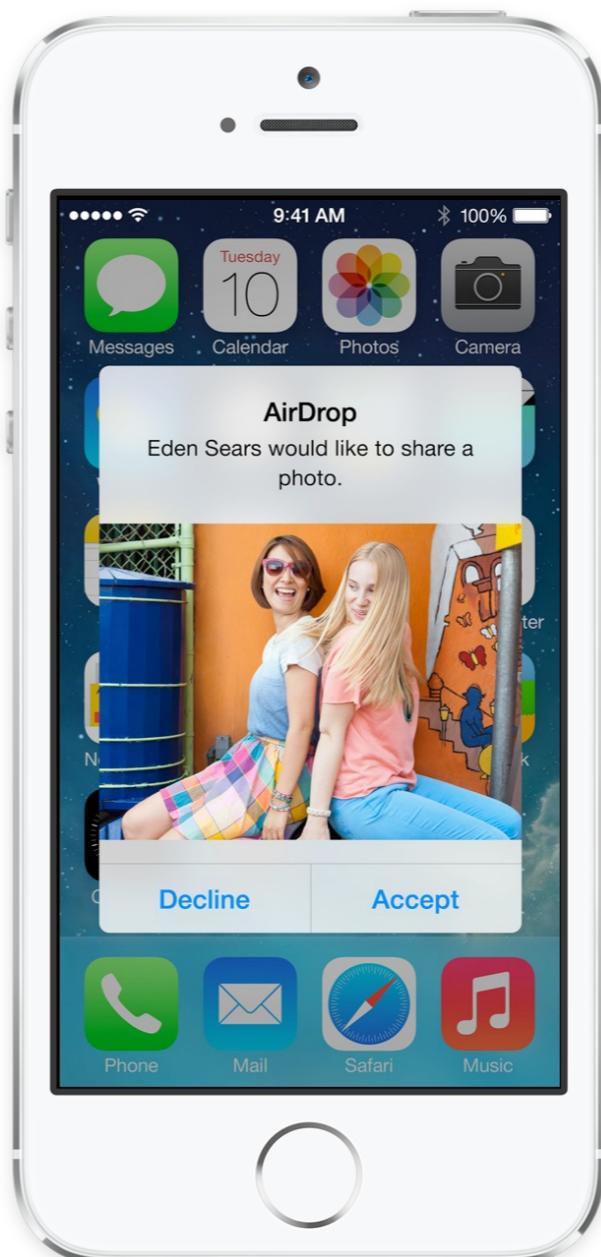
New Features in iOS 7



User Interface



Control Center



Airdrop

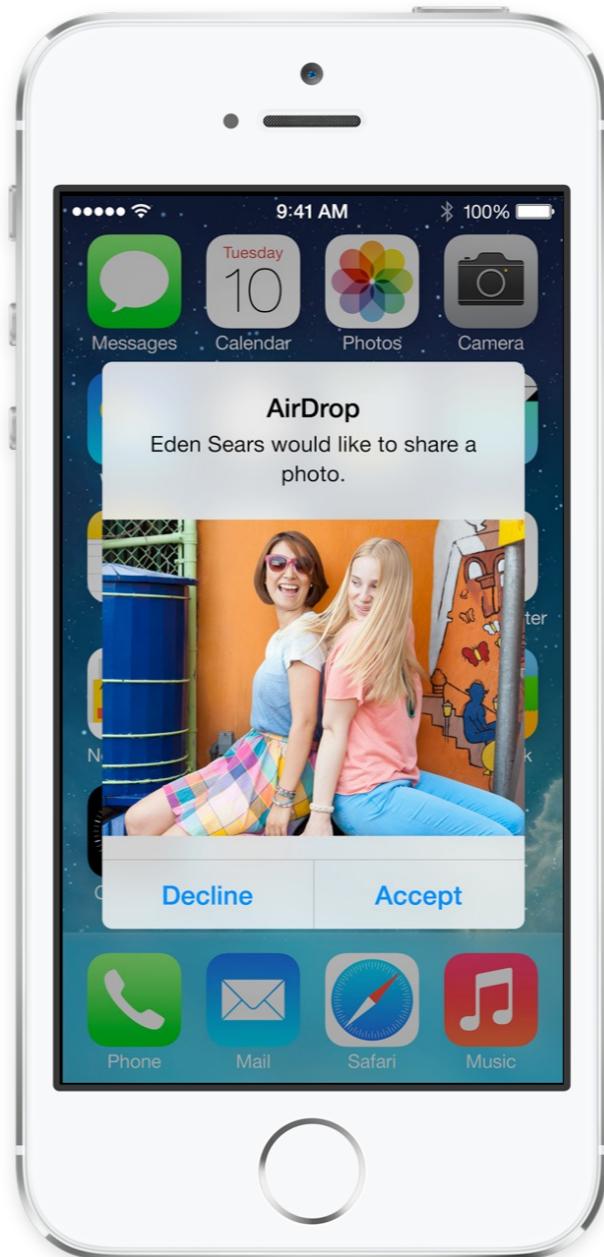
New Features in iOS 7



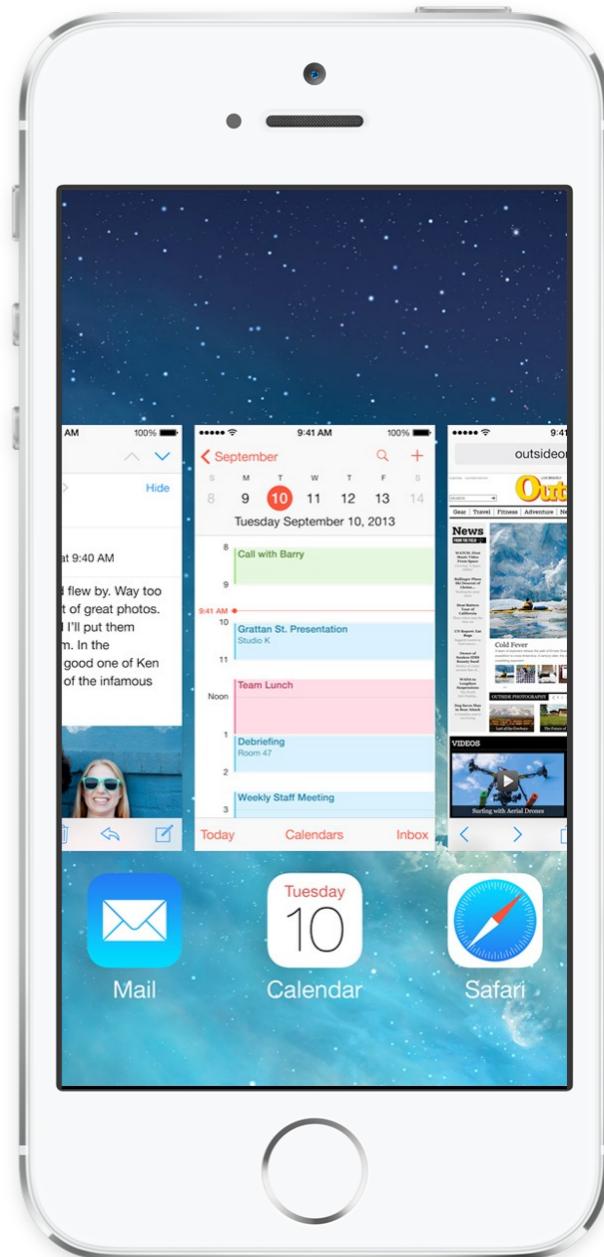
User Interface



Control Center



Airdrop



Multitasking

New Features in iOS 7

Touch ID for iPhone 5s



Installing Xcode 5 and iOS 7 SDK

The screenshot shows the Apple Developer website as it would appear in a web browser. The address bar at the top displays "Apple Inc. developer.apple.com". The main header features the "Developer" logo and navigation links for Technologies, Resources, Programs, Support, and Member Center. A search bar is also present. The central content area features a large banner with the text "Design. Code. Build. Innovate." and "Here's where it all happens for Apple developers." Below this, there are three main promotional sections: "iOS 7" (with a large "7" icon), "OS X Mavericks" (with a large "X" icon), and "Xcode 5" (with a stylized hammer and blue square icon). To the right, there is a section titled "Submit Your iOS 7 Apps" with a sub-section about preparing apps for submission to the App Store. At the bottom right of the main content area, there is a "View all news" link. The overall layout is clean and modern, typical of Apple's developer resources.

Apple Developer

Apple Inc. developer.apple.com

News iCloud Facebook Twitter Wikipedia Yahoo! Popular Apple

Reader

Developer Technologies Resources Programs Support Member Center

Design. Code. Build. Innovate.

Here's where it all happens for Apple developers.

iOS 7

Develop your apps for iOS 7 today.

[Learn more](#) | [iOS Dev Center](#)

OS X Mavericks

Download the Developer Preview of OS X 10.9.

[Learn more](#) | [Mac Dev Center](#)

Xcode 5

See what's new in version 5.0.

[Learn more](#) | [Download](#)

Submit Your iOS 7 Apps

Download iOS 7 and Xcode 5 and prepare your apps for submission to the App Store.

[View all news](#)

Installing Xcode 5 and iOS 7 SDK

What's New in Xcode 5 – Developer Tools Technology Overview – Apple Developer

Apple Inc. developer.apple.com/technologies/tools/whats-new.html

Reader

News iCloud Facebook Twitter Wikipedia Yahoo! Popular Apple

Developer Technologies Resources Programs Support Member Center

Overview

Developer Tools

What's New in Xcode

Features

iOS

OS X

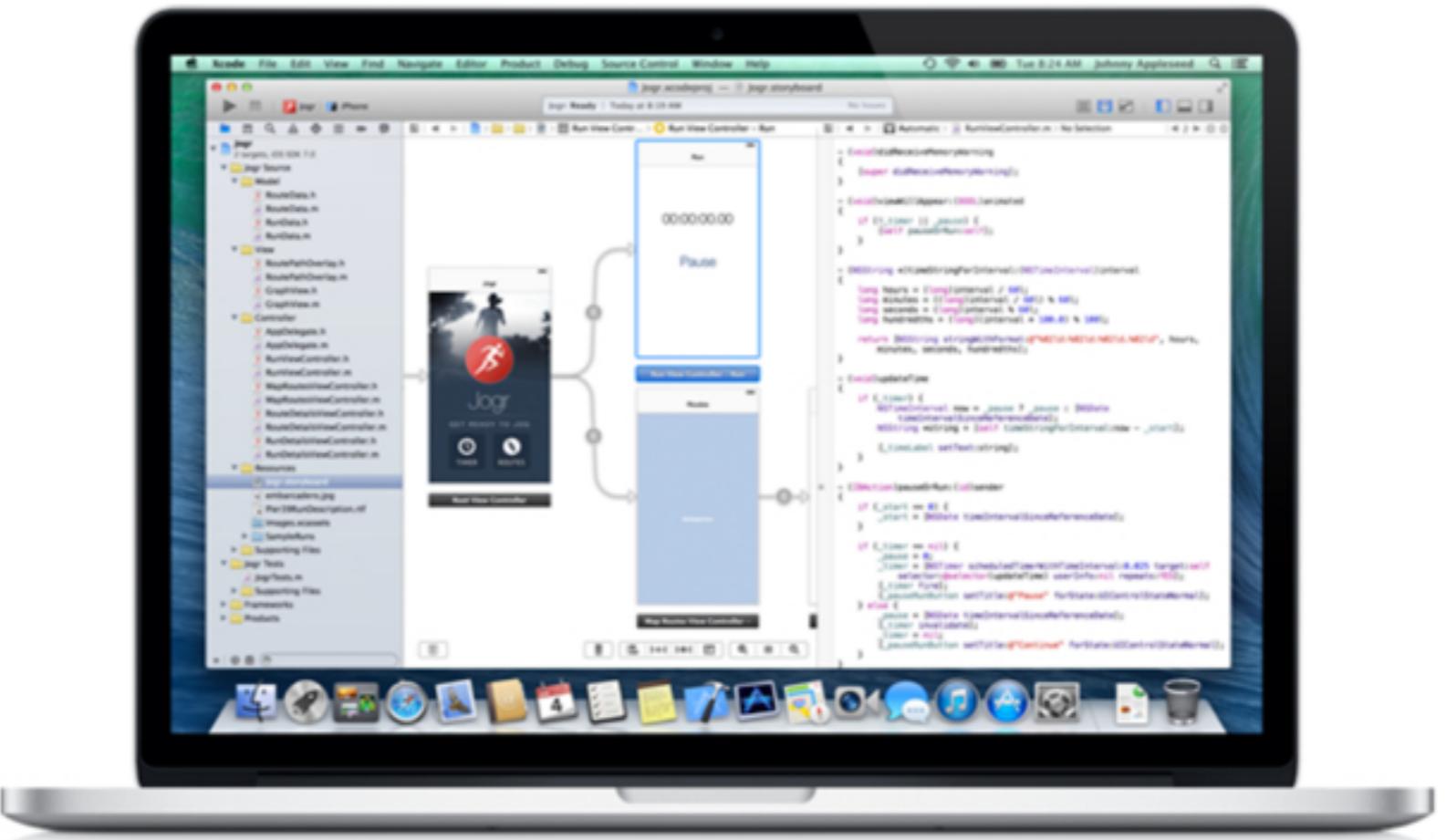
Safari

Xcode
Download the complete toolset for building iOS apps and Mac apps, including the Xcode IDE, Instruments, and iOS Simulator.



[Download Xcode](#)

What's New in Xcode 5



The screenshot shows the Xcode interface. On the left is the Project Navigator displaying files like AppDelegate.h, Model, View, and Controller. In the center is the Storyboard showing a sequence of screens: a splash screen with a jogger icon, a timer screen showing "00:00:00.00", and a pause screen. On the right is the Assistant Editor showing the corresponding Swift code for the storyboard. The Xcode interface includes a menu bar (File, Edit, View, Find, Navigate, Editor, Product, Debug, Source Control, Window, Help), a toolbar, and a status bar at the bottom.

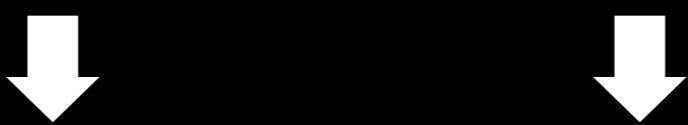
iOS 7 Architecture & SDK Frameworks

Cocoa Touch

Media

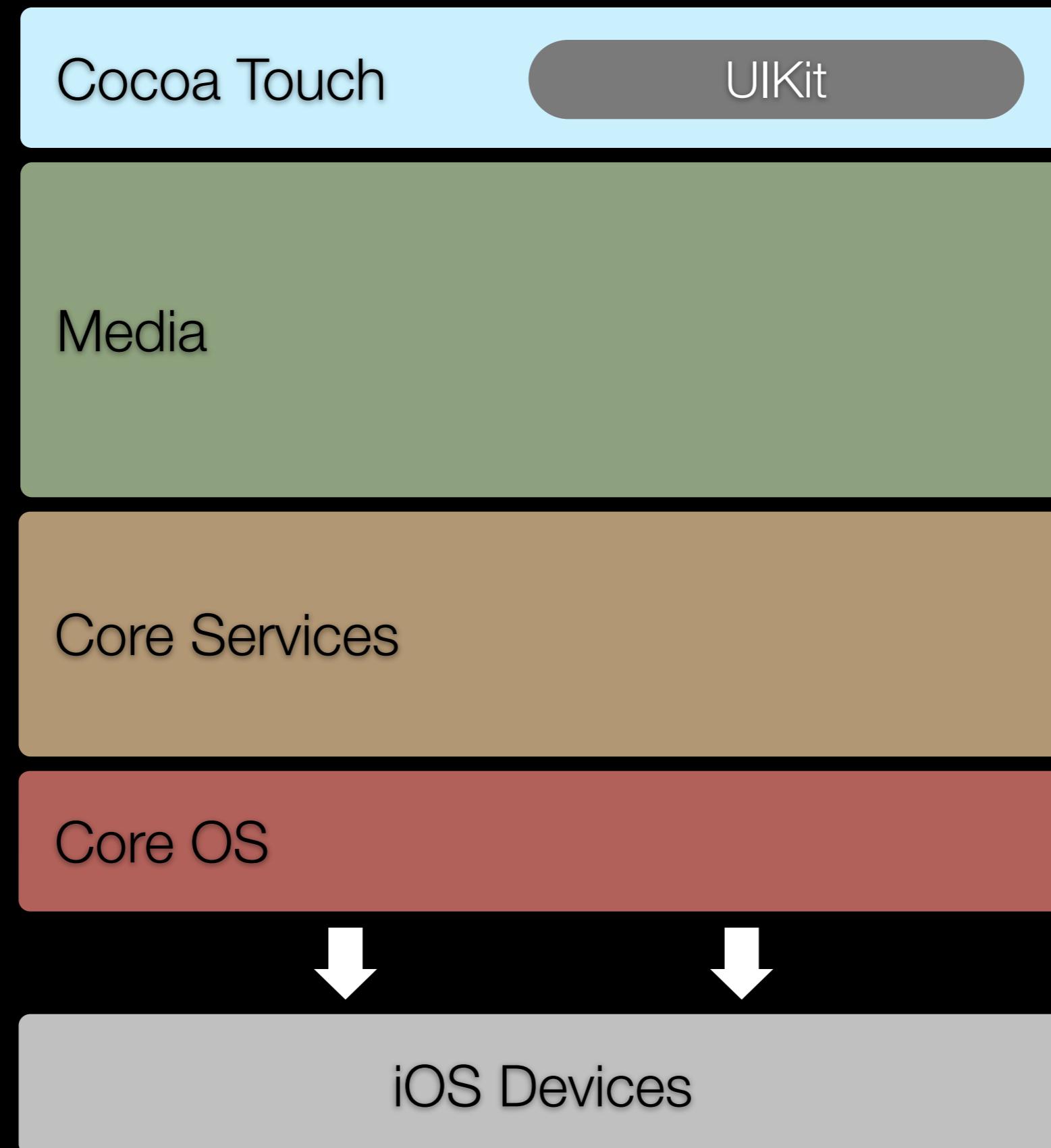
Core Services

Core OS

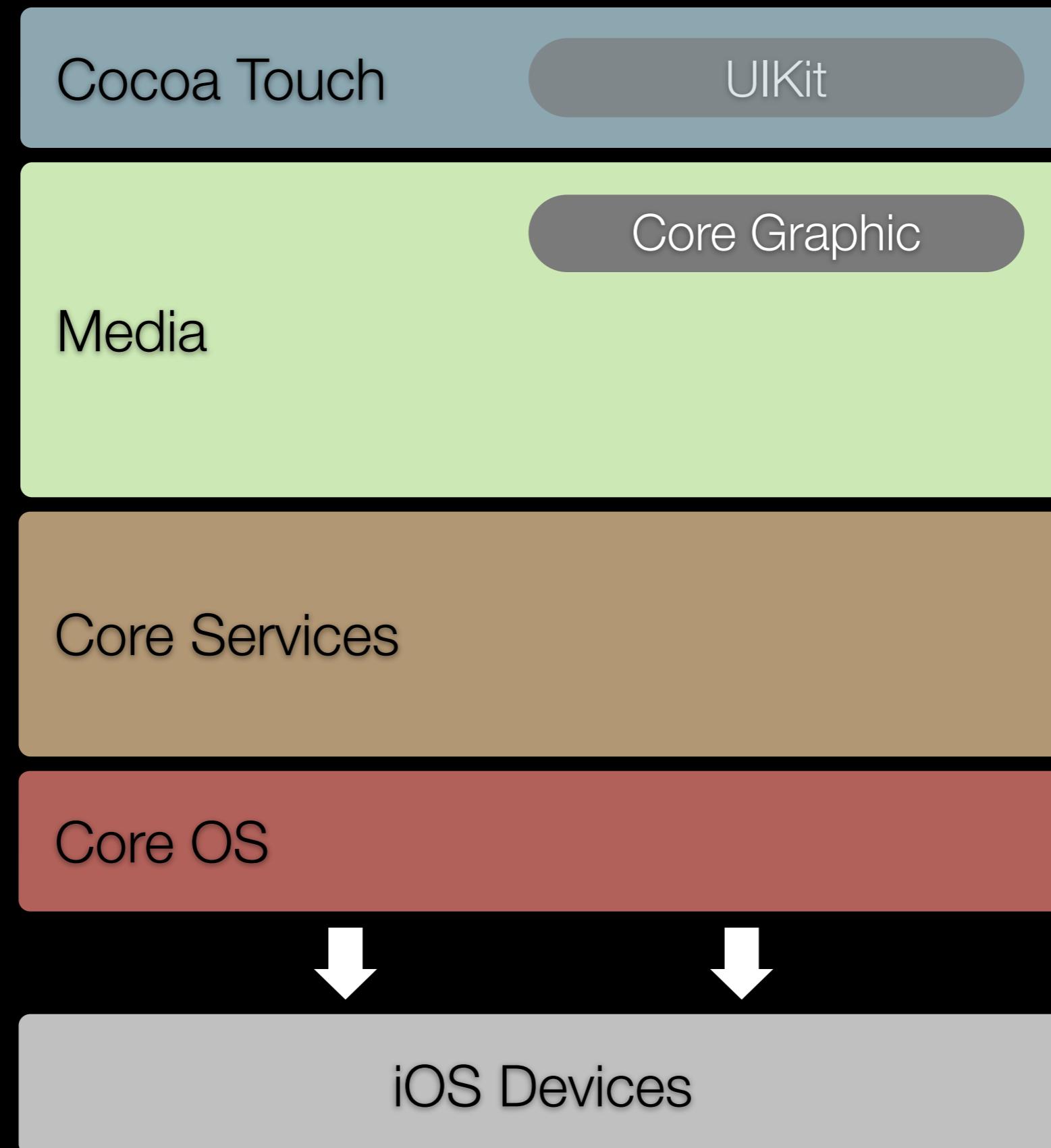


iOS Devices

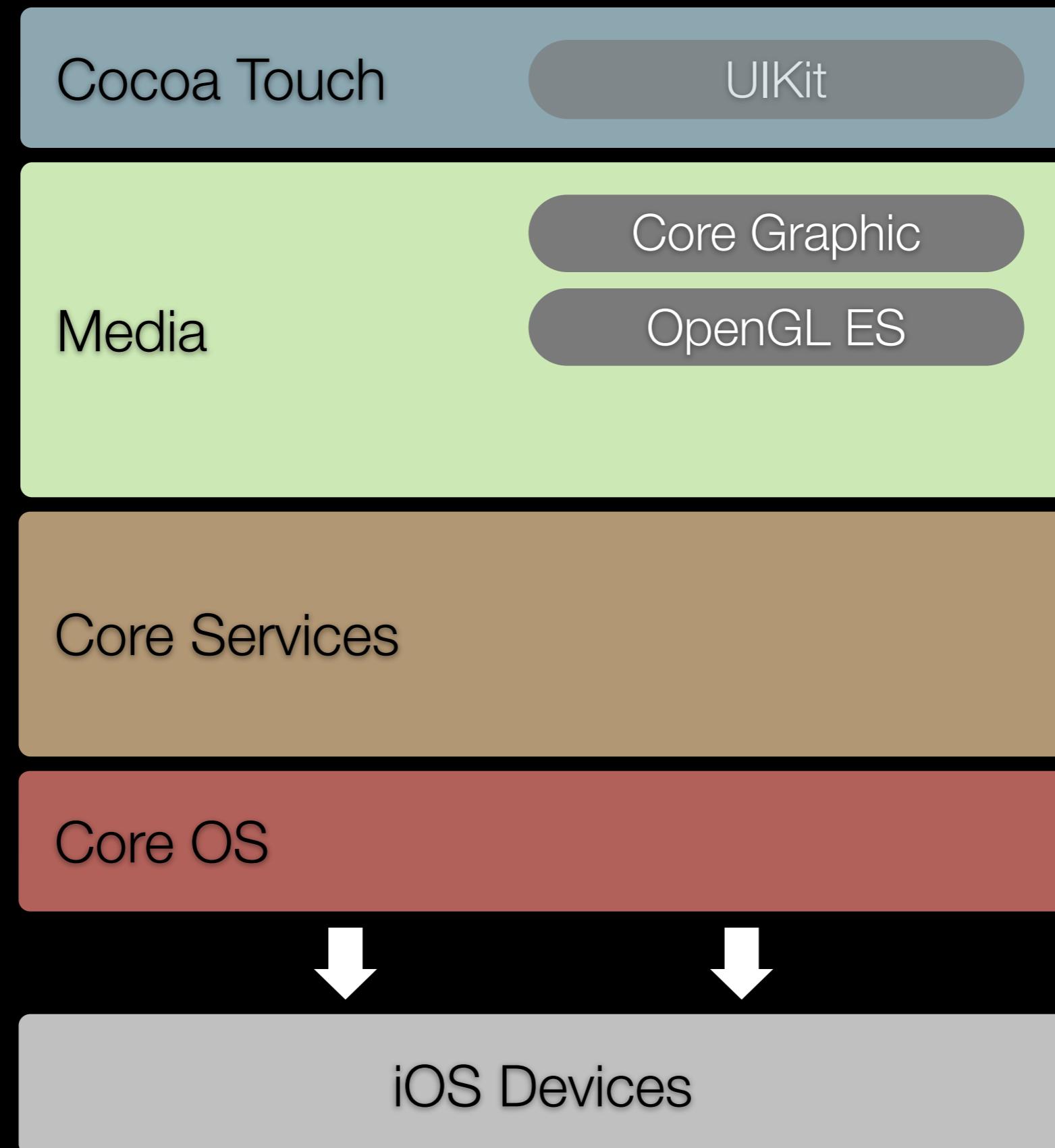
iOS 7 Architecture & SDK Frameworks



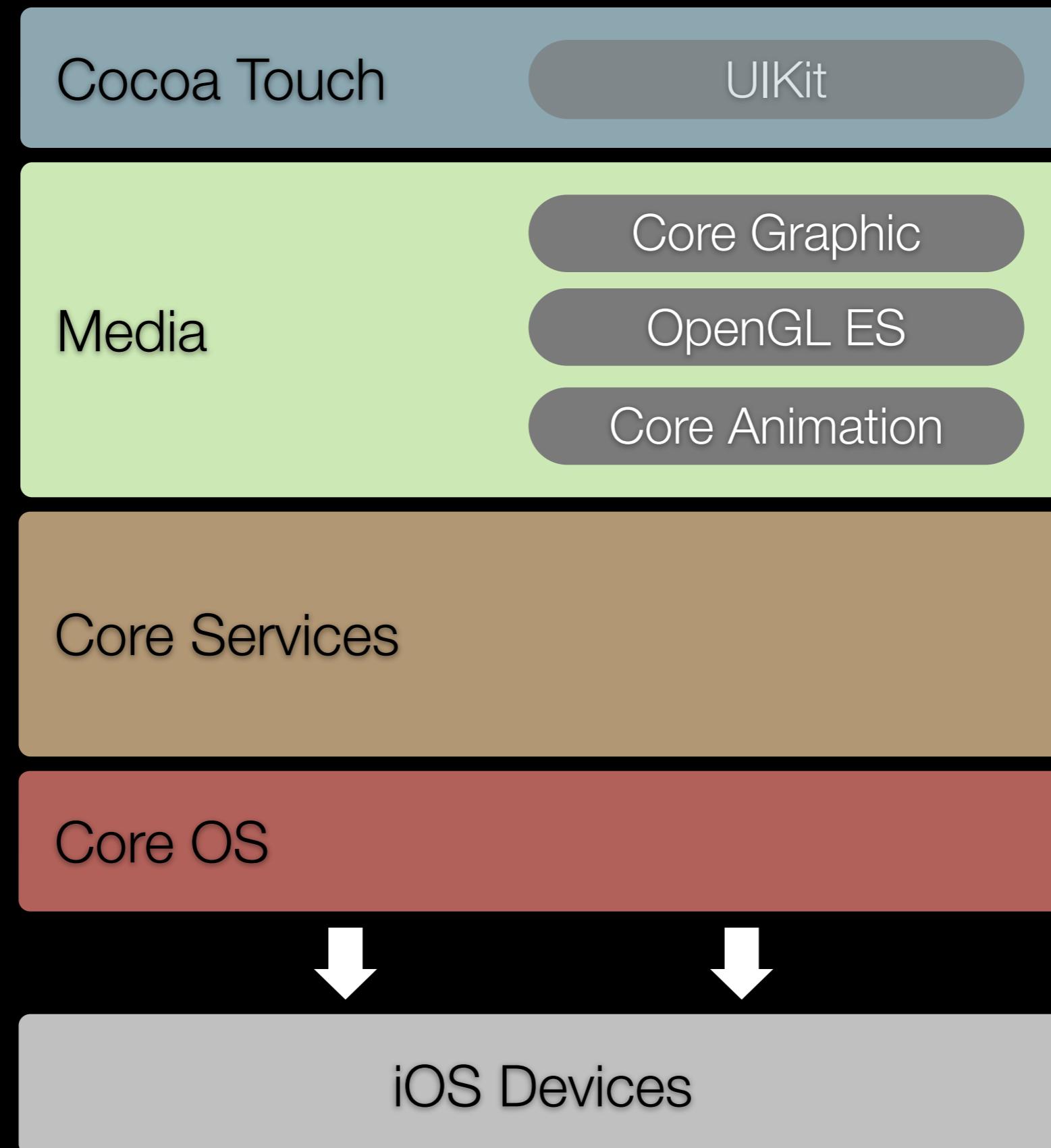
iOS 7 Architecture & SDK Frameworks



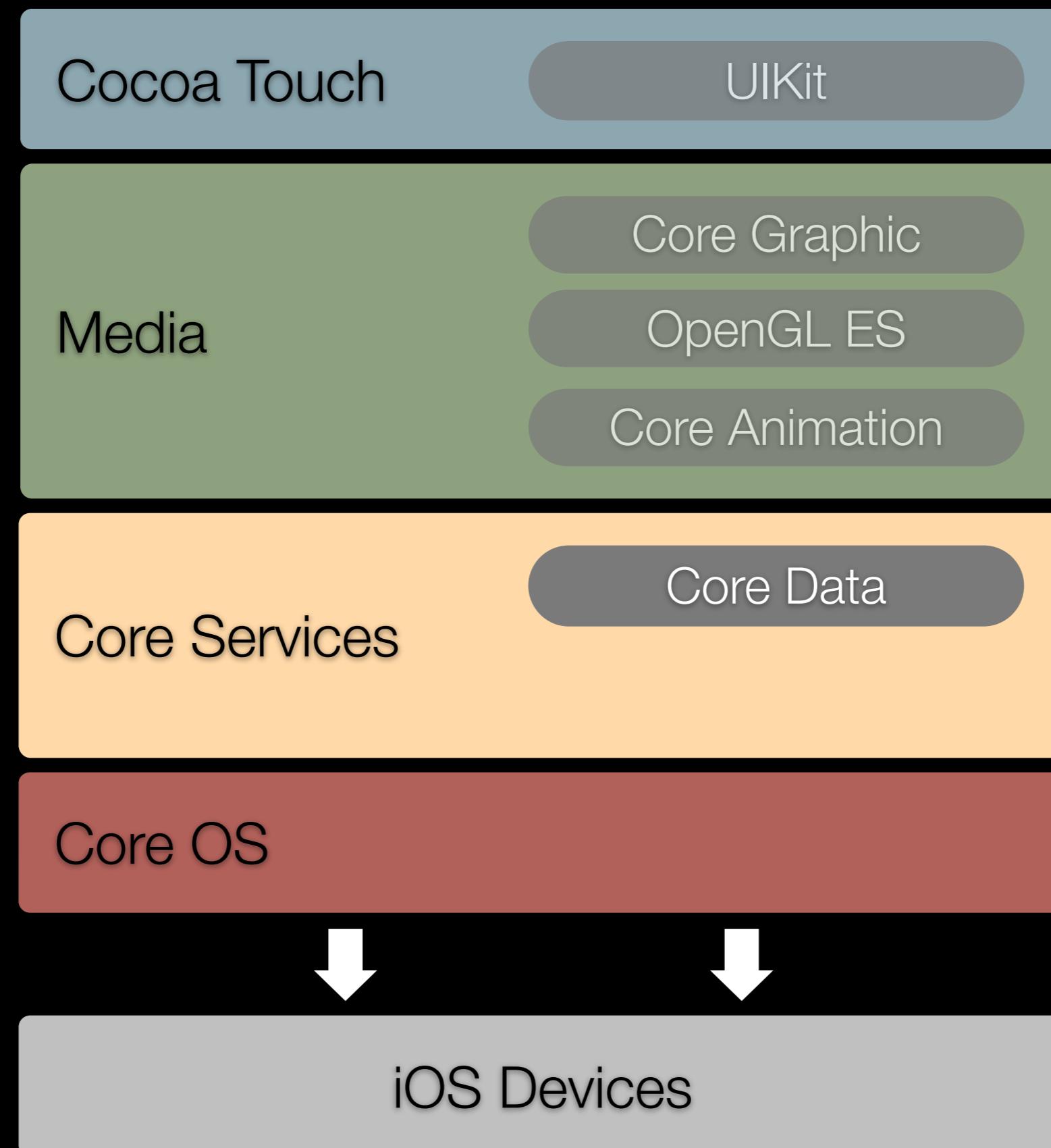
iOS 7 Architecture & SDK Frameworks



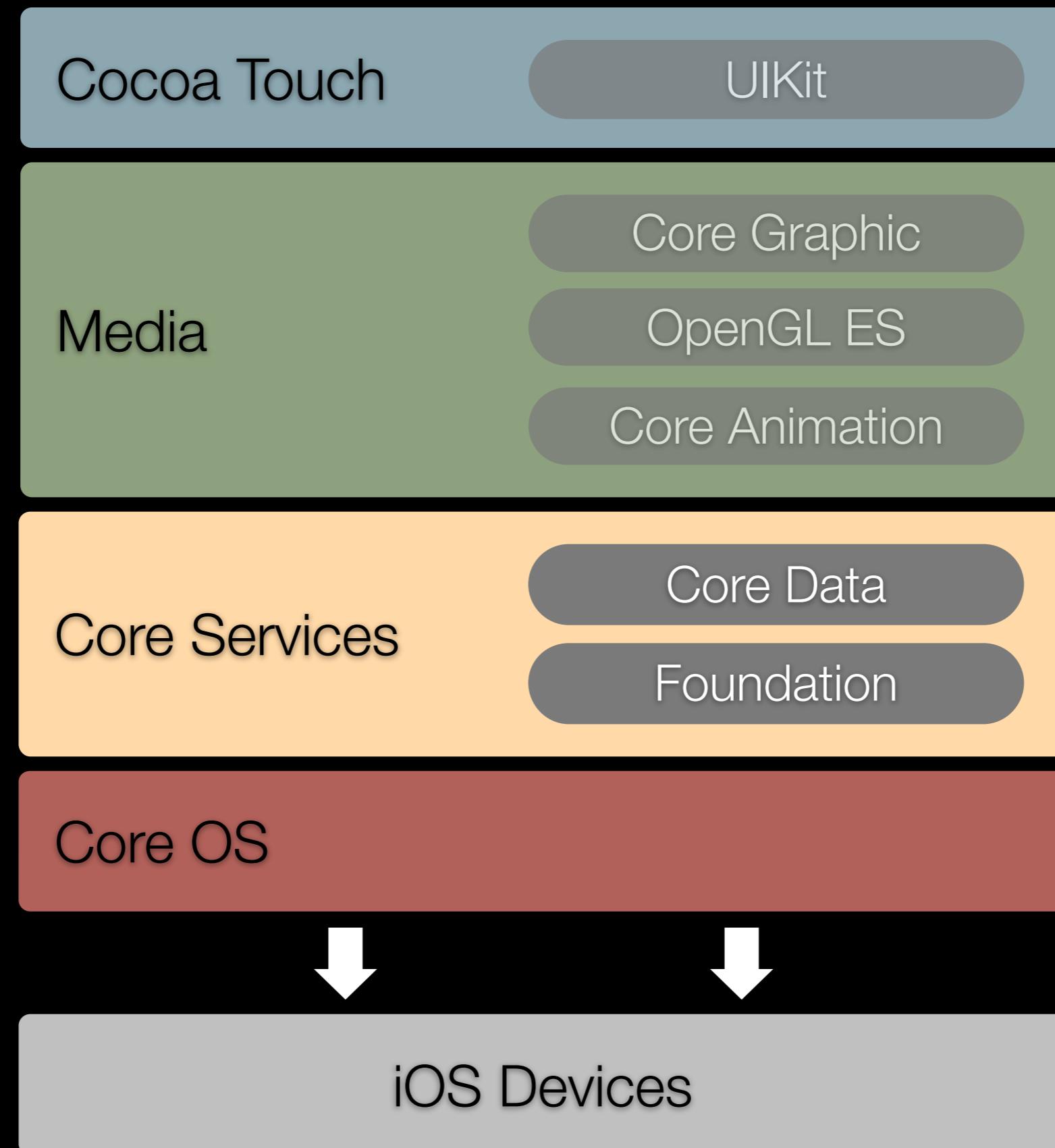
iOS 7 Architecture & SDK Frameworks



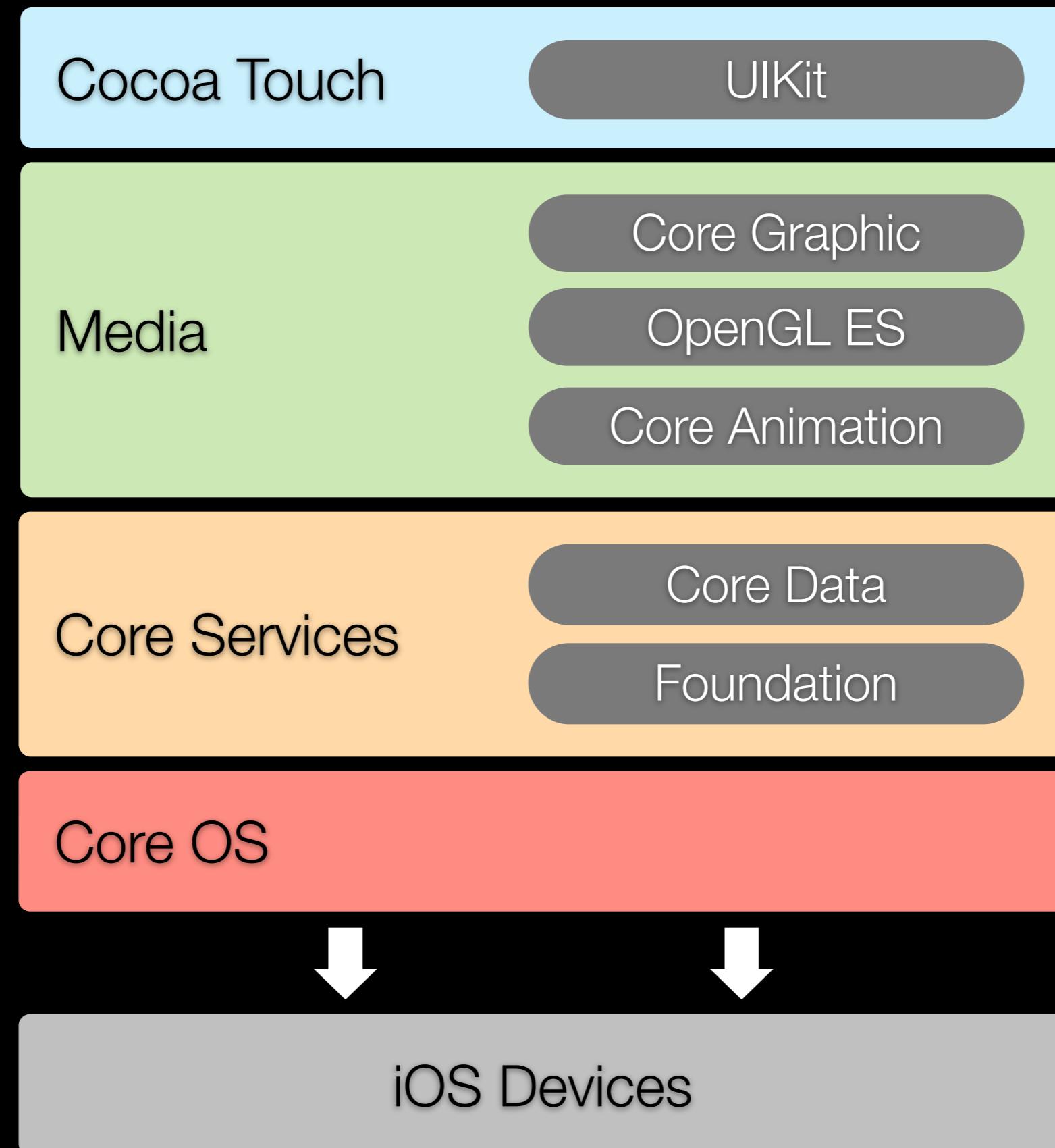
iOS 7 Architecture & SDK Frameworks



iOS 7 Architecture & SDK Frameworks

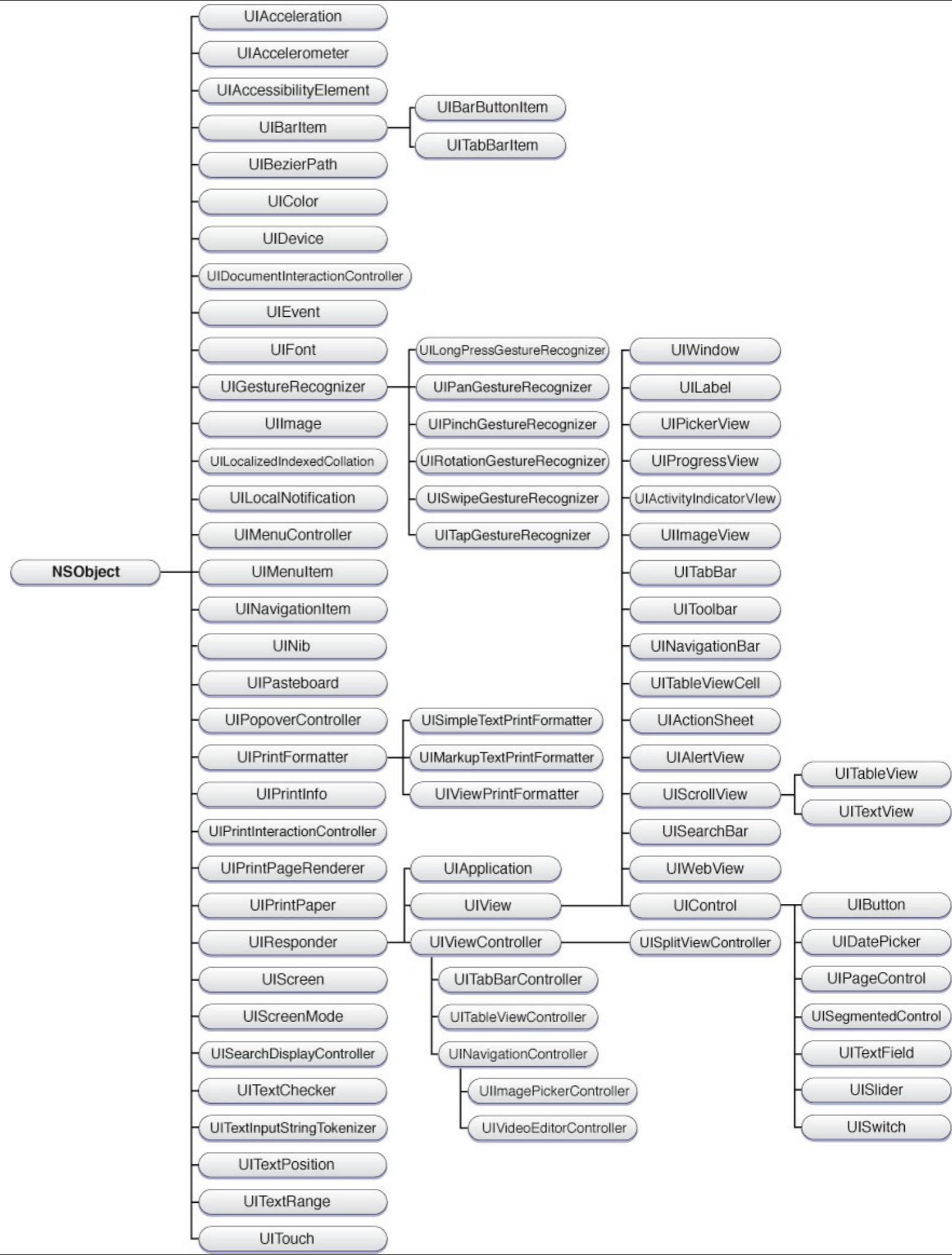


iOS 7 Architecture & SDK Frameworks



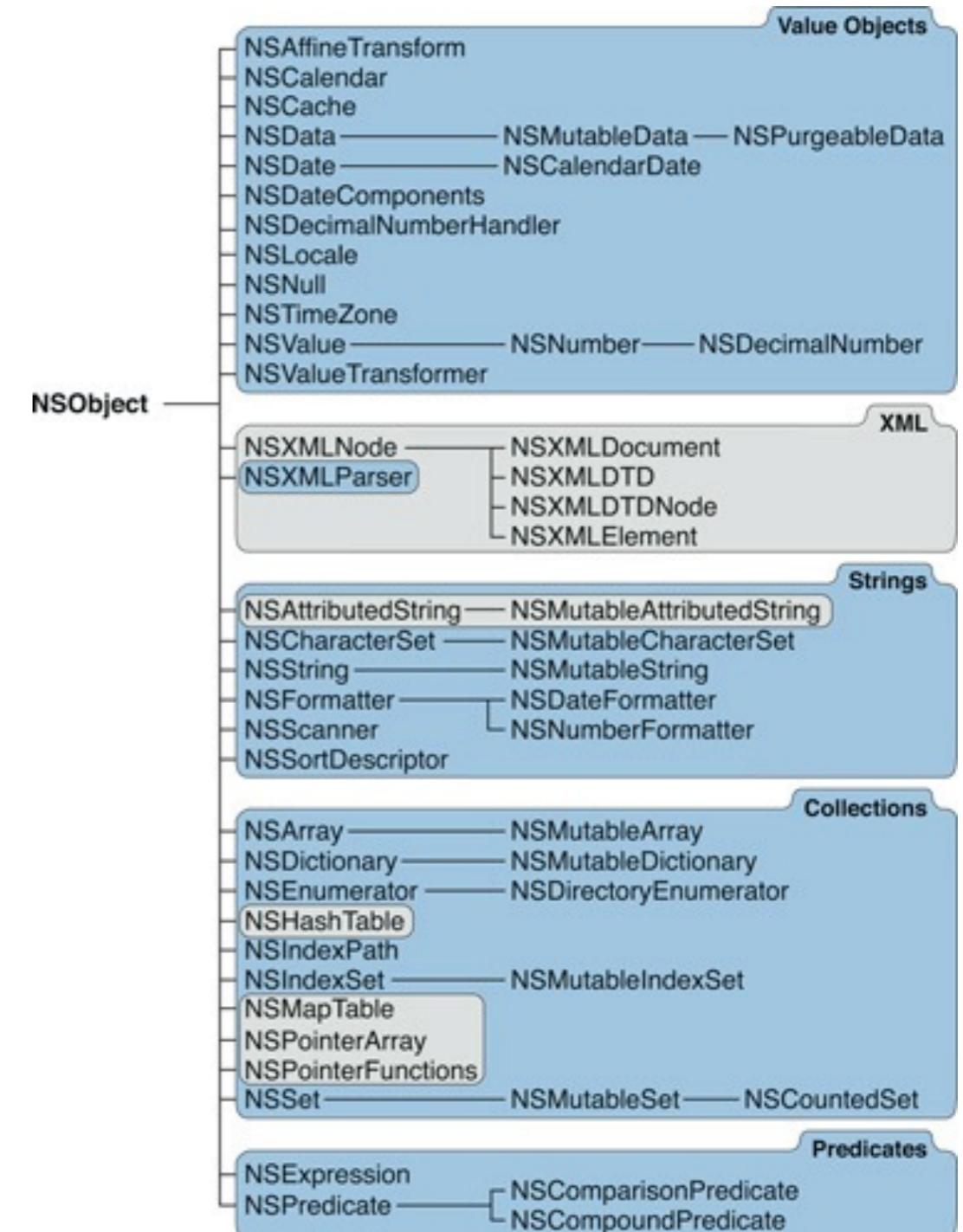
UIKit Framework

- Provides the classes need to construct and manage GUI for iOS
- Provides an application object, event handling, drawing model, windows, views and controls designed for a touch screen interface



Foundation Framework

- Define a base layer of Objective-C classes
- Provide a small set of basic utility classes
- Support Unicode strings, object persistence and object distribution
- Provide a level of OS independence, to enhance portability

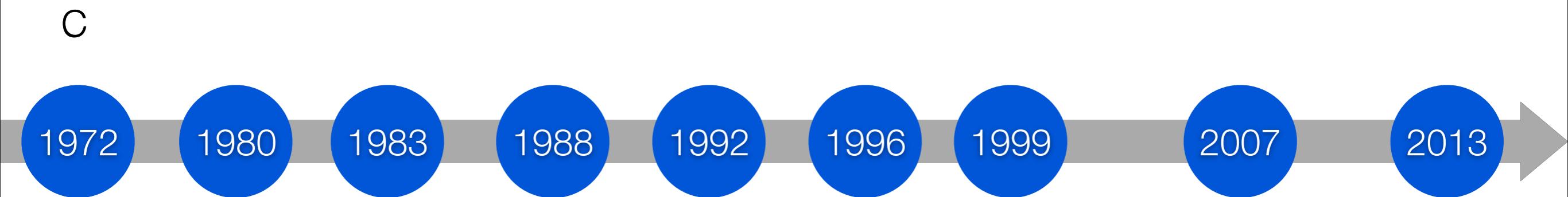


Objective-C Introduction

The Objective-C programming language had created by Brad Cox in the early 1980s as an extension of the venerated C, the language was based on another called SmallTalk-80. NeXT Software licensed the language in the 1988, and developed a code library called NeXTSTEP.

When Apple Computer acquired NeXT in 1996, the NeXTSTEP code library was built into the core of Apple's operating system, Mac OS X. NeXTSTEP provided Apple with a modern OS foundation, which Apple could not produce on its own.

History of Objective-C



History of Objective-C

SmallTalk

C

1972

1980

1983

1988

1992

1996

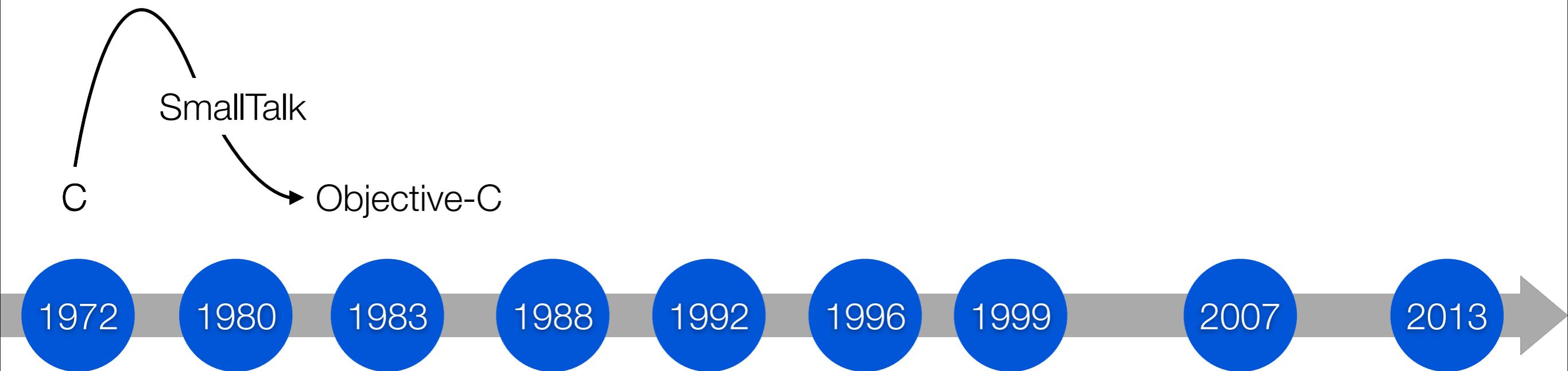
1999

2007

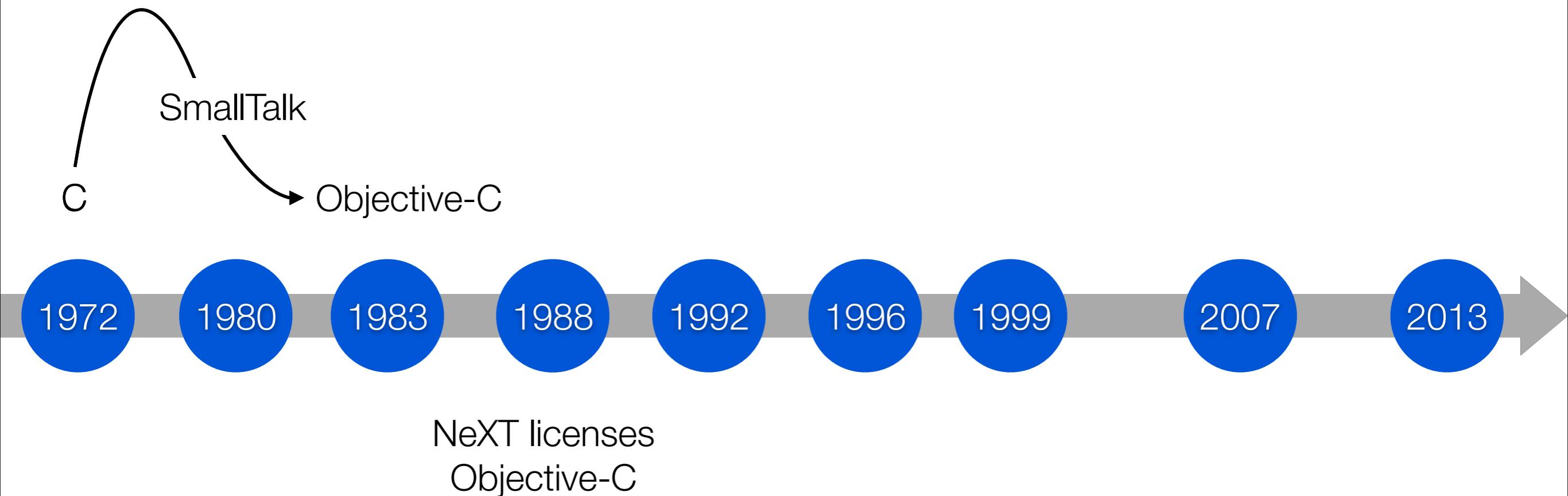
2013



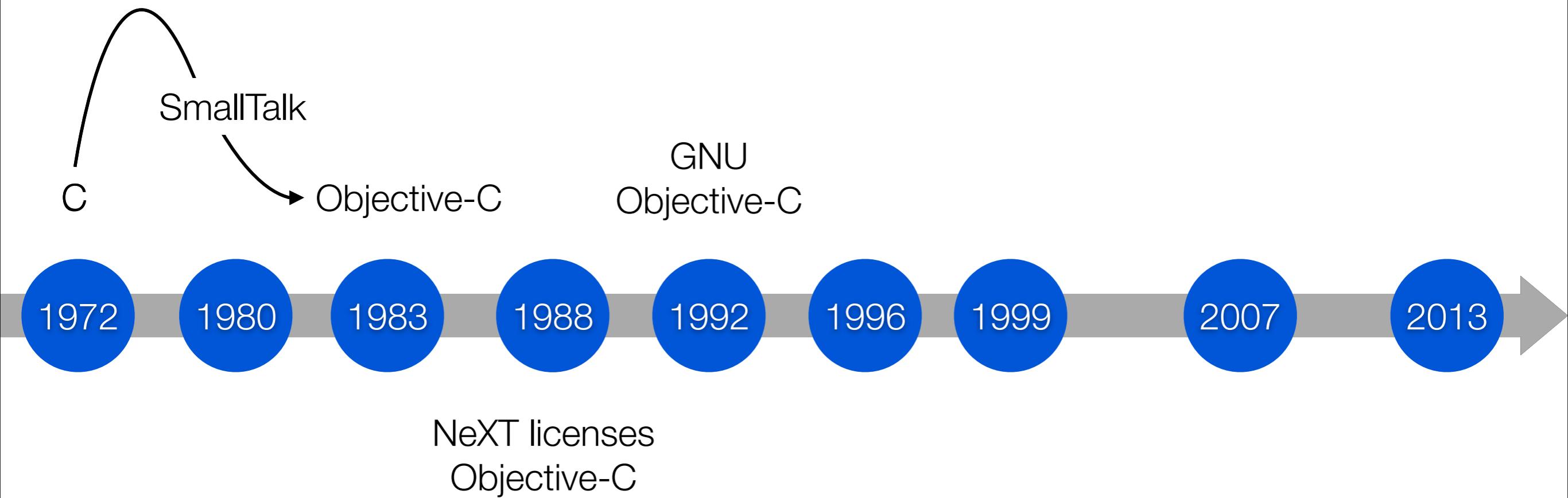
History of Objective-C



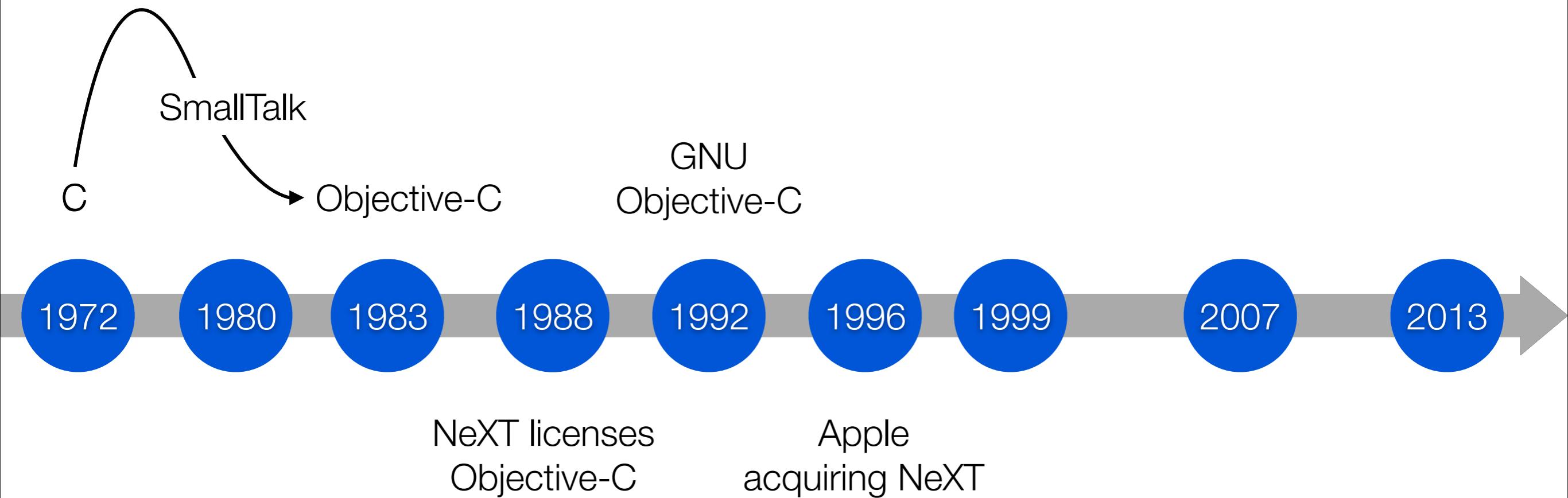
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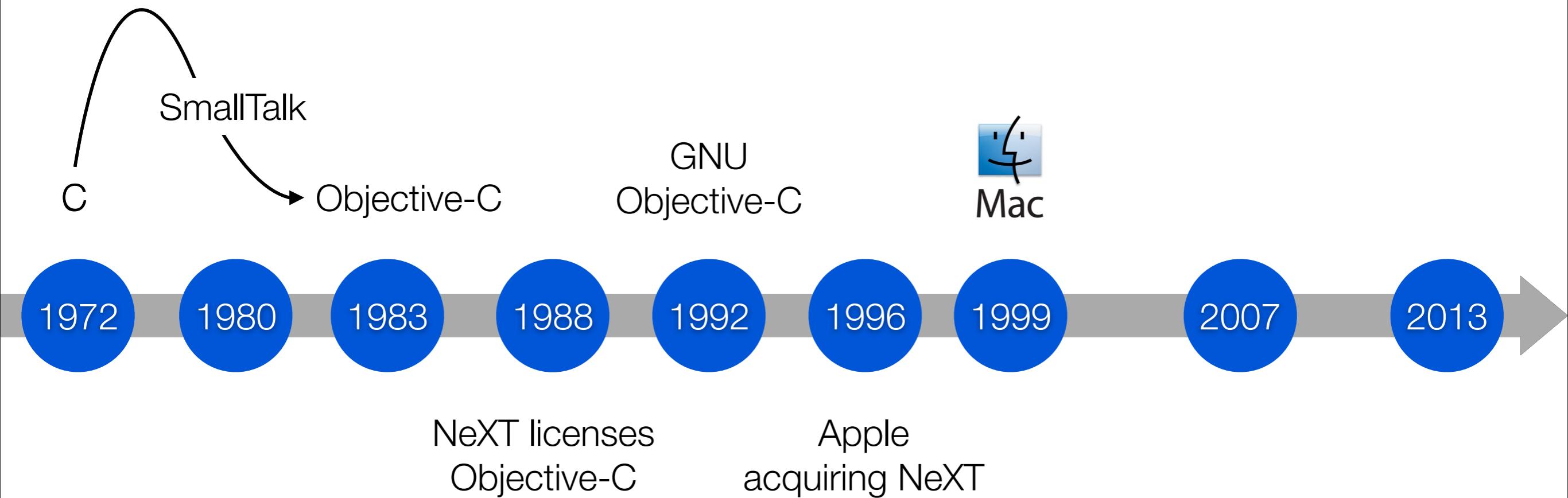
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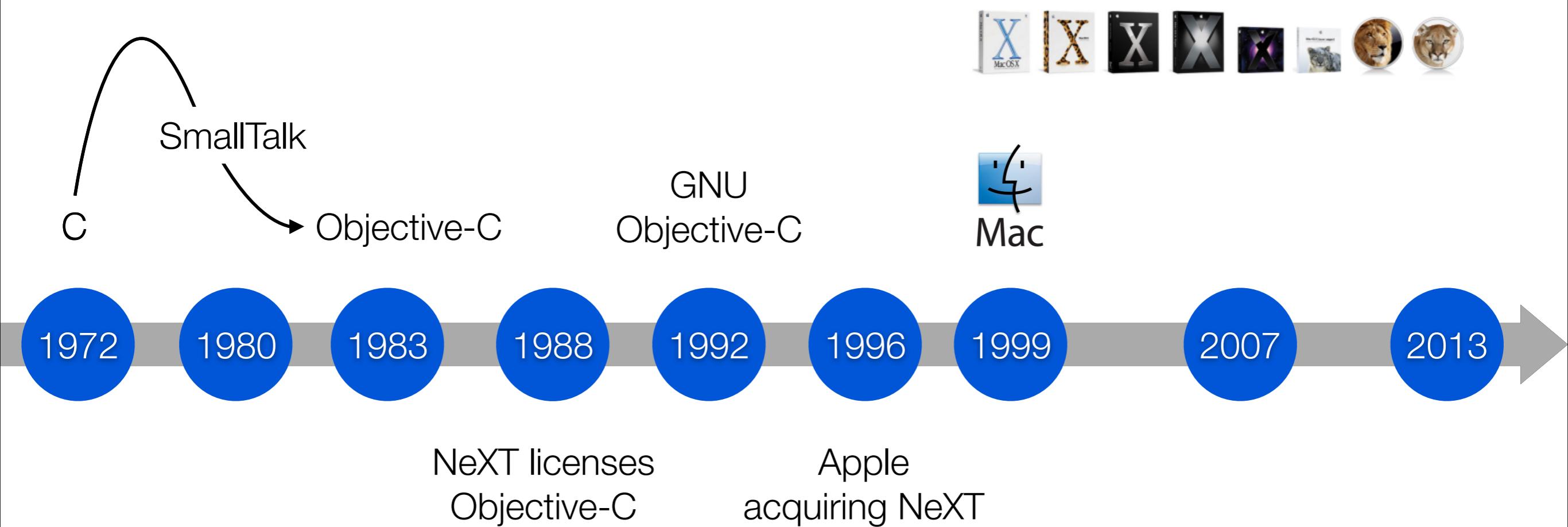
History of Objective-C



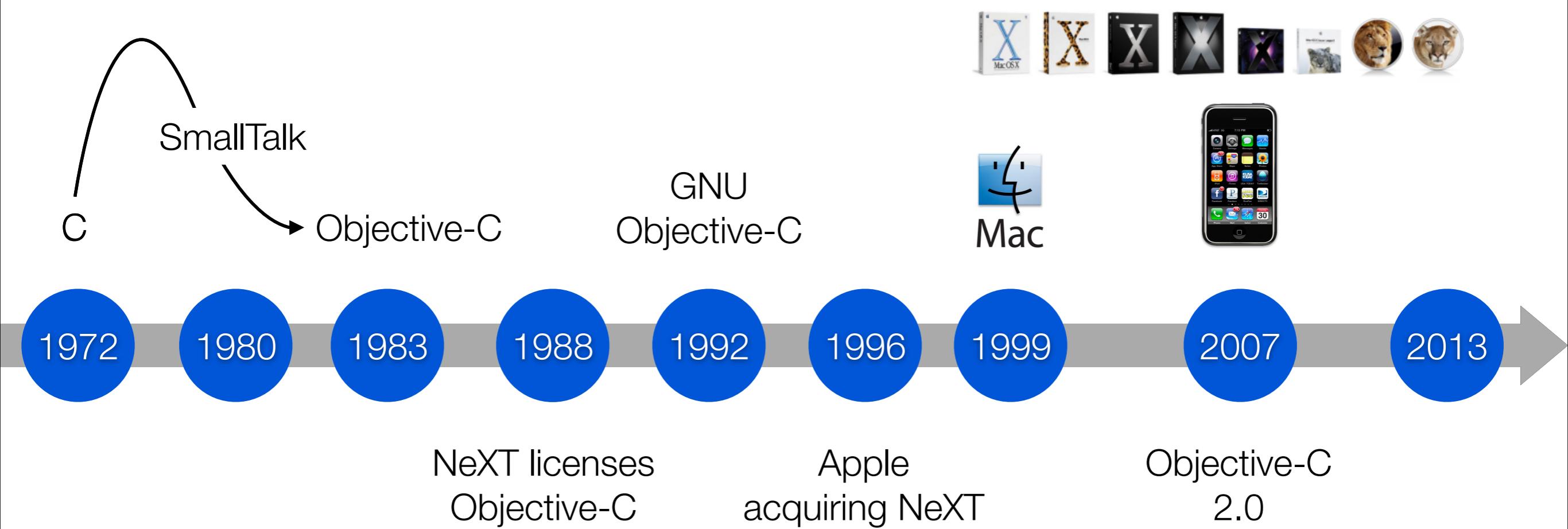
History of Objective-C



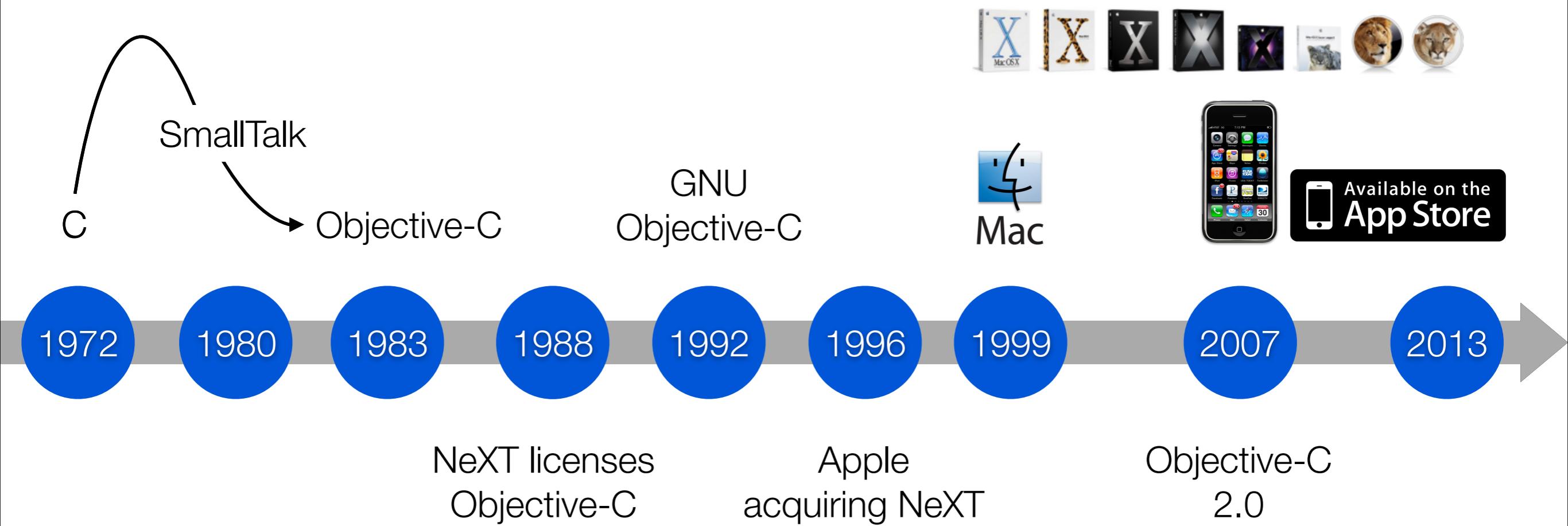
History of Objective-C



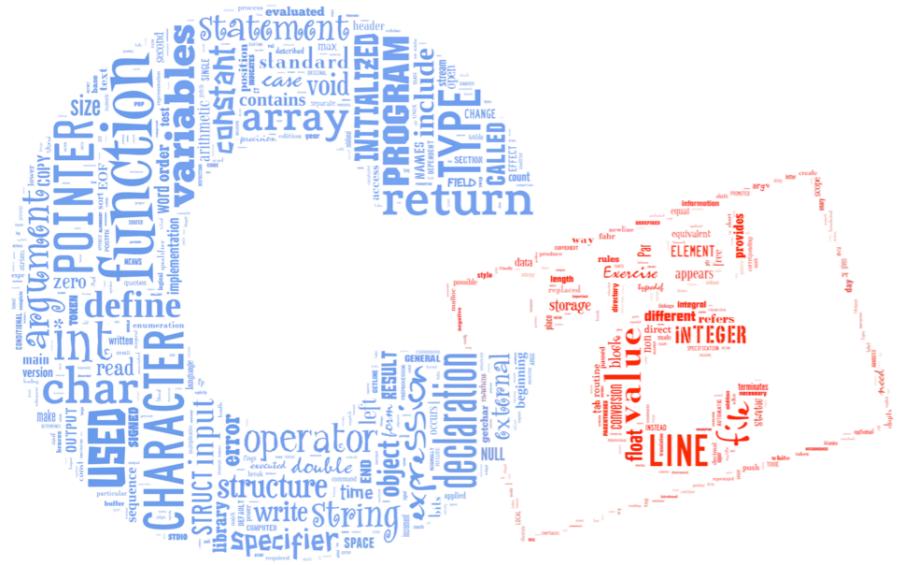
History of Objective-C



History of Objective-C



C vs Objective-C



Objective-C

C vs Objective-C

+ object =



Objective-C

C vs Objective-C

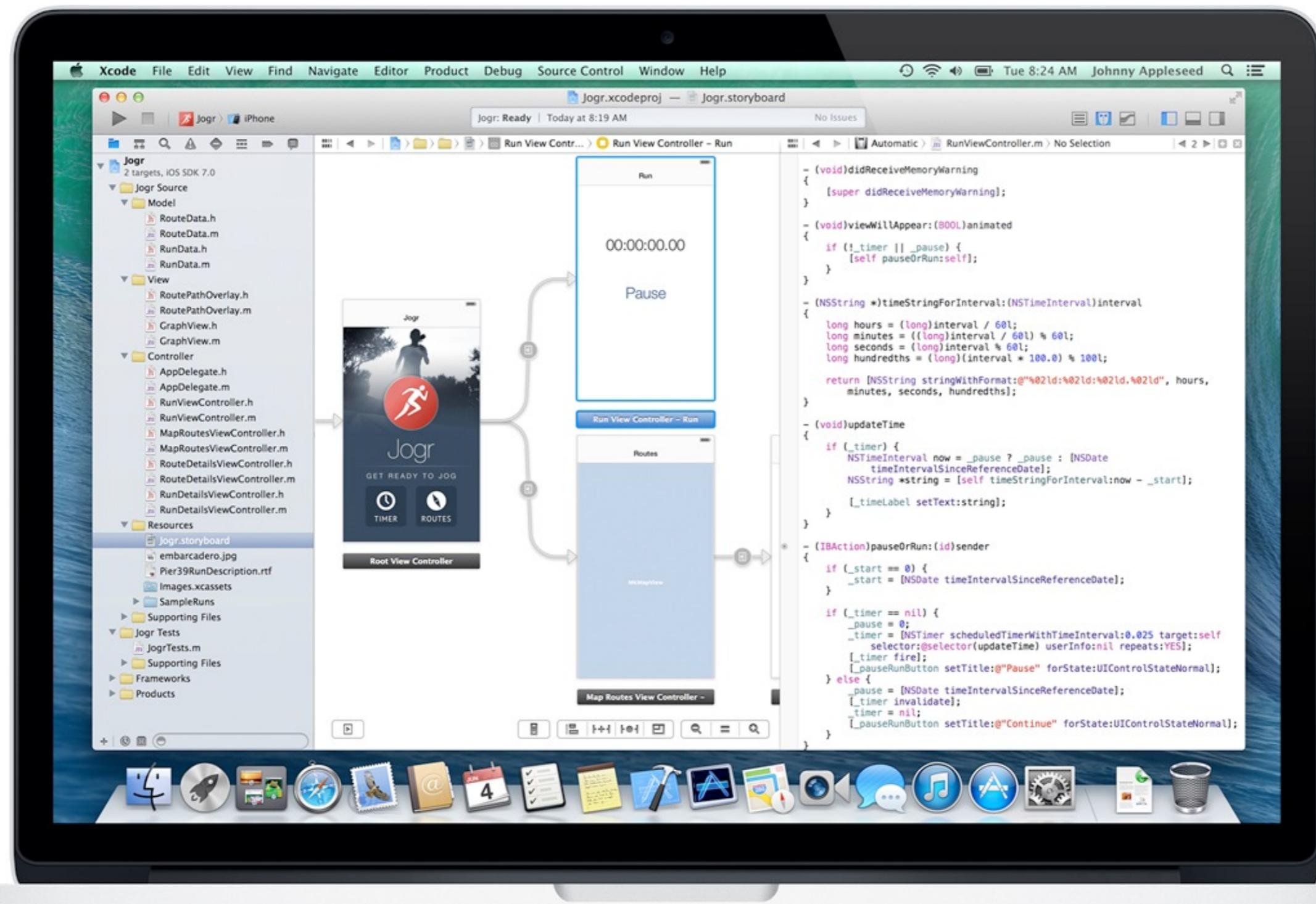
+ object =



Objective-C

Objective-C: A Superset of C

Overview of Xcode 5



Overview of Xcode 5



Automatic
Configuration

Overview of Xcode 5



Automatic
Configuration



Test Navigator

Overview of Xcode 5



Automatic
Configuration



Test Navigator



Bots for Continuous
Integration

Overview of Xcode 5



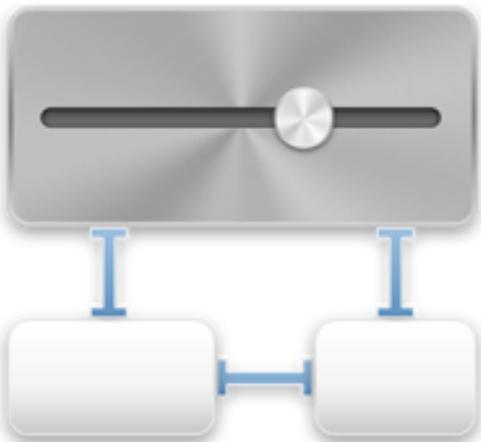
Automatic
Configuration



Test Navigator



Bots for Continuous
Integration



Auto Layout

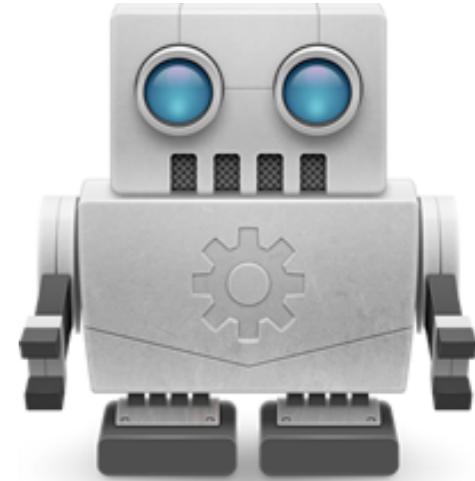
Overview of Xcode 5



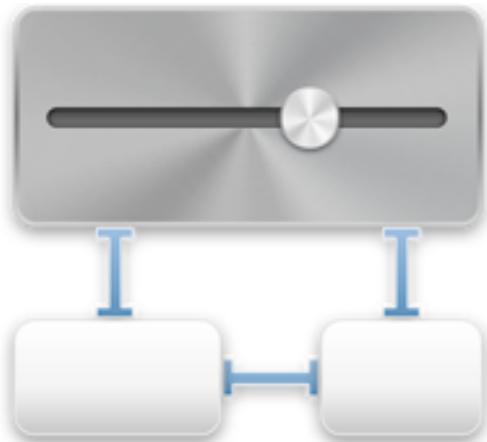
Automatic
Configuration



Test Navigator



Bots for Continuous
Integration



Auto Layout



Debug Gauges

Overview of Xcode 5



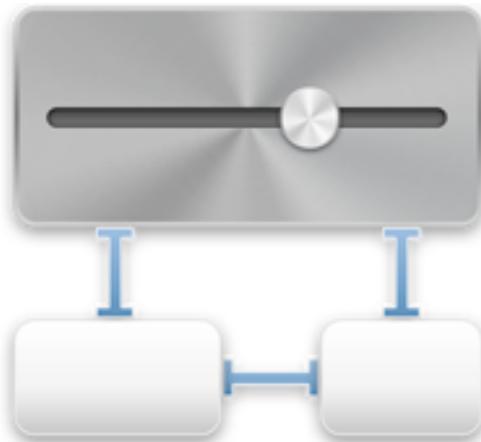
Automatic
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Test Navigator



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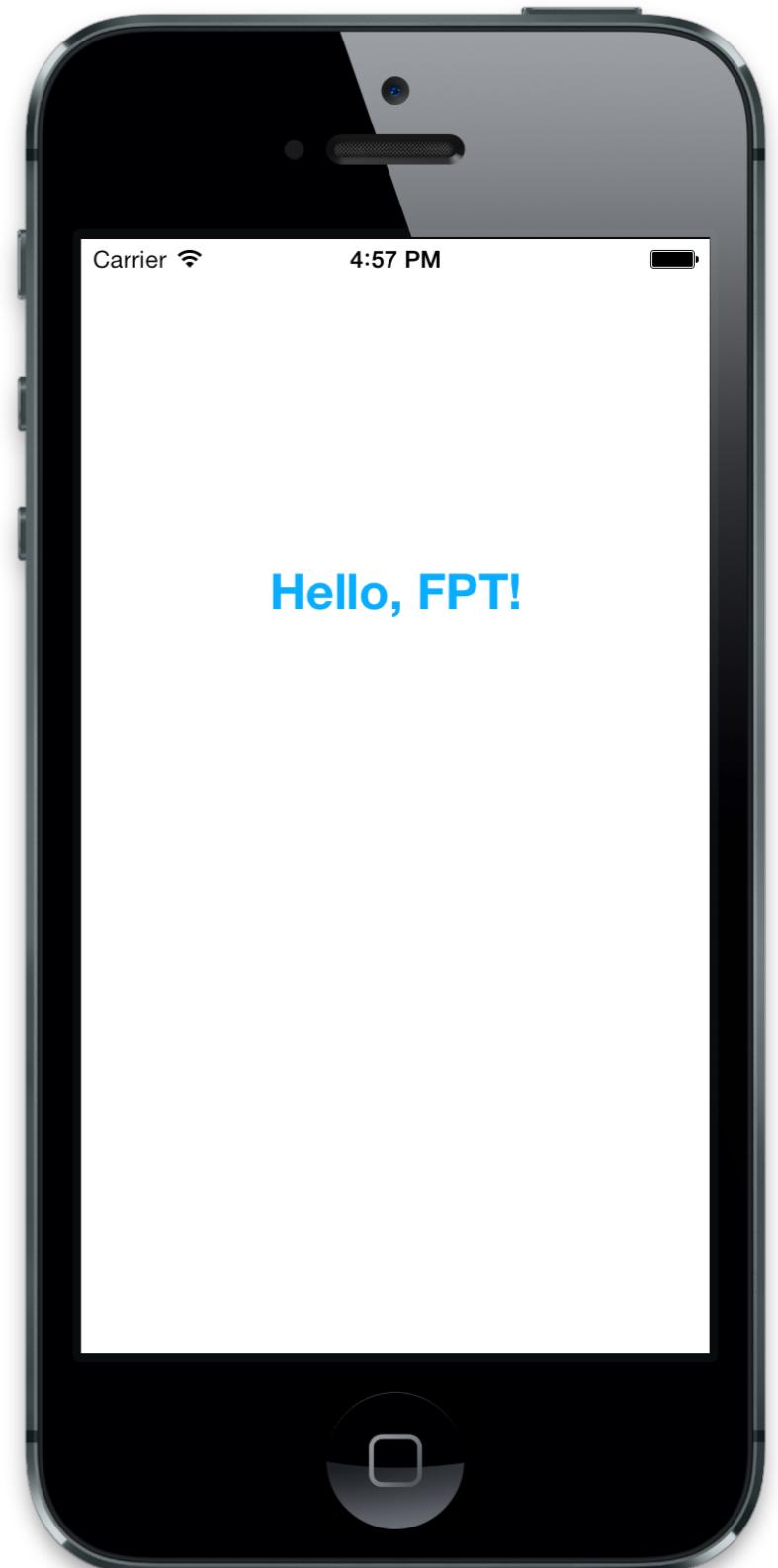
Debug Gauges



Source Control

Building the First iOS 7 App: Hello FPT

1. Creating Single View project in Xcode
2. Designing View, UI using Storyboard
3. Running HelloFPT App on iOS 7 Simulator



Documentation and Demo

iOS Dev Center

<https://developer.apple.com/devcenter/ios/index.action>

Developer Tools

<https://developer.apple.com/technologies/tools/>

iOS

<https://developer.apple.com/technologies/ios/>

Slide

<http://www.slideshare.net/vutlam9083/session-1-introduction-to-i-os-7-and-sdk>



please
say

xin
chào

lamvt@fpt.com.vn

many thanks

to



Developer Center

<https://developer.apple.com>



Stanford University

<http://www.stanford.edu/class/cs193p>



Next: The Basics of Objective-C Programming