MOBILE APP DEVELOPMENT CRASH COURSE

Tripta Gupta, Web Development Instructor at General Assembly Stephanie Szeto, Associate Product Manager at LiveRail David Ladowitz, Software Engineer at Omada Health

AGENDA

- Introductions
- The Apple Way
- App Design Overview
- Model-View-Controller Structure
- X-Code Walkthrough
- Objective-C Overview
- Storyboards
- ▶ TableViews, Segues, WebViews
- Building the Social Links Tab
- Buttons, APIs, AlertViews
- Building the Contact Me Tab
- Build an App!

INTRODUCTIONS

INTRODUCTIONS

- Name
- ▶ Tech Background Programming Language
- What do you want to learn from this class?
- Favorite App
- App Idea

THE APPLE WAY

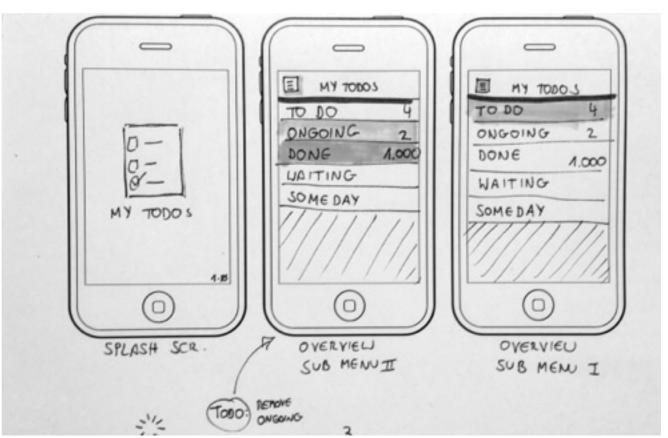
THE APPLE WAY

- Why develop for iOS?
- Devices http://en.wikipedia.org/wiki/List_of_iOS_devices
- Objective-C & Swift
- Closed Source
- XCode, Interface Builder
- biOS Human Interface Guidelines https://developer.apple.com/library/ ios/documentation/UserExperience/Conceptual/MobileHIG/index.html#//apple_ref/doc/uid/TP40006556
- Apple Approval Needed

APP DESIGN OVERVIEW

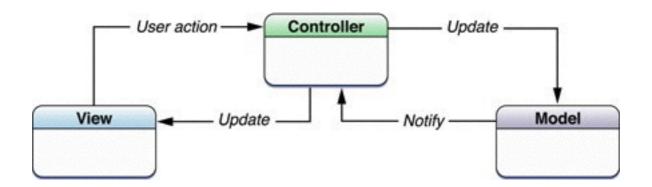
APP DESIGN OVERVIEW

- Multi-faceted graphic design, UI, UX, software engineering
- Design phase sketches, storyboards
- Translate designs into software architecture

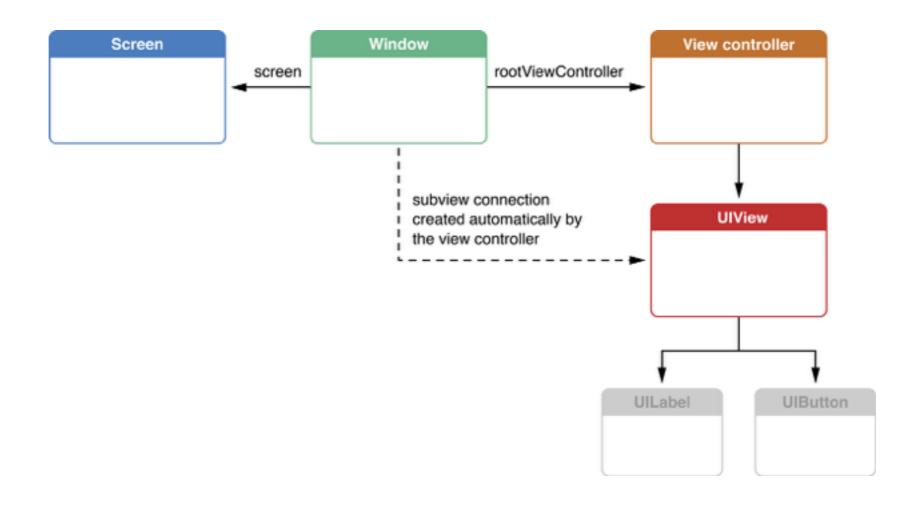


- *User interfaces are comprised of **views** https://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/MobileHIG/Anatomy.html#//apple_ref/doc/uid/TP40006556-CH24-SW1
- Views can contain subviews
- Views are managed by view controllers
- View controllers can contain children view controllers
- View controllers interface with the app's model

- Model-View-Controller (MVC) design pattern assigns objects in an application one of 3 roles: model, view, or controller
- Model objects encapsulate the data specific
- A view object is an object in an application that users can see
- A controller objects acts an intermediary between one or more of an application's view objects and one or more of its model objects



In iOS, each view controller organizes and controls a view; this view is often the root view of a root hierarchy



APP PROJECT OVERVIEW

APP PROJECT OVERVIEW

We're going to start by building a Resume app.

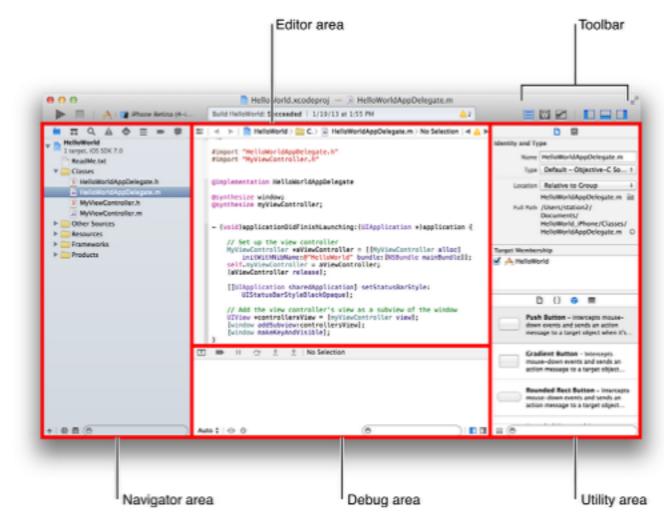
The Resume app will consist of three sections:

- About Me: Share your story
- -Social Links: Make it easy for others to follow you on LinkedIn, Twitter, Facebook, Github, and more
- Projects: Impress employers with projects you've worked on

XCODE WALKTHROUGH

XCODE WALKTHROUGH

https://developer.apple.com/library/mac/recipes/xcode_help-general/index.html



OBJECTIVE-C OVERVIEW

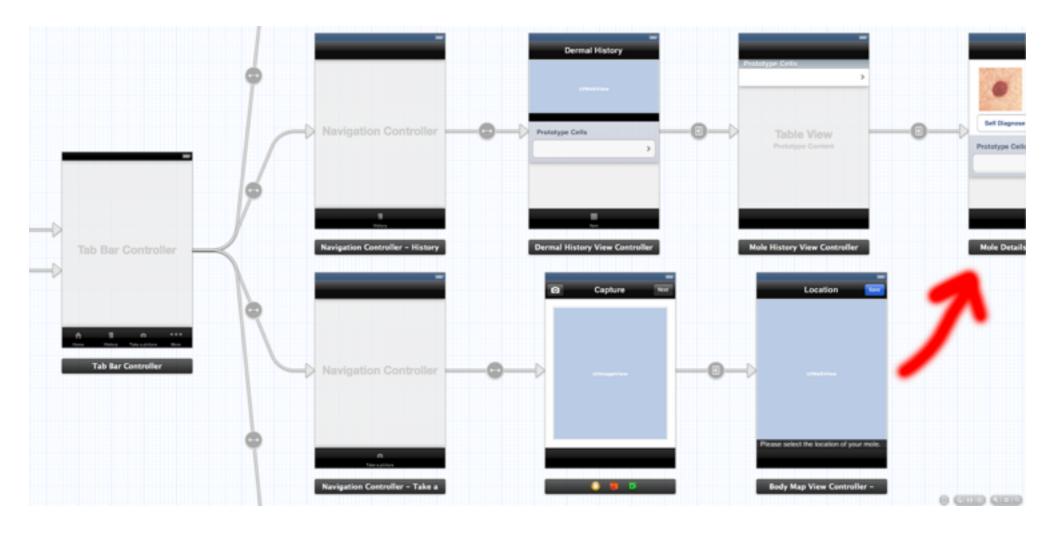
OBJECTIVE-C OVERVIEW

- Objective-C Syntax
- Objective-C Language Structure Classes, Properties, etc.
- Objective-C Data Types NSString, NSArray, NSObject, NSDictionary
- Cheat Sheet http://cdn1.raywenderlich.com/downloads/RW-Objective-C-Cheatsheet-v-1-5.pdf

STORYBOARDS

STORYBOARDS

A **storyboard** is a visual representation of the app's user interface, showing screens of content and the transition between them.



TABLEVIEWS, SEGUES, WEBVIEWS

BUILDING THE SOCIAL LINKS TAB

BUILDING SOCIAL LINKS - OBJECTIVES

- Continue practicing your Storyboard skills
- Practice using TableViews
- Practice using Segues to pass information between two ViewControllers
- Practice loading URLs in a WebView

BUILDING THE PROJECT TAB

BUILDING PROJECT TAB - OBJECTIVES

- Continue practicing your Storyboard skills
- Collection Views
- Practice connecting Buttons to Actions

BUILD YOUR APP!!

WRAP UP

WRAP UP

- How to use Xcode
- How to use Storyboards
- Connecting Visual Storyboard Views with ViewController Code
- Reading Documentation

RESOURCES

RESOURCES

Coding:

- StackOverflow
- Ray Wenderlich Tutorials http://www.raywenderlich.com/
- Tutsplus http://code.tutsplus.com/categories/ios-sdk
- -Apple Developer Resources https://developer.apple.com/library/ios/navigation/

RESOURCES

Design:

- iOS 7 Design Cheat Sheet http://ivomynttinen.com/blog/the-ios-7-design-cheat-sheet/
- iOS 7 Guides https://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/MobileHIG/index.html
 - iOS Patterns
 - http://www.pttrns.com/
 - http://inspired-ui.com/
- Smashing Magazine http://www.smashingmagazine.com/category/uxdesign/

Q&A

THANKS!

CONTACT INFO:

- Tripta Gupta: tripta@ga.co @triptagupta
- Stephanie Szeto: stephaniexszeto@gmail.com
- David Ladowitz: david.ladowitz@omadahealth.com