

MOBILE DEVELOPMENT

William Martin

Head of Product, Floored

INTRODUCTIONS

- 1. WHAT WAS IT LIKE WHEN YOU FIRST USED AN IPHONE?
- 2. WHAT'S YOUR PREVIOUS PROGRAMMING EXPERIENCE?
- 3. WHY ARE YOU TAKING THIS COURSE?
- 4. WHAT'S YOUR FAVORITE APP AND WHY?

MEET YOUR INSTRUCTORS

LEARNING OBJECTIVES

- Set course expectations
- List and define the basic constructs of a programming language
- Outline developer workflow and tools on a high level
- Outline the development process of an app
- Label Xcode workspace window
- Create the first working iOS app!

SYLLABUS AND PRE-WORK DEBRIEF

CLASS INFORMATION

- Amount of work expected for class
- Processes for getting recent class resources
- Submitting homework
- Final project
- Syllabus and learning goals

GITBOOK

HTTP://MOBBOOK.GENERALASSEMB.LY/

DEV WORKFLOW

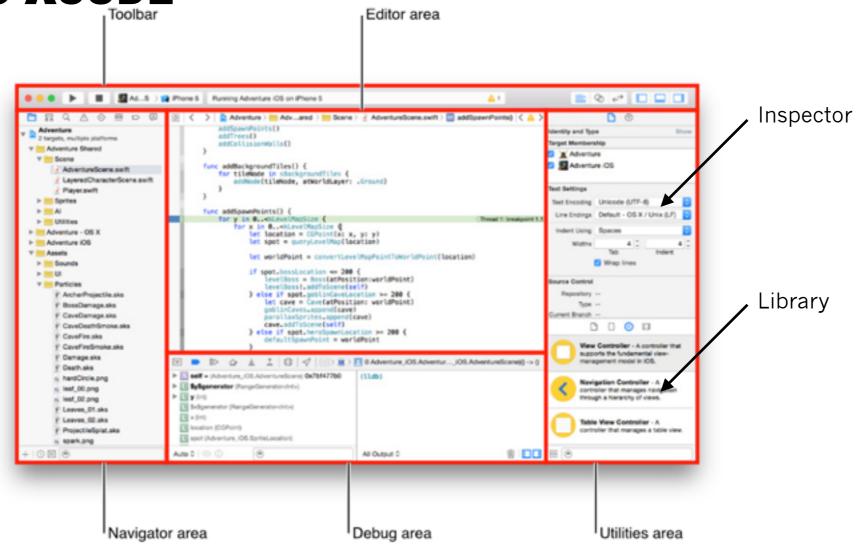
DEV WORKFLOW OVERVIEW

- Run Xcode
- Create new project
- Briefly discuss the different project templates
- Add user interface elements to project
- Change user interface element properties
- Build / run the app
- Iterate
- Post to Github when done

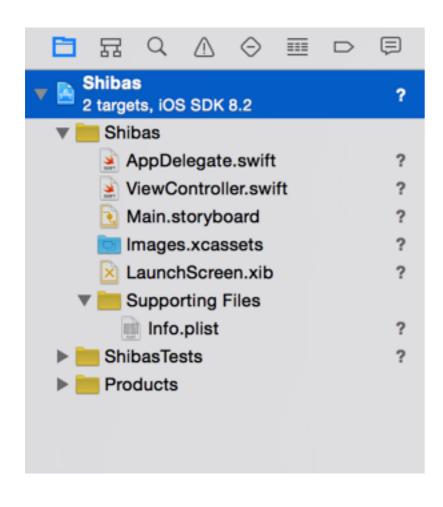
WHAT IS XCODE?



NAVIGATING XCODE



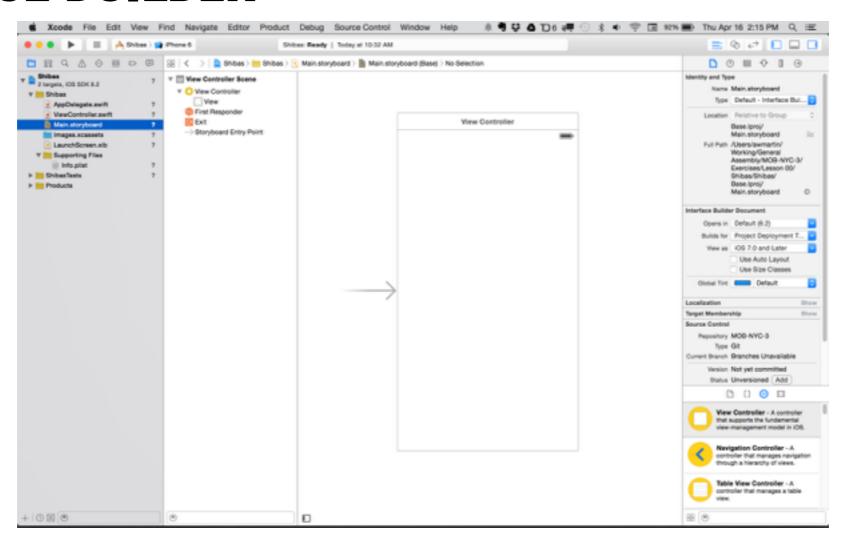
FILE TYPES



- <u>swift</u>Swift source code file
- <u>.storyboard</u> an Interface Builder "storyboard" file
- <u>.xib</u> an Interface Builder "NIB" file
- .plist a "property list"

GETTING THINGS ON THE SCREEN

INTERFACE BUILDER



GETTING VIEWS ON SCREEN

- To start understanding iOS apps, we'll first tackle 'views' on the screen
- Almost everything we see on screen is a view.
- There are lots of kinds of views:
 - Buttons, labels, tables, images, etc
- There are several ways to lay things out on screen, we'll cover these later in class
 - Until then, our views may look a little misaligned.

VIEWS ON THE WHITEBOARD

CODE ALONG: TO XCODE!

ACTIVITY



KEY OBJECTIVE(S)

Learn the flow of building a new project. Add UI elements to project and modify their properties.

TIMING

5 min 1. New project

5 min 2. Set up the UI

15 min 3. Download and place photos

DELIVERABLE

A new project with at least 10 photos of a topic (e.g. shiba inus), laid out in a scroll view.

RUNNING YOUR APP

RUNNING YOUR APP

- Run app on simulator
- Outline the steps for deploying an app to device

RUNNING APP ON SIMULATOR

- Select iOS version in toolbar area
- → Select "Build and then Run" in toolbar area (\(\mathbb{R} \mathbb{R} \)

Note

- iPad apps only run on iPad simulator
- iPhone and universal apps run on both iPad and iPhone simulators

NAVIGATING SIMULATOR

- To run Simulator without running a project select Xcode -> Open Developer Tool -> iOS Simulator

CLASS REVIEW

- How often do students submit assessments?
- What is a typed language? Is Swift typed?
- What is the difference between a compiled and scripted language? Which one is Swift?
- How does layout sizing work?
- What are requirements for deploying to device?

GIT/GITHUB, HOMEWORK, SUBMISSION

GITHUB

- A social network for sharing and collaborating on code
- What we'll use to get slides, submit homework, post resources, collaborate on the final project
- Free, as long as what you post is public

GIT

- The 'pipes' that power github
- Many developers use the command line, though we'll use an app
- A general-purpose 'version control' tool that lets us:
 - Back up
 - Revert
 - Collaborate
 - · ...our code

GITHUB WALKTHROUGH

RUNNING AN APP ON YOUR DEVICE

RUNNING APP ON DEVICE

- Deploying app to device and publishing app to store requires participating in the developer program (\$99/year)
- Get UDID number (http://whatsmyudid.com/)
- Add device to Xcode (Windows->Devices)
- Create development certificate and provisioning profile