

MOBILE DEVELOPMENT 4

GETTING STARTED

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GETTING STARTED

LEARNING OBJECTIVES

- › explain the goals and purpose of the course,
- › describe Xcode and Interface Builder,
- › explain the four filetypes that comprise most Swift-powered iPhone apps,
- › perform the workflow between Xcode and the iOS Simulator,
- › add Views to an iPhone app interface with Interface Builder,
- › add media (images) to an iPhone app and use them in an interface,
- › outline the basic components of an iPhone app,
- › label the Xcode IDE window, and
- › *create a working iOS app.*

GETTING STARTED

GA INTRO

GETTING STARTED

MEET YOUR INSTRUCTORS

STUDENT INTRODUCTIONS

- 1. WHAT WAS IT LIKE WHEN YOU FIRST USED AN IPHONE? WHAT HAPPENED?**
- 2. WHAT'S YOUR PREVIOUS PROGRAMMING EXPERIENCE? IF NONE, WHOM DO YOU KNOW WHO PROGRAMS?**
- 3. WHAT'S YOUR FAVORITE APP AND WHY?**
- 4. WHAT DO YOU DO? WHY ARE YOU TAKING THIS COURSE? WHAT ARE YOUR GOALS?**

GETTING STARTED

COURSE INFORMATION

GETTING STARTED

CLASS INFORMATION

- › Course objective
- › Syllabus and learning goals
- › Amount of work expected for class
- › Getting recent class resources
- › Course schedule
- › Final project

GETTING STARTED

COURSE OBJECTIVE

“Students will be able to create an iOS app for iPhone or iPad that is App Store ready.”

GETTING STARTED

COURSE OBJECTIVE

“Students will be able to create an iOS app for iPhone or iPad that is App Store ready.”

... but with some limitations...

GETTING STARTED

COURSE OBJECTIVE

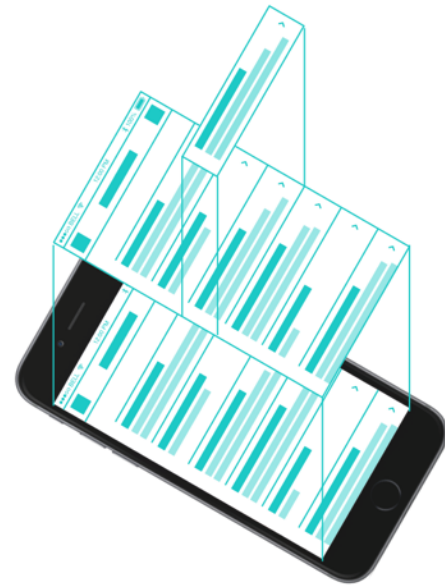
You'll learn enough to:

- › continue your own learning after the course,
- › collaborate with others who have taken the course, or
- › produce an MVP-level app or
- › a simple one to submit to the App Store.

The goal isn't to make you into a professional developer.

GETTING STARTED

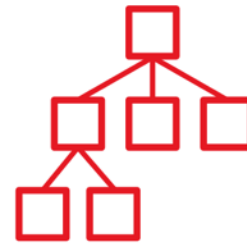
ANATOMY OF AN IPHONE APP



UI Design



UI Code



Data Model



Core App Logic



iOS frameworks



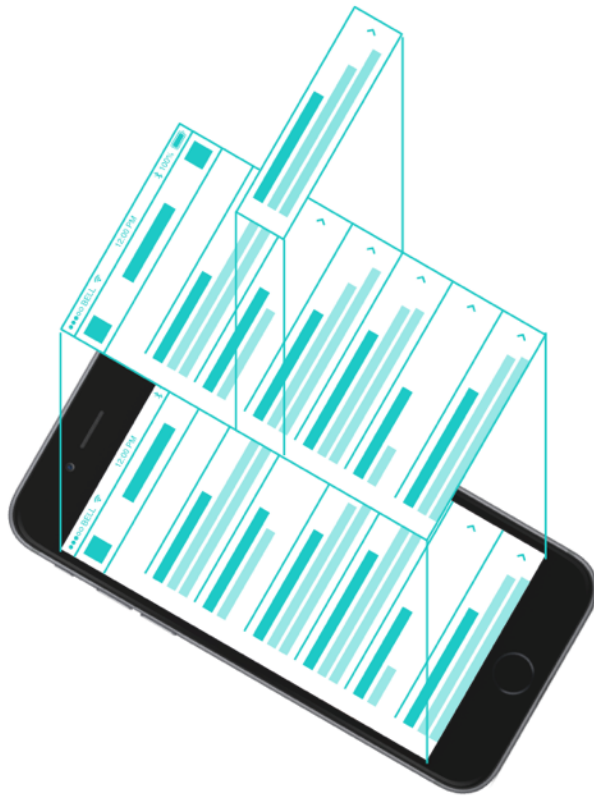
3rd-party code



Persistent Storage



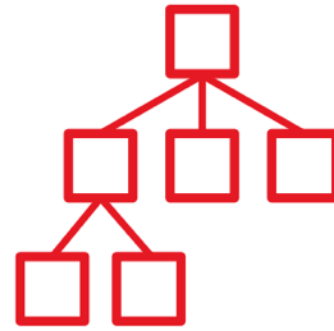
Networking +
Communication



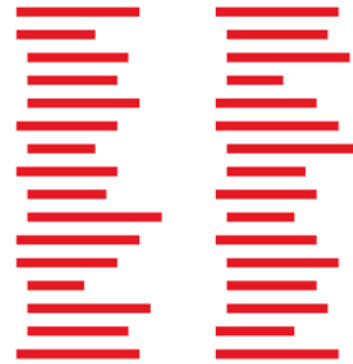
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Networking +
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GETTING STARTED

SYLLABUS

▸ [On Slack]

GETTING STARTED

AMOUNT OF WORK

- 6 hours each week in-class.
- 5-10 hours outside of class at least.

GETTING STARTED

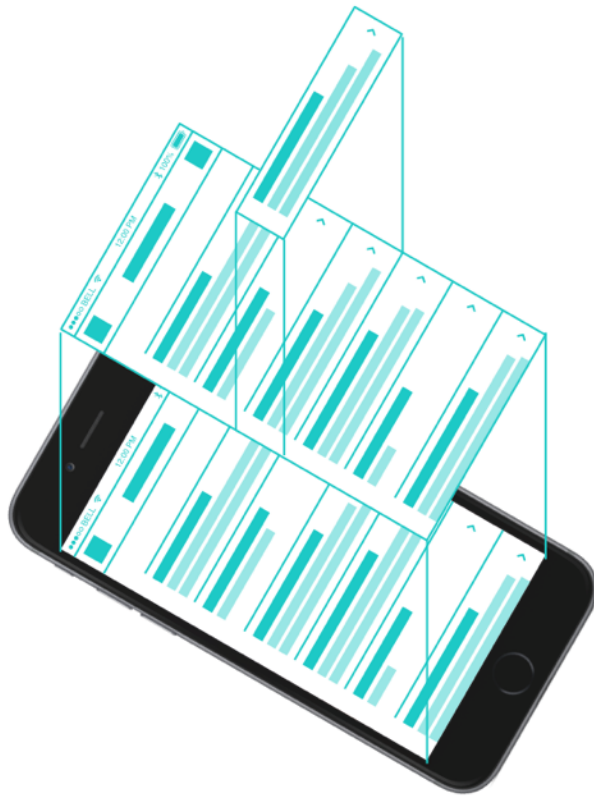
CLASS RESOURCES

- › Github site, the main place to get materials:
<https://github.com/ga-students/MOB-NYC-4>
- › Gitbook:
<http://mobbook.generalassemb.ly/>
- › *Learning Swift from Scratch*
Serves as additional practice.
<https://www.weheartswift.com/swift-programming-scratch-100-exercises/>
- › Apple Developer Site, Stack Overflow, etc.
- › Your EIRs and fellow students.

GETTING STARTED

GITHUB.COM

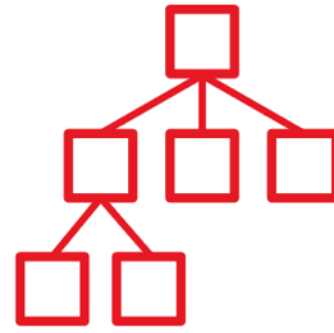
- › <https://github.com/ga-students/MOB-NYC-4>
- › Create an account.
- › Send us your username on Slack.
- › Course Schedule...



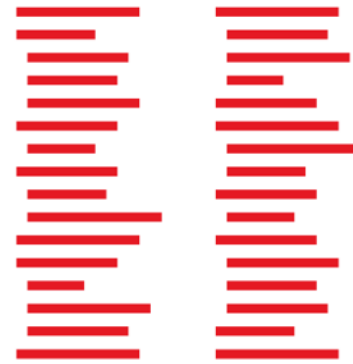
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GETTING STARTED

FINAL PROJECT

▸ [On Slack]

GETTING STARTED

DEVELOPMENT WORKFLOW

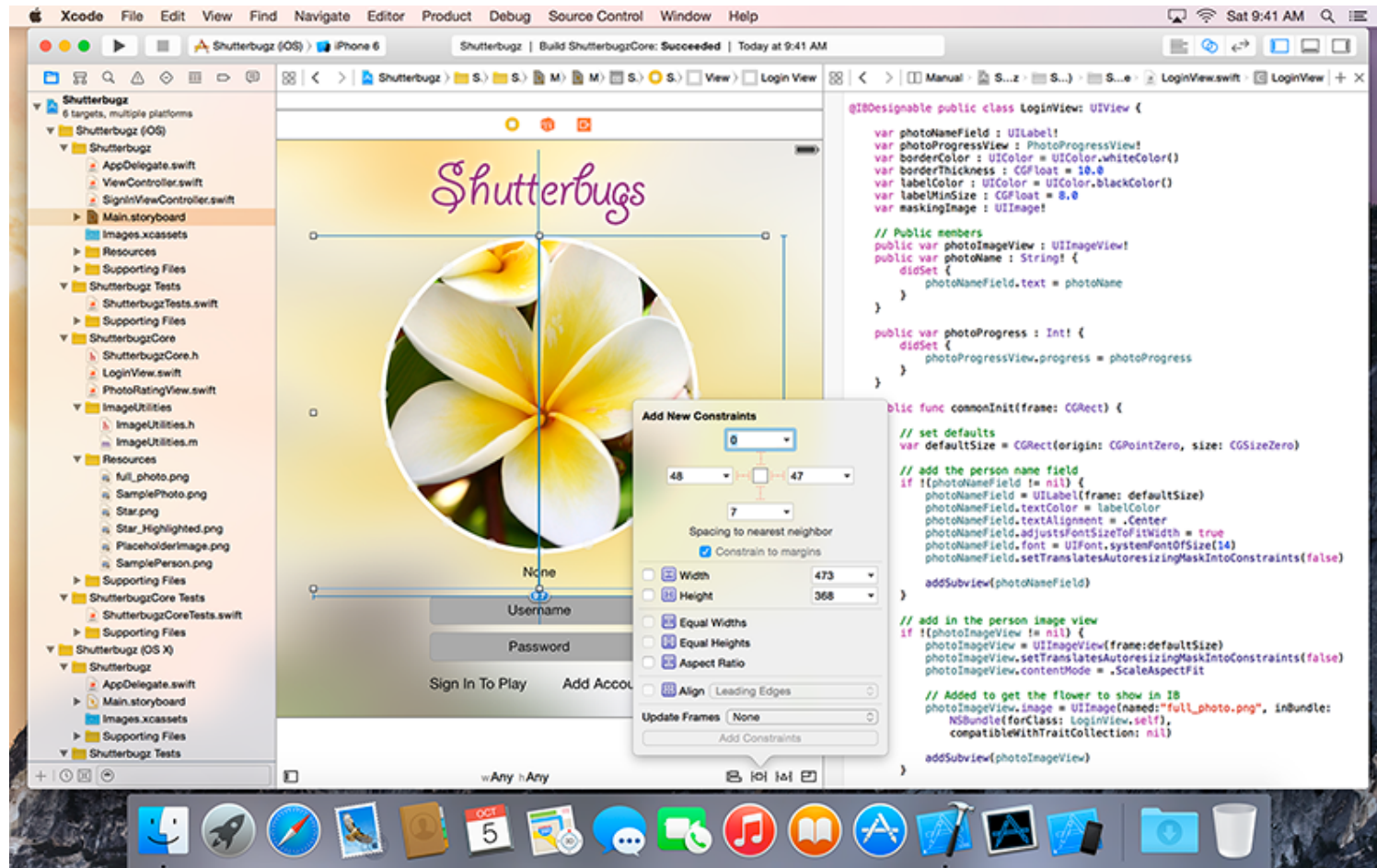
GETTING STARTED

DEV WORKFLOW OVERVIEW

- Launch 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 / test it
- Iterate
- Post to Github when done

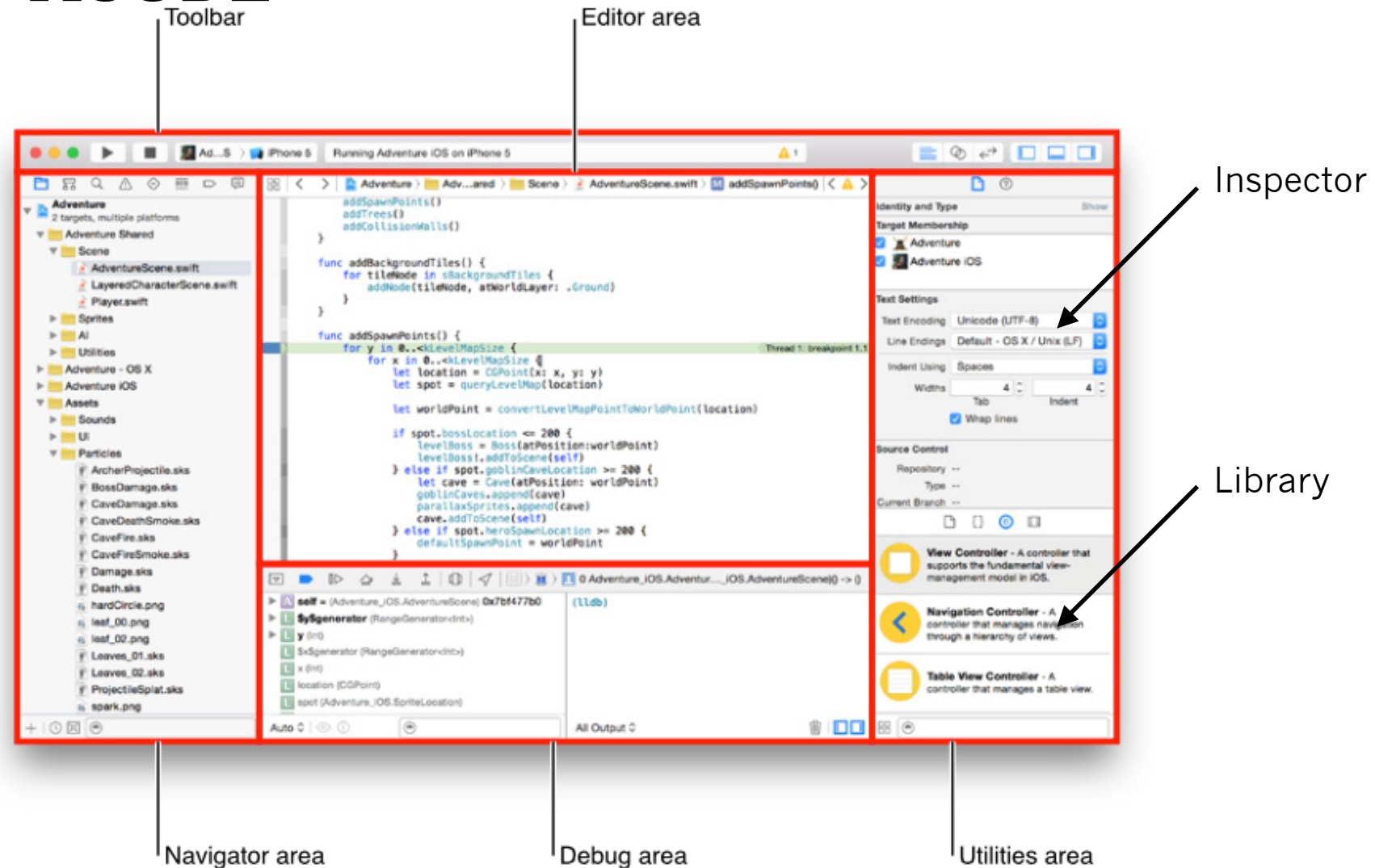
GETTING STARTED

WHAT IS XCODE?



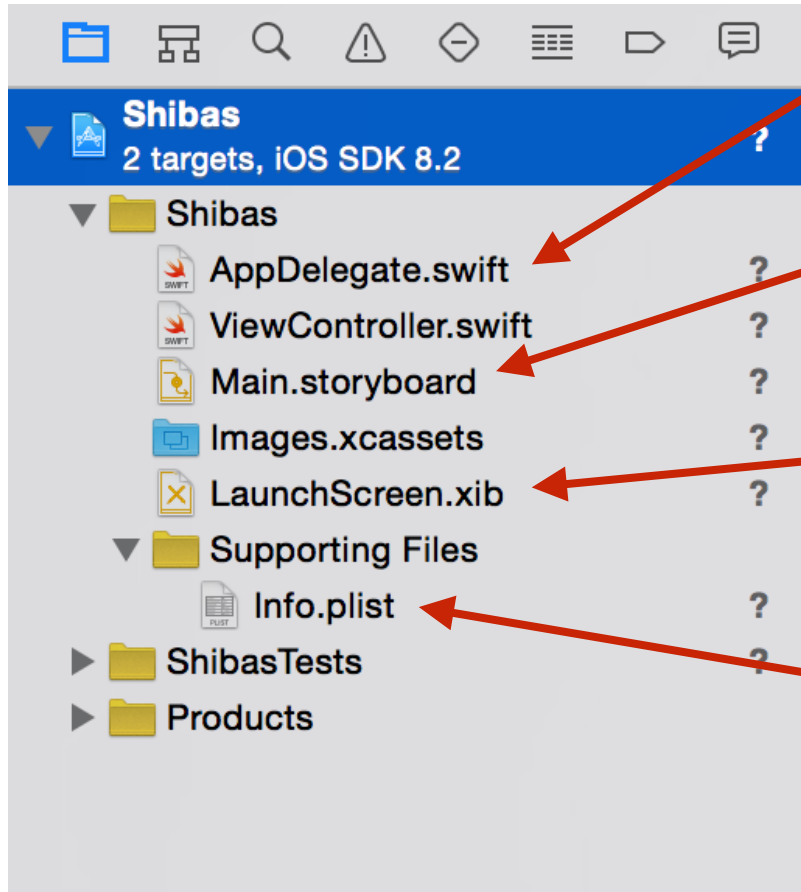
GETTING STARTED

NAVIGATING XCODE



GETTING STARTED

FILE TYPES



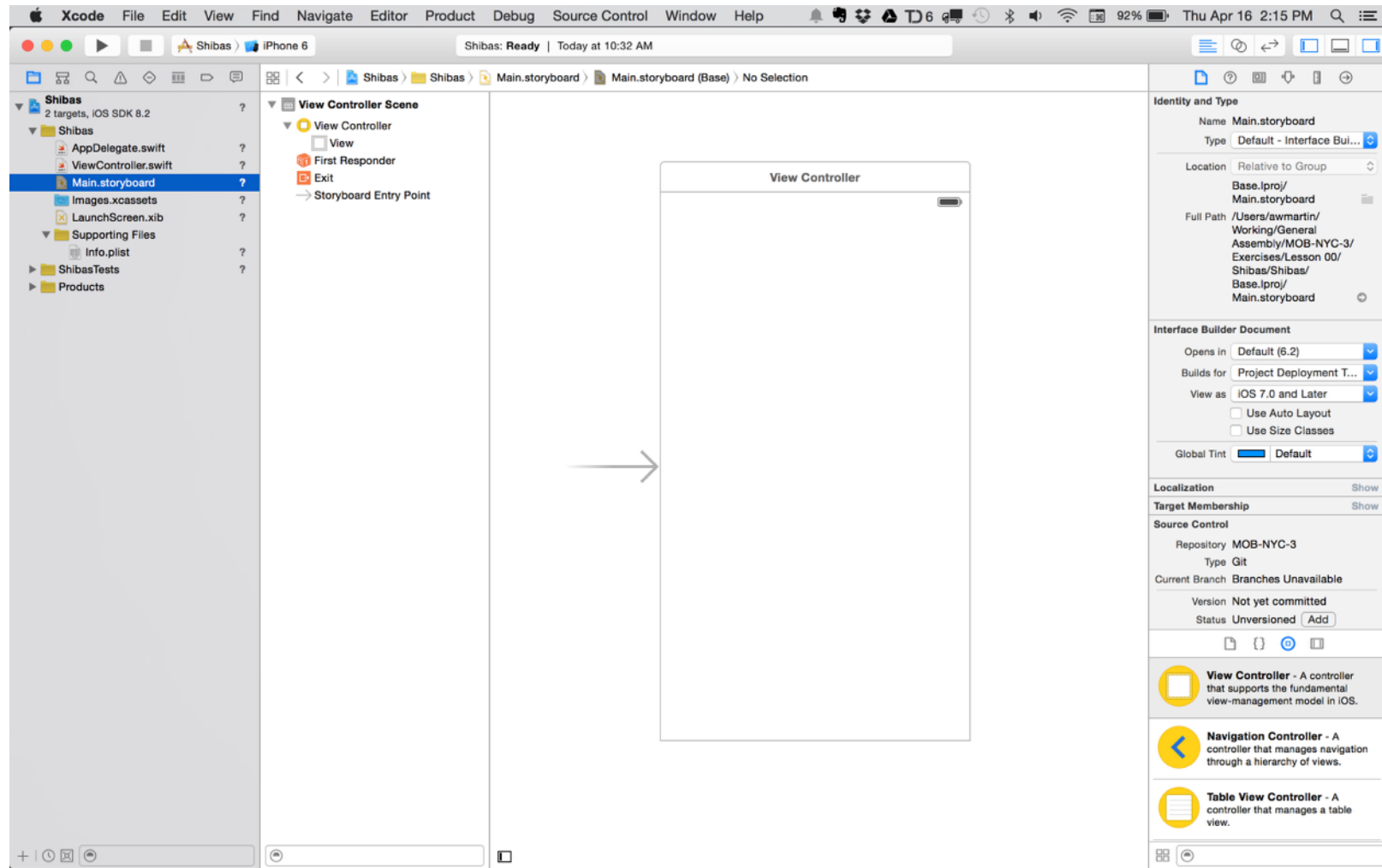
- .swift
Swift source code file
- .storyboard
an Interface Builder “storyboard” file
- .xib
an Interface Builder “NIB” file
- .plist
a “property list”

GETTING STARTED

GETTING THINGS ON THE SCREEN

GETTING STARTED

INTERFACE BUILDER



GETTING STARTED

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.

GETTING STARTED

VIEWS ON THE WHITEBOARD

GETTING STARTED

**CODE ALONG:
TO XCODE!**

ACTIVITY



EXERCISE

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 |
| 10 min | 2. Set up the UI |
| 20 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.

GETTING STARTED

RUNNING YOUR APP

GETTING STARTED

RUNNING YOUR APP

- Run app on simulator (Cmd + R or click Play)
- BONUS: Outline the steps for deploying an app to device

GETTING STARTED

RUNNING AN APP IN THE IOS SIMULATOR

- › Select iOS version in toolbar area
- › Select “Build and then Run” in toolbar area (⌘R)

Note

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

GETTING STARTED

NAVIGATING THE IOS SIMULATOR

- › To run Simulator without running a project, select:
Xcode -> Open Developer Tool -> iOS Simulator
- › To select the “Home” button on simulator press ⌘ + ⏏ + H.

GETTING STARTED

Q&A