MOBILE DEVELOPMENT

DESIGN OF MOBILE INTERFACES

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LEARNING OBJECTIVES

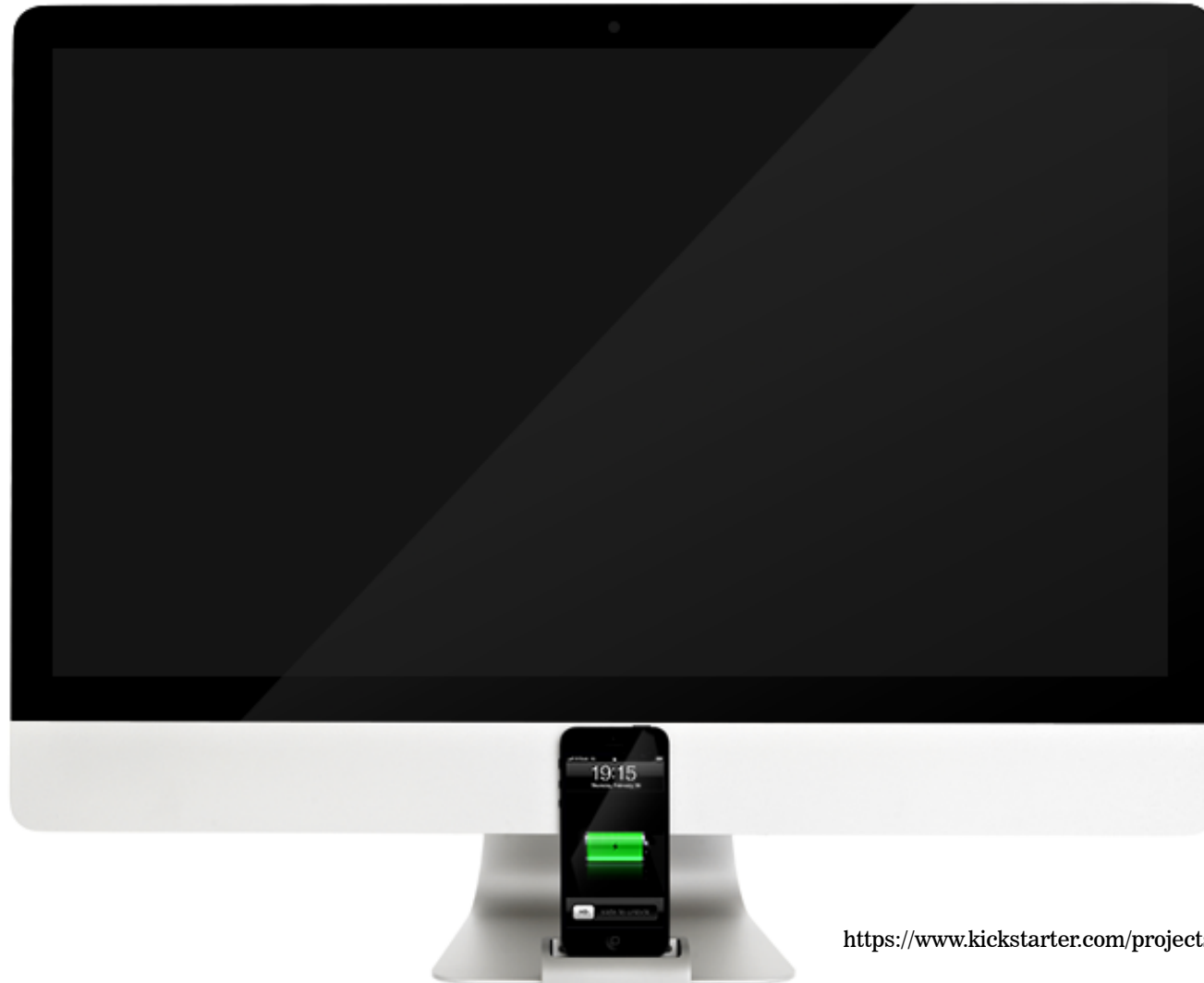‣ Explain the principles of mobile design.

‣ Add multiple View Controllers to storyboard

‣ And link them together with segues

‣ Use Navigation Controller to link scenes

HOW IS MOBILE DIFFERENT?

OVERVIEW

‣ Less UI real estate

‣ Wide range of devices

‣ Touch gestures

‣ Usage context

‣ Network latency

LESS REAL ESTATE
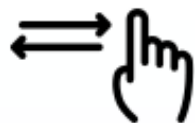
WIDE RANGE OF DEVICES

TOUCH GESTURES

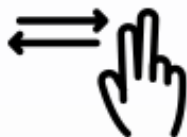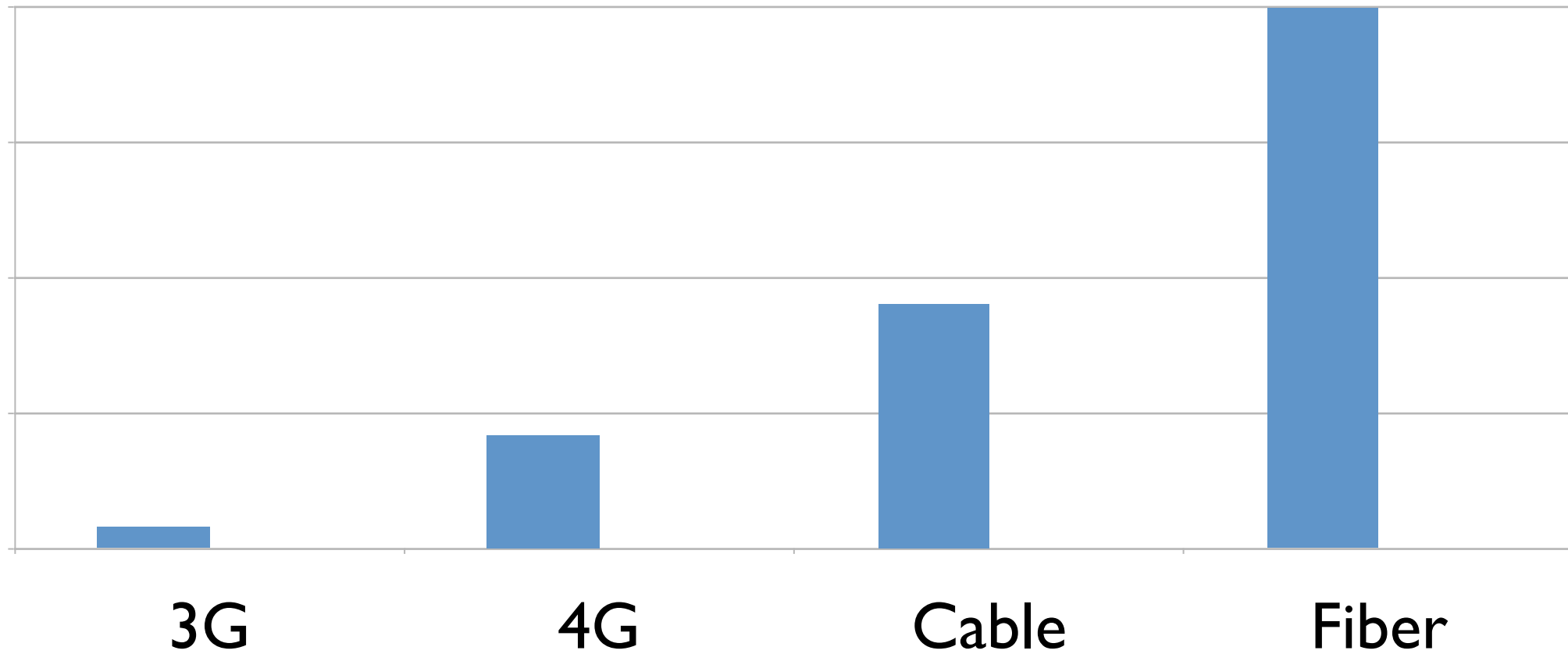|							
TAP	DOUBLE TAP	TOUCH & HOLD	VERTICAL SCROLL	HORIZONTAL SCROLL	2X DRAG DOWN	2X DRAG	2X FLICK LEFT
DRAG FLICK	FLICK LEFT	FLICK RIGHT	FLICK DOWN	FLICK UP	2X FLICK UP	2X ZOOM IN	2X ZOOM OUT
2X TAP	2X DOUBLE UP	2X HORIZONTAL SCROLL	2X VERTICAL SCROLL	2X FLICK UP	3X DRAG DOWN	3X DRAG	3X TAP
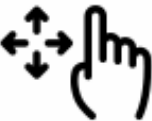
CONTEXT OF USE

‣ Especially task-driven

‣ More time-sensitive

‣ Shorter attention span

‣ Potentially dangerous?

http://www.thinkdigit.com/Car-Tech/New-study-suggests-talking-on-the-phone_17154.html

NETWORK CONCERNS

GESTURAL INTERFACES

OVERVIEW

‣ Tap

‣ Swipe

‣ Hold

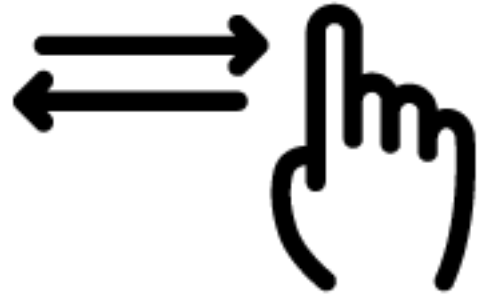‣ Pinch

‣ Rotate

‣ Other

TAP

DOUBLE/TRIPLE TAP

SCROLL, SWIPE, FLICK

HOLD, DRAG

PINCH, SPREAD

ROTATE

SHAKE, BUMP, BLOW…
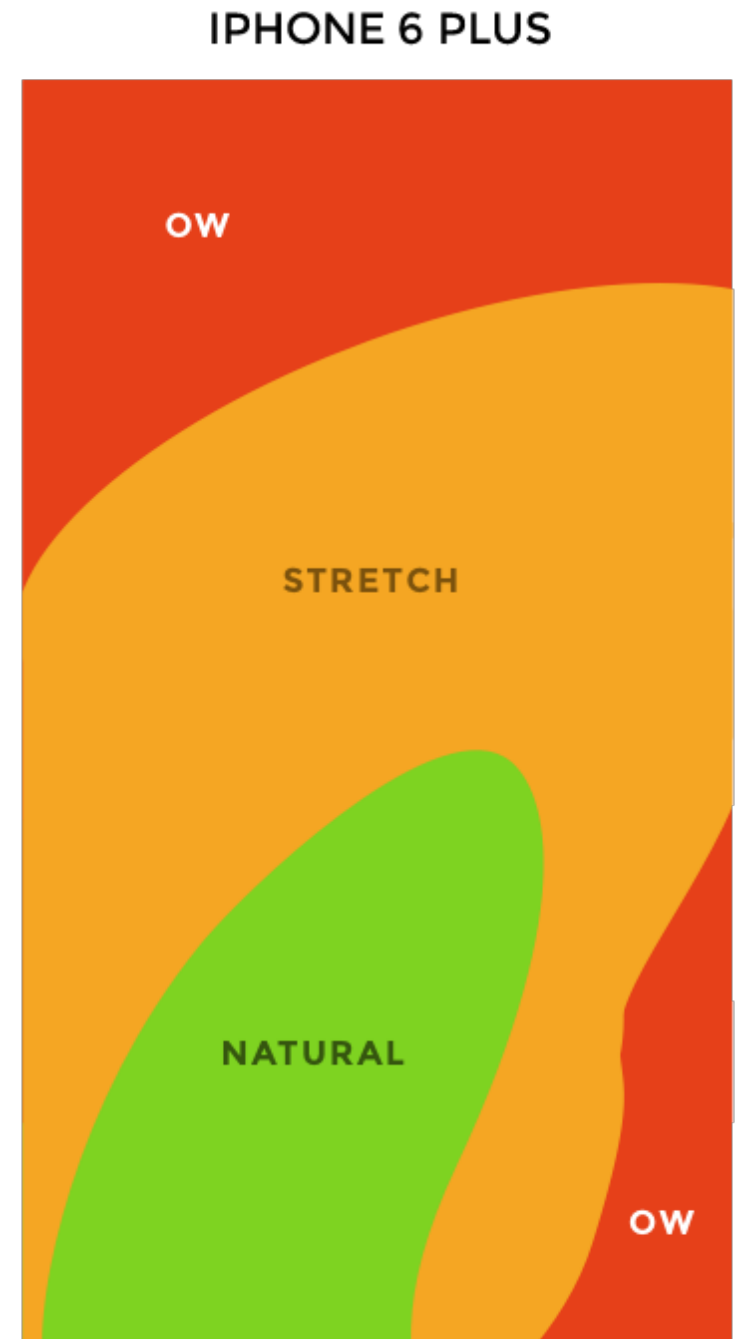
DEVICE-SPECIFIC GUIDELINES

OVERVIEW

‣ Different native platforms have different design languages

‣ Good designs leverage the conventions of the platform

‣ There's a lot to know:

  ‣ Design principles and terminology

  ‣ UI components

  ‣ Design patterns

  ‣ Gestural conventions

HOW TO DESIGN FOR THUMBS

‣ Also might depend on the physicality of the device.

IPHONE 6

IPHONE 6 PLUS

‣ http://scotthurff.com/posts/how-to-design-for-thumbs-in-the-era-of-huge-screens
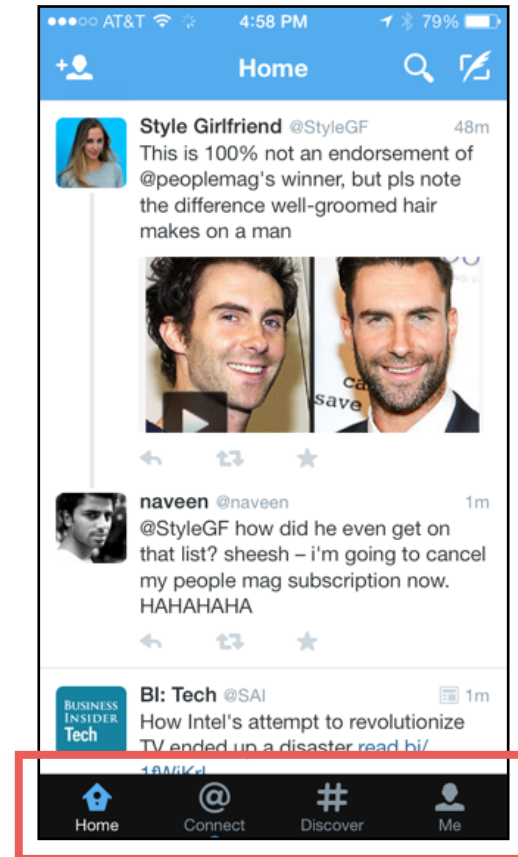
RESOURCES

‣ iOS Human Interface Guidelines:

  ‣ https://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/MobileHIG/
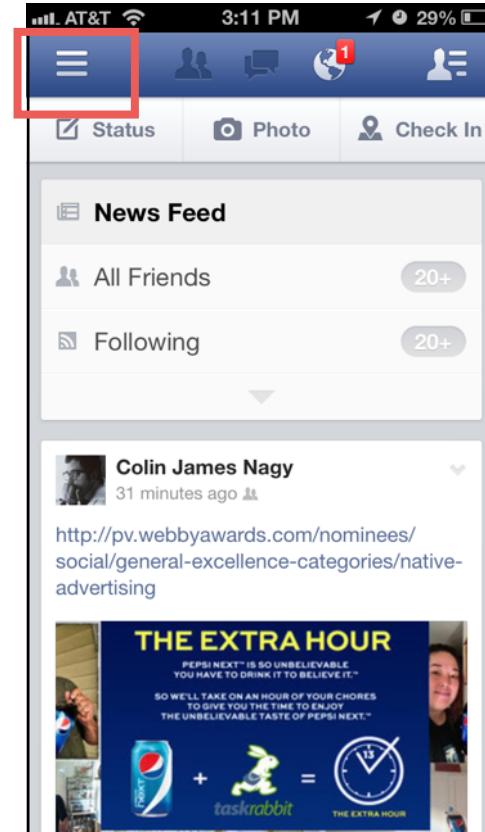
MOBILE DESIGN PATTERNS

OVERVIEW

‣ Navigation

‣ Screen-level actions

‣ User onboarding

‣ Lists, filtering, and empty sets

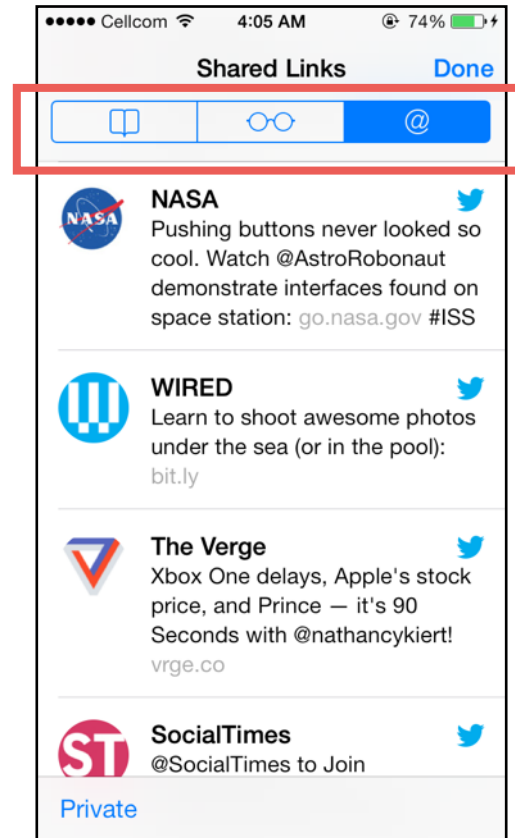‣ Dialog boxes

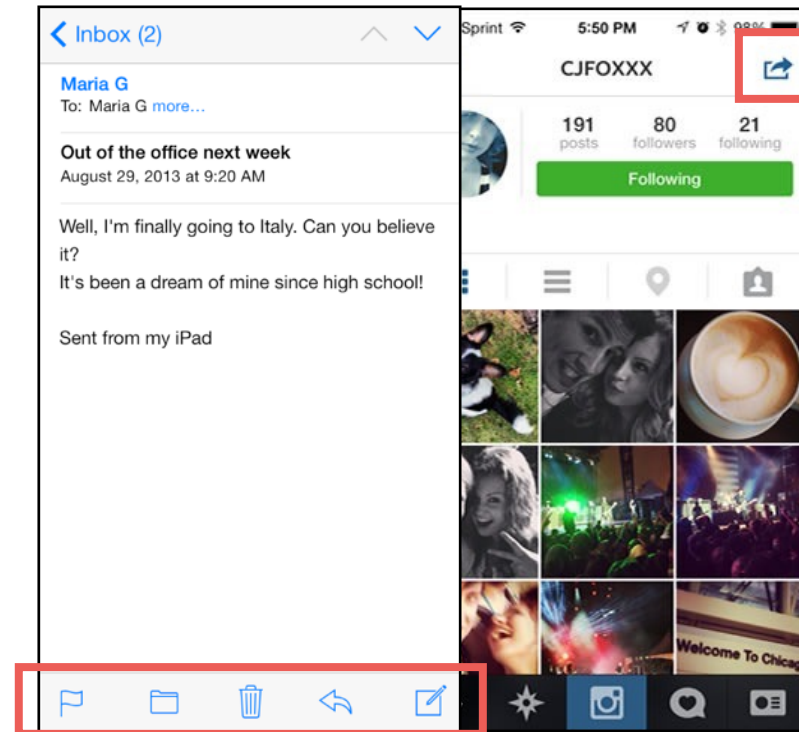# NAVIGATION

Tab Bar   Hamburger Menu

NAVIGATION
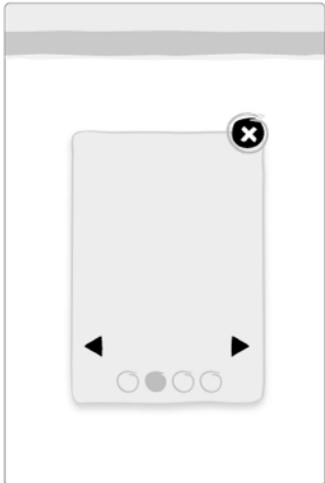

Scope Bar

NAVIGATION

Navigation Bar
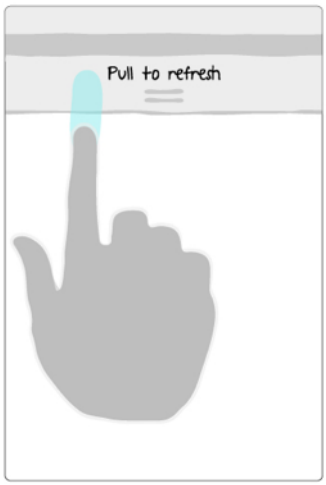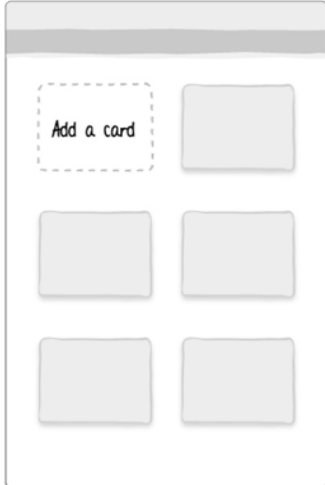
SCREEN-LEVEL ACTIONS

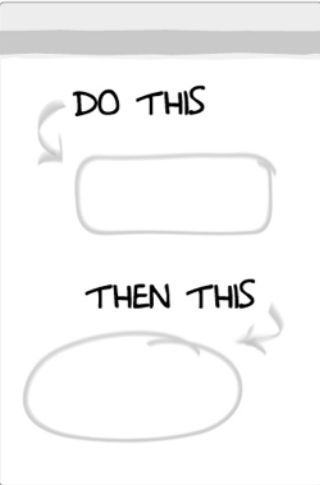Tool Bar, Navigation Bar

ONBOARDING

Dialog

Popover Tip

Tour

Demo

Overlay

Embedded

Persistent

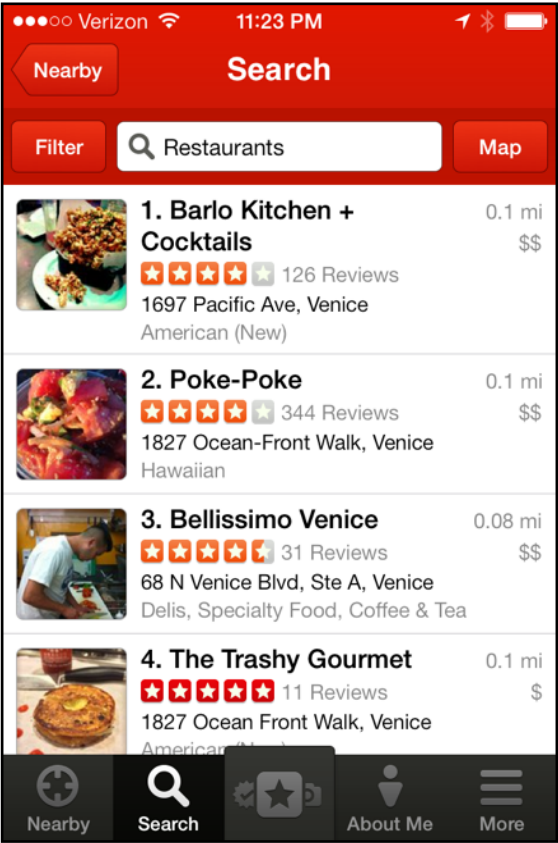Discoverable

DO THIS

THEN THIS

Tap to get started

Add a card
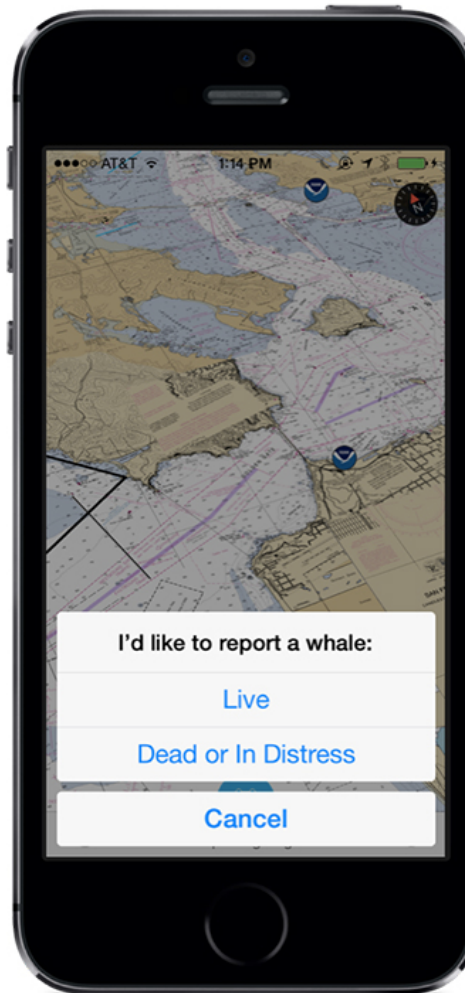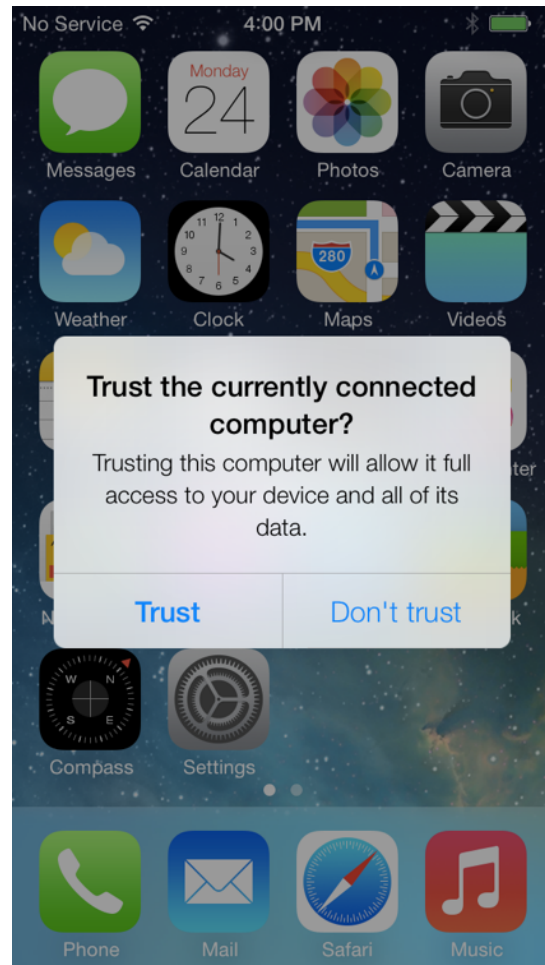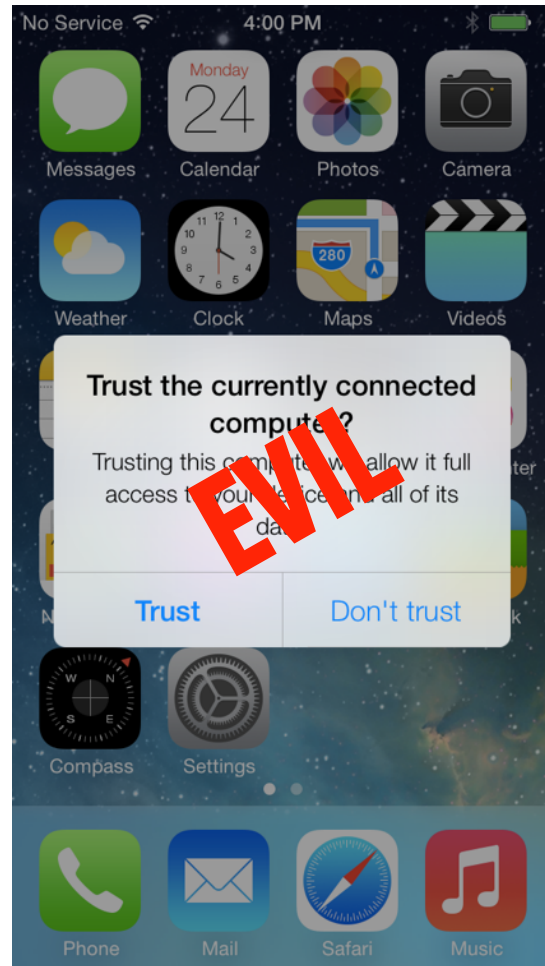
Pull to refresh

LISTS

Table View

DIALOG BOXES: ALERTS

DIALOG BOXES: ALERTS

DIALOG BOXES: ACTION SHEET

NOTIFICATIONS (INTERACTIVE AND PASSIVE)
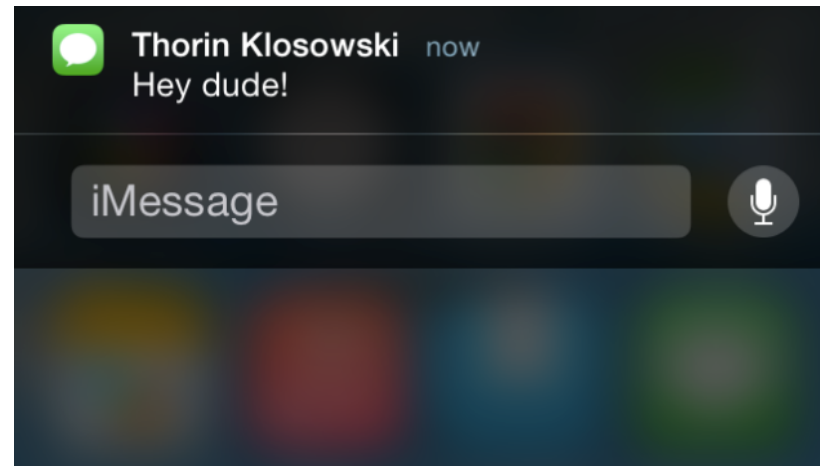
…AND MANY MORE

‣ mobile-patterns.com

‣ pttrns.com

‣ inspired-ui.com

‣ appreciateui.com

‣ mobiledesignpatterngallery.com/mobile-patterns.php

WHAT ARE STORYBOARDS?

STORYBOARDS

WEBSITE SITEMAPS

POTENTIAL USER
ENTERS WEBSITE

WATCHES VIDEO -
CONTACTS CORETALK

INTRO VIDEO

SELECTS SPECIFIC
INDUSTRY

INTRO HEADER

CONTACTS
CORETALK

CONTACT

INDUSTRIES

INDUSTRY
SPECIFIC
BENEFITS

GENERAL
TESTIMONIALS

DOWNLOAD
USER GUIDE

DOWNLOAD
CONFIRMATION

SUCCESS

GENERAL
BENEFITS

INDUSTRY
SPECIFIC
BENEFITS

CALL TO ACTION

GENERAL
BENEFITS

PRICING
TABLE
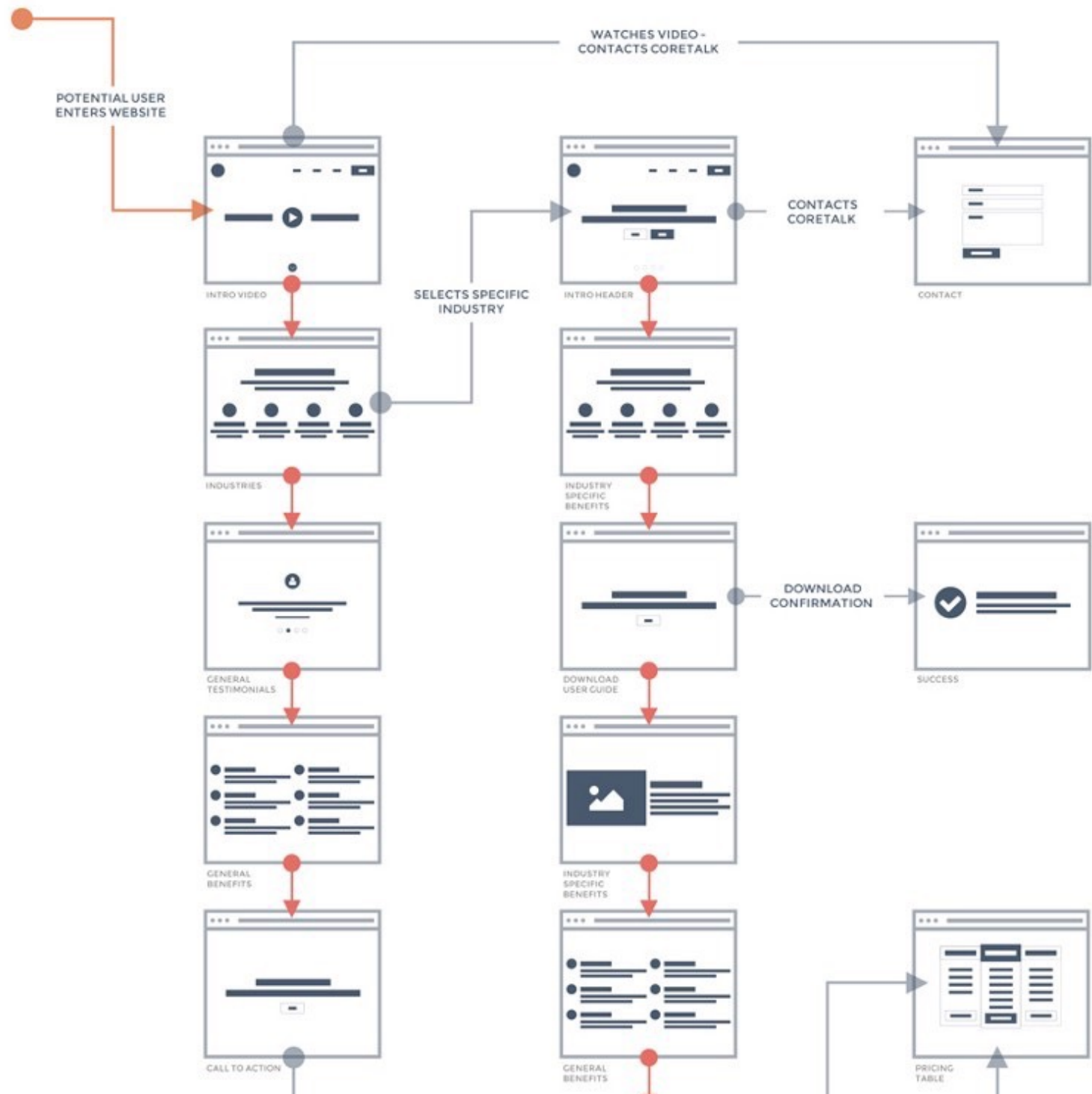
DRAW A SITEMAP (5 MIN)

WHAT IS COCOA TOUCH?

‣ The Cocoa Touch layer contains key frameworks for building iOS apps. These frameworks define the appearance of your app.

‣ They also provide the basic app infrastructure and support for key technologies such as multitasking, touch-based input, push notifications, and many high-level system services.

‣ When designing your apps, you should investigate the technologies in this layer first to see if they meet your needs.

‣ From the Apple docs here.

VIEWS

‣ A view is a UI element, with a size, drawn at some location.

‣ Views can contain other views (**subview**).

VIEW CONTROLLERS

‣ Each screen of our app is made up of at least one **view controller** and at least one view.

‣ Typically supports one "scene," or a single UI screen.

‣ A view controller "manages" a set of views.

‣ View controllers can contain other view controllers (**child view controllers**).

NAVIGATION CONTROLLERS

‣ Navigation controllers "manage" several view controllers.

‣ They are also view controllers themselves! They just have special powers…

‣ One view is presented at a time.

‣ Organizes the view controllers in a browser-history-like fashion (think forward and back buttons).
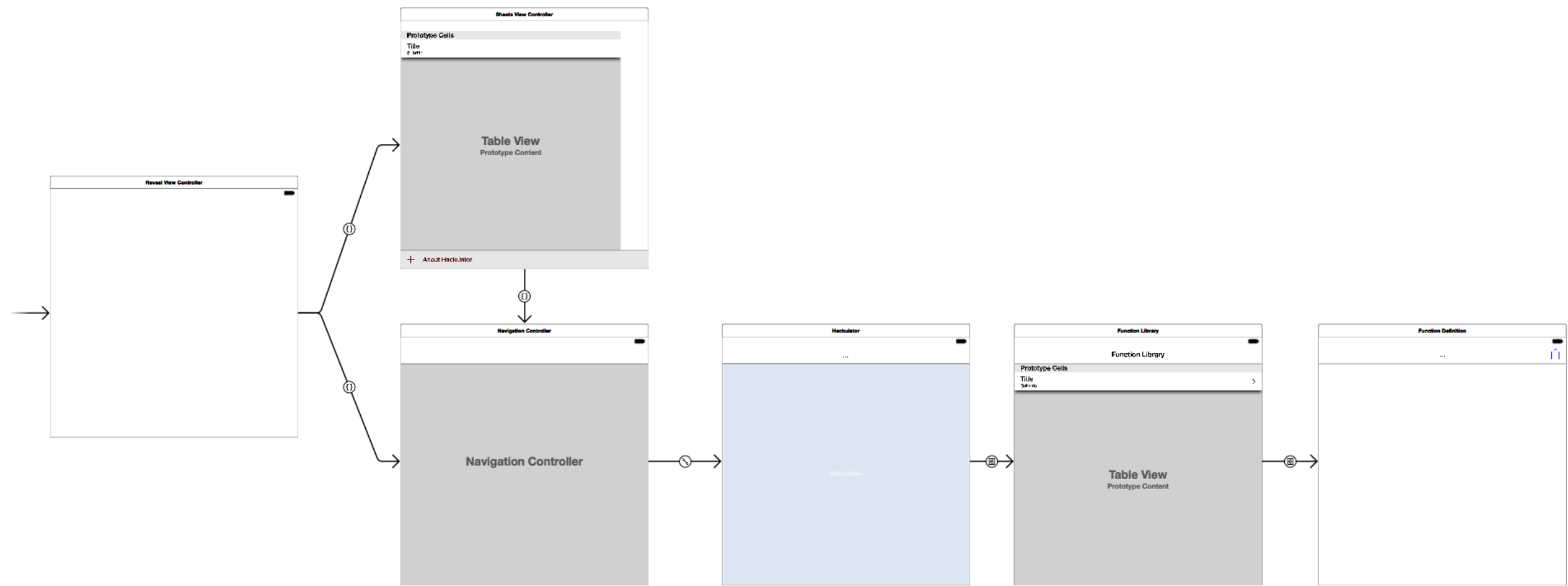
‣ Comes with a conveniently built-in navigation bar.

STORYBOARDS

‣ Link multiple scenes together using a navigation controller.

‣ Transition between scenes. These transitions are represented by "segues".

HACKULATOR'S STORYBOARD

XCODE DEMO: CREATING SEGUES

WATCH ME!

Name	Interface Builder Symbol	Description
Show		Present the content in the detail or master area depending on the content of the screen. If the app is displaying a master and detail view, the content is pushed onto the detail area. If the app is only displaying the master or the detail, the content is pushed on top of the current view controller stack.
Show Detail		Present the content in the detail area. If the app is displaying a master and detail view, the new content replaces the current detail. If the app is only displaying the master or the detail, the content replaces the top of the current view controller stack.
Present Modally		Present the content modally. There are options to choose a presentation style (`UIModalPresentationStyle`) and a transition style (`UIModalTransitionStyle`).
Present as Popover		Present the content as a popover anchored to an existing view. There is an option to specify the possible directions of the arrow shown on one edge of the popover view (`UIPopoverArrowDirection`). There is also an option to specify the anchor view.
Custom		A custom segue enabling you to write your own behaviors.
Push (Deprecated)		Present the content by pushing it onto the current stack of view controllers.
Modal (Deprecated)		Present the content modally on top of the existing screen. The options are the same as Present Modally.
Popover (Deprecated)		Present the content as a popover. The options are the same as Present as Popover.

NOW YOU TRY: CREATING SEGUES

STORYBOARDS

EXERCISE

KEY OBJECTIVE(S)

Link multiple scenes together.

TIMING

25 min   1. Build out the Vanity app the way we've discussed.

5 min   2. Debrief

DELIVERABLE

- Add UI elements.
- Link scenes together using segues.

Q&A