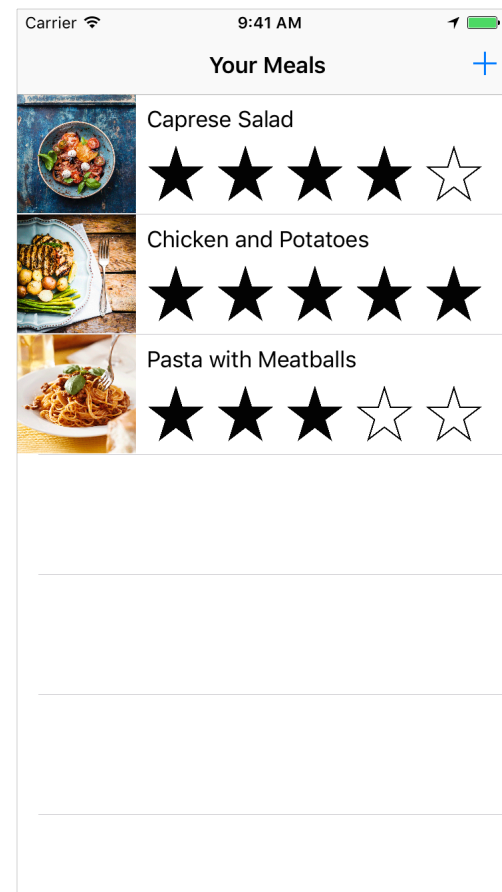


Session #5

First App

<https://developer.apple.com/library/archive/referencelibrary/GettingStarted/DevelopiOSAppsSwift/index.html>



Build a Basic UI

- Create a project in Xcode
- Identify the purpose of key files that are created with an Xcode project template
- Open and switch between files in a project
- Run an app in iOS Simulator
- Add, move, and resize UI elements in a storyboard

Build a Basic UI ...

- Edit the attributes of UI elements in a storyboard using the Attributes inspector
- View and rearrange UI elements using the outline view
- Preview a storyboard UI using the Assistant editor's Preview mode
- Use Auto Layout to lay out a UI that automatically adapts to the user's device size

Connect the UI to Code

- Explain the relationship between a scene in a storyboard and the underlying view controller
- Create outlet and action connections between UI elements in a storyboard and source code
- Process user input from a text field and display the result in the UI
- Make a class conform to a protocol

Connect the UI to Code ...

- Understand the delegation pattern
- Follow the target-action pattern when designing app architecture

What is a View Controller

- Manage a single content view with its hierarchy of subviews
- Coordinate the flow of information between the app's data model and the views that display that data
- Manage the life cycle of their content views
- Handle orientation changes when the device is rotated
- Define the navigation within your app
- Implement the behavior to respond to user input

Target-Action pattern

- The event is the user tapping the Set Default Text button.
- The action is `setDefaultLabelText(_)`.
- The target is `ViewController` (where the action method is defined).
- The sender is the Set Default Label Text button.

Delegation

A delegate is an object that acts on behalf of, or in coordination with, another object.

Any object can serve as a delegate for another object as long as it *conforms* to the appropriate *protocol*.