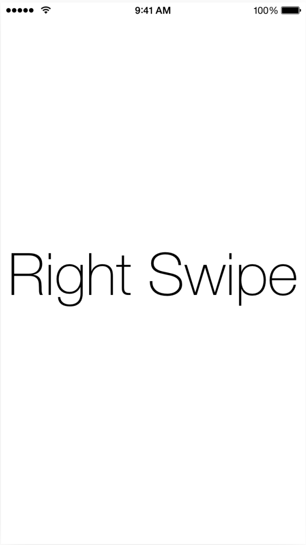
Gesturizer
Lesson 8

Description

Add a Swipe Gesture Recognizer to detect right swipes.

Learning Outcomes

- Apply a Swipe Gesture Recognizer to detect a right swipe gesture.
- Apply the `state` property of a gesture recognizer to properly update an interface.
- Practice simulating a swipe gesture with the iOS Simulator.
- Describe structures and relate them to classes.



Right Swipe

Vocabulary

swipe gesture	Swipe Gesture Recognizer	`UIGestureRecognizer`
`UISwipeGestureRecognizer Direction`	structure	

Materials

- **Gesturizer Lesson 8** Xcode project

Opening

How might we handle swipe gestures?

Agenda

- Using Interface Builder and the Object Library (⌥⌘L), observe the full description of the Swipe Gesture Recognizer.
- Using Interface Builder and the Object Library (⌥⌘L), drag a Swipe Gesture Recognizer into the Document Outline (◧), and rename it as **Right Swipe**.
- In the Document Outline (◧), select the Right Swipe gesture recognizer and observe the Attributes Inspector (⌥⌘4), drawing attention to the **Swipe** direction attribute.
- Using the Assistant Editor (⌥⌘↩), Control-drag from the Right Swipe gesture recognizer to a new controller action called `swipe:`.

```
@IBAction func swipe(sender: UISwipeGestureRecognizer) {
   if sender.direction == .Right) {
      showGestureName("Right Swipe")
   }
}
```

- Using the Xcode Documentation and API Reference (⇧⌘0), examine the `UISwipeGestureRecognizer` class reference, the `direction` property, and the `UISwipeGestureRecognizerDirection` structure.
- Explain how the `UISwipeGestureRecognizerDirection` is a structure with static properties, such as `Right` and `Left`, and how Swift can infer the data type of `direction`, enabling a shorthand syntax similar to enumerations.
- Using the Interface Builder Document Outline (◧), Control drag from the View to the Right Swipe gesture recognizer, and add the Swipe Gesture Recognizer to the View's `gestureRecognizers` outlet collection.
- Run the app (⌘R), click and drag to the right to simulate a swipe, and observe the **Right Swipe** text appear.

Closing

What would you do to add detection for up, down, and left swipes? What about two-finger swipes?

Modifications And Extensions

- Bind all the gesture recognizers to a single controller action that uses a dictionary to look up strings for the label depending on which gesture recognizer invoked the action.

Resources

Event Handling Guide for iOS http://developer.apple.com/library/ios/documentation/EventHandling/Conceptual/EventHandlingiPhoneOS/Introduction/Introduction.html

Creating an Action Connection https://developer.apple.com/library/ios/recipes/xcode_help-IB_connections/chapters/CreatingAction.html

Cocoa Core Competencies: Target-Action http://developer.apple.com/library/ios/documentation/General/Conceptual/Devpedia-CocoaApp/TargetAction.html

UIGestureRecognizer Class Reference https://developer.apple.com/library/ios/documentation/UIKit/Reference/UIGestureRecognizer_Class/index.html

UISwipeGestureRecognizer Class Reference https://developer.apple.com/library/ios/documentation/UIKit/Reference/UISwipeGestureRecognizer_Class/index.html