

Gesturizer

Lesson 7

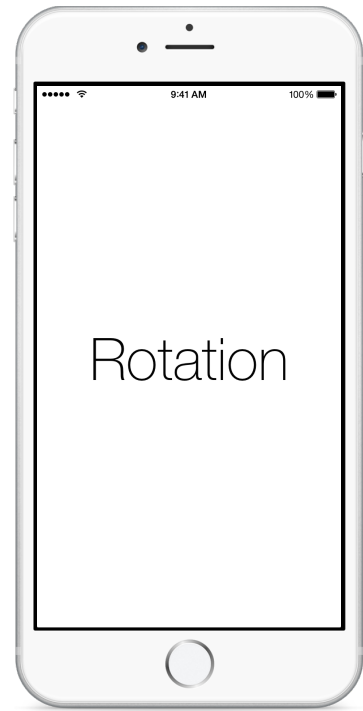


Description

Add a Rotation Gesture Recognizer to the app, and update the label when the rotation completes.

Learning Outcomes

- Apply a Rotation Gesture Recognizer to detect a rotation gesture with multiple touches.
- Apply the `state` property of a gesture recognizer to properly update an interface.
- Practice simulating a two-finger rotation gesture with the iOS Simulator.
- Describe and define enumerations.



Vocabulary

rotation gesture	Rotation Gesture Recognizer	UIGestureRecognizer
enumeration	UIGestureRecognizerState	

Materials

- **Gesturizer Lesson 7** Xcode project

Opening

How might we detect a rotation gesture?

Agenda

- Using Interface Builder and the Object Library (⌘L), drag a Rotation Gesture Recognizer into the Document Outline (☐).
- Using the Assistant Editor (⌘⇧↔), Control-drag a connection from the Rotation Gesture Recognizer to a new controller action called `rotation:`.

```
@IBAction func rotation(sender: UIRotationGestureRecognizer) {  
    if sender.state == .Ended {  
        showGestureName("Rotation")  
    }  
}
```

- Using the Interface Builder Document Outline (☐), Control-drag from the View to the Rotation Gesture Recognizer, and add the Rotation Gesture Recognizer to the View's `gestureRecognizers` outlet collection.
- Run the app (⌘R), hold down the ⌘ key to simulate two fingers, click and drag the mouse to simulate a rotation, and observe the **Rotation** text appear.

Closing

What are the differences between a pinch gesture and a rotation gesture? How does the documentation describe each of these gestures?

Modifications and Extensions

- Investigate the `rotation` and `velocity` properties of the `UIRotationGestureRecognizer`, and display their values on the screen.
- Rotate the label according to how the user imparts the rotation gesture.

Resources

Event Handling Guide for iOS <https://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

UIPinchGestureRecognizer Class Reference https://developer.apple.com/library/ios/documentation/UIKit/Reference/UIPinchGestureRecognizer_Class/index.html