GENERAL ASSEMBLY

MOBILE DEVELOPMENT
TYING INTERFACE BUILDER TO CLASSES

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LEARNING OBJECTIVES

- Be able to install iOS apps onto iOS devices
- Create hooks from interface builder to Swift code
- Create and implement custom classes
- Point out ability to access Xcode documentation for any external classes

REVIEW LESSON 4

GETTING STARTED

INTRO TO FUNCTIONS

WHAT IS A FUNCTION?

- A function is a series of repeatable steps that, at some point, ends
- Optional input and output
- Multiple inputs and outputs, as needed

CALLING FUNCTIONS

- ***name***() // No parameters, no return
- ***name***(***parameter***) // One parameter, no return
- ***name***(***parameter, parameterTwoName: parameterTwo***) // Two parameters, no return
- var result = ***name***(***parameter***) // One parameter, one returned value
- let result = ***name***() {/* code */} // No parameters, two returned values
  - println("\(result.paramOneName) \(result.paramTwoName)")

DEFINING FUNCTIONS

- func ***name***() { /* code */} // No parameters, no return
- func ***name***(***parameterName: type***) { /* code */} // One parameter, no return
- func ***name***(***parameterName: type, parameterTwoName: type***) { /* code */} // Two parameters, no return
- func ***name***(***parameterName: type***) -> ***returnType*** { /* code */} // One parameter, one returned value
- func ***name***() -> (***returnOne: valueOne***, ***returnTwo: valueTwo***) {/* code */} // No parameters, two returned values

FUNCTION PROBLEM SOLVING: FINDING A LETTER IN AN ARRAY

FUNCTION PROBLEM SOLVING: FIBONACCI SEQUENCE

XCODE DEMO: TYING AN IB ACTION TO A FUNCTION

IB'S FUNCTIONS

- Actions dragged into code from IB define **functions** (of a sort)
- Outlets dragged into code from IB define **variables** (of a sort)
- Your functions can interact with your variables
- Do you have a text field, label or text view that you've made an outlet of?
  - You can get its text by using 'var text = label.text'
  - You can set its text by using 'label.text = 'Some text'
- You can get and set other things, too!

TYING IB TO CLASSES

DOCUMENTATION DEMO

CLASSES

WHAT IS THIS ‘CLASS’ KEYWORD?

TYING IB TO CODE

WHAT IS THIS ‘CLASS’ KEYWORD?

- A basic building block
- A bundle of state and behavior that form an outline of a type
  - Variables (state)
  - Functions (behavior, in this case known as ‘methods’)
- One can create instances of classes
  - ‘Human’ is a class, ‘Rudd’ is the instance
- How does this tie into Interface builder and our code?

TYING IB TO CLASSES

HOW DOES THIS TIE INTO IB?

- We use IB to set up various **classes** of controllers, and the **segues** that they use to connect with each other
- Uses these storyboards to create an **instance** of the first controller **class** when your app starts. That **instance** is what's displayed on screen.
- When you use a segue to go to a new view controller **class**, a new **instance** of it is created and navigated to
- Multiple **instances** of the same class can exist

XCODE DEMO: CREATING CLASSES