

RICH INFANTE

IOS APP DEV. WITH SWIFT



HELLO, WORLD!

- My name's Rich
- CSE Senior @ UConn
- Interned @ ABC News doing iOS / tvOS Apps

PRESENTATION GOALS

- Provide a starting point for further learning
- Go over basic tools, design patterns, and setup of a project.
- If you want to follow along, you'll need a Mac with Xcode installed

PRESENTATION GOALS

- Overview of some swift concepts and design patterns
- Project Setup demo
- Basic app demo
- Q&A + App Teardown

SWIFT BASICS

- Protocol oriented - similar to java's interfaces.
- Syntax similar to javascript with pascal type annotations
- Heavily infers the data type of objects.

SWIFT BASICS - CLASSES

```
class Student {  
    var name: String  
  
    init(name: String) {  
        self.name = name  
    }  
}
```

```
let bob = Student(name: "bob")  
print(bob.name) // prints "bob"
```

```
let joe = bob  
joe.name = "joe"
```

```
print(joe.name, bob.name) // prints "joe", "joe"
```

SWIFT BASICS - STRUCTS

```
struct Student {  
    var name: String  
  
    init(name: String) {  
        self.name = name  
    }  
}
```

```
var bob = Student(name: "bob")  
print(bob.name) // prints "bob"
```

```
var joe = bob  
joe.name = "joe"
```

```
print(joe.name, bob.name) // prints "joe", "bob"
```

SWIFT BASICS - PROTOCOLS

```
protocol Student {
    var name : String { get set }
    var schoolName : String { get }
}

struct UConnStudent : Student {
    var name : String
    var schoolName : String { return "UConn" }
}

struct MITStudent : Student {
    var name : String
    var schoolName : String { return "MIT" }
}

let alice = UConnStudent(name: "Alice")
let bob = MITStudent(name: "Bob")

let students : [Student] = [ alice, bob ]

print(students)
```


SWIFT BASICS - DELEGATE PATTERN

```
protocol TableDelegate {
    func numberOfRows() -> Int
    func numberOfColumns() -> Int
    func cellContent(row: Int, col: Int) -> String
}

class RegistrationTable : TableDelegate {
    var names : [String] = []

    func addName(name: String) {
        self.names.append(name)
    }

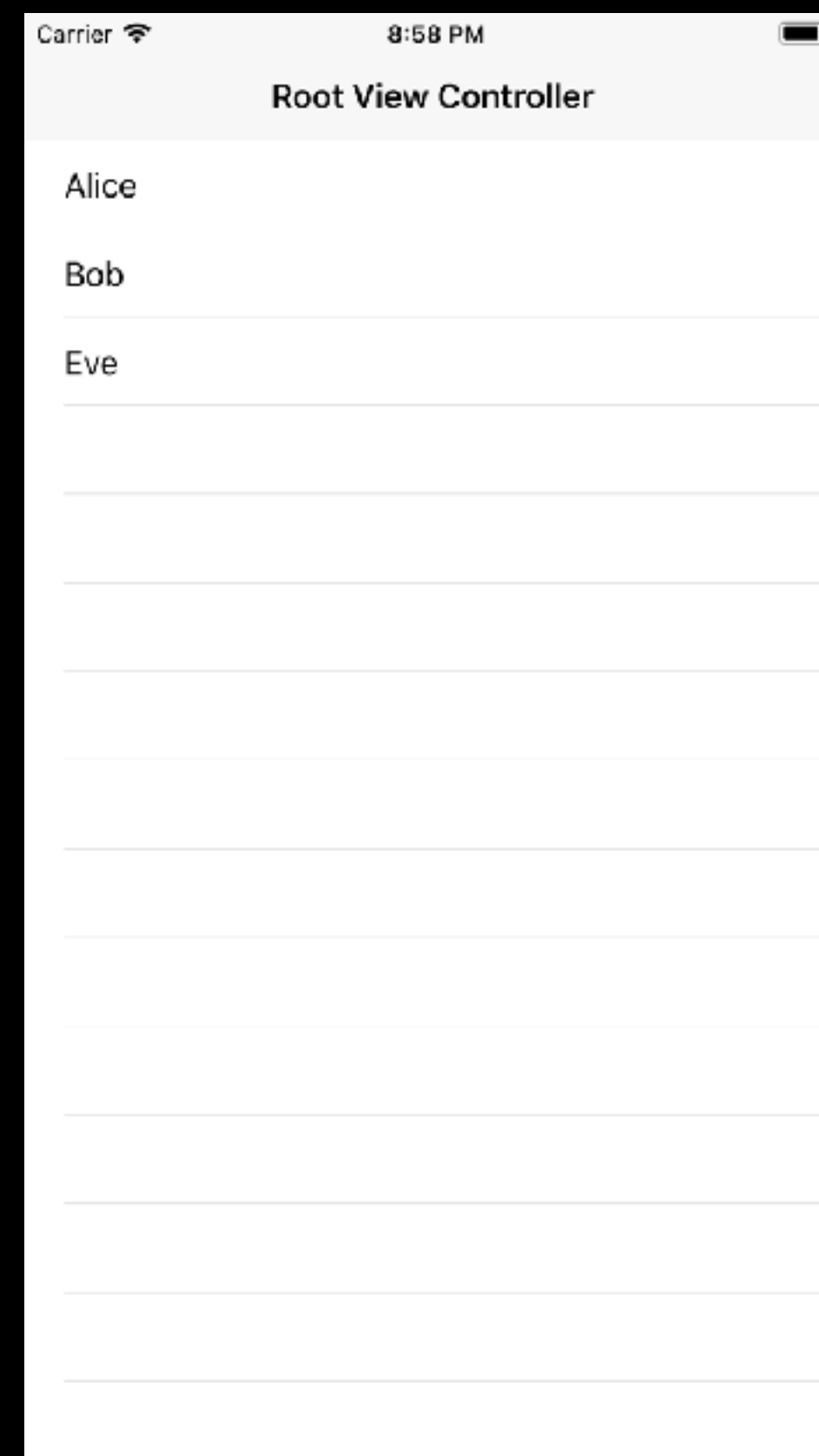
    func numberOfRows() -> Int {
        return names.count
    }

    func numberOfColumns() -> Int {
        return 1
    }

    func cellContent(row: Int, col: Int) -> String {
        return names[row]
    }
}
```

PROJECT SETUP DEMO!

SIMPLE IOS APP DEMO!



OTHER NEED-TO-KNOW

- Submitting apps to the app store requires a developer membership fee of \$100 / year.
- Also need a Mac computer with Xcode