

# A Swift Kickstart

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# Enumerations

# Create an enumeration

```
enum CocoaConfTutorial {  
    case GameDevelopment  
    case AVFoundation  
    case Swift  
    case AllDayiOS  
}
```

```
var tutorial = CocoaConfTutorial.AllDayiOS
```

# Create an enumeration

```
enum CocoaConfTutorial {  
    case GameDevelopment  
    case AVFoundation  
    case Swift  
    case AllDayiOS  
}
```

```
var tutorial = CocoaConfTutorial.AllDayiOS
```

```
tutorial = .Swift
```

# Enumerations and Switch

```
switch tutorial {  
case .Swift, .AllDayiOS:  
    println("What a great choice")  
default:  
    println("Whatever")  
}
```

# Raw Values - Int

```
enum CocoaConfTutorial: Int {  
    case GameDevelopment  
    case AVFoundation  
    case Swift  
    case AllDayiOS  
}
```

```
var tutorial = CocoaConfTutorial.AllDayiOS  
tutorial.rawValue  
tutorial = .Swift  
tutorial.rawValue
```

# Raw Values - Int

```
enum CocoaConfTutorial: Int {  
    case GameDevelopment = 7  
    case AVFoundation  
    case Swift  
    case AllDayiOS  
}
```

```
var tutorial = CocoaConfTutorial.AllDayiOS  
tutorial.rawValue  
tutorial = .Swift  
tutorial.rawValue
```

# Optional from raw

```
possibleTutorial
    = CocoaConfTutorial(rawValue: "AV Foundation Film School")

if let tutorial = possibleTutorial {
    switch tutorial {
    case .Swift, .AllDayiOS:
        println("What a great choice")
    default:
        println("Whatever")
    }
}
```



# Raw Values - String

```
enum CocoaConfTutorial: String {  
    case GameDevelopment = "iOS Game Development"  
    case AVFoundation = "AV Foundation Film School"  
    case Swift = "A Swift Kickstart"  
    case AllDayiOS = "All Day iOS Tutorial"  
}
```

```
var tutorial = CocoaConfTutorial.AllDayiOS  
tutorial.rawValue  
tutorial = .Swift  
tutorial.rawValue
```

# Optional

```
var possibleTutorial: CocoaConfTutorial?  
  
possibleTutorial = CocoaConfTutorial.fromRaw("AV Foundation Film School")  
  
if let tutorial = possibleTutorial {  
    switch tutorial {  
    case .Swift, .AllDayiOS:  
        println("What a great choice")  
    default:  
        println("Whatever")  
    }  
}
```

# Methods

```
enum CocoaConfTutorial: String {  
    case GameDevelopment = "iOS Game Development"  
    case AVFoundation = "AV Foundation Film School"  
    case Swift = "A Swift Kickstart"  
    case AllDayiOS = "All Day iOS Tutorial"  
  
    func tutorialName() -> String {  
        return rawValue  
    }  
}  
  
var swift = CocoaConfTutorial.Swift  
  
swift.tutorialName()
```

# Properties

```
enum CocoaConfTutorials: String {  
    case GameDevelopment = "iOS Game Development"  
    case AVFoundation = "AV Foundation Film School"  
    case Swift = "A Swift Kickstart"  
    case AllDayiOS = "All Day iOS Tutorial"  
  
    var tutorialName: String {  
        return rawValue  
    }  
}  
  
var swift = CocoaConfTutorial.Swift  
  
swift.tutorialName
```

# Using Enumerations

```
class CocoaConfTutorialAttendee: CocoaConfAttendee {  
    var tutorial: CocoaConfTutorial  
    init(name: String, hometown: String, tutorial: CocoaConfTutorial) {  
        self.tutorial = tutorial  
        super.init(name: name, hometown: hometown)  
    }  
    override func nameBadge() -> String {  
        return super.nameBadge() + ", I'm taking \"tutorial.tutorialName\""  
    }  
}
```

# Using Enumerations

```
let tutorialAttendee = CocoaConfTutorialAttendee (name: "Kim",  
                                                  hometown: "Shaker",  
                                                  tutorial: .AVFoundation)  
  
tutorialAttendee.nameBadge()  
tutorialAttendee.tutorial = .Swift  
tutorialAttendee.nameBadge()
```

# Associated Values

```
enum CocoaConfRegistrationType {  
    case Regular  
    case Tutorial(CocoaConfTutorial)  
}  
  
class CocoaConfAttendee {  
    let name: String  
    let hometown: String?  
    let registrationType = CocoaConfRegistrationType.Regular  
    // ...  
}
```

# Associated Values

```
enum CocoaConfRegistrationType {  
    case Regular  
    case Tutorial(CocoaConfTutorial)  
}  
  
class CocoaConfAttendee {  
    let name: String  
    let hometown: String?  
    let registrationType = CocoaConfRegistrationType.Regular  
    // ...  
}
```



# Associated Values

```
class CocoaConfTutorialAttendee: CocoaConfAttendee {  
    init(name: String, hometown: String, tutorial: CocoaConfTutorial) {  
        super.init(name: name, hometown: hometown)  
        registrationType = CocoaConfRegistrationType.Tutorial(tutorial)  
    }  
    override func nameBadge() -> String {  
        return super.nameBadge() + ", I'm taking \"tutorial.tutorialName\""  
    }  
}
```

# Associated Values

```
enum CocoaConfRegistrationType {  
    case Regular  
    case Tutorial(CocoaConfTutorial)  
  
    var tutorialName:String? {  
        switch self {  
            case .Tutorial(let tutorial):  
                return tutorial.tutorialName  
            default:  
                return nil  
        }  
    }  
}
```

# Associated Values

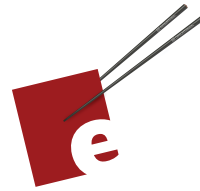
```
let tutorialAttendee = CocoaConfTutorialAttendee (name: "Kim",  
                                                    hometown: "Shaker",  
                                                    tutorial: .AVFoundation)  
tutorialAttendee.nameBadge()  
tutorialAttendee.registrationType = .Tutorial(.Swift)  
tutorialAttendee.nameBadge()
```

# Try this

- Continue with the example from the last section.
- Create an enumeration named `SizeOfCup` that has `Int` raw values for three different sizes.
- Create an `init` method for `HotBeverage` that takes a `SizeOfCup` and sets the amount to the raw value

# Try this

```
enum SizeOfCup: Int {  
    case Small = 8  
    case Medium = 12  
    case Large = 16  
}  
class HotBeverage: Beverage {  
    func sip() {  
        amount--  
        if isEmpty {  
            println("You're done")  
        }  
    }  
    init(sizeOfCup: SizeOfCup) {  
        super.init(amount: sizeOfCup.rawValue)  
    }  
}  
let coffee = HotBeverage(sizeOfCup: .Medium)  
for i in 1...8 {  
    coffee.sip()  
}
```



# A Swift Kickstart

DANIEL H STEINBERG



Introducing  
the Swift Programming Language

Editors Cut

<https://itunes.apple.com/us/book/a-swift-kickstart/id891801923?mt=11&uo=4&at=11156E>