
Mobile Development

Lesson 3 - Feb 2, 2016

Last week

- UIViewController
 - Some autolayout
 - UINavigationController
 - UITabBarController
 - Badges - and how to clear them
 - Custom App Icon
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Agenda

- Swift!
 - Variables
 - Loops
 - Conditionals
 - Functions
 - Interface Builder \longleftrightarrow Code
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Framework and Tools



Language and Programming paradigm

Variables

- Variables are building blocks
 - Change-able (var) or permanent value (let)
 - Transfer reference and value
 - Build higher level blocks like functions
-

Variables

```
let maximumNumberOfLoginAttempts = 10
```

```
var currentLoginAttempt = 0
```

```
var x = 0.0, y = 0.0, z = 0.0
```

```
let  $\pi$  = 3.14159
```

```
let 你好 = "你好世界"
```

Variables

```
var welcomeMessage: String
```

```
var names = ["Anna", "Alex",  
"Brian", "Jack"]
```

```
let numberOfLegs = ["spider": 8,  
"ant": 6, "cat": 4]
```

Loops

- What computers are good at!
 - (And humans get tired of)
 - Repeat
 - for a known number of times
 - until a condition is met (forever?)
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Loops

- For
 - For In
- While
 - Do/while

Conditionals

- Compare values/variables to drive conditional logic
 - if..else statements
 - Switch statements
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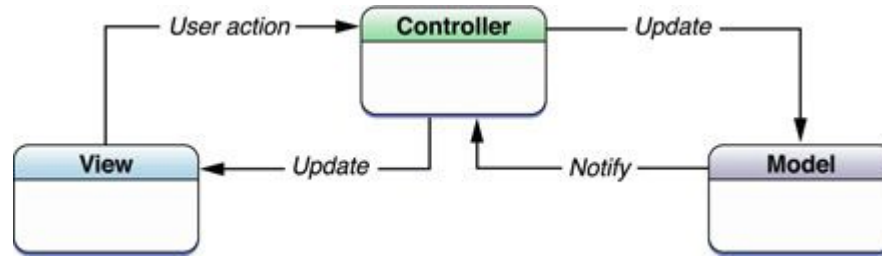
Functions

- Reusable blocks of code
 - Can be exposed at top level or within a class (called methods)
 - Usually has inputs and outputs
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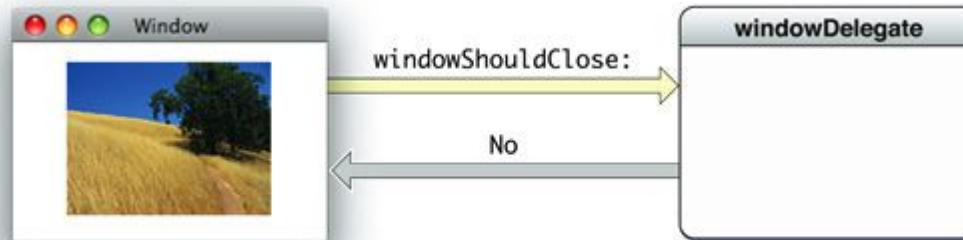
Interface Builder \longleftrightarrow Code

- IB lets you build the visual elements and control some of the flow
 - Need to write code to drive logic and behavior
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Model View Controller



Delegation



UIKit flow

