iPhone Dev.

Paul Solt

Agenda

- iPhone Developer University Program

- Xcode

- Objective-C Primer

- Demos

- Resources

- Questions

iPhone Developer University Program

- RIT is registered in the University Program

- Test and debug applications on devices

- Distribute applications

  - Internally

  - App Store

```objc
@synthesize direction;
@synthesize staticImage;
@synthesize activeImage;

- (id)initWithFrame:(CGRect)frame
    if (self = [super initWithFram
        // Initialization code
        NSLog(@"Init me");
    }
    return self;
}

- (void)setupStaticImage:(NSString
    self.staticImage = [self loadIm
    self.activeImage = [self loadIm
    self.image = self.staticImage;
}

// Load an image. It will display
- (UIImage *) loadImageName:(NSStr
    UIImage *image = [UIImage imageN
    if(!image) {
        NSLog(@"Error loading the
    }
    return image;
}

- (void)touchesBegan:(NSSet *)touc
    direction = CGPointMake(0.0);
```

Xcode

- Install the Xcode iPhone 3.1.2 SDK from **developer.apple.com/iphone**

  - Free to develop with the iPhone Simulator

- Interface Builder - GUI

- iPhone Simulator - "virtual iPhone"

- Instruments - Performance metrics tool

- Shark - Code profiling application

Objective-C Primer

- Bing "*The Objective-C 2.0 Programming Language*"

- Extension to C

- Garbage collection in 2.0

- Can mix C, C++, and Objective-C in a single file

- Compiled by **gcc** and debugged by **gdb**

Objective-C Primer

- Data types

  - **id** - a pointer to any object

  - **BOOL**

    - YES = 1

    - NO = 0

  - **IBOutlet** - macro, hint for Interface Builder

  - **IBAction** - same as *void*, hint for Interface Builder

  - **nil** - same as NULL

Objective-C Primer

- C++/Java

```java
public void increment(Object sender) {
    count++;
    textField.setIntValue(count);
}
```
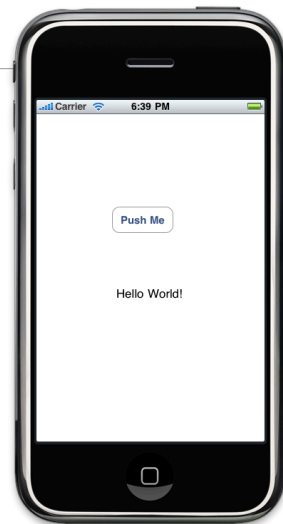
- Objective-C

```objc
- (void)increment:(id)sender
{
    count++;
    [textField setIntValue:count];
}
```

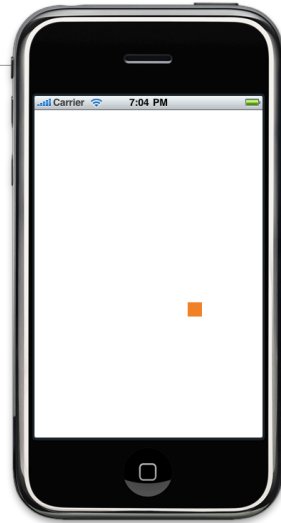## Demo: Hello World Pusher

- Learn

  - Objective-C code

    - UIButton

    - UILabel

  - Interface Builder

  - iPhone Simulator

Demo: Touch Input

- Learn

  - UIView

    - Touch input

    - Animation

  - iPhone Dev Debugging

Demo: Robot Remote Control
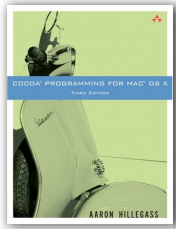
- Learn

  - Player/Stage Robotics

  - App Settings

  - Objective-C/C++ integration

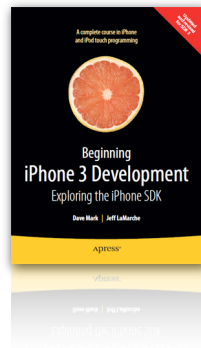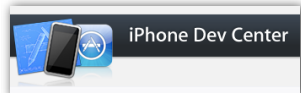 - Source available at **www.paulsolt.com**

Resources

- Cocoa Programming for Mac OS X by Aaron Hillegass (Third Edition)

- Stanford iPhone Course (cs193p.stanford.edu)

    - Search "*iPhone Application Programming*" in iTunes

Resources

- Beginning iPhone 3 Development: Exploring the iPhone SDK by Jeff LaMarche

    - Blog: **iphonedevelopment.blogspot.com**

- iPhone Dev Center

    - **developer.apple.com/iphone**

Questions