Beginning



Development

Christopher M. Judd

Judd Solutions

Christopher M. Judd

President/Consultant of Judd Solutions

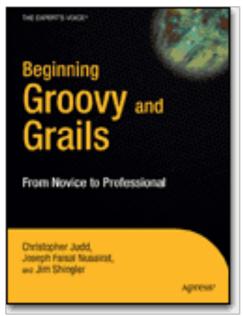


Central Ohio Java Users Group leader

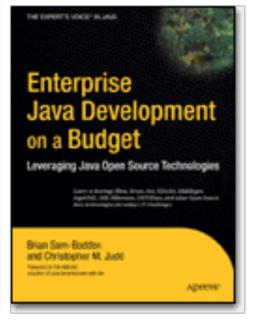
Columbus



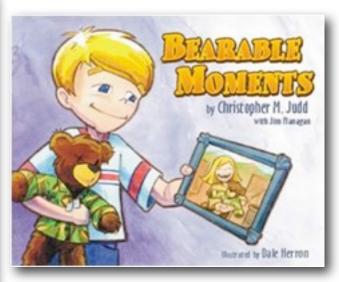
Developer User Group (CIDUG)



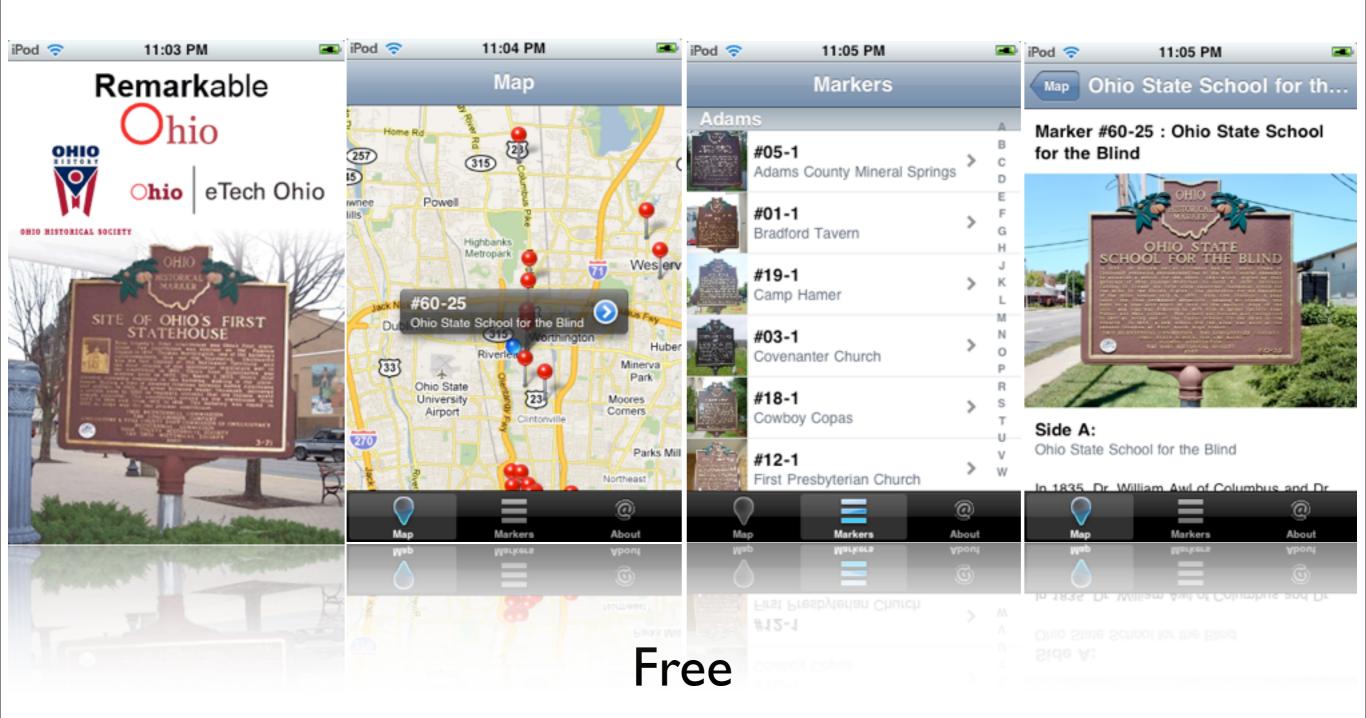








Remarkable Ohio



Developed for eTech Ohio and Ohio Historical Center

University System Of Ohio







Developed for eTech Ohio and University System Of Ohio



CALL FOR ENTRIES!! eTech Ohio is pleased to announce the eTech Ohio Mobile Apps Development Contest

The state of Ohio is seeking new apps that showcase Ohio and its unique talents and creativity! eTech Ohio encourages mobile applications developers, both new and experienced, to produce apps that will increase awareness and usage of mobile apps, both in and outside of the classroom. Full guidelines and forms are available online at: www.etech.ohio.gov/appscontest/.

Contact: Amy Estep, amy.estep@etech.ohio.gov, 877.383.2406

More Mobile Apps

- 8:00-8:45 02/01/2011
 Developing Apps for the iPhone, iPod Touch or iPad
- 10:45-11:30 02/01/2011
 Developing Apps for Android
- 3:45-4:40 02/01/2011
 Developing Android App with Google App Inventor

iOS Devices











Input

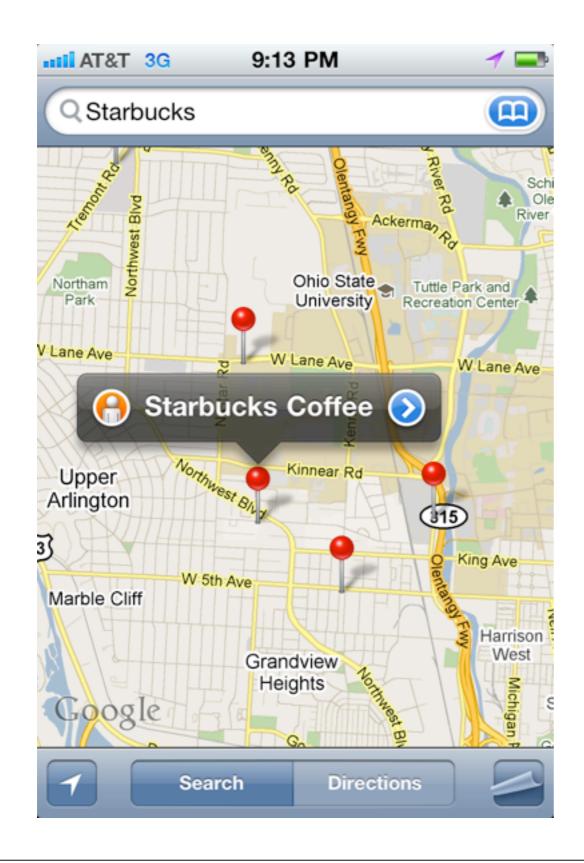


Multi-touch



Virtual Keyboard

Location Aware





Accelerometer/Gyroscope



Camera/Video



iPhone Development



VS



iPhone SDK





Advantages:

- Access native features

 - location awareness
 - 3D support
 - accelerometer (fine grain)
 - off-line access
- Performance
- SQLite database

Disadvantages:

- Must know Objective-C
- Need Mac and OSX Leopard
- Give up first born child in mountain of legal agreements
- Must have application approved and vetted before distribution in App Store
- Process is on Apple's timeline not yours

iPhone Developer Programs

- Developer
 - Free
 - Can not deploy to a device
- Standard Program
 - § \$99/year
 - Deploy to up to 100 Ad Hoc devices
 - Deploy to App Store
- Enterprise Program
 - § \$299/year
 - For developing internal application and deploying to company phones

What you need



Registration Process



Register for Standard Program



Read lots of boring legal documents



Wait



Prove who you are



Wait



Gain access to Program Portal for creating certificates

iPhone Web Development





Advantages:

- Develop with Server-side technology of choice
 - Java
 - Groovy/Grails
 - Ruby

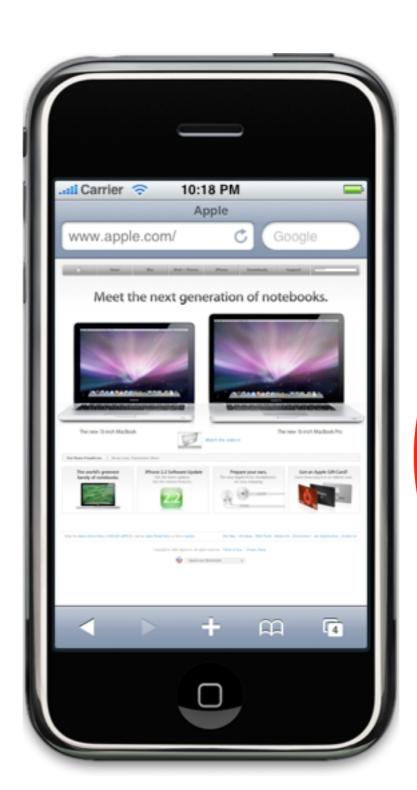
 - PHP
 - Perl
- Don't have to deal with syncing data with cloud
- Deployment and schedule is under your control
- Easier to deal with versioning

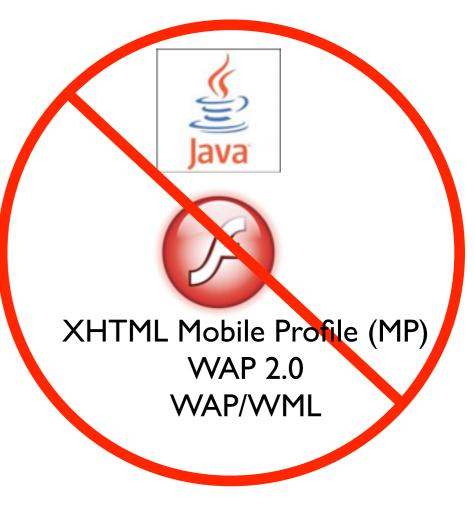
Disadvantages:

- Don't have access to native features
- Not as glamorous
- Network performance

Browser

HTML 4.01 & 5
XHTML 1.0
JavaScript 3
CSS 2.1 (partial 3.0)
DOM Level 2
AJAX (XMLHTTPrequest)





Mobile Safari (WebKit)

iPhone SDK



FREE!!!



http://developer.apple.com/ios/

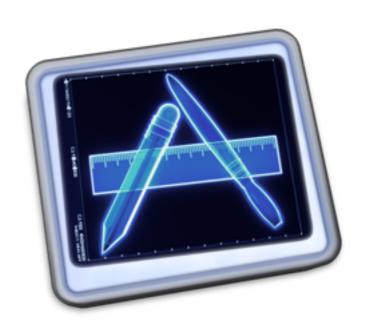




Interface Builder GUI Builder



Simulator iPhone Simulator



Instruments Profiler

MyWebBrowser Example

- Create project
- 2. Design interface M
- 3. Add component references 7

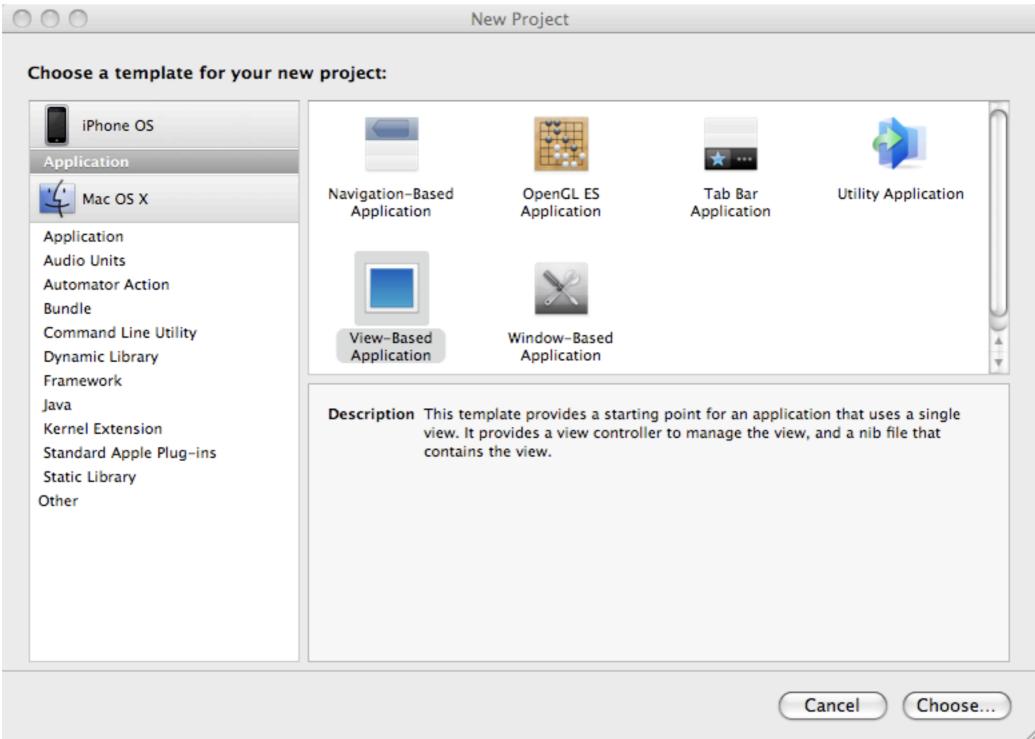


- 4. Add event handler
- 5. Connect components to references
- 6. Connect events to event handler
- 7. Implement even handler
- 8. Run application
- 9. Profile application

Create Project

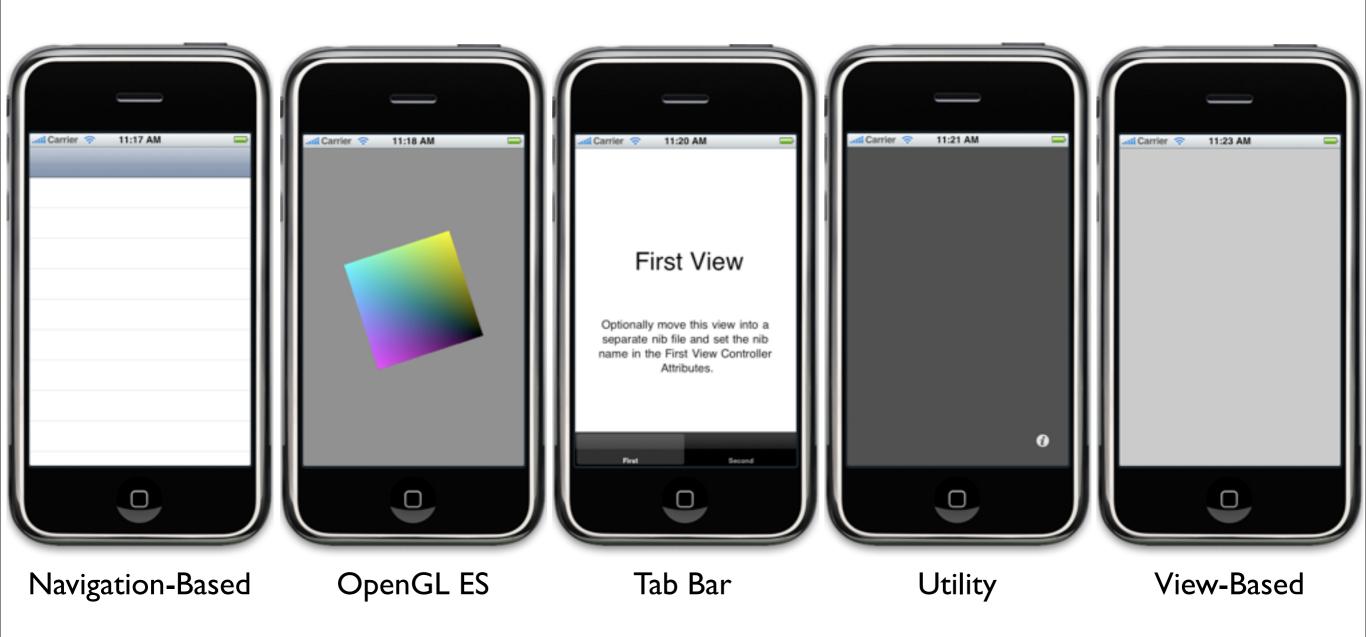


File > New Project > View-Based Application



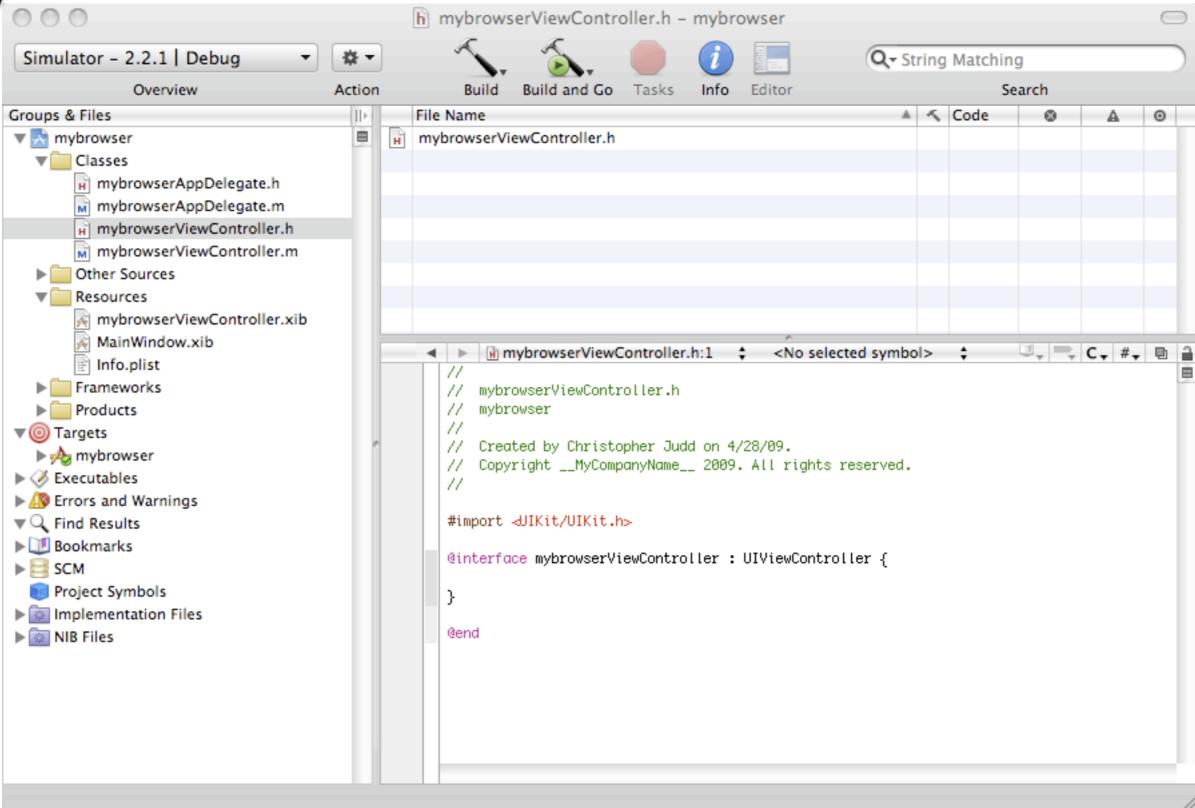


Application Templates



Window-Based is total generic

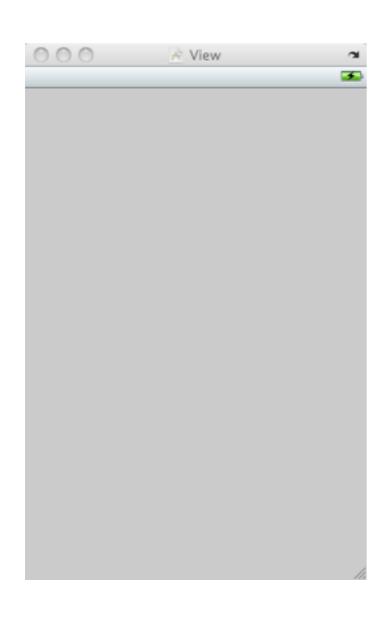


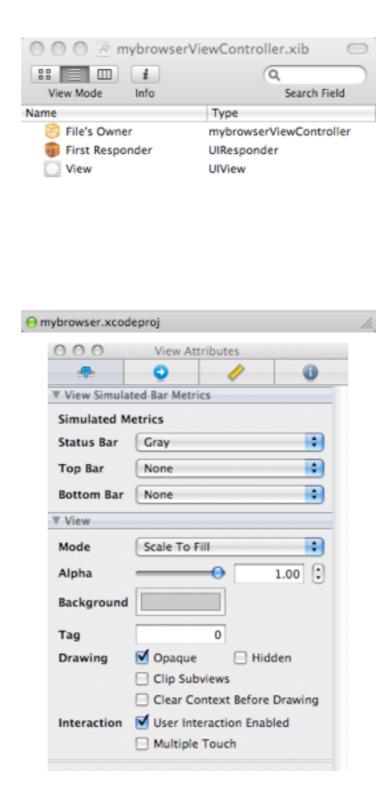


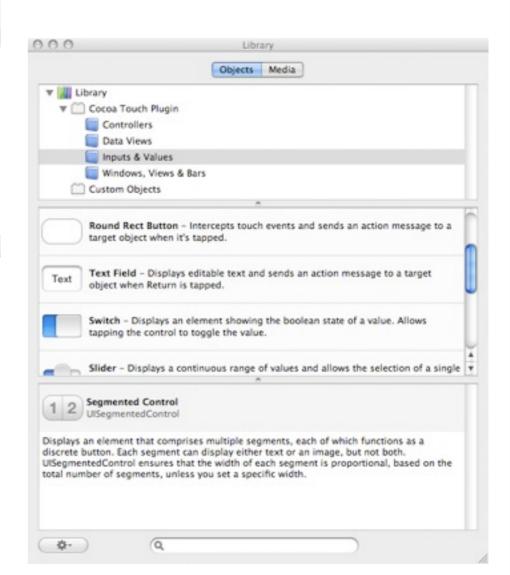


Double clicking *.xib opens







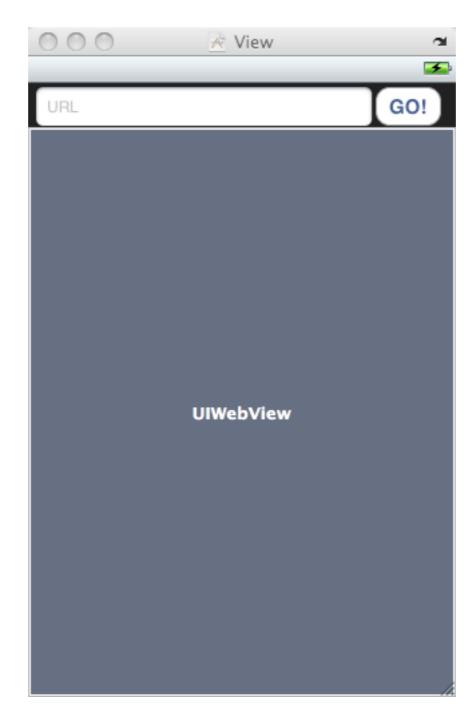




Design Interface

Text

Text Field Placeholder: URL



Rounded Rect Button Title: GO!



Web View



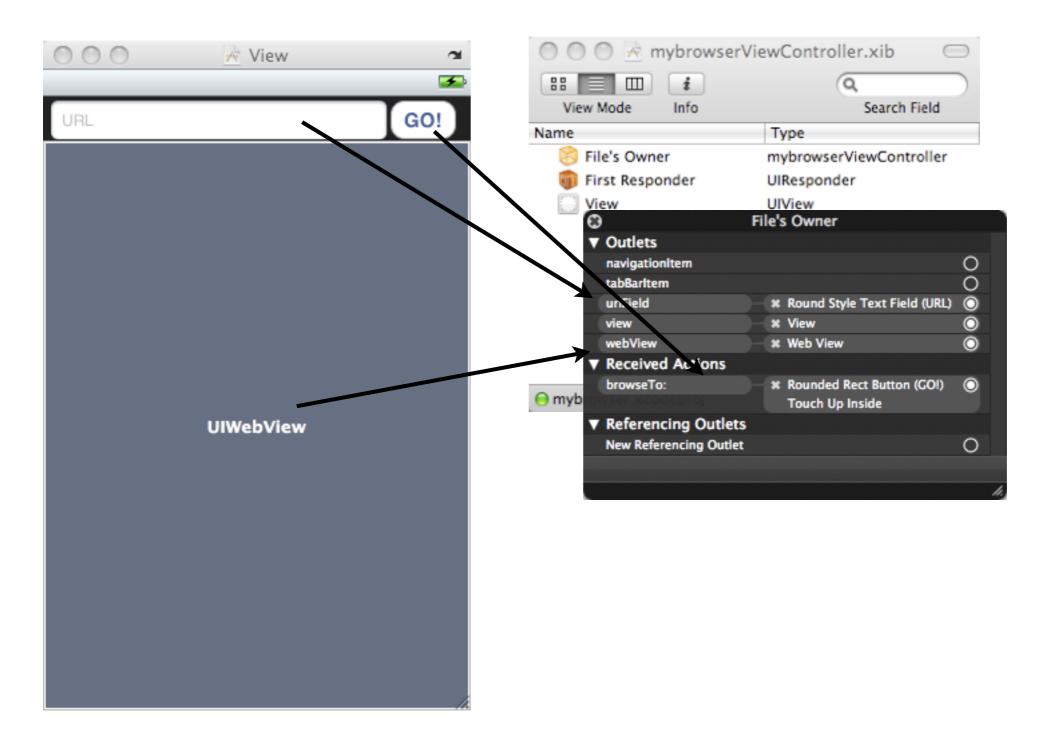
Add Component and Even Handler

*ViewController.h

```
#import <UIKit/UIKit.h>
@interface mybrowserViewController : UIViewController {
    IBOutlet UITextField *urlField;
    IBOutlet UIWebView *webView;
}
-(IBAction) browseTo: (id) sender;
@end
```



Connect Component and Even Handler



Right Click or Control Click and Drag



Implement Event Handler *ViewController.m

```
#import "mybrowserViewController.h"
@implementation mybrowserViewController
-(IBAction) browseTo: (id) sender {
  // hide keyboard
  [urlField resignFirstResponder];
  NSURL *url = [[NSURL alloc] initWithString:urlField.text];
  NSURLRequest *request = [[NSURLRequest alloc] initWithURL: url];
  [webView loadRequest:request];
  [request release];
  [url release];
- (void)didReceiveMemoryWarning {
    [super didReceiveMemoryWarning];
}
- (void)dealloc {
    [super dealloc];
}
@end
```



Run Application



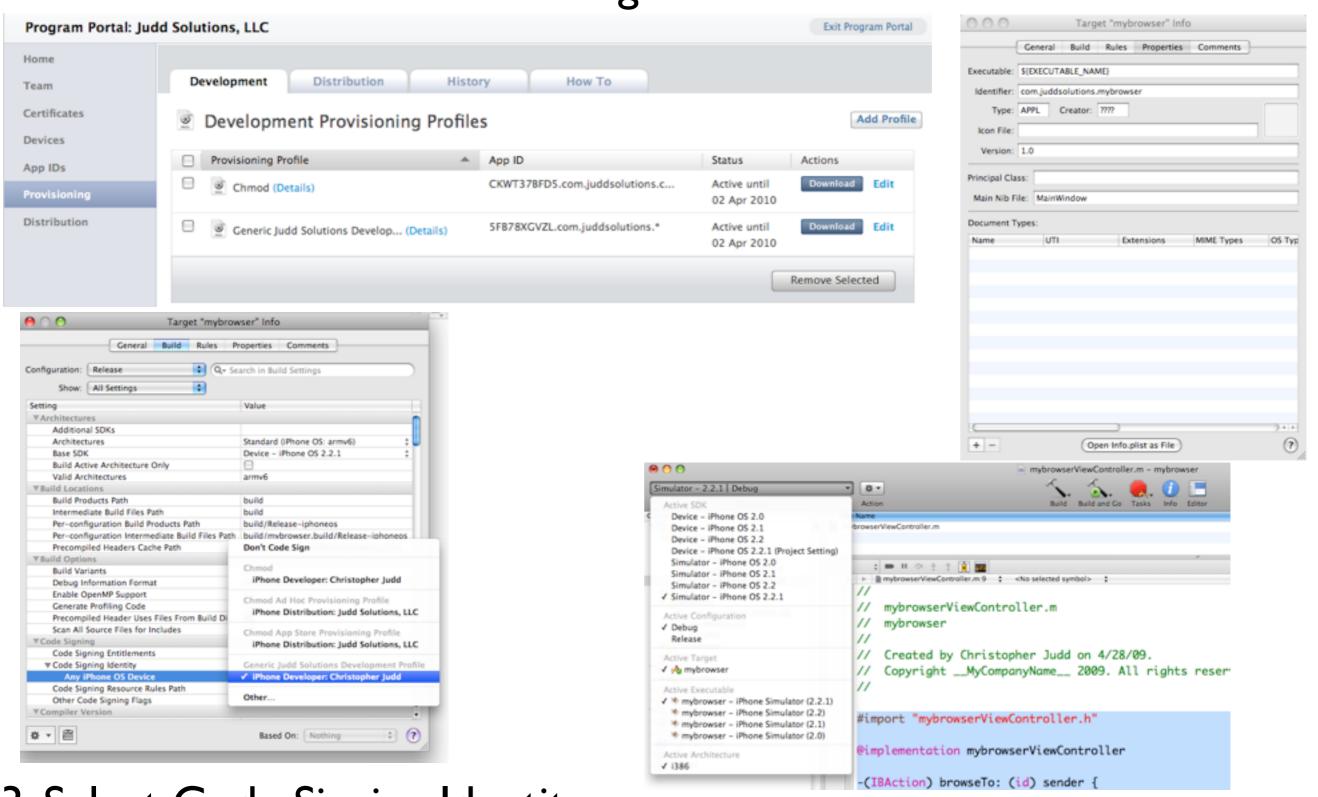




Run Application on Device

I. Create and Install Provisioning Profile

2. Set Executable Name

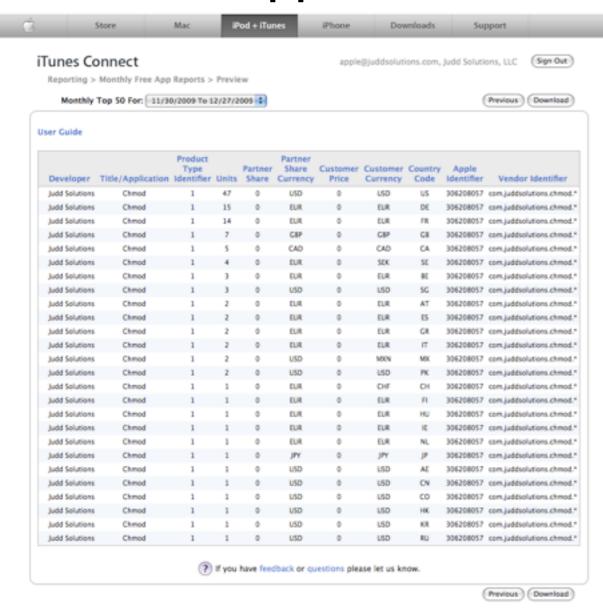


3. Select Code Signing Identity

4. Select Device

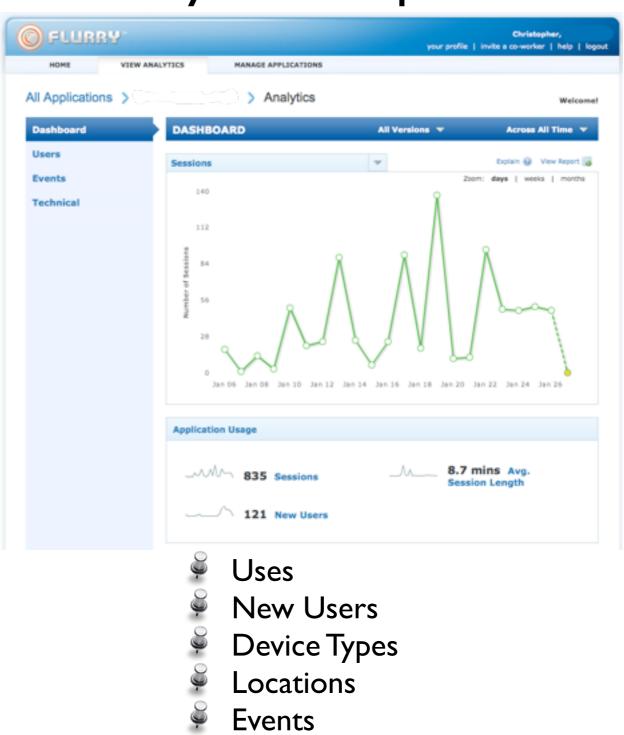
Analytics

Apple



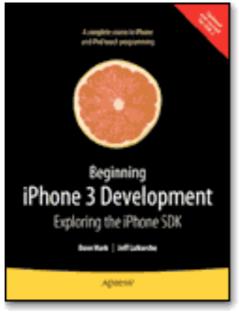
Downloads

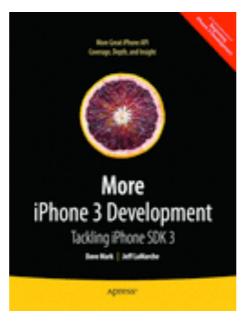
Analytic Companies

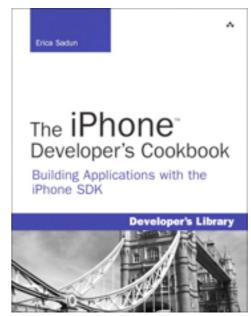


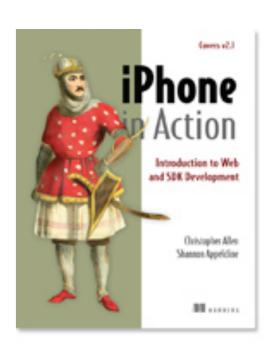
Resources

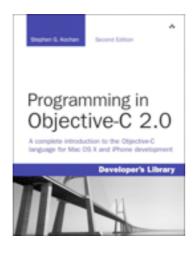


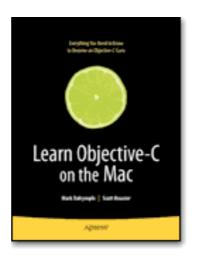












The Objective-C Programming Language





Open Source Frameworks

Three20 Framework - http://github.com/facebook/three20

kissxml - http://code.google.com/p/kissxml/

json framework - http://code.google.com/p/json-framework/



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