DEVELOPMENT BASICS

Xcode, Apple's IDE (integrated development environment)- a computer programing program

Jogr › iPhone Retina (4-inch 64-bit)   Build Jogr: Succeeded | Today at 1:06 PM   No Issues

Jogr › Jogr Source › Controller › RunViewController.m › M –timeStringForInterval: Counterparts › h RunViewController.h › M –timeStringForInterval:

```objc
- (id)initWithNibName:(NSString *)nibNameOrNil bundle:(NSBundle *)nibBundleOrNil
{
    if ((self = [super initWithNibName:nibNameOrNil bundle:nibBundleOrNil])) {
    }
    return self;
}

- (void)viewDidLoad
{
    [super viewDidLoad];
}

- (void)didReceiveMemoryWarning
{
    [super didReceiveMemoryWarning];
}

- (void)viewWillAppear:(BOOL)animated
{
    if (!_timer || _pause) {
        [self pauseOrRun:self];
    }
}

- (NSString *)timeStringForInterval:(NSTimeInterval)interval
{
    long hours = (long)interval / 60l;
    long minutes = ((long)interval / 60l) % 60l;
    long seconds = (long)interval % 60l;
    long hundredths = (long)(interval * 100.0) % 100l;

    return [NSString stringWithFormat:@"%02ld:%02ld:%02ld.%02ld", hours, minutes, seconds, hundredths];
}

- (void)updateTime
{
    if (_timer) {
        NSTimeInterval now = _pause ? _pause : [NSDate timeIntervalSinceReferenceDate];
        NSString *string = [self timeStringForInterval:now - _start];

        [_timeLabel setText:string];
    }
}

- (IBAction)pauseOrRun:(id)sender
{
    if (_start == 0) {
        _start = [NSDate timeIntervalSinceReferenceDate];
    }

    if (_timer == nil) {
        _pause = 0;
        _timer = [NSTimer scheduledTimerWithTimeInterval:0.025 target:self selector:@selector
            (updateTime) userInfo:nil repeats:YES];
        [_timer fire];
        [_pauseRunButton setTitle:@"Pause" forState:UIControlStateNormal];
    } else {
        _pause = [NSDate timeIntervalSinceReferenceDate];
        [_timer invalidate];
        _timer = nil;
        [_pauseRunButton setTitle:@"Continue" forState:UIControlStateNormal];
    }
}
```

```objc
//
//  RunViewController.h
//
//  Created by Johnny Appleseed on 5/22/13.
//  Copyright (c) 2013 Johnny Appleseed. All rights reserved.
//

#import <UIKit/UIKit.h>

/*! RunViewController controls the view of your recent jogs, times, and routes
 */
@interface RunViewController : UIViewController

@property (nonatomic,assign) NSTimeInterval start;
@property (nonatomic,assign) NSTimeInterval pause;
@property (nonatomic,strong) NSTimer *timer;

@property NSString *savedNameForThisJog;
@property NSString *nameOfRoute;

@property NSInteger lapsForThisJog;
@property NSTimeInterval lastRecordedTime;

/* Actions and outlets tied to UI elements in the Storyboard file
 */
@property (weak, nonatomic) IBOutlet UILabel *timeLabel;
@property (weak, nonatomic) IBOutlet UIButton *pauseRunButton;

/*! Start and stop the current run (toggle button action linked to Interface Builder Storyboard)
 */
- (IBAction)pauseOrRun:(id)sender;

/*! Directly updates the timeLabel property with the current time
 */
- (void)updateTime;


/*! Turns the interval spent jogging into a nicely formatted string
 *
 * \param interval is an NSTimeInterval - time of jog, measured in seconds
 * \returns formatted NSString showing how long you have been jogging in hours, minutes, seconds
 */
- (NSString *)timeStringForInterval:(NSTimeInterval)interval;


@end
```
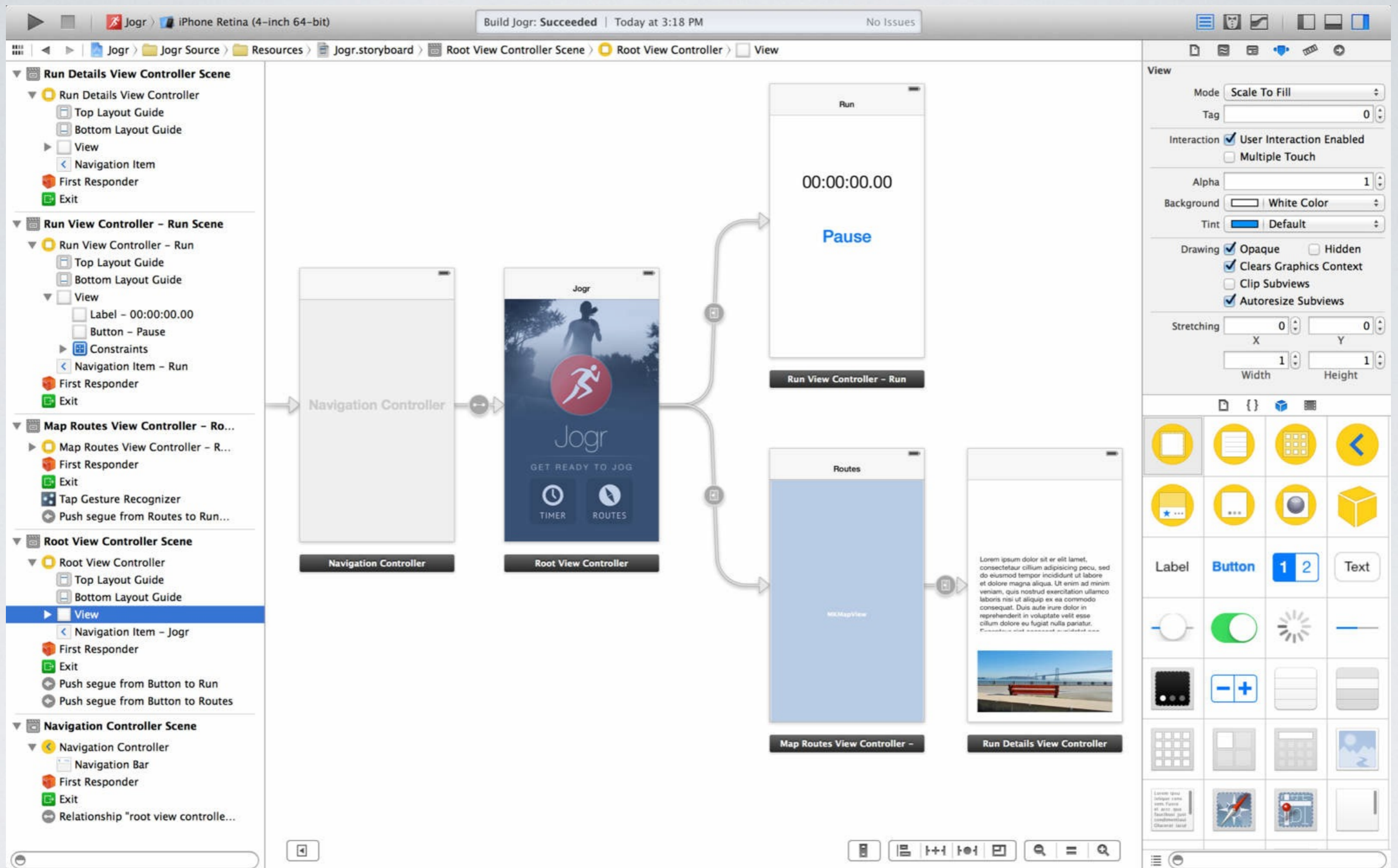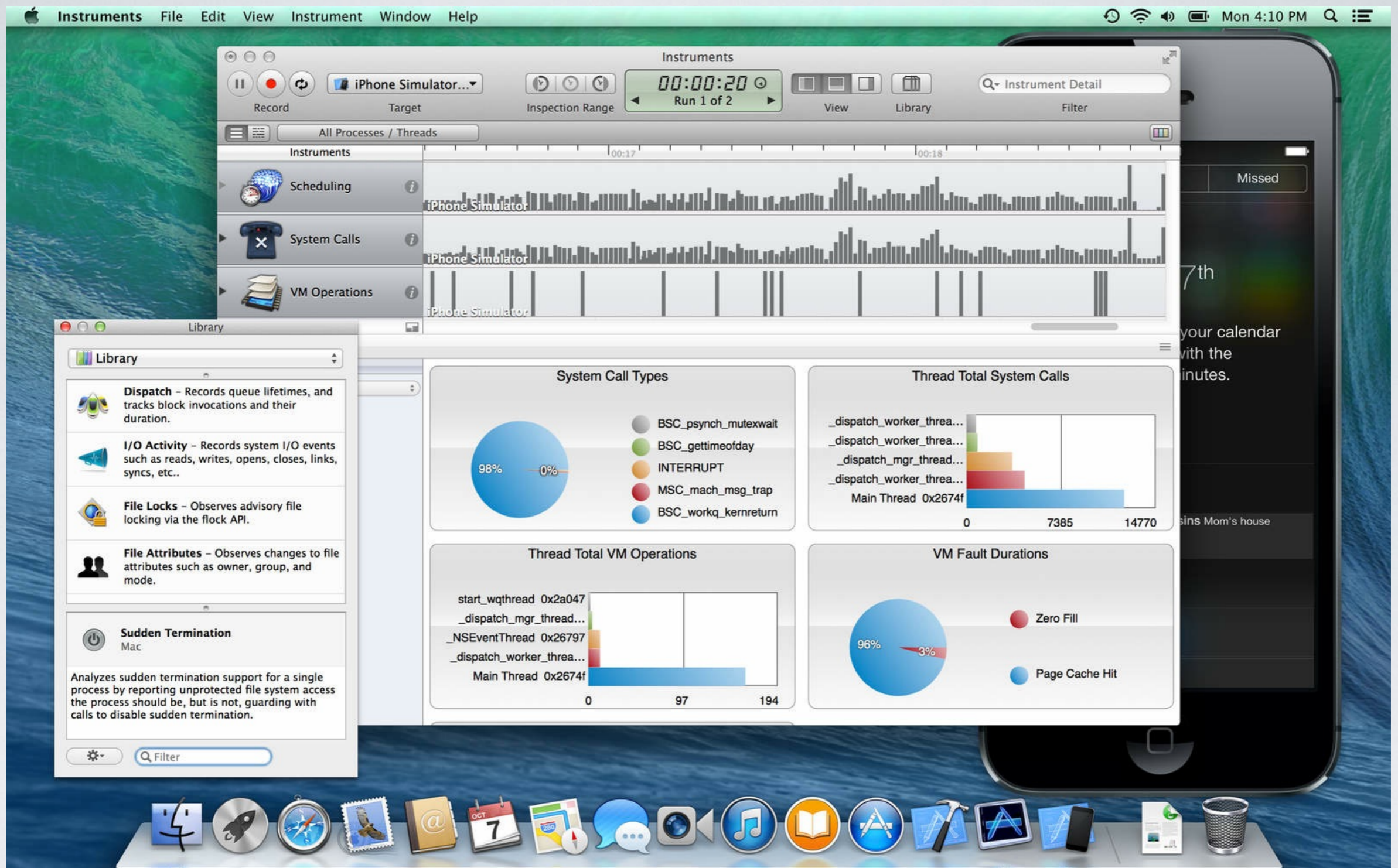
NSThread
NSTimeInterval
NSTimer
NSTimeZone
NSTimeZoneNameStyle
NSUbiquitousKeyValueStore
NSUInteger
NSUncaughtExceptionHandler
Used to specify a time interval, in seconds. More...
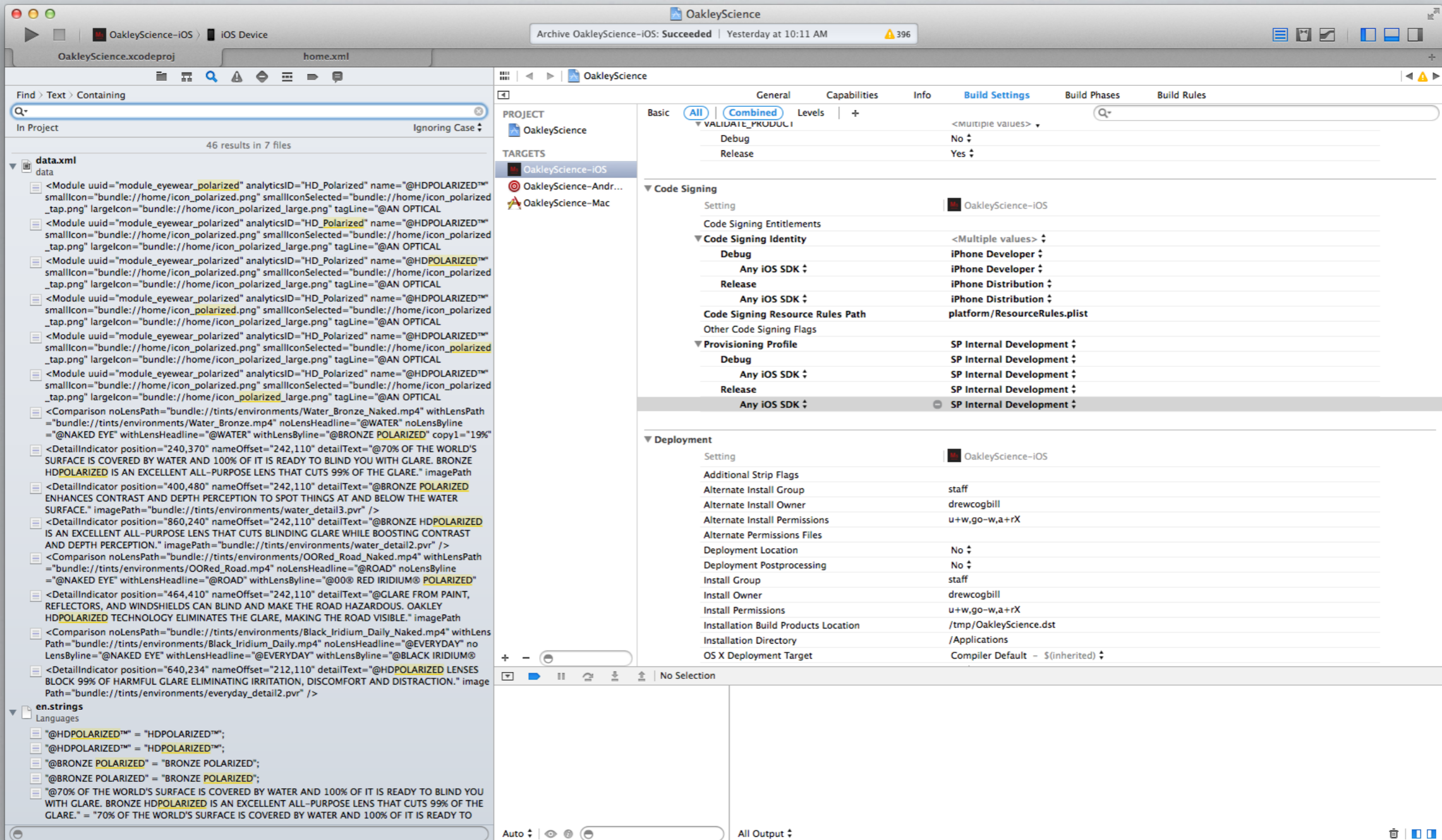
Objective-C

Interface Builder

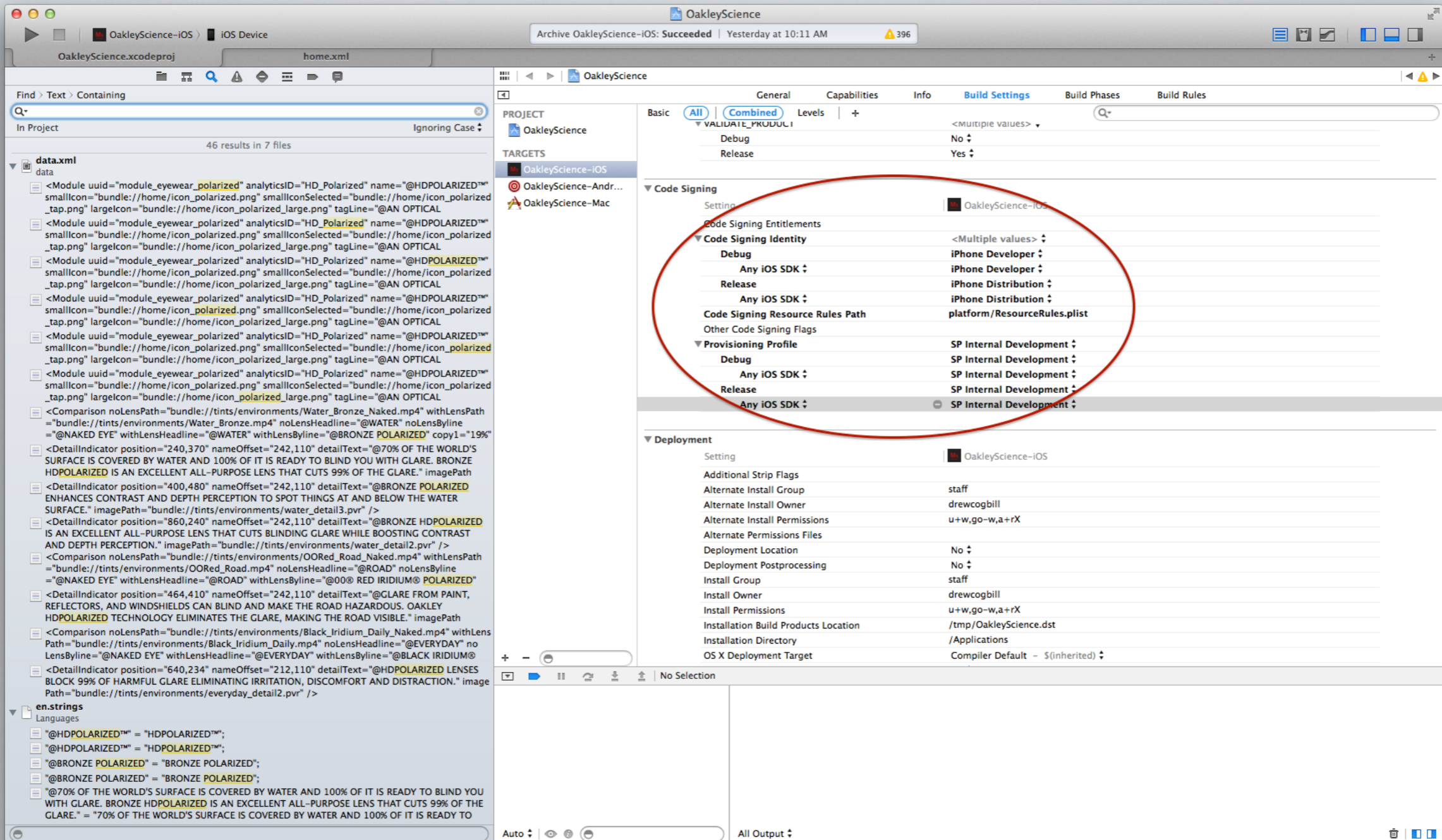Debugging, Instruments, building to simulators
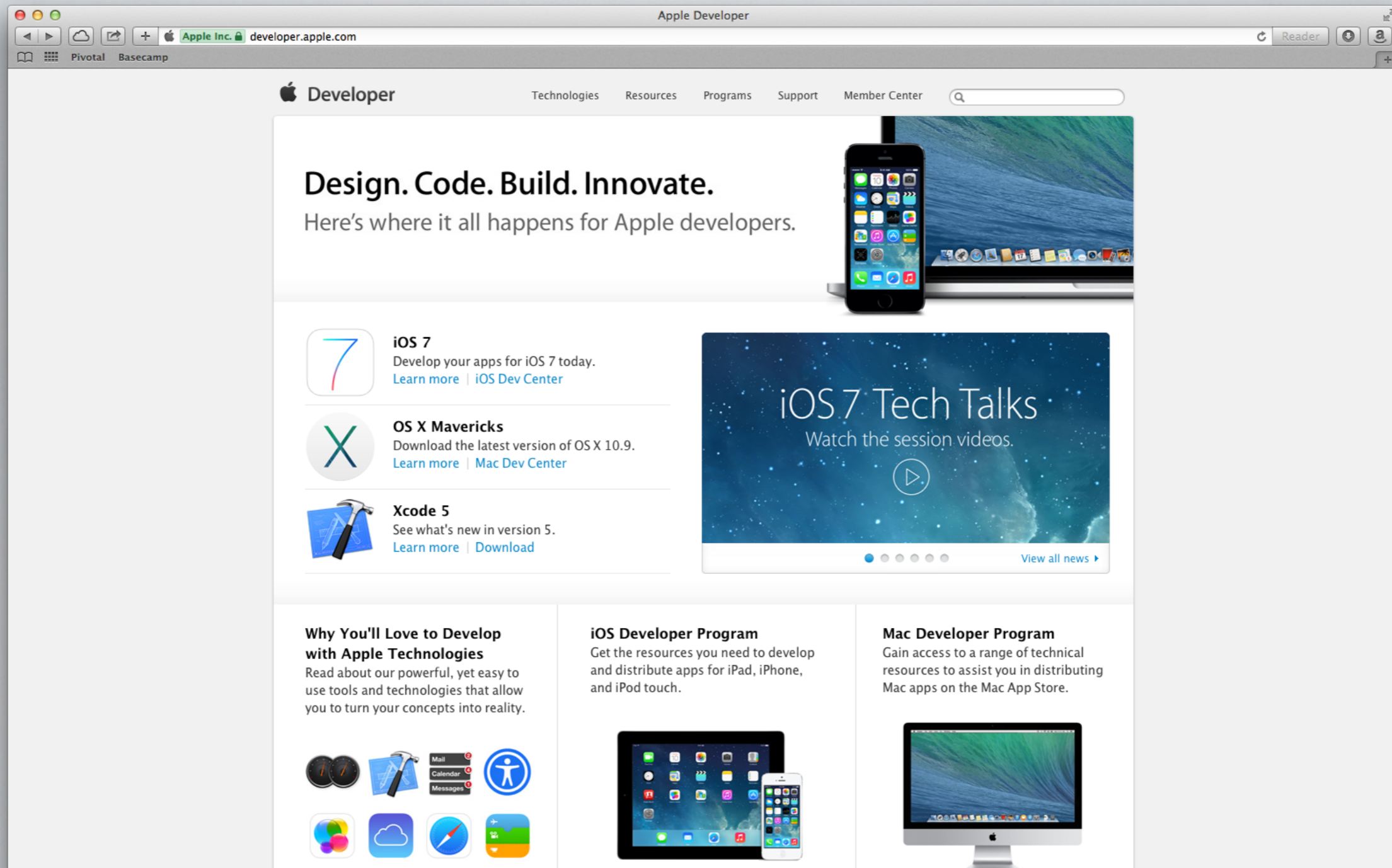
Just push play

Other useful bits: left column tabs, searching, errors/warnings

ALSO

- If your app connects to the internet, that's a whole other can of worms. You'll need a server and such.

Provisioning (the manual way)

http://developer.apple.com - free to register, $100 for a year to publish
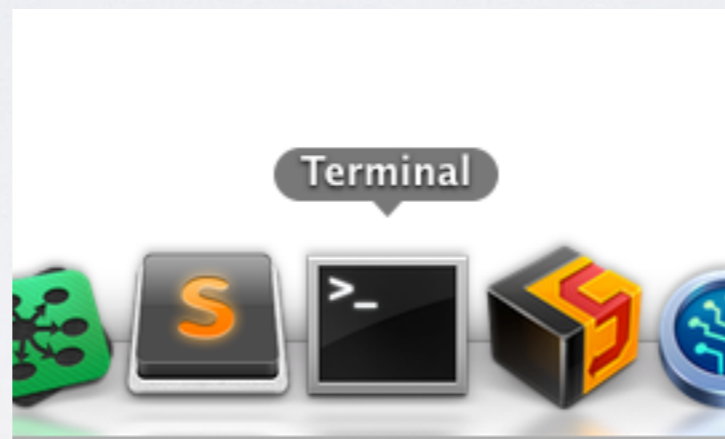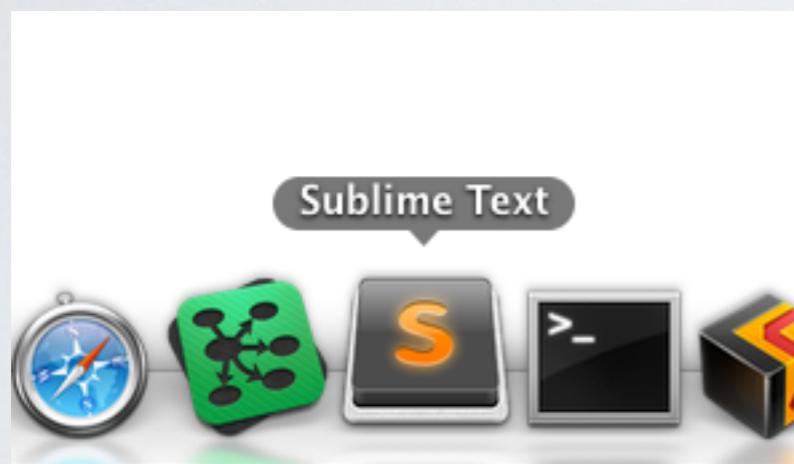
http://developer.apple.com
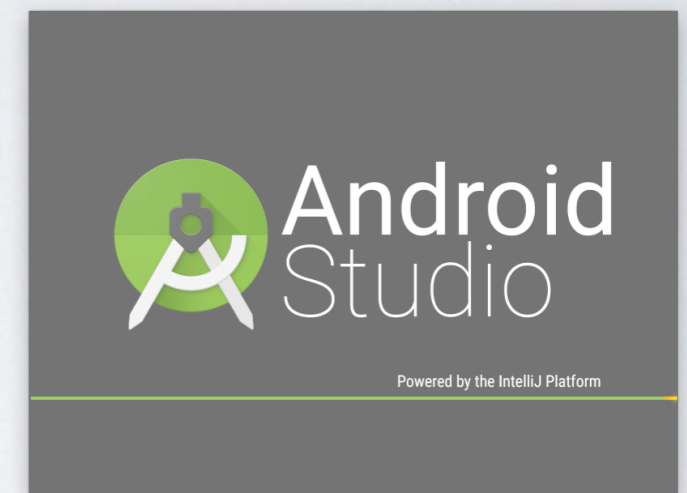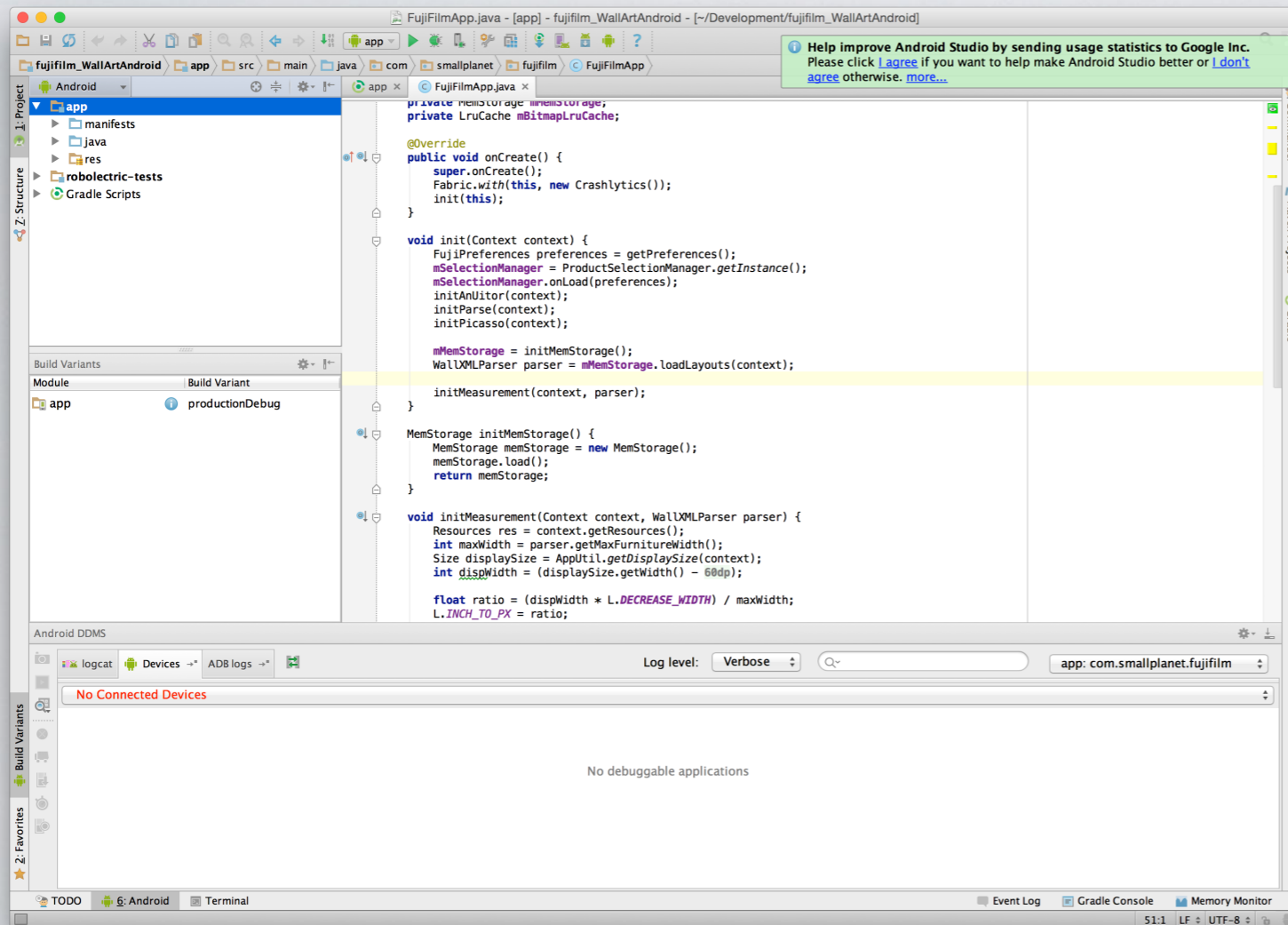
IOS PROVISIONING

- Key needed for

- Certificate needed for

- Profile (which allows certain devices to run a certain app)

- iOS apps are .ipa's

PROVISIONING

- Profiles can mostly be wildcarded * (unless they need IAP, data protection, etc.)

- All app store apps have a unique **bundle identifier** - e.g. com.appco.appyapp

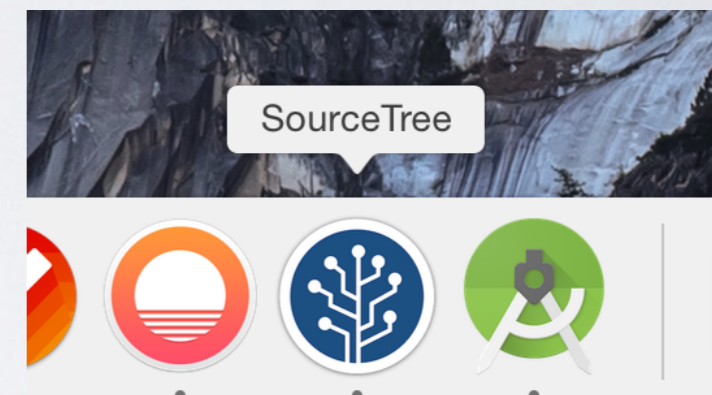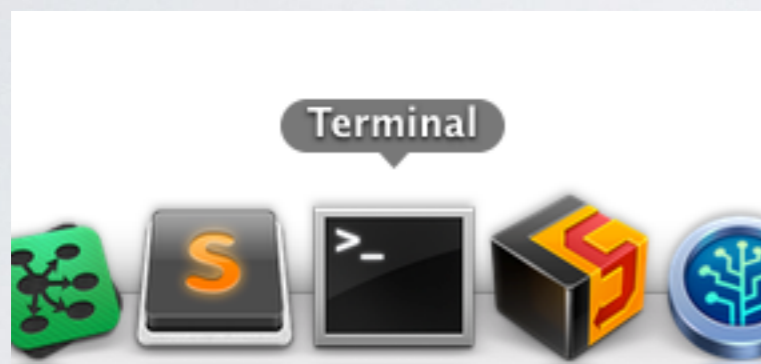# OTHER USEFUL THINGS
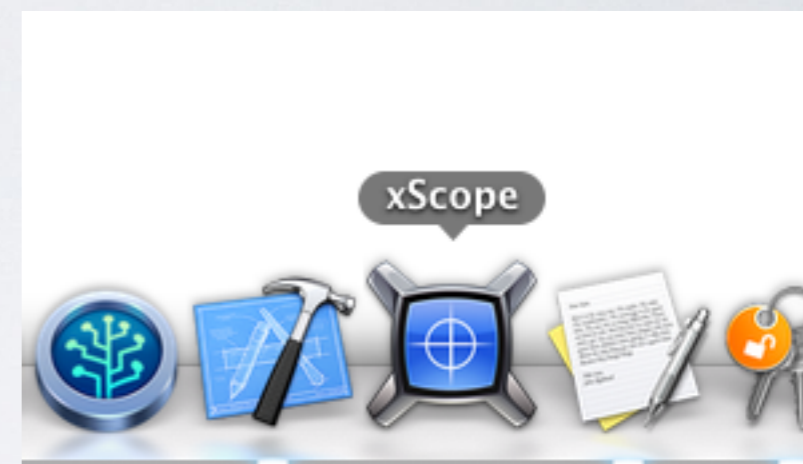
Android Studio

ANDROID PROVISIONING

- Anything anywhere!

- Android apps are generally .apk's (and .obb's)

SOURCE CONTROL

- Subversion (svn) - a centralized versioning system

- Git - a distributed versioning system (github)

SUGGESTED TOOLS

PROCESS: AGILE

- Individuals and interactions over processes and tools

- Working software over comprehensive documentation

- Customer collaboration over contract negotiation

- Responding to change over following a plan

PROCESS: AGILE

- Scrum

- Standups

- Scrum master, product owner/manager

- Pivotal Tracker

PROCESS: AGILE

- Recommended book: Agile Software Development with Scrum

- http://www.amazon.com/Agile-Software-Development-Scrum-Series/dp/0130676349/ref=sr_1_10?ie=UTF8&qid=1403314856&sr=8-10&keywords=scrum

ANALYTICS