Objective-C
Beginning iOS 5 Application Development

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#import <Foundation/Foundation.h>

int main(int argc, const char * argv[]) {
    @autoreleasepool {
        NSLog(@"Hello, World!");
    }
    return 0;
}

clang
clang -fobjc-arc main.m -framework Foundation
Xcode provides everything developers need to create great applications for Mac, iPhone, and iPad. Xcode 4 has been streamlined to help you write better apps. It has unified user interface design, coding, testing, and debugging all within a single window. The Xcode IDE analyzes the details of your project to identify mistakes in both syntax and logic, it can even help fix your code for you.

Xcode runs on OS X Lion and includes the Xcode IDE, Instruments, iOS Simulator, the latest Mac OS X and iOS SDKs, and hundreds of powerful features:

...
iOS Dev Center

Data Types

BOOL

did

nil

...
Foundation Data Types

NSInteger
NSPoint
NSRect
NSSize
NSSUInteger
...
...
@interface Foo: NSObject {
    // instance variables
}

// declarations of methods
@end
@implementation Foo

// definitions of methods
@end
Instance Variables

@protected
@private
@public
Class Methods

+alloc;
Student *student = [Student alloc];
Instance Methods

- (int)age;
- (void)setAge:(int)age;
- (void)init;
- (void)initWithName:(NSString *)name andAge:(int)age;
Messages

@student age;
@student setAge:20;
@student init;
@student initWithName:@"Alice" andAge:20;
Selectors

alloc
age
setAge:
init
initWithName:andAge:
@property

assign
copy
strong
weak

atomic
nonatomic

readonly
readwrite
@synthesize
Collections

NSArray
NSMuableArray

NSMutableDictionary

NSSet
NSMutableSet

...
Fast Enumeration

for (id foo in bar) {
    // do something with foo
}

to be continued...