

## Setting up the Development Environment for ECE150 (Macintosh Version)

1. Open Terminal. This can be found in Utilities under Applications. Proceed to step 2.
2. Type "g++". Press Enter.

If the output is "clang: error: no input file", you have the resources to compile and run C/C++. Proceed to step 5.

If the output is anything other than "clang: error: no input file", you do not have the resources to compile and run C/C++. Proceed to step 3.

3. When you type in "g++", it may prompt you to download Xcode developer tools. Do this and proceed to step 5.

It may output an error in which you can manually download Xcode (which installs all the required developer tools) from the App Store which is found under Applications. Proceed to step 6.

In less frequent cases, you may not be able to download Xcode or Xcode developer tools or you may **choose** not to install Xcode or its developer tools. In these cases, proceed to step 4.

4. Go to [Clang.llvm.org/get\\_started.html](http://Clang.llvm.org/get_started.html). Follow the steps under "On Unix-Like Systems", ignore optional steps. Proceed to step 5.

5. You will need an application to edit your program. You can choose your editor base on your personal preference. The editors recommended for this course is Xcode and Sublime.

Xcode is installed from the App store under Applications.

Sublime can be downloaded from <http://www.sublimetext.com/2>.

Proceed to step 6.

6. You have successfully installed the g++ compiler.

You will compile and run a basic Hello World application on windows in your lab. However, if you wish to do this with your mac as well, do the following:

1. Open the application you have chosen to write code in. Create a file with contents:

```
#include <stdio.h>

Int main(){

    printf("Hello World!\n");

}
```

2. Name the file HelloWorld.cpp. Save this file under desktop.
3. Open terminal.
4. Navigate to the directory where you saved HelloWorld.cpp. The current directory when you start terminal will be the root. Write the command 'ls'. Press enter. This will list everything in the root directory. Write 'cd Desktop' into terminal and press enter to change the current directory to the desktop.
5. Compile HelloWorld.cpp. Do this by writing "g++ HelloWorld.cpp -o HelloWorld".
6. This will create a program based off the code in the HelloWorld.cpp.
7. To run the program, write './HelloWorld'.
8. You are done. The program should run in terminal.

If you are still having troubles, please ask the TAs during your lab session or come to E2-1309E.