

History and Use of C++

The name of the language I will be focusing on is C++. It was originally created by a Danish computer scientist named Bjarne Stroustrup, who was inspired by his issues scaling the computer language Simula during his work on his Ph.D thesis^{1,2}. C++, which was originally called C with Classes, can now be found in a large variety of situations, including in building modern operating systems and many other interfaces including in medical technology and video games³. There are many websites and online resources that can assist with learning C++. The list of sources at the bottom of this page shows the ones I have found and referenced so far.

Steps To Install C++ in VSCode

To install C++, I chose to use the VSCode programming environment. This is for several reasons. First, I have used VSCode to program other languages and feel comfortable navigating the interface. Second, there are several resources available online that detail how to install and use C++ on VSCode. The resources I used were first, an article by VSCode, “C/C++ for Visual Studio Code”⁶ through which I first downloaded an extension on VSCode labeled “C/C++”. Because I have a Mac, I also installed Clang using the terminal, following the instructions from a youtube video⁵. From there, I also installed an additional VSCode extension called Code Runner. Finally, to complete installation, you must go to the VSCode settings and search for “Run Code Configuration”⁵. There, make sure the boxes for “Run In Terminal,” and “Save File Before Run” are selected. With this, you are ready to run your code.

To Run Code in C++ in VSCode

There are two ways I found to run C++ code in VSCode. First, my preferred way is to select the run (triangle/play) button at the top of the screen and from the drop down menu of options, select “Run Code”. This allows you to view any output in the terminal. Secondly, you can view output in the debug console, if you select “Run C/C++ file” and then select the option labeled “C/C++ : g++ build and debug active file”.

To Comment In C++ in VSCode

The two ways to comment in C++ are first, for a single line, “//”. For a multiline comment “/* ... */”.

SOURCES:

1. <https://cplusplus.com/info/history/>
2. <https://www.perforce.com/blog/qac/misra-cpp-history>
3. <https://www.codecademy.com/resources/blog/what-is-c-plus-plus-used-for/>
4. https://www.codecademy.com/learn/learn-c-plus-plus?utm_source=ccblog&utm_medium=ccblog&utm_campaign=ccblog&utm_content=what_is_c_plus_plus_used_for_blog
5. <https://www.youtube.com/watch?v=Qw5qjRNIC-Y>
6. <https://code.visualstudio.com/docs/languages/cpp>