

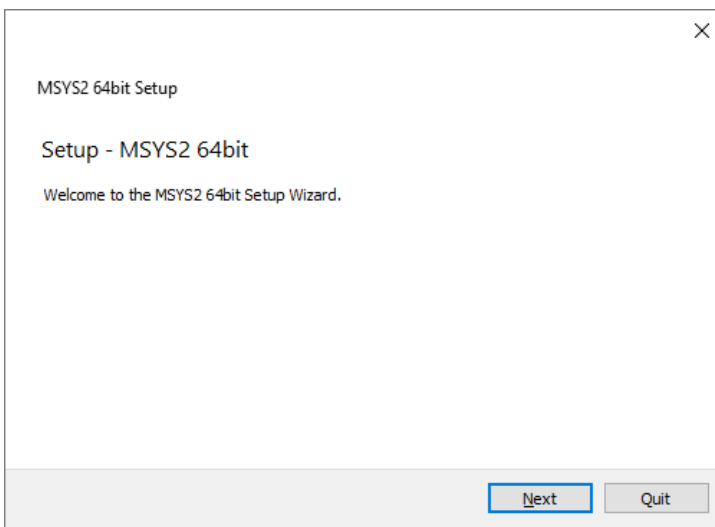
Installing CLion on a 64-bit Windows-10 PC for use in CS2201 & CS3251

Step 1: Install MSYS2

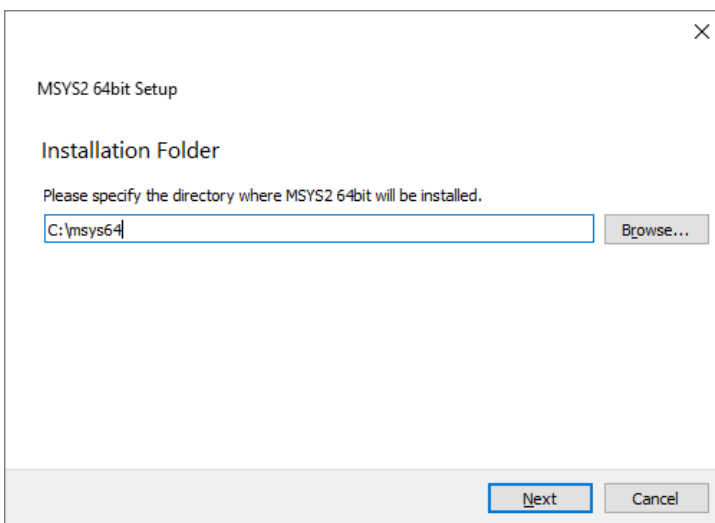
Note: during the installation of MSYS2, you must have Internet access as the installer will be downloading files during the installation process.

The website for MSYS2 is at <https://msys2.github.io/>

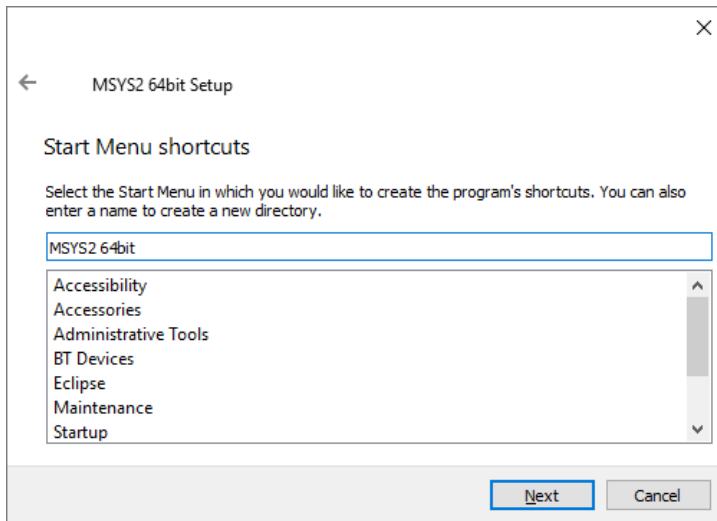
From the homepage, download the 64-bit installer (the .exe file that starts with "msys2-x86_64") and run it. Press "Next" on the welcome screen.



For the installation folder, keep the default folder (should be c:\msys64) and press "Next".



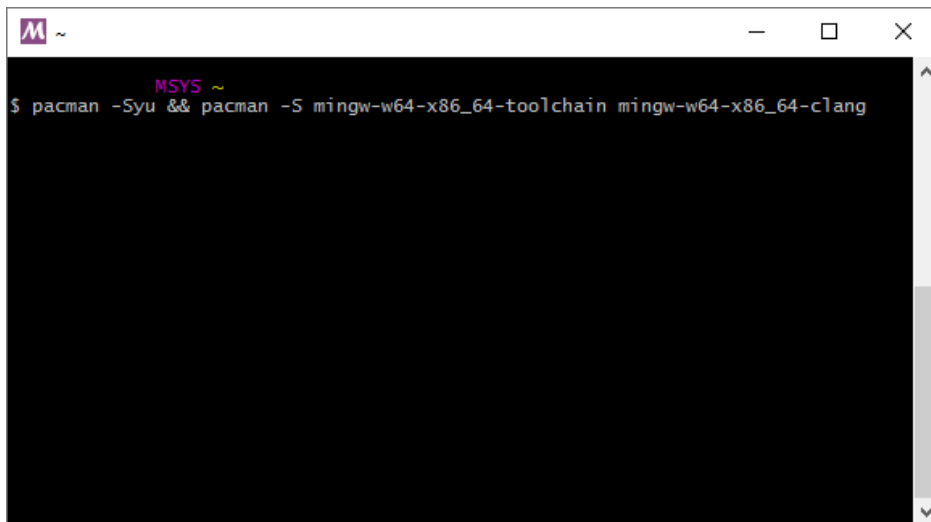
For the program shortcut, keep the default name (should be "MSYS 64bit") and press "Next".



Make sure "Run MSYS2 64bit now" is checked and press "Finish". Once MSYS2 has been installed, a command prompt window will be displayed. Type the following command and press "Enter".

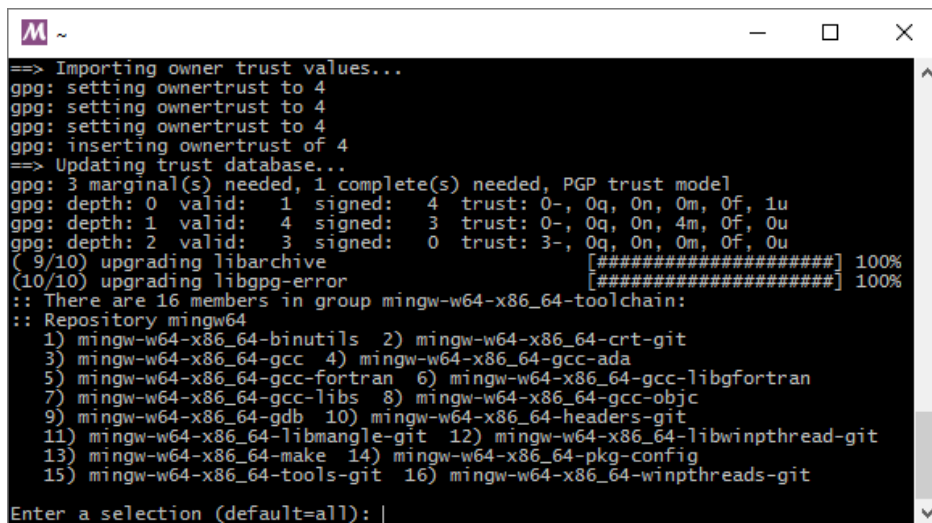
```
pacman -Syu && pacman -S mingw-w64-x86_64-toolchain mingw-w64-x86_64-clang
```

Note: you may copy the command above, but to paste it into the command prompt, right click on the command prompt window and select "Paste".



If asked to "Proceed with installation? [Y/n]", type "y" and press "Enter".

When asked to "Enter a selection", press "Enter" to select all.



```
==> Importing owner trust values...
gpg: setting ownertrust to 4
gpg: setting ownertrust to 4
gpg: setting ownertrust to 4
gpg: inserting ownertrust of 4
==> Updating trust database...
gpg: 3 marginal(s) needed, 1 complete(s) needed, PGP trust model
gpg: depth: 0 valid: 1 signed: 4 trust: 0-, 0q, 0n, 0m, 0f, 1u
gpg: depth: 1 valid: 4 signed: 3 trust: 0-, 0q, 0n, 4m, 0f, 0u
gpg: depth: 2 valid: 3 signed: 0 trust: 3-, 0q, 0n, 0m, 0f, 0u
( 9/10) upgrading libarchive [#####] 100%
(10/10) upgrading libgpg-error [#####] 100%
:: There are 16 members in group mingw-w64-x86_64-toolchain:
:: Repository mingw64
1) mingw-w64-x86_64-binutils 2) mingw-w64-x86_64-crt-git
3) mingw-w64-x86_64-gcc 4) mingw-w64-x86_64-gcc-ada
5) mingw-w64-x86_64-gcc-fortran 6) mingw-w64-x86_64-gcc-libgfortran
7) mingw-w64-x86_64-gcc-libs 8) mingw-w64-x86_64-gcc-objc
9) mingw-w64-x86_64-gdb 10) mingw-w64-x86_64-headers-git
11) mingw-w64-x86_64-libmangle-git 12) mingw-w64-x86_64-libwinpthread-git
13) mingw-w64-x86_64-make 14) mingw-w64-x86_64-pkg-config
15) mingw-w64-x86_64-tools-git 16) mingw-w64-x86_64-winpthreads-git
Enter a selection (default=all): |
```

When the installation of the MinGW toolchain and Clang is complete, type "exit" and press "Enter".

Step 2: Install CLion

The website for JetBrains is at <https://www.jetbrains.com/>

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Visit the CLion web site and click on the "Buy" button near top-right.

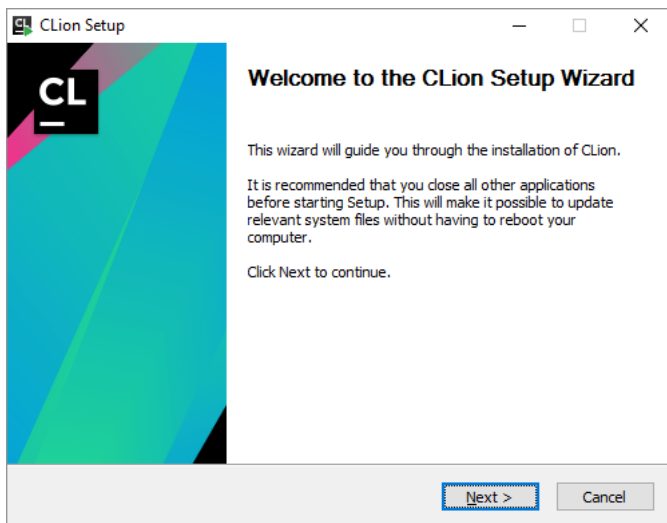
On the Subscription page, click on the tab titled "Discounted and Complimentary Licenses".

Click on the link for "Students and Teachers". On the Student page, scroll down and click on the "Apply Now" button. Apply for a license using your Vanderbilt email address. You must use your Vanderbilt email address to receive the free license. You will receive a confirmation email. Click on the "Confirm Request" link in the email you received. Follow any instructions on the page you visit. As you go through this process, be sure to make notes of your user name, password, license id, and your activation code.

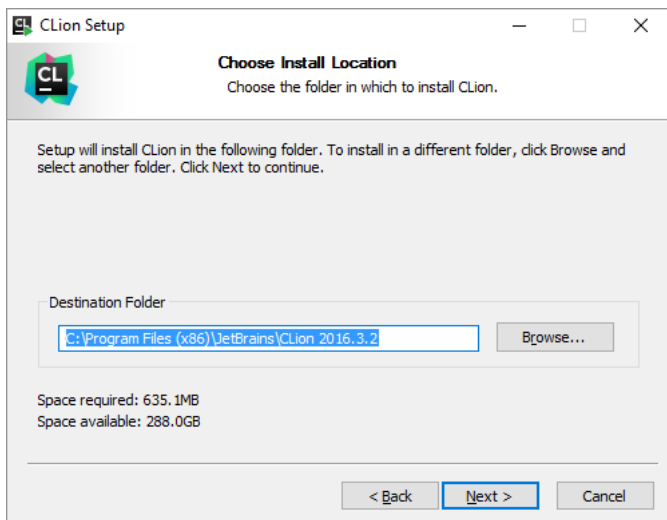
You will receive another email confirming your student license. Click on the provided link in the email to activate your educational license and save your activation code. On this page there are links to download various products. Click on the CLion link which will take you back to the CLion home page.

Now click on the "Download" button near the top-right. On the Download page, download the Windows version of CLion and save the installer to your computer.

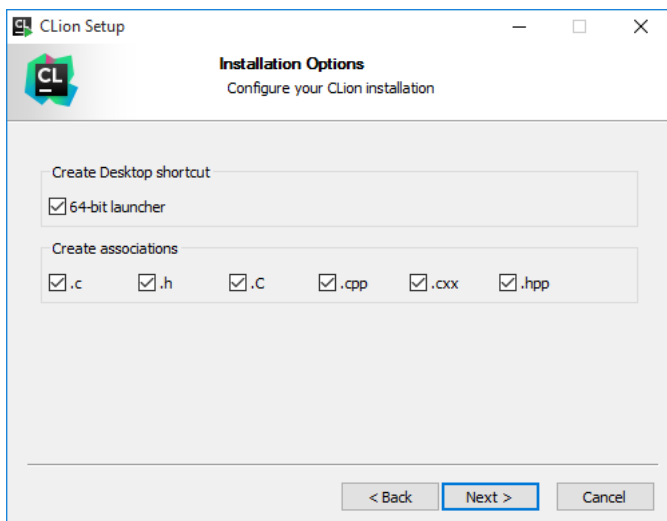
Now, run the CLion installer you just saved. Press "Next" on the welcome screen.



Accept the default installation location by pressing "Next".

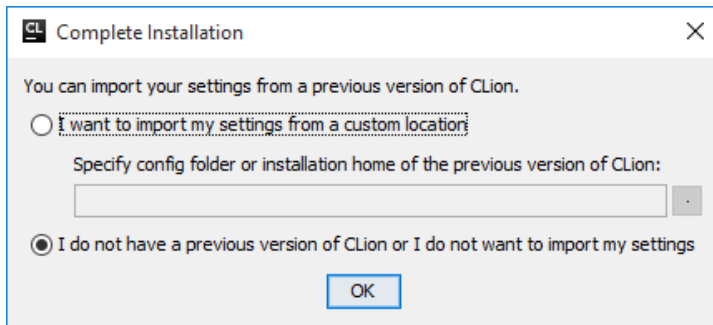


For the installation options, create a desktop shortcut and associate all the related file extensions with CLion, and press "Next".

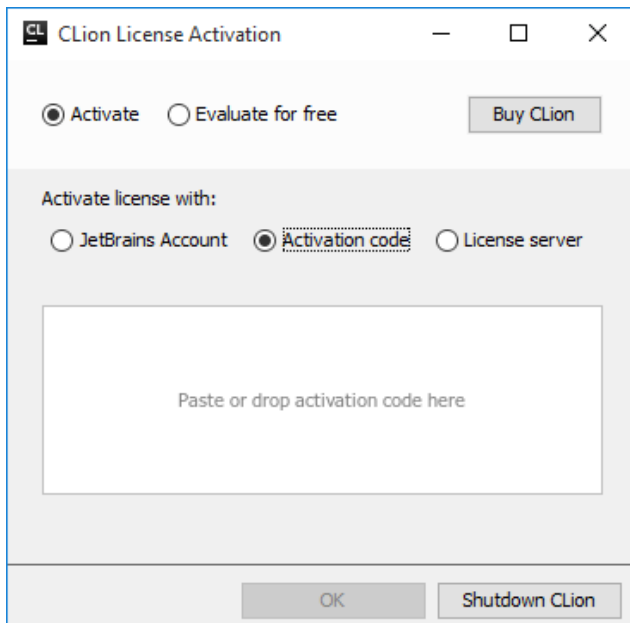


Accept the default Start Menu folder by pressing Install. When the install has completed, check the "Run CLion" box and press "Finish".

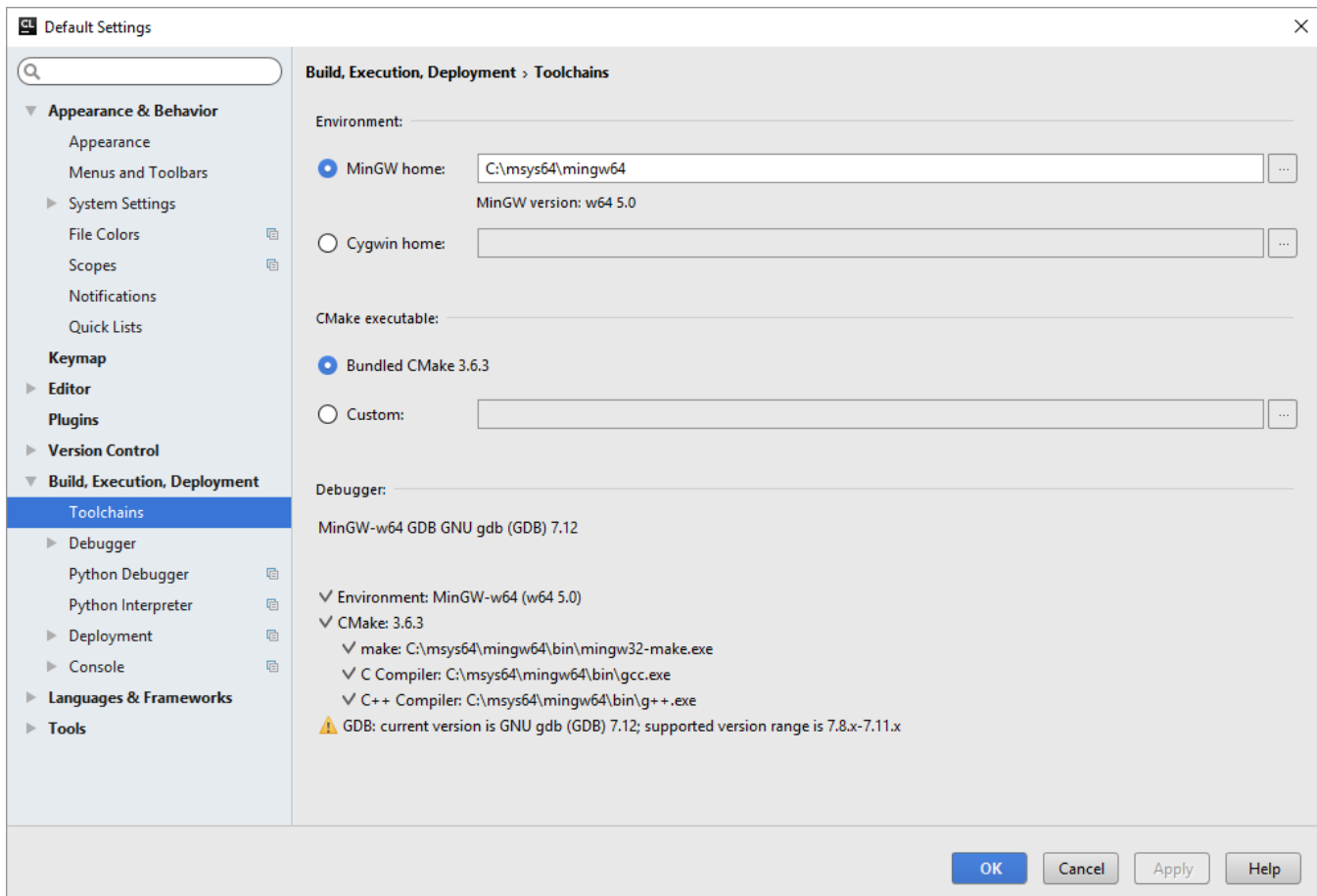
When starting CLion for the first time, you will be greeted with this installation dialogue. Specify that you do not have a previous version of CLion and press "OK".



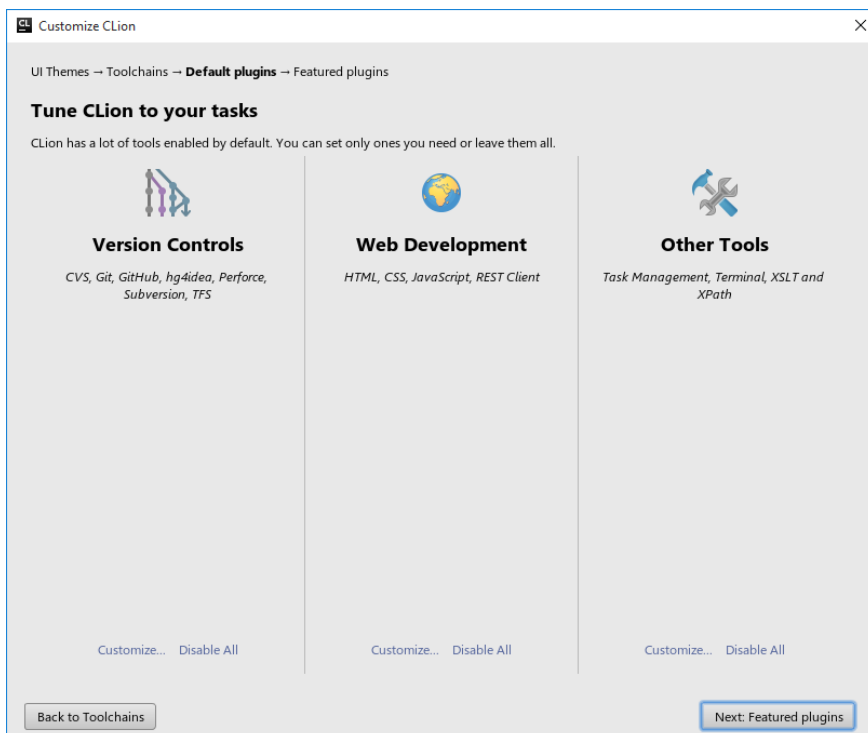
You will then be presented with the following License Activation dialogue. Check the "Activation code" button and copy-n-paste your activation code that you saved into the text box, and press "OK".



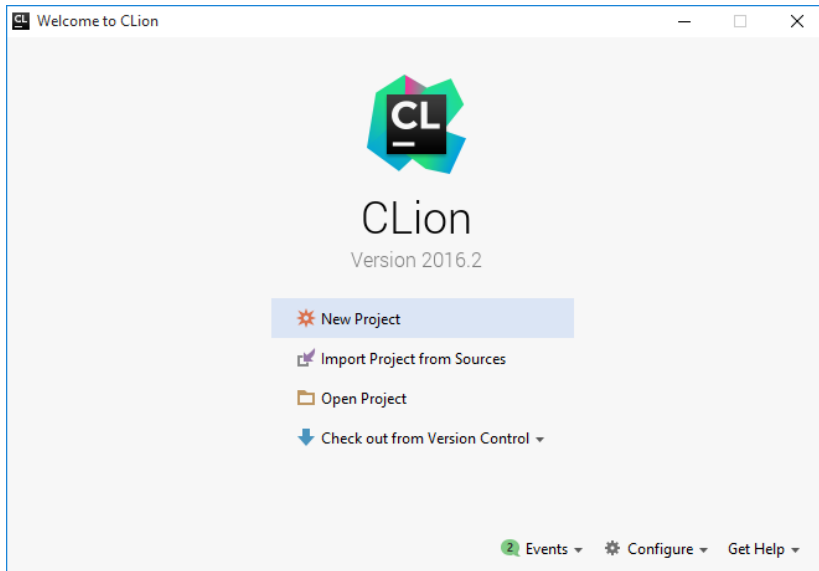
You next can select your desired user interface theme, and then click "Next: Toolchains". Press on the three dots to the right of "MinGW home". Browse to the root folder of the MSYS2 installation (c:\msys64\mingw64). Press "Next Default Plugins".



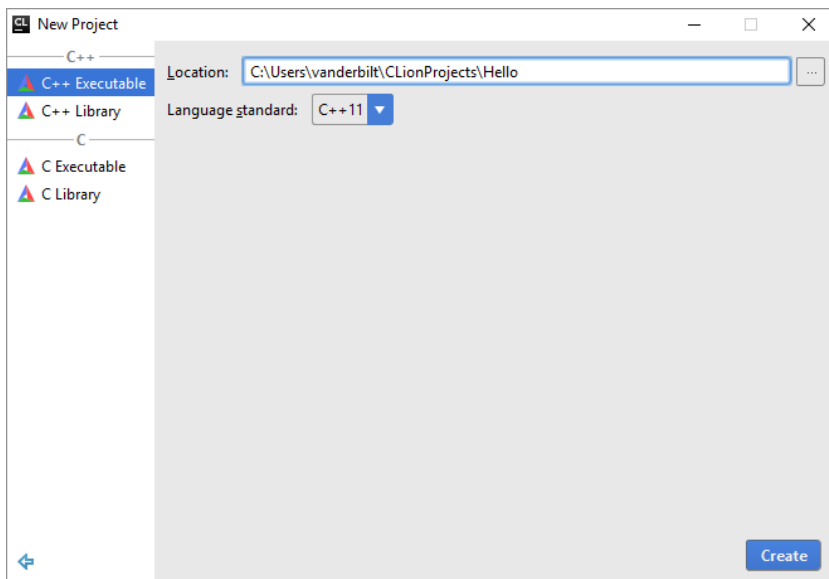
We will accept the default plugins, so simply click on "Next: Featured plugins".



We do not plan to use any featured plugins, so simply click on "Start using CLion". And you will be presented with the CLion start-up dialogue.

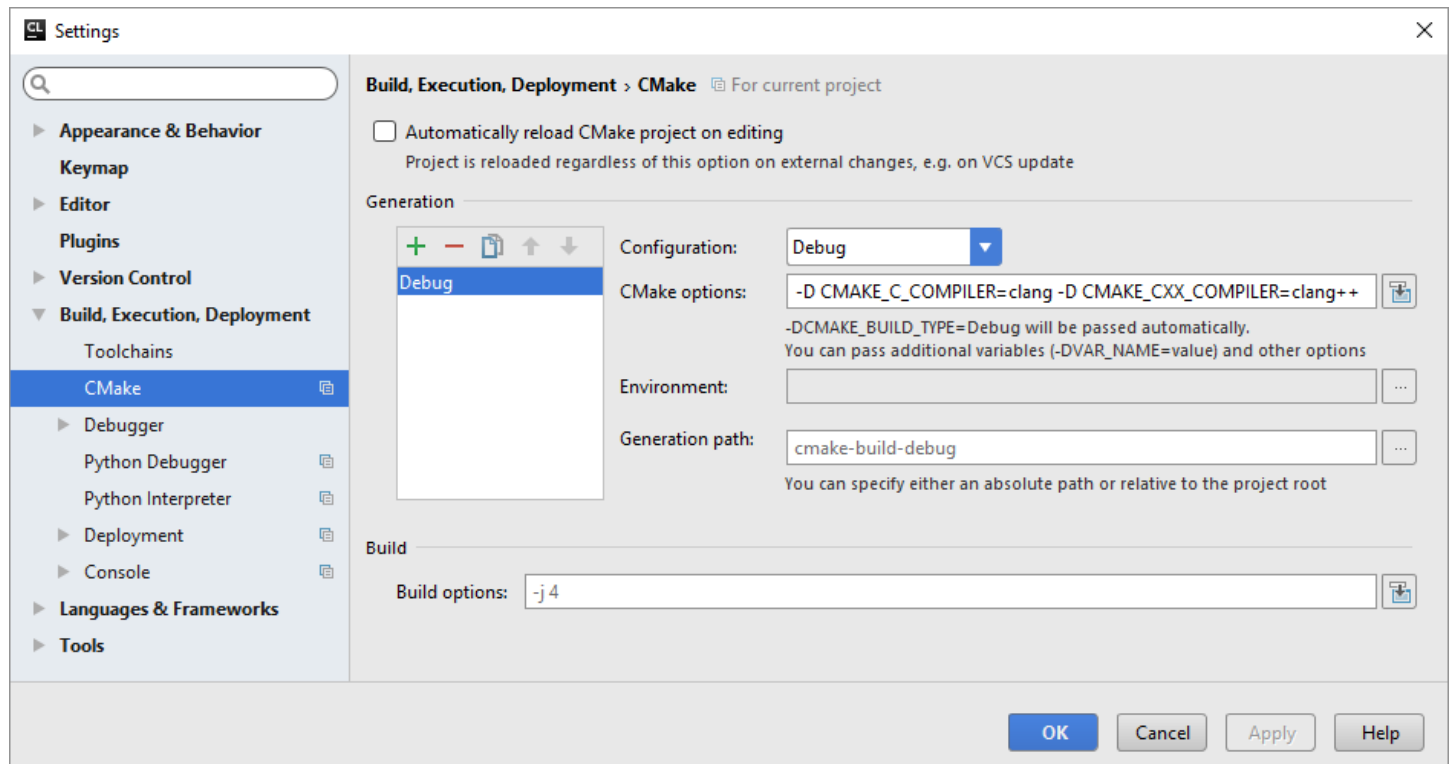


Click on "New Project". Enter a project name (something other than "test") and a location for the project (use a directory you can later find), and press "OK".



The IDE will now open up with two tabs: CMakeLists.txt and main.cpp. The main.cpp tab will be displayed and it will contain a simple Hello World program. Before building and running the CPP file, go to File > Settings > Build, Execution, Deployment > CMake. For "CMake options", type the following:

```
-D CMAKE_C_COMPILER=clang -D CMAKE_CXX_COMPILER=clang++
```



At this point you can build the project (Run > Build) and run it.