

Using a Modern C++ Compiler

There are many compilers available for compiling C++ code. The most popular ones are:

- Microsoft Visual C++ Compiler (comes with Visual Studio)
- Clang
- GCC

Since this course covers C++ 20 features, some of the features we explore, may not be supported in the version of compiler you're using.

Assuming you've followed the steps precisely and typed the code correctly, if the code doesn't compile on your machine, you may need to update your compiler to a newer version.

I've recorded this course with **Clang v14.0.6**.

The instructions to update your compiler vary depending on your operating system and IDE. So you'll have to do your own research. But here are a few tips to get you started.

Windows Users

You should not have any issues if you're using the latest version of Visual Studio. So my recommendation is to download and install the latest Visual Studio.

If you're using CLion, follow the link below to install Clang and configure CLion to use it. The steps are a bit time-consuming and sometimes tricky. So I still recommend you use Visual Studio.

<https://blog.jetbrains.com/clion/2020/12/setting-up-clang-on-windows/>

Mac Users

To install Clang, first you need to install MacPorts:

<https://www.macports.org/install.php>

With MacPorts installed, you can install Clang 14:

```
sudo port install clang-14
```

Now, view all available versions of Clang on your machine:

```
port select --list clang
```

Set Clang 14 as the active Clang:

```
sudo port select --set clang mp-clang-14
```

Verify that the version of Clang is now 14.

```
clang++ --version
```

If this doesn't work, open a new terminal window and check the Clang version again.

Find the path to the active Clang:

```
which clang++
```

If using CLion, go to **Settings / Preferences | Build, Execution, Deployment | Toolchains | Default**.

In the **C++ Compiler** box, paste the path to **clang++** you obtained earlier. It is often (/opt/local/bin/clang++).

NOTE: Make sure to use **clang++** and not **clang**.

CLion will detect that the environment settings have changed and suggests to reload the project. Accept and reload the project.

If you're still having difficulties, create a new project.

Linux Users

The instructions vary depending on the distribution of Linux and IDE you're using.