

Code::Blocks

Code::Blocks is a cross-platform (works with Windows, Mac OS X and Linux) integrated development environment (IDE) for writing C++ programs.

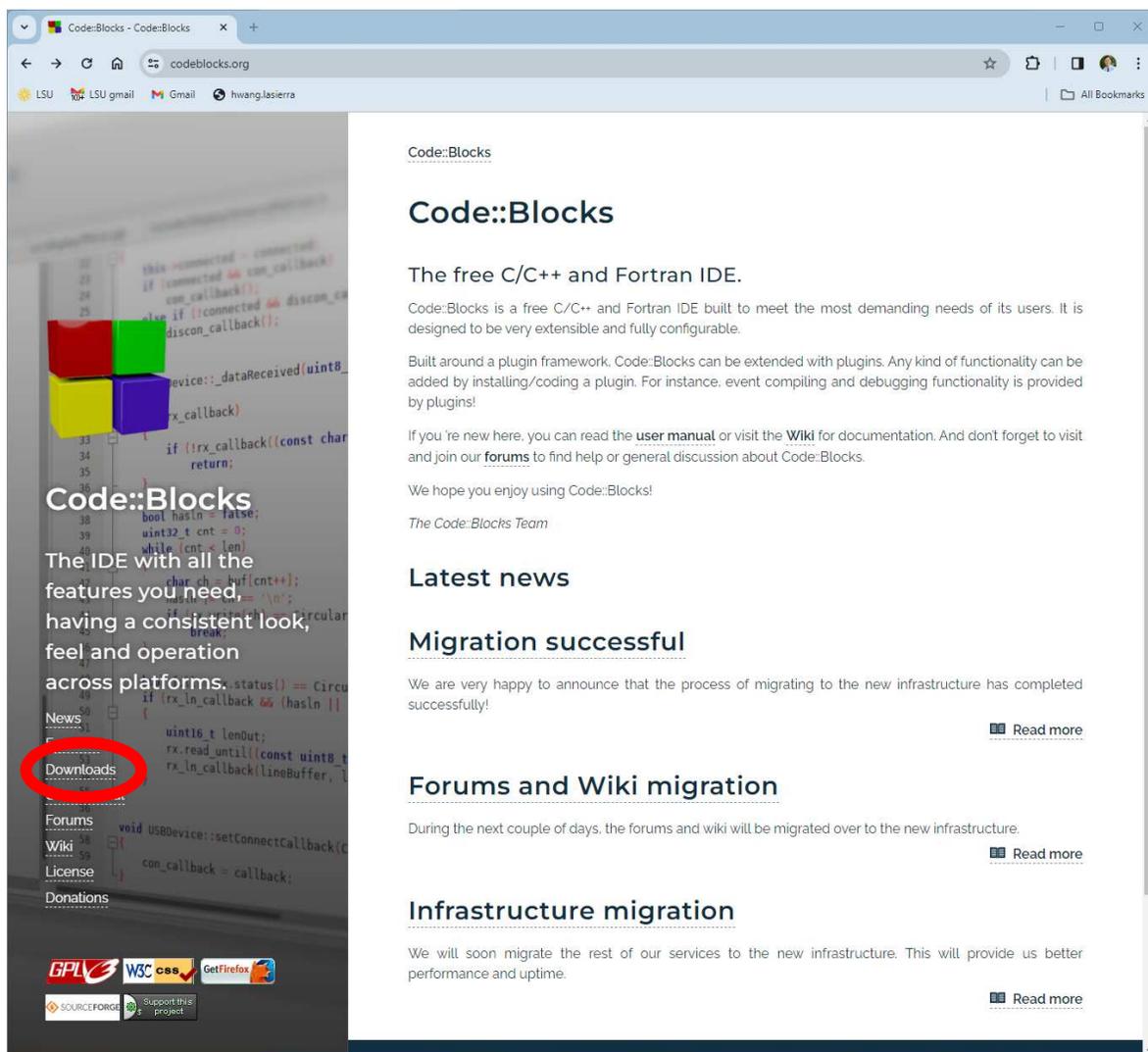
This document describes how to install Code::Blocks and write your first C++ program using Code::Blocks.

1. Download Code::Blocks

Go to Code::Blocks' main page at

<https://www.codeblocks.org/>

and click on the Downloads link on the left sidebar.



Code::Blocks

Code::Blocks

The free C/C++ and Fortran IDE.

Code::Blocks is a free C/C++ and Fortran IDE built to meet the most demanding needs of its users. It is designed to be very extensible and fully configurable.

Built around a plugin framework, Code::Blocks can be extended with plugins. Any kind of functionality can be added by installing/coding a plugin. For instance, event compiling and debugging functionality is provided by plugins!

If you're new here, you can read the [user manual](#) or visit the [Wiki](#) for documentation. And don't forget to visit and join our [forums](#) to find help or general discussion about Code::Blocks.

We hope you enjoy using Code::Blocks!

The Code::Blocks Team

Latest news

Migration successful

We are very happy to announce that the process of migrating to the new infrastructure has completed successfully!

[Read more](#)

Forums and Wiki migration

During the next couple of days, the forums and wiki will be migrated over to the new infrastructure.

[Read more](#)

Infrastructure migration

We will soon migrate the rest of our services to the new infrastructure. This will provide us better performance and uptime.

[Read more](#)

In the **Downloads** page, click on the **Download the binary release** link.

In the **Binary releases** page, click on the download link for the most current version for your operating system.

For Windows

The screenshot shows a web browser window displaying the Code::Blocks website. The page title is "Binary releases" and the breadcrumb is "Code::Blocks / Downloads / Binary releases". The main heading is "Binary releases". Below this, there is a list of platforms to select a setup package: Windows XP / Vista / 7 / 8.x / 10, Linux 32 and 64-bit, and Mac OS X. There are several notes regarding older OSes, nightly builds, changelogs, and default builds. A section titled "Microsoft Windows" contains a table of download links. The table has two columns: "File" and "Download from". The first row is "codeblocks-20.03-setup.exe" and the download link is "FossHUB or Sourceforge.net", with "Sourceforge.net" circled in red. Other rows list various zip and exe files for different architectures and bitnesses.

File	Download from
codeblocks-20.03-setup.exe	FossHUB or Sourceforge.net
codeblocks-20.03-setup-nonadmin.exe	FossHUB or Sourceforge.net
codeblocks-20.03-nosetup.zip	FossHUB or Sourceforge.net
codeblocks-20.03mingw-setup.exe	FossHUB or Sourceforge.net
codeblocks-20.03mingw-nosetup.zip	FossHUB or Sourceforge.net
codeblocks-20.03-32bit-setup.exe	FossHUB or Sourceforge.net
codeblocks-20.03-32bit-setup-nonadmin.exe	FossHUB or Sourceforge.net
codeblocks-20.03-32bit-nosetup.zip	FossHUB or Sourceforge.net
codeblocks-20.03mingw-32bit-setup.exe	FossHUB or Sourceforge.net
codeblocks-20.03mingw-32bit-nosetup.zip	FossHUB or Sourceforge.net

NOTE: The codeblocks-20.03-setup.exe file includes Code::Blocks with all plugins. The codeblocks-20.03-setup-nonadmin.exe file is provided for convenience to users that do not have administrator rights on their machines).

NOTE: The codeblocks-20.03mingw-setup.exe file includes additionally the GCC/G++/GFortran compiler and GDB debugger from [MinGW-W64 project](#) (version 8.1.0, 32/64 bit, SEH).

NOTE: The codeblocks-20.03(mingw)-nosetup.zip files are provided for convenience to users that are

For Mac OS X

Binary releases - Code::Blocks

codeblocks.org/downloads/binaries/#imagesoswindows48pnglogo-microsoft-windows

LSU LSU gmail Gmail hwang.lasierra

If unsure, please use `codeblocks-20.03mingw-setup.exe`.

Linux 32 and 64-bit

Distro	File	Download from
	codeblocks_20.03_amd64_oldstable.tar.xz	FossHUB or Sourceforge.net
	codeblocks_20.03_i386_oldstable.tar.xz	FossHUB or Sourceforge.net
	codeblocks_20.03_amd64_stable.tar.xz	FossHUB or Sourceforge.net
	codeblocks_20.03_i386_stable.tar.xz	FossHUB or Sourceforge.net
	codeblocks-20.03-1.el6.mps.tar	FossHUB or Sourceforge.net
	codeblocks-20.03-1.el7.mps.tar	FossHUB or Sourceforge.net
	For Ubuntu, use this PPA	

Note: The Linux packages above are compressed archives (tar, tar.xz or tar.bz2). When you decompress the package you downloaded on your system, you will find all the .rpm or .deb packages required to install Code::Blocks.

Note: On RedHat/CentOS older revisions of 6 (up to 6.2 as far as we know) you need to add repoforge (former rpmforge) to your repolist, to be able to install the needed wxGTK-package. See <https://repoforge.org/use> for an instruction.

Note: Redhat/CentOS probably also needs an installed hunspell-package, if you want to install the contrib-plugins.

Mac OS X

File	Download from
CodeBlocks-13.12-mac.zip	FossHUB or Sourceforge.net

NOTES:

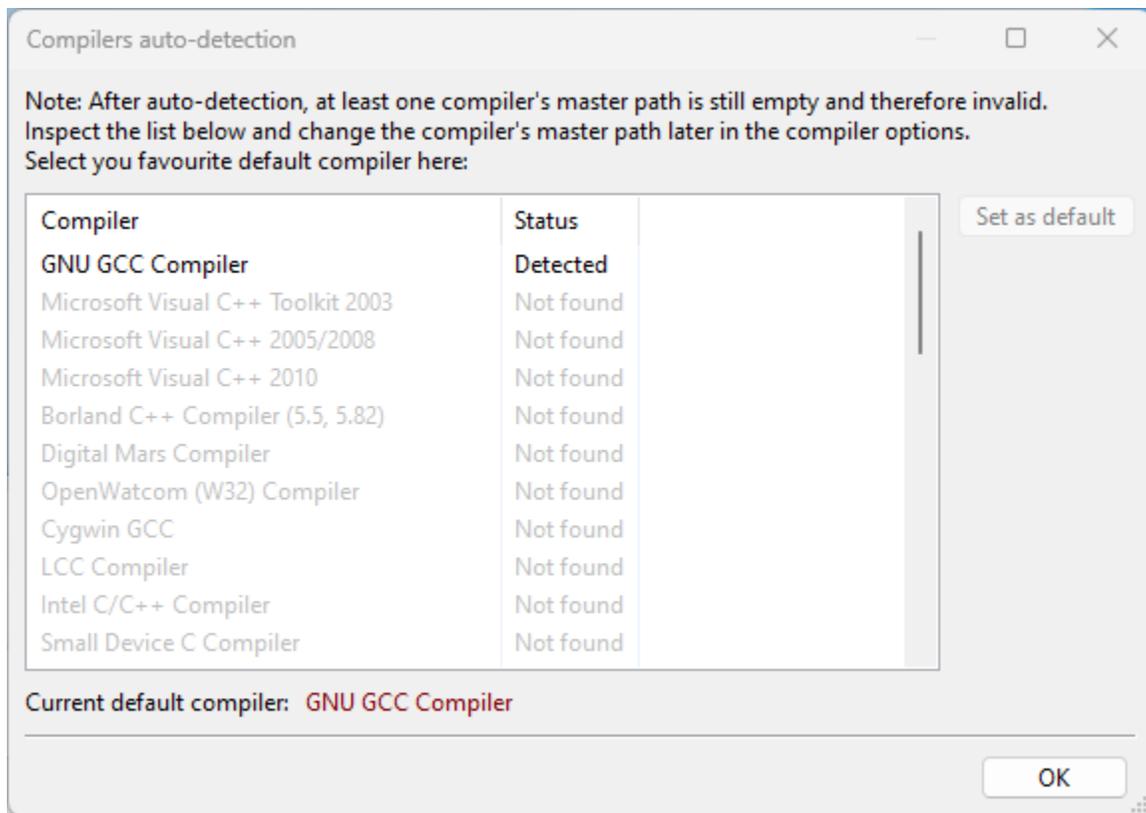
- Code::Blocks 20.03 for Mac is currently not available due to issues caused by Apple hardening their install packages and lack of Mac developers. We could use an extra Mac developer to work on these issues.
- The provided download contains an Application Bundle (for the i386 architecture) built for Mac OS X 10.6 (and later), bundling most Code::Blocks plugins.

2. Install Code::Blocks

For Windows

After the download, run the installation file **codeblocks-20.03mingw-setup.exe**. Accept all the defaults. It'll take about a minute or two.

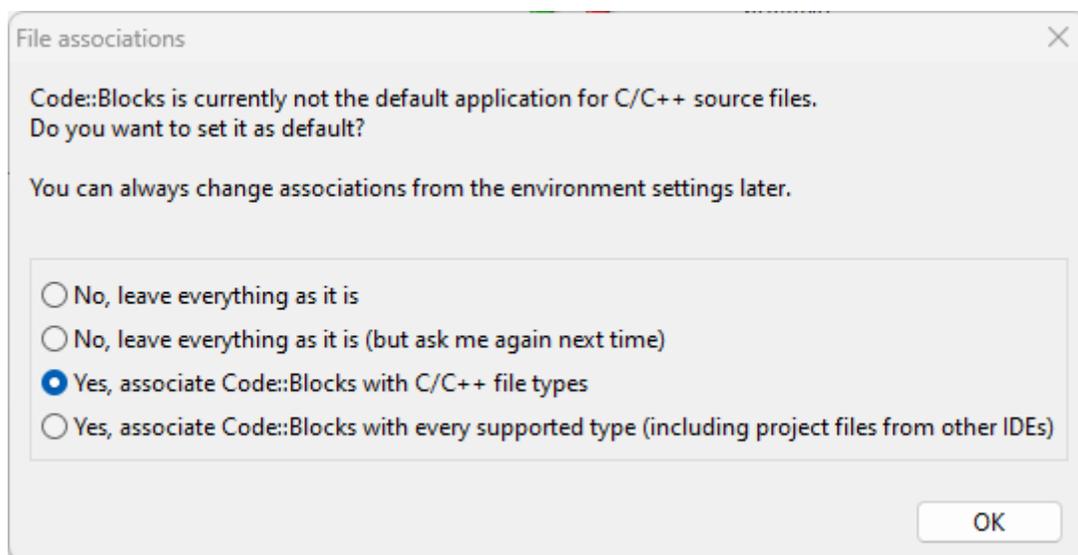
After the installation, it will auto detect a C++ compiler that is already installed on your computer. It must find one or else it will not work.



Click **OK**.

3. Run Code::Blocks

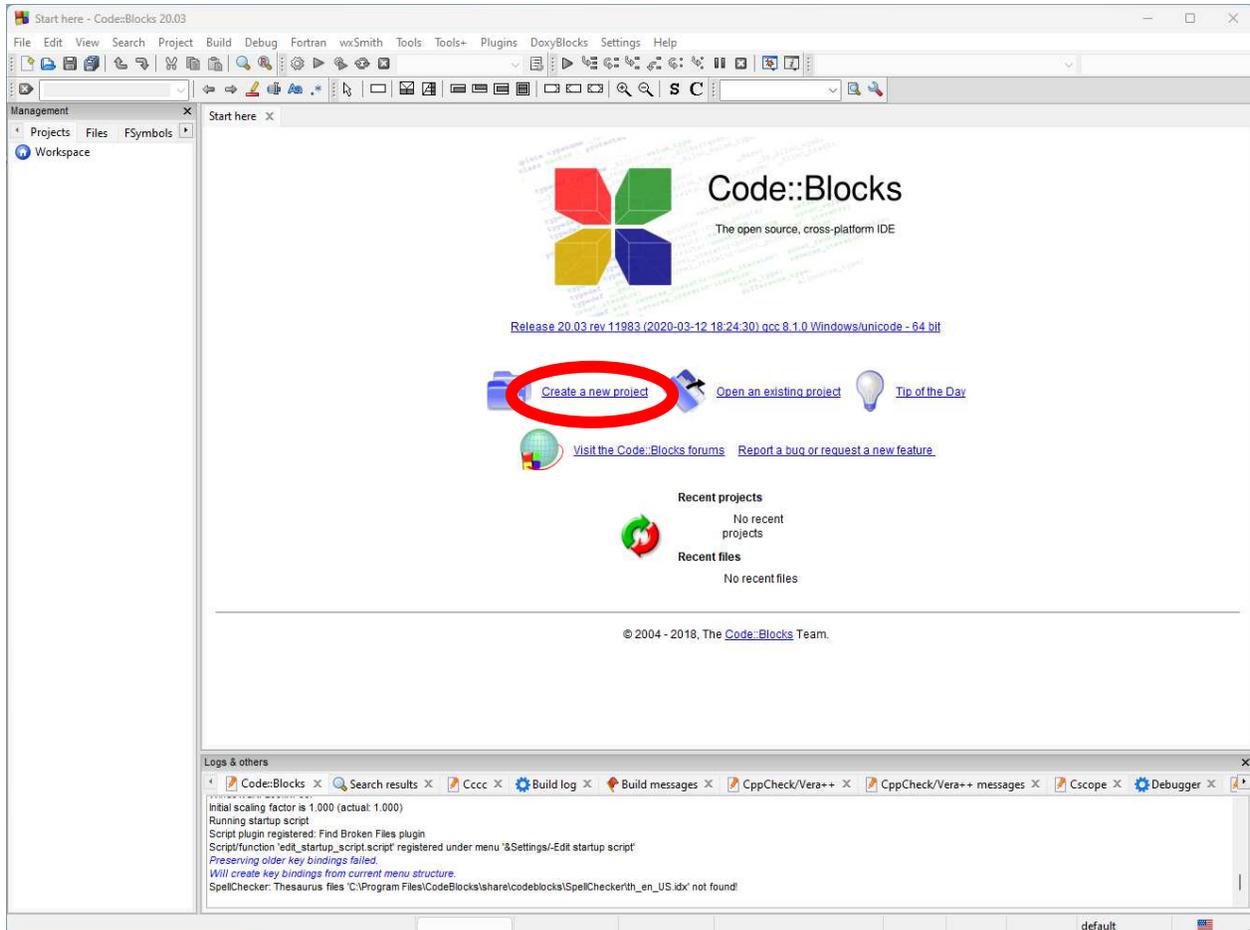
The first time you run Code::Blocks you might see this window



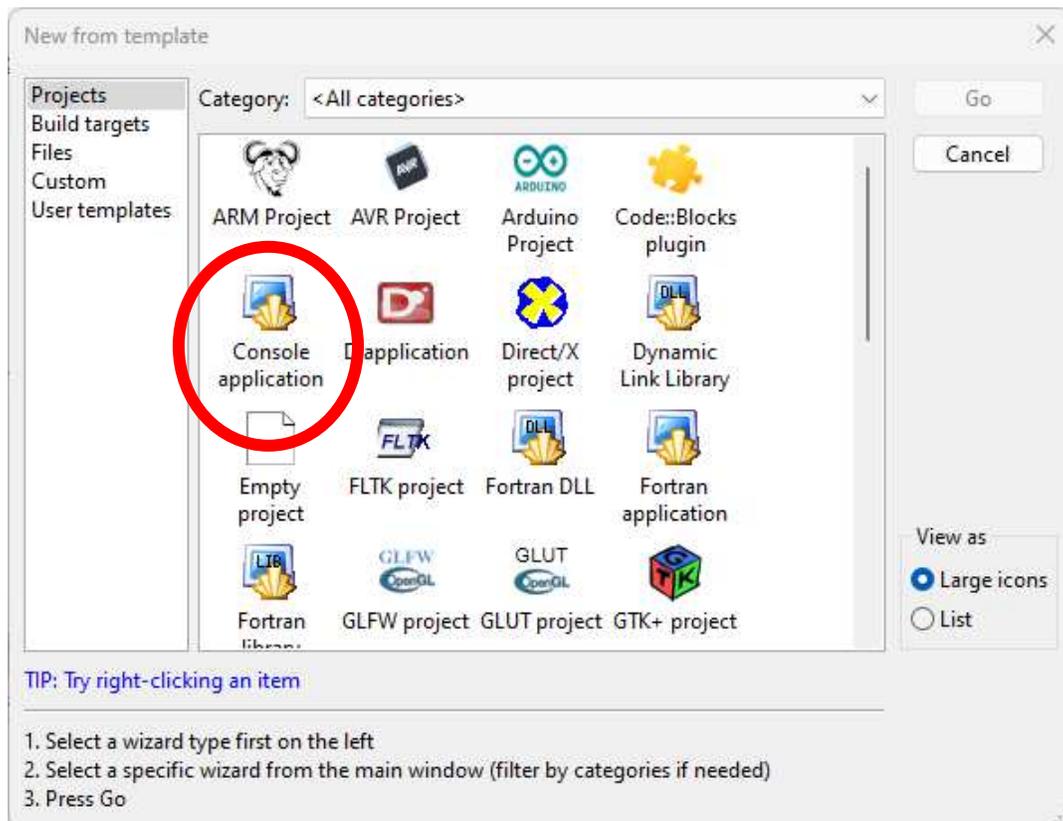
You can select to associate C++ files with Code::Blocks. Click **OK**.

4. Writing your first C++ program

In the main Code::Blocks window click **Create a new project**.



In the **New from template** window select the **Console application** icon and then click **Go**.



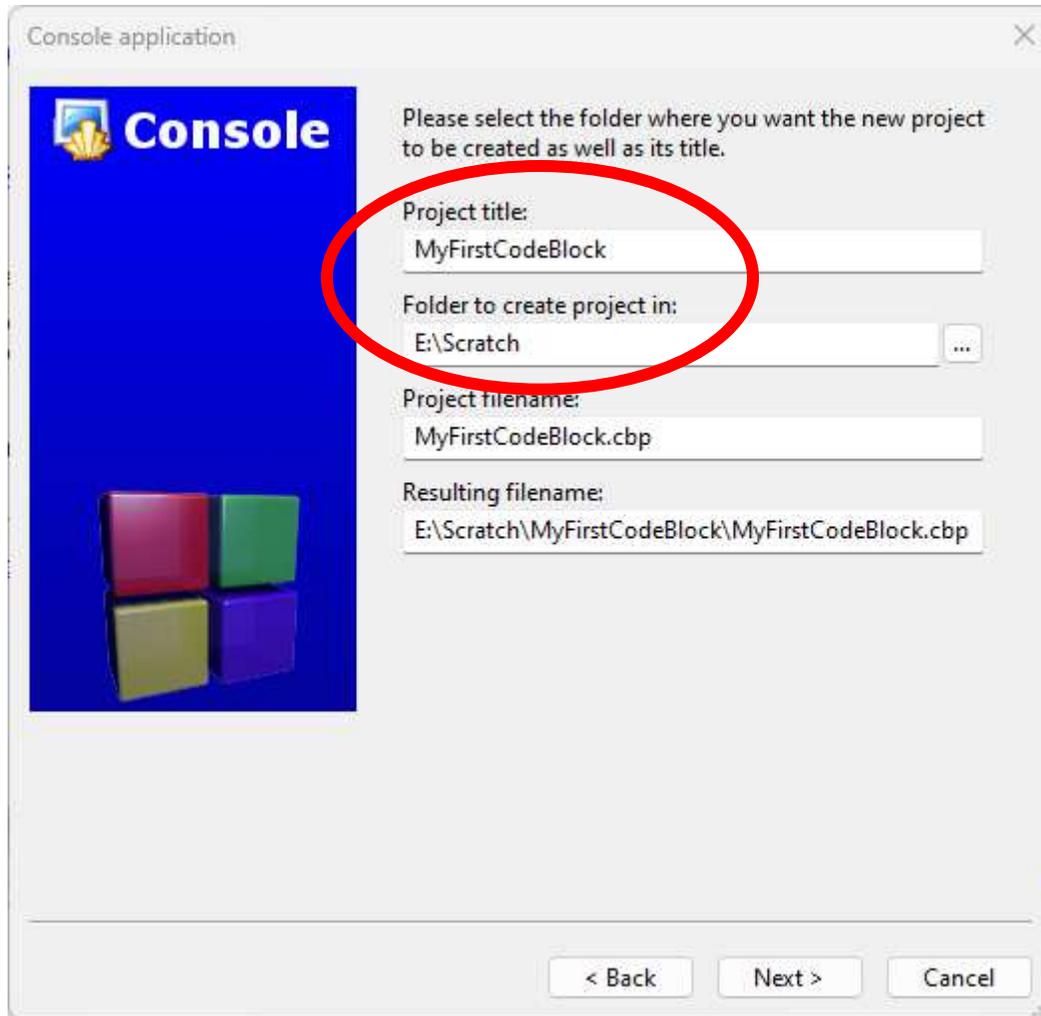
In the next window, you can check the **Skip this page next time** option and click **Next**.



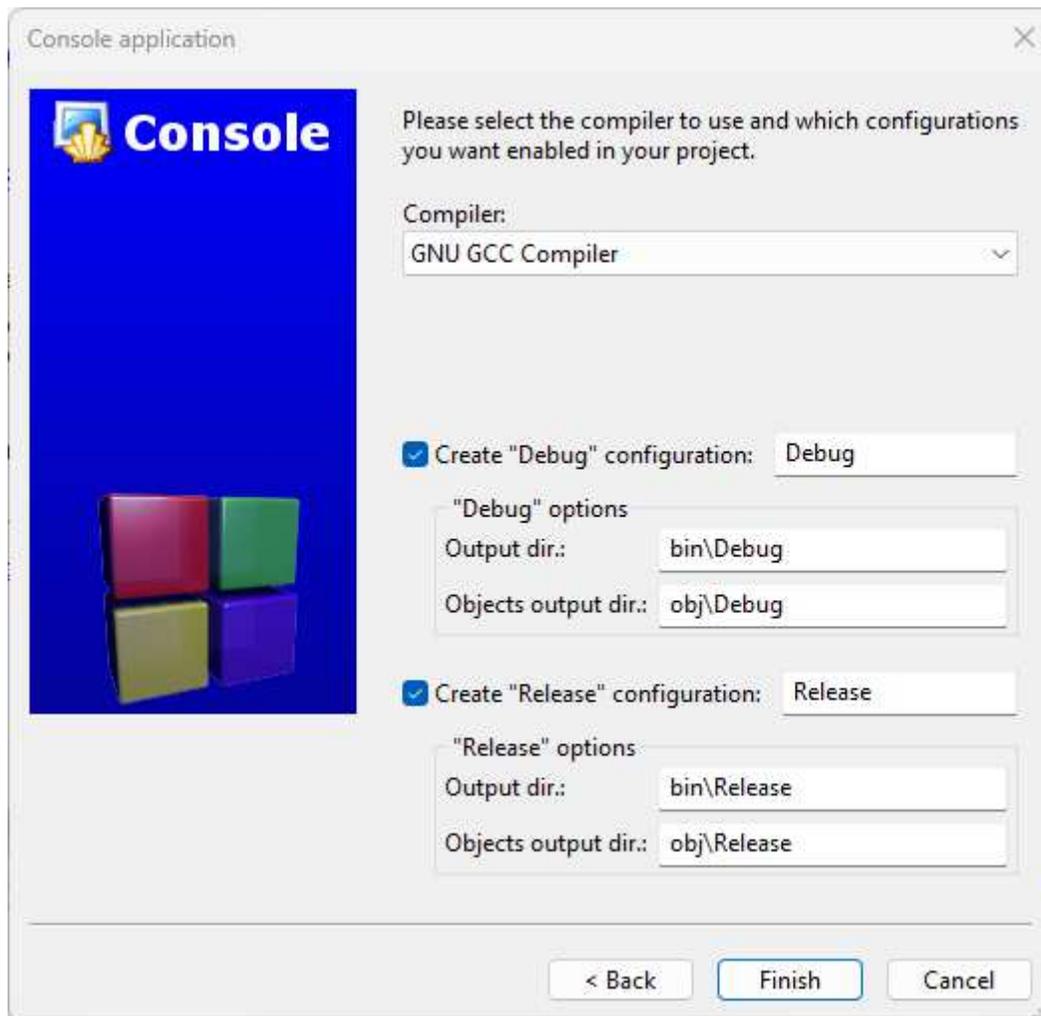
In the next window, make sure the **C++** option is selected and click **Next**.



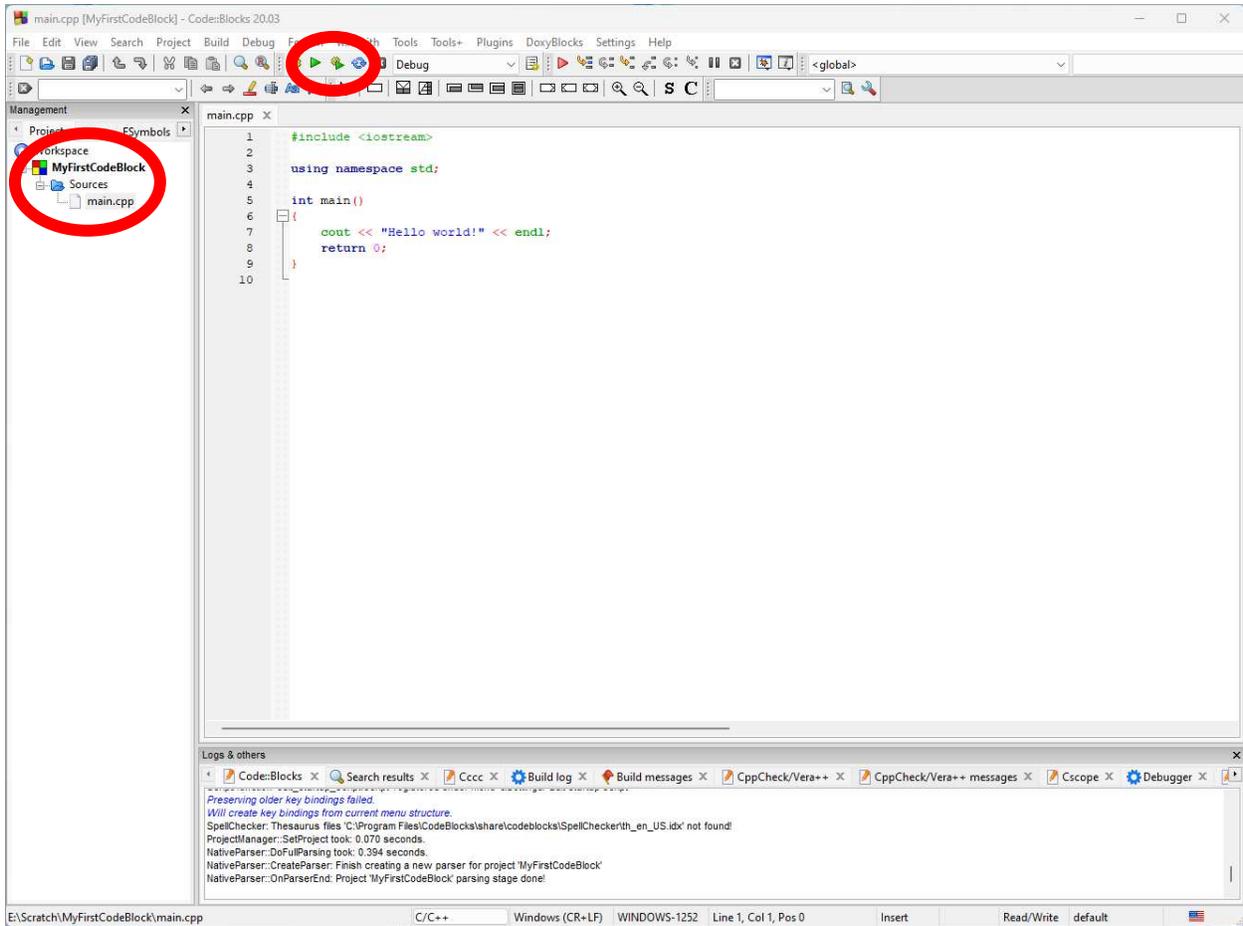
In the next window type in your project title and the location where you want to store the project, and then click **Next**. Don't change the last two fields. In the example below, the project title is **MyFirstCodeBlock** and I'm storing it on the **E:** drive under the **Scratch** directory.



In the next window just leave everything as it is and click **Finish**.



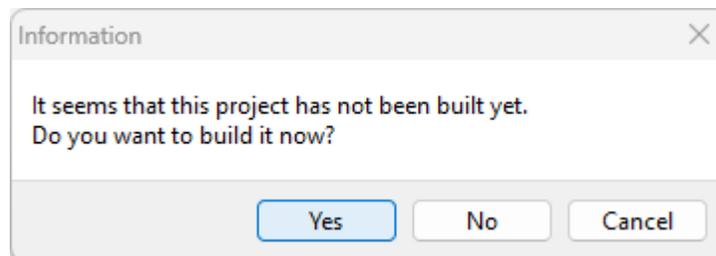
You will see this main workspace window. Open up the **Sources** folder and double-click on the **main.cpp** file. It will show the contents of the file on the right.



Click on the green/yellow  **Build and run** icon to build and run the program.

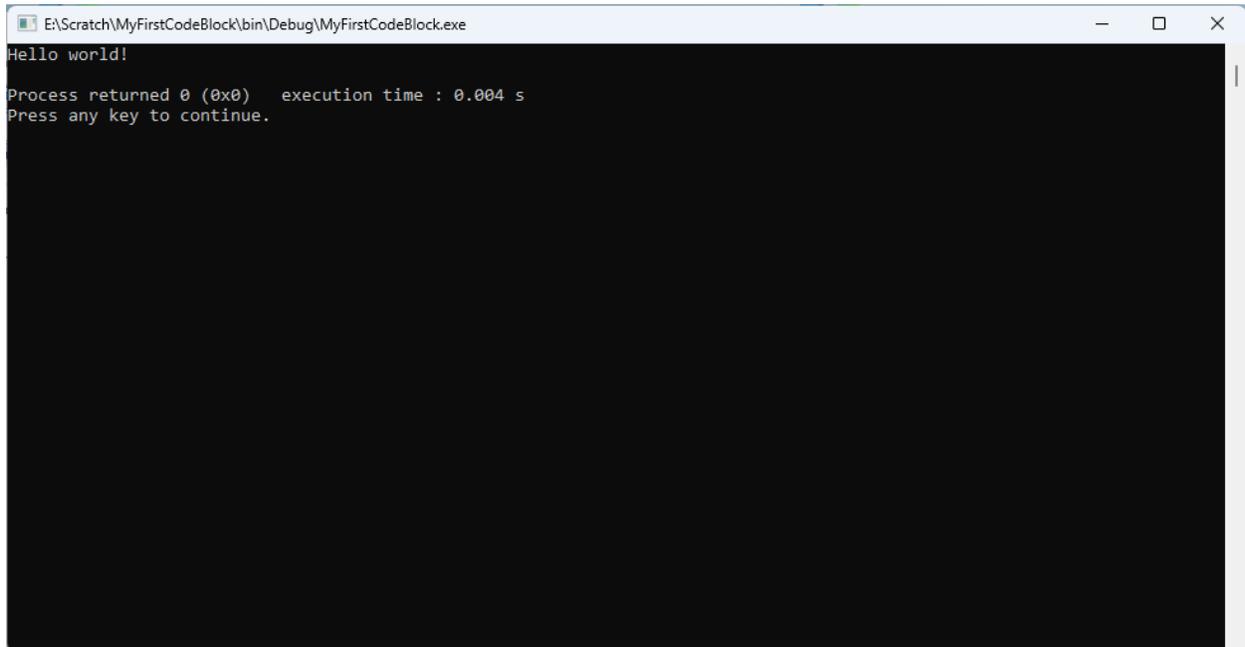
It is very important that each time after you have made changes to your program that you do a **build** before you run it otherwise, the run will not reflect your changes. In other words, the run command does not re-compile your program with the changes.

If you see the message then click **Yes** to build the program.



You can also access these commands from the menu under **Build**.

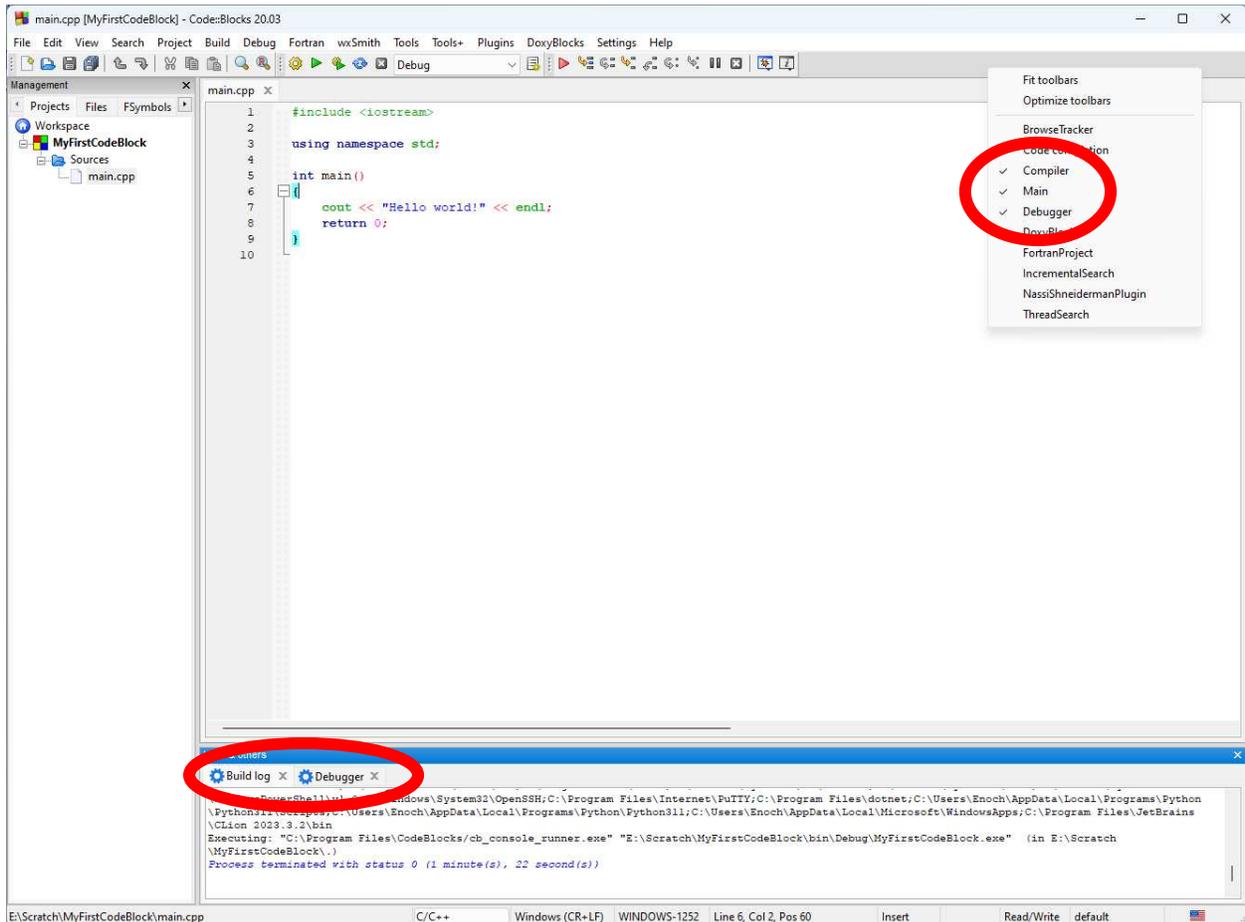
A console window will appear to display the outputs from your program. Press any key to close this window.

A screenshot of a Windows console window. The title bar shows the file path "E:\Scratch\MyFirstCodeBlock\bin\Debug\MyFirstCodeBlock.exe" and standard window controls (minimize, maximize, close). The console output is as follows:

```
Hello world!  
Process returned 0 (0x0)   execution time : 0.004 s  
Press any key to continue.
```

5. Customizing the IDE toolbars

Code::Blocks contains many other tools that we will not use, so we can remove them from the IDE window. Right-click on the toolbar area. In the pop-up menu uncheck all items except for **Compiler**, **Main** and **Debugger**.



We can also remove several of the information windows at the bottom, such as Search results, Cccc, Build log, Build messages, CppCheck/Vera++, CppCheck/Vera++ messages, Cscope, DoxyBlocks, Fortran info, Closed files list and Thread search.

6. Multiple files

To add another file to your project, click on the **New** icon and select **File...**

In the next window select whether you want a header file (.h) or a source file (.cpp).

In the next window type in the filename and the full path. It's easier if you just click on the ... icon and then just type in the filename. This way the full path will be automatically filled in for you.

Make sure you check the **Add file to active project** for both Debug and Release.

