

Software specifications

All the code samples from the book use language or library features introduced in C++11, C++14 or C++17. Therefore, you need a C++17 compliant compiler to be able to test the source code from the book. Clang 4.0 and GCC 7.0 can be used to run the source code on both Linux and Mac. Visual Studio 2017 can be used on a Windows machine, but it does not support all the language or library features discussed in the book.

Chapter number	Software required (With version)	Free/Proprietary	Download links to the software	Hardware specifications	OS required
All	GCC 7.0 or newer	Free	https://gcc.gnu.org/	2 GB of RAM and 20GB of disk. A Virtual Machine with this characteristics should suffice.	Linux Mac
All	Clang 4.0 or newer	Free	http://clang.llvm.org/	2 GB of RAM and 20GB of disk. A Virtual Machine with this characteristics should suffice.	Linux Mac
All	Visual Studio 2017 or Visual Studio Community 2017	Proprietary Free	https://www.visualstudio.com/	2 GB of RAM and 40GB of disk. A Virtual Machine with this characteristics should suffice.	Windows (7, 8.x or 10)
Chapter 11	Google Test	Free	https://github.com/google/googletest		Linux Mac Windows
Chapter 11	Boost Test	Free	http://www.boost.org/		Linux Mac Windows
Chapter 11	Catch	Free	https://github.com/philsquared/Catch		Linux Mac Windows

Online compilers are available for all the major C++ compilers and can be used to run all the samples from the book. Note that new versions of the compilers are added to these online resources all the time. The compiler versions referred in the table below are from January 2017.

Chapter number	Web link	Compiler
All	http://melpon.org/wandbox	GCC (many versions including experimental HEAD) Clang (many versions including development trunk)
All	https://godbolt.org/	GCC (many versions including 7.0) Clang (many versions, but latest 3.9.0) Intel C++ Compiler (several versions, latest 17)
All	http://webcompiler.cloudapp.net/	Visual C++ (one version, currently Visual Studio 2017)

Detailed installation steps (software-wise)

The installation instructions for the testing frameworks are available as stand-alone recipes in the 11th chapter.