




Course

-  ELEC-A7151

 Course materials

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Code

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-  MyCourses


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This course has already ended.
The latest instance of the course can be found at: [Object oriented programming with C++: 2023 Autumn](#)

« 3

Project topics and descriptions

Course materials

Software development tools »

ELEC-A7151 / Module 6: Software Projects / 4 Recommended libraries

4 Recommended libraries

Contents

- 4 Recommended libraries
 - 4.1 SFML
 - 4.2 Box2D
 - 4.3 Qt

4.1 SFML

SFML is a fairly easy to use graphics/sound/etc library especially useful for developing simple graphical games.

The Aalto Linux machines have SFML 2.5.1 readily installed, so it is advised that you test your project with that version, even though there are also newer versions.

- [The SFML web page](#)
- [Some helpful tutorials](#)
- Useful book: [SFML game development : learn how to use SFML 2.0 to develop your own feature-packed game](#) from Aalto university library
- [Instructions on how to set SFML on Eclipse](#) (Windows/Linux)

In addition, on Windows the SFML .dll files need to be placed in a location that is accessible for the project. One working solution is to copy the .dll files to the same location with your project executable.

4.2 Box2D

[Box2D](#) is a good option to implement the physics in the 2D games.

The [repository](#) also includes a testbed where you can try out the logics implemented in Box2D before continuing with your own project.

Some tutorials for [Box2D](#) are available on [iforce2D](#).

4.3 Qt

Qt is a cross-platform application framework that is used for developing application software that can be run on various software and hardware platforms with little or no change in the underlying codebase, while still being a native application with native capabilities and speed. Qt is available with both commercial and open source GPL 2.0, GPL 3.0, and LGPL 3.0 licenses.

Qt is used for developing multi-platform applications and graphical user interfaces (GUIs); however, programs without a GUI can be developed, such as command-line tools and consoles for servers.

Qt uses standard C++ with extensions including signals and slots that simplify handling of events, and this helps in development of both GUI and server applications which receive their own set of event information and should process them accordingly. Qt supports many compilers, including the GCC C++ compiler and the Visual Studio suite.

Notable applications using Qt are:

Skype, VLC media player, Google Earth, Bitcoin Core, VirtualBox, Adobe Photoshop Album, Spotify for linux, etc.

- [Qt web page](#)
- [Some helpful Qt tutorials](#)
- [Qt download link](#)

Use above mentioned link, stackoverflow questions, and youtube links to study Qt topics.

Following youtube video explains [Games using Qt](#).

« 3

Project topics and descriptions

Course materials

Software development tools »