

Getting started with CLion

Exercise 1: *Starting CLion for the first time*

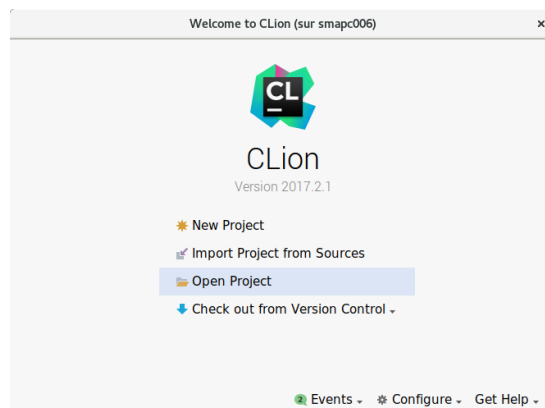
CLion is already installed on your workstations. You can open it by typing:

```
clion
```

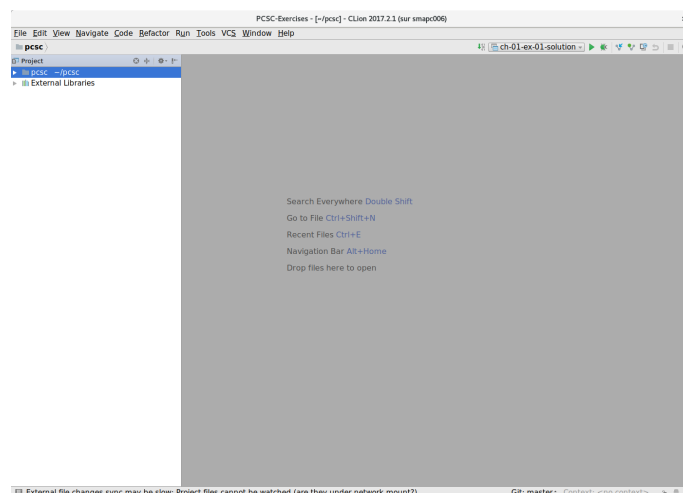
into a terminal. During the first launch you will have to activate your license by asking JetBrains a student license. To that end, please go to the webpage <https://www.jetbrains.com/student/> and apply for a student license.

You can now import the project that you will use for the rest of the class. It is stored in the root directory of your Git repository clone, where there is this specific file: CMakeLists.txt

To import the project in CLion just click to the **Open project** button and select the directory where the CMakeLists.txt file is.



Once the project has been imported, in CLion you find the project imported in left pane:



Exercise 2: *Key locations in the project*

The important locations you will be revisiting during the course are:

- The Project Explorer, where you see all the files and directories in the project. Here is where you add new files and open existing ones to make changes.
- The Target selection (close to the play button) on the top right, is where you select and configure what is built and run for this project.
- The Console/Terminal and other tools can be found while expanding the lower tabs by clicking on a button in the left-bottom part
In the *Terminal* tab you can launch commands, and in the *Run* tab the text output of your programs will be displayed.

The internal structure of the project is the following:

- There will be one folder called solutions. Within it, the folders chapter-XX will be created to hold the sources of the exercises at each chapter of the text book. For each exercise, a file containing the solution will be available.
- A folder work, that is intended to be used to solve exercises during the exercise sessions. You can create new folders if you need.

Exercise 3: *Configuring, building and running executables*

The project you imported has been setup automatically by *CLion*. Let's compile the code corresponding to the exercise template in the folder work:

- Select the target *exercise-template* in the target selector (top right).
- Now, click the play button. This will compile and run the code as can be seen in the *Messages* and *Run* tabs (bottom).

Exercise 4: *Getting started with the exercises*

There is one folder named work which contains a single source file *exercise-template.cpp*. You can copy this file when solving the exercises.

- Start by making a copy of the template file, giving it a meaningful name.
- Open the CMakeLists.txt and edit to request the creation of a new executable. A more complete help can be found here <https://www.jetbrains.com/help/clion/quick-cmake-tutorial.html#d93553e214>
- Fill in the contents of the source file with your solution and compile&run it.
- Optional: Add the file to the project (in the GIT sense). Right click the file in the browser pane and search for the GIT menu.

You need to repeat this set of tasks each time you add a new source file to the project.