

## Installation of cfl library with Unix-based systems: Linux/Mac

The software was created to accompany the course and is intended only for educational purposes. No guarantee whatsoever is given with respect to the accuracy of the results.

These instructions are for experienced users. If you are new to programming, then you will be better off with the Visual Studio Community IDE.

Please follow the instructions carefully, line-by-line. This is not the time to be creative!

1. Create a directory, where you will keep the material related to the course. Hereafter we shall call this directory FC.
2. Place the file `Course.zip` in the directory FC and extract it using the option “Extract Here” or similar. Check that you have the directory tree as `FC:\Course\cfl` (not as `FC:\Course\Course\cfl`).
3. Go to the file `\test\Output.hpp` and type your Student ID in “ ”.
4. Open terminal and (using the “cd” command as usual) arrive to the directory `FC:\Course`. To check that you are at the correct position, type “dir”. You should get the output like

```
.../FC/Course$ dir
bin  cfl  Course.sln  Examples lib  test
```

5. We now compile the libraries in the order: `cfl`  $\rightarrow$  `test`  $\rightarrow$  `Examples`.
  - (a) To compile `cfl` we type “`make --directory=cfl/Src`”. The compilation process will start. The first two lines will look like

```
.../FC/Course$ make --directory=test/Src
make: Entering directory '.../FC/Course/test/Src'
g++ -g -Wall -std=c++0x -c Main.cpp -o Debug/Main.o -I../..
```
  - (b) To compile `test` we similarly type “`make --directory=test/Src`”. The compilation process will start.
  - (c) To compile `Examples` we type “`make --directory=Examples/Src`”. The compilation process will start.

The following files should appear (check it!):

- in directory FC:\Course\lib: cfl.lib and cflg.lib, test.lib and testg.lib (letter g at the end indicates the debug versions).
- in directory FC:\Course\bin: Examples.exe and Examplesg.exe.

Throughout the course you will never need to recompile these libraries again!

6. Finally, run the project Examples. To do that,
  - (a) Type “cd bin” and move to the directory FC:\Course\bin.
  - (b) Type “./Examples”. Follow the instructions on the screen to continue with computations (type some letter). *Be patient: the running time may take a few minutes!*

The five text files:

- (a) ExamplesBlackPathDependent.txt,
- (b) ExamplesBlackStandard.txt,
- (c) ExamplesData.txt,
- (d) ExamplesHullWhitePathDependent.txt,
- (e) ExamplesHullWhiteStandard.txt,

will be created in the directory FC:\Course\Examples\Output. Your Student ID should appear on the first line of each of these files. Check it!

The library is ready for use!