

Assignment 4 GUI and Qt

This lab assignment is due **Feb. 7th at 5:30 pm**. See the syllabus for late penalties.

You may ask other members of the class questions about the assignment. However, you must do your own assignment; you may not use anyone else's code. You must write your own code. Also, **remember any programming task that does not compile under CMake+Visual Studio 2013 will receive 0 points.**

Resources:

QT Reference - <http://doc.qt.io/qt-5/classes.html>

Task:

Part 1 - 50 points

Write a simple calculator in Windows with Qt framework. **Use QtHelloWorld project as your base.**

Five operations should be implemented, which are addition (+), subtraction (-), multiplication (*), division (/) and equal (=).

Also implement the 'clear' function in the calculator to clean the previous results.

Note:

All operators should be supported by both buttons (20 points) on the program and the keyboard (20 points).

The Clear function and the GUI worth 10 points.

Part 2 - 20 points

Add one new operation to the calculator. You can refer to the Scientific Calculator of Windows. It should also support button clicking and keyboard input.

Part 3 - 10 points

Write a brief report for Part 1 and Part 2, explain how to use your program and what you learned from Qt programming.

Delete the folder for binaries (/bin, or another name when you use CMake to create) from the project. Just keep the source code, related resources (e.g. *.ui) and the correct CMakeLists.txt.

To turn in your assignment, place the source code folder and your report into a zipped folder called **YourLastName_Lab4.zip**. **Only the top folder should be zipped**. Then upload it to blackboard, download it yourself to make sure it was uploaded correctly. If your file is not uploaded correctly, you may be subject to the late policy.