Getting started with Qt

1. Download Qt (LGPL license) from http://qt-project.org/downloads. If you have other compiler installed already, you should download the one that matches your system (the assignment project should be compatible with Visual Studio). If not, you need to download software that provides a compiler for Qt creator.

2. Install Qt.

Using Qt's editor and compiler (easier and more platform friendly):

3. Run “Qt Creator”
   a. By double clicking the .pro file.
   b. Or select “Open file or project” from File menu. Select the file “ImgFilter.pro”
   c. Click “Configure Project.”
   d. Click on the “Sources” folder. You should see a file called ProjectX.cpp (X is a number). This is the only file you should need to edit.
   e. To compile click on the green play button at the bottom left of window.
   f. You can select between debug and release builds above the green play button.

Using Visual Studio’s editor and compiler:

1. Make sure you have the correct Qt and Visual studio installed. For example, your Qt path should include msvc_2012_opengl folder if you wish to use Visual Studio 2012.
2. Add environment variable for QTDIR as the path to your msvc_201x_opengl folder. You should be able to compile and run the project now. If not, follow the steps below to check the dependencies:

3. Run “Visual Studio”
   a. Select “Open Project/Solution” from File menu.
b. Select the file “ImgFilter.vcproj”
c. Right click on the ImgFilter project and select “Properties”
d. Select “Configuration Properties -> C/C++ -> General”
e. Update the directories under “Additional Include Directories” with “Qt” in the name according to where you installed Qt.
f. In the same window select “Configuration Properties -> Linker”.

g. Update the directory in “Additional Library Directories” according to where you installed Qt and add the libraries.
h. Compile and Run.
i. If it complains about not finding Qt’s dlls when running, you should update your system’s “path” variable to include Qt’s “bin” directory. To update the “path” variable, type “environment” into the window search box and select “Edit the system’s environment variables”. Press the “Environment Variable...” button and find “path” in the second list box.

j. Qt also has a VS add-in that is nice for editing UIs. This isn’t necessary for the assignment, but it’s pretty handy to edit Qt setting. You can find it at the same download page. After installation you will find a “Qt” tab in your VS environment, and sometimes you can resolve the setting issue by right clicking on your project to convert your project into “Qt add-in project.”

k. You shouldn’t have to do this – but just in case. If you’d like to convert a Qt project to a Visual Studio project use the following command “qmake -tp vc test.pro”. This will create a file test.vcproj.

l. If it complains about MOC/UIC not found, make sure the Qt Project Settings look like this (disregard the version I used here, the project is compatible with Qt up to 5.2):
m. And the modules should selected like this: