

# Building AwesomeBump v3.0 from source

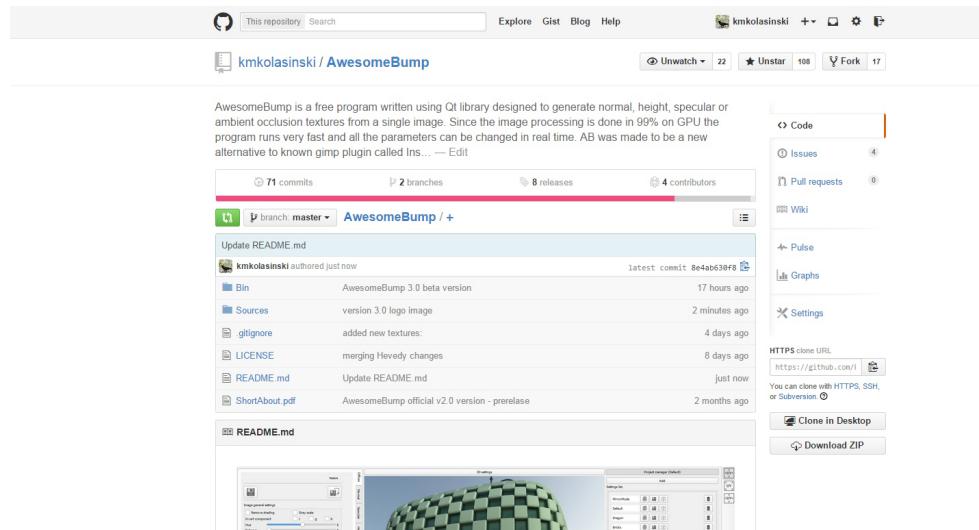
Krzysztof Kolasiński April 2015

April 30, 2015

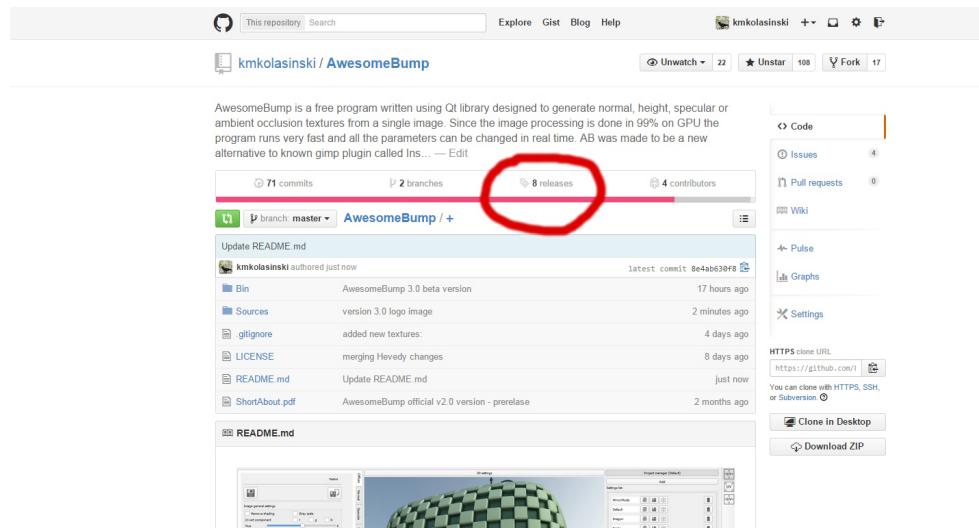
## Abstract

This article is about how to build **AwesomeBump** since **3.0** version from the source code. The process of building described below was done for windows platform but it will be almost the same for other systems: Linux or OSX only the paths are different. Since  $\pi \approx 3.14$  version you can build AB to work with **openGL 3.30** version! Using openGL 3.30 tessellation is disabled but still you can load some high resolution mesh in order to see the displacement in real time (See step 8 for more info).

**Step 1.** Open the **github** project page: <https://github.com/kmkolasinski/AwesomeBump>



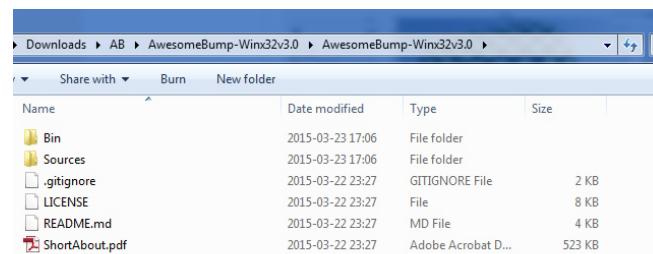
**Step 2.** Go to the releases page: <https://github.com/kmkolasinski/AwesomeBump/releases>



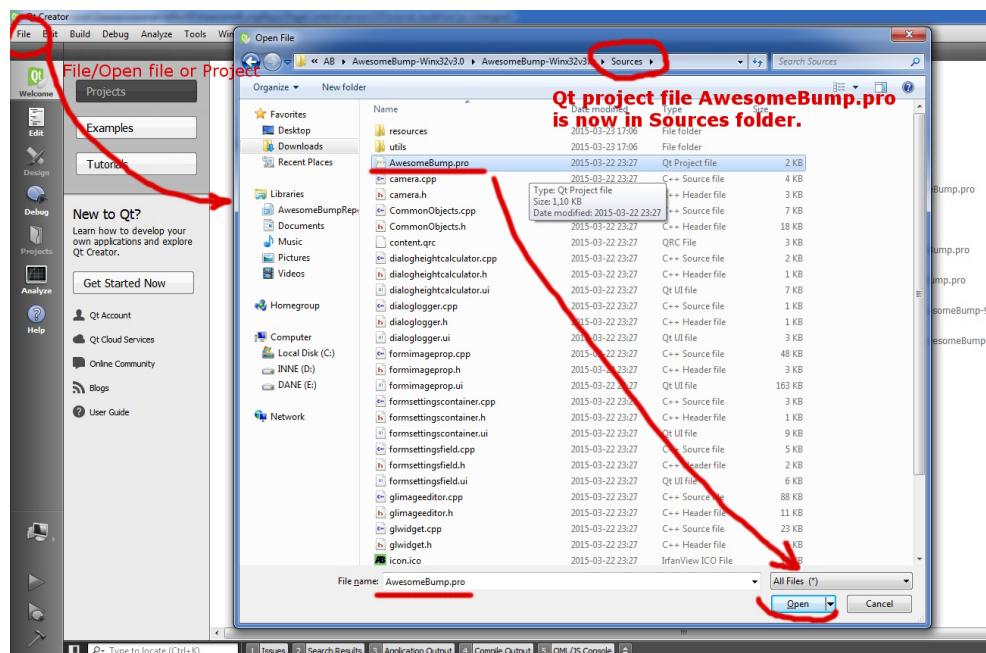
**Step 3.** Choose proper repository and source code (this instruction does not describe the building process for AB versions lower than 3.0). Click link to download and unpack.

The screenshot shows two GitHub release pages. The top section is for 'AwesomeBumpv3.0 for Win7/8 x32' by kmkolasinski. It includes a 'Latest release' button, a commit log, and a 'Downloads' section with two options: 'Source code (zip)' and 'Source code (tar.gz)'. A red box highlights the 'Source code (zip)' link. Below it is another release for 'AwesomeBumpv2.1 for Linux x64 (Ubuntu/Mint)' by the same user, with a similar structure.

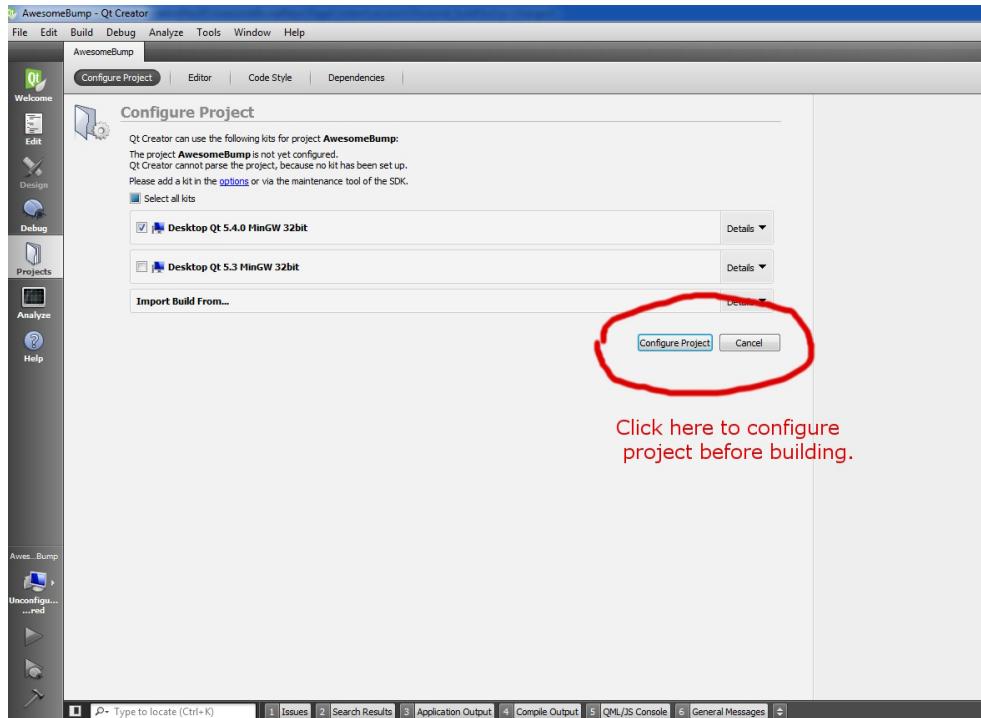
**Step 4.** This is how the AB main folder should look like after unpacking:



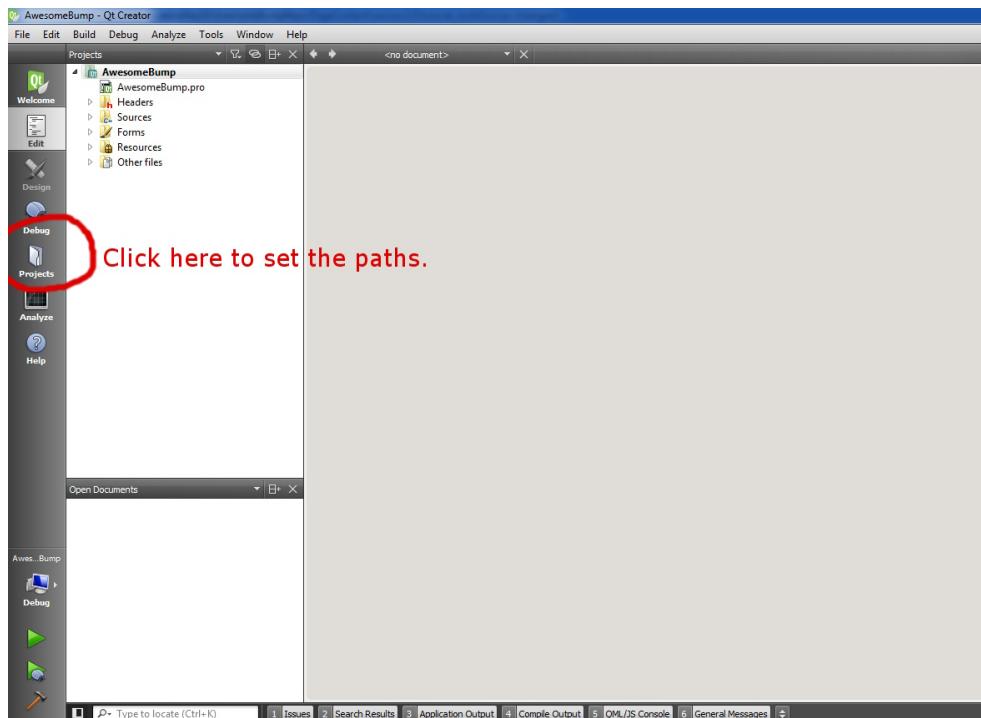
**Step 5.** Open Qt Creator and choose ‘File/Open file or Project’ or Ctrl+O. Navigate to the unpacked AB source codes. Find AwesomBump.pro file in Sources folder and Click open.



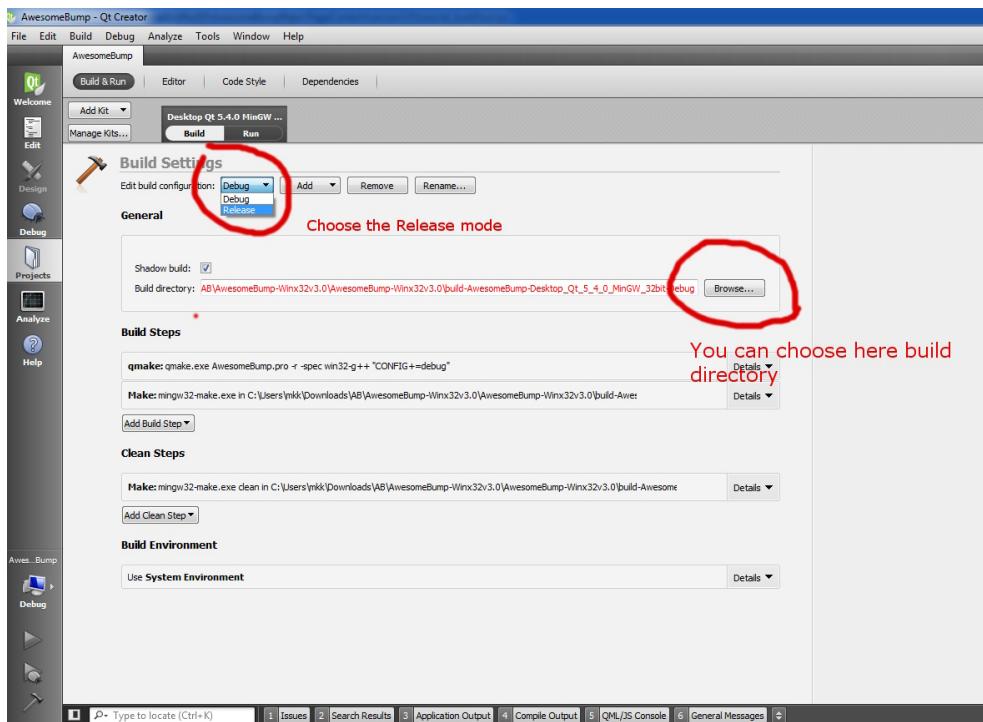
**Step 6.** Configure project. On windows systems it will probably look like this. Note that there are two versions of MinGW libraries (if you have different compiler e.g on linux (GCC) or OSX (I have not idea what) it should also work for you).



**Step 7.** Click on the project settings path to configure build and run paths.



**Step 8.** Switch to the **release** mode and choose the **build path** it can be any (if the **build path** will be different from the **Bin** folder you will have to copy the builded AwesomeBump.exe file to Bin folder manually).

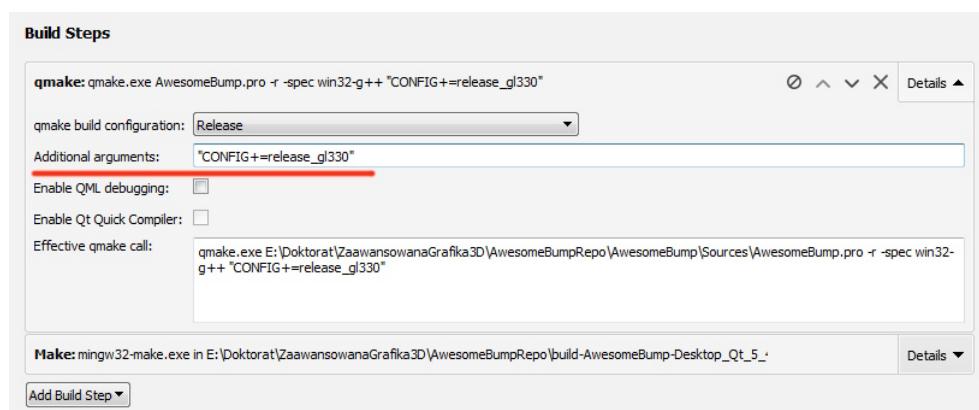


**Important: For those who are interested in building AB with openGL 3.30:** Since Pi (3.14) version you can build AB with openGL 3.30 compatibility. In order to do that you can a) create a new “build configuration” by clicking on the “Add▼” button then selecting “Clone selected” b) or edit your current “Release” configuration in order to build AB with openGL 3.30. I will choose the second option. Steps to do:

- Choose **Release** configuration:

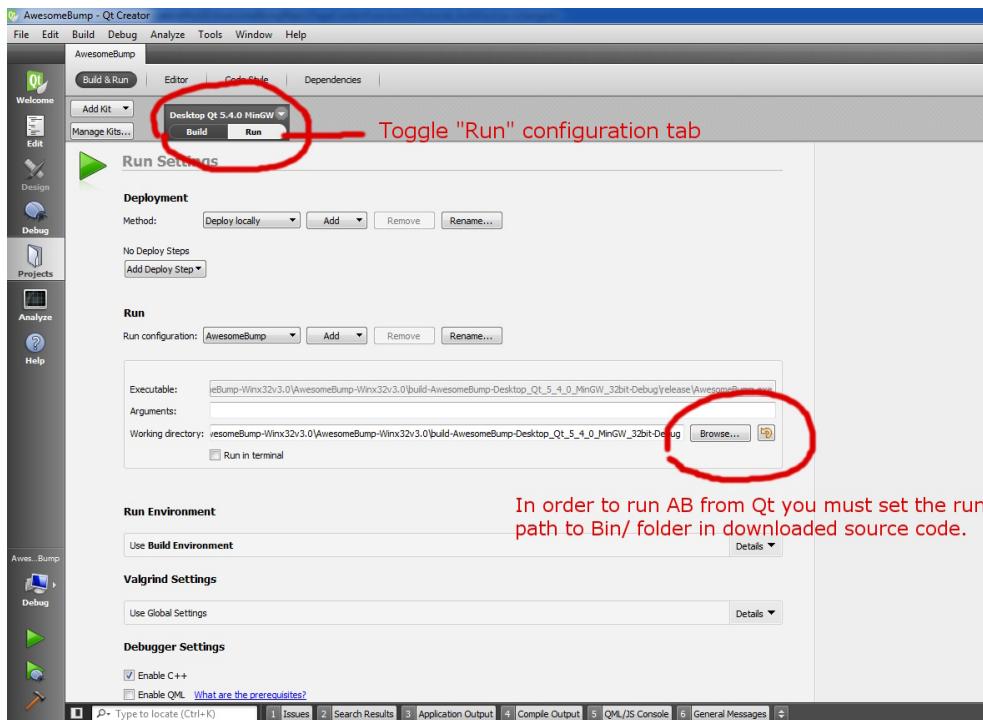


- In section **Build Steps**, select **Details** and paste the “**CONFIG+=release\_gl330**” command into the **Additional arguments** text field. See screen below:

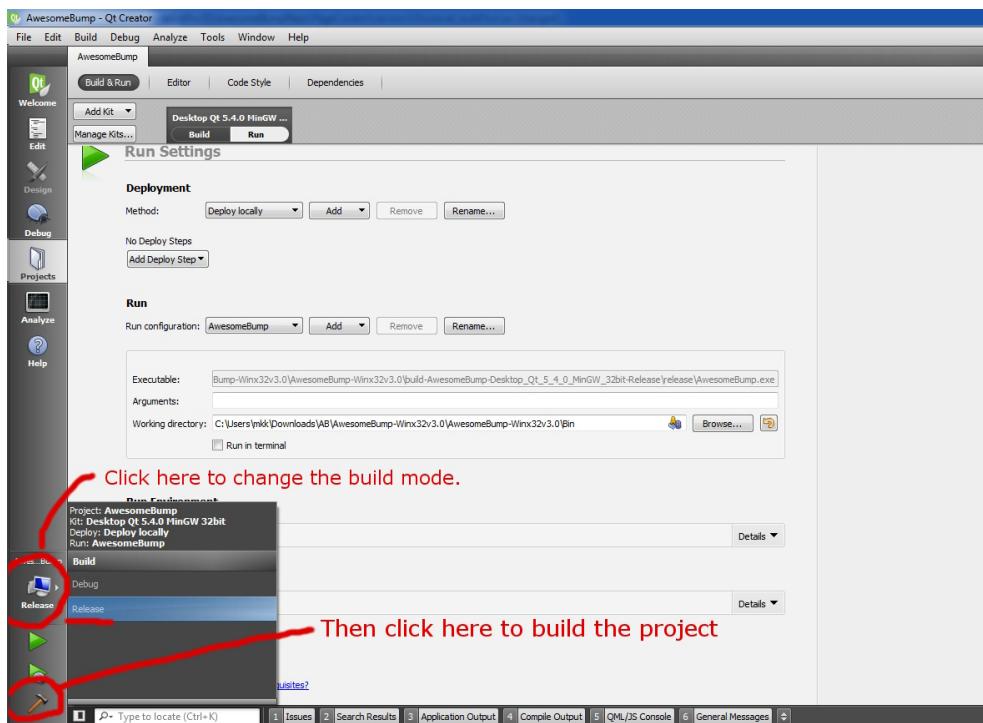


- Go to the next step.

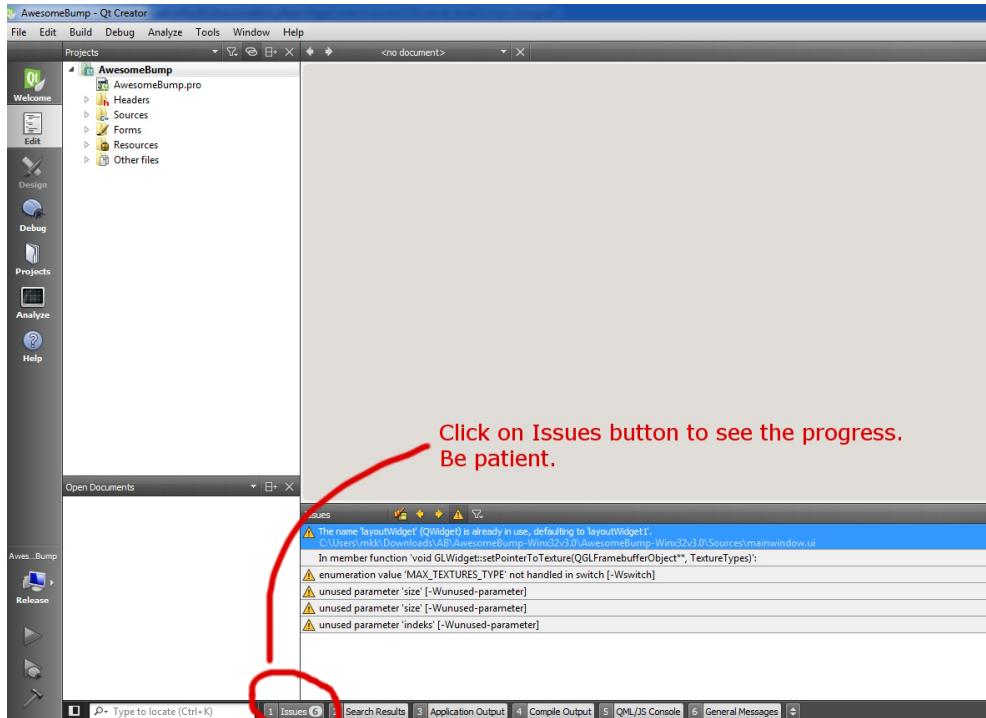
**Step 8 B.** If you want to run the program from Qt Creator you must set the proper “**run path**”. Go to the Run tab (see figure), and set the “**Working directory**” to the Bin/ folder location.



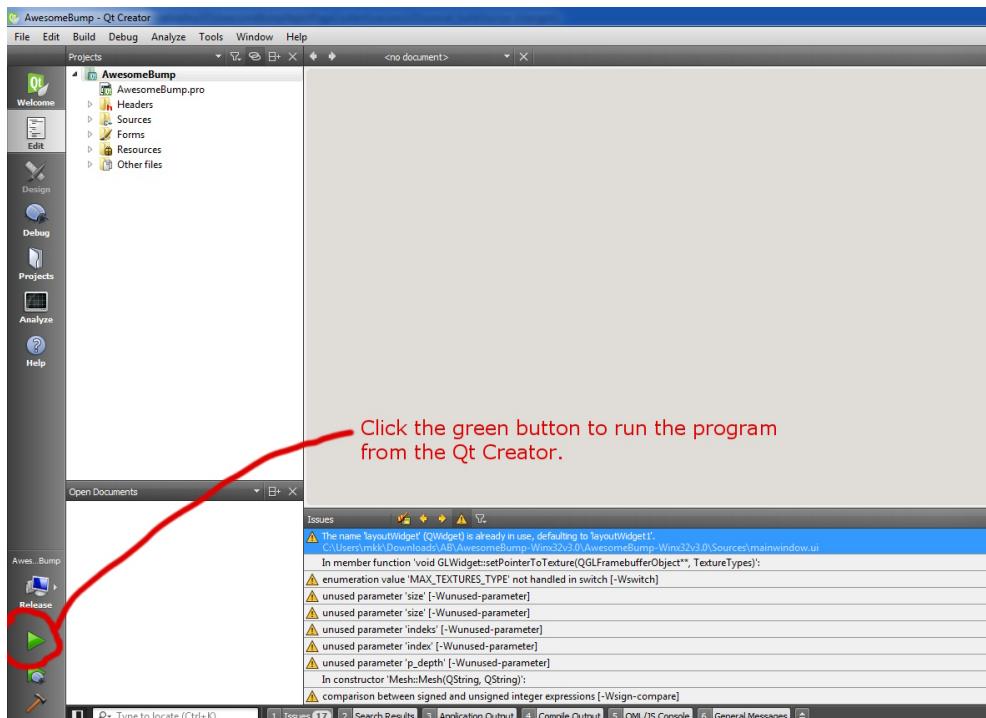
**Step 9.** Change the build mode to “Release”, wait a while and build the project using “hammer button”.



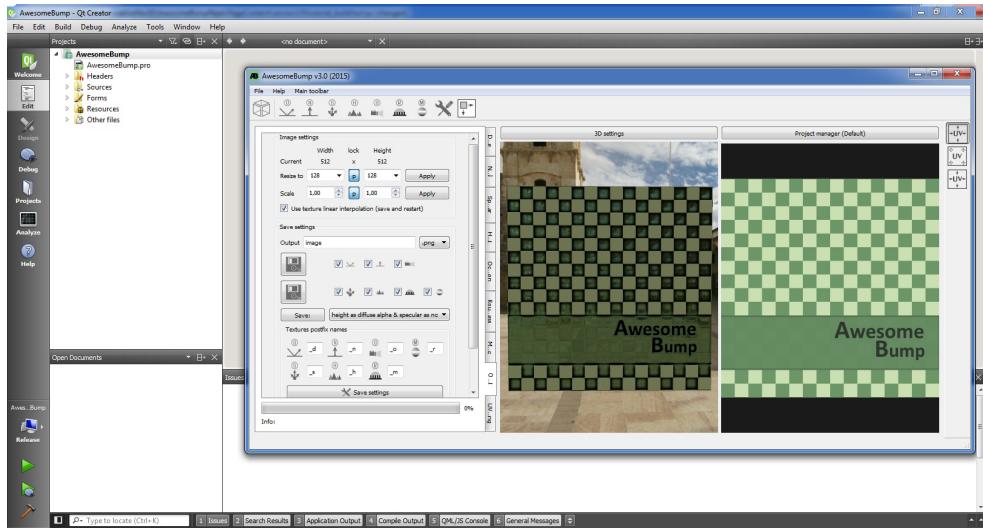
**Step 10.** If you are building AB on windows system you have time to make a coffee. You can see the progress of building by clicking on the **Issues** button.



**Step 11.** Run program from Qt Creator using the green arrow. If all the steps were done properly you should be able to start the program without problems.



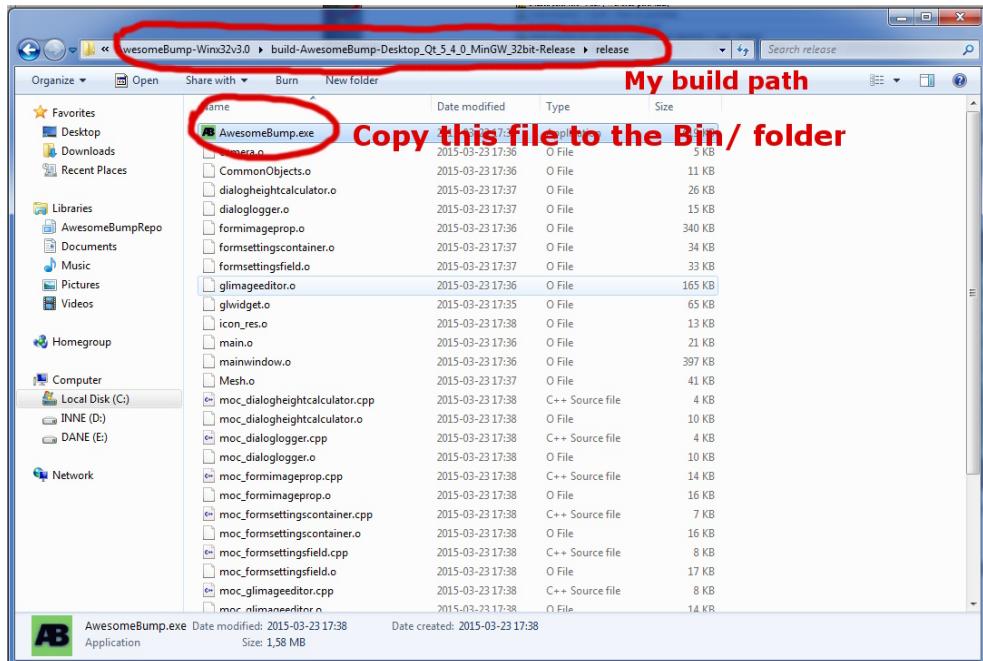
**Step 12.** Test the program :)



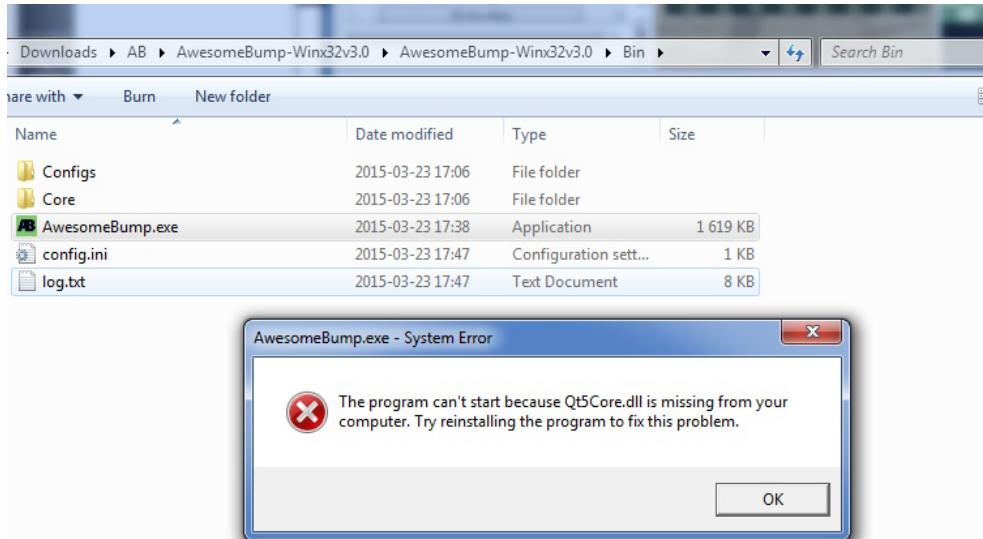
If you decided to build AB with OpenGL 3.30 compatibility you should see in the left-up corner different Application name (**OpenGL 330 release**):



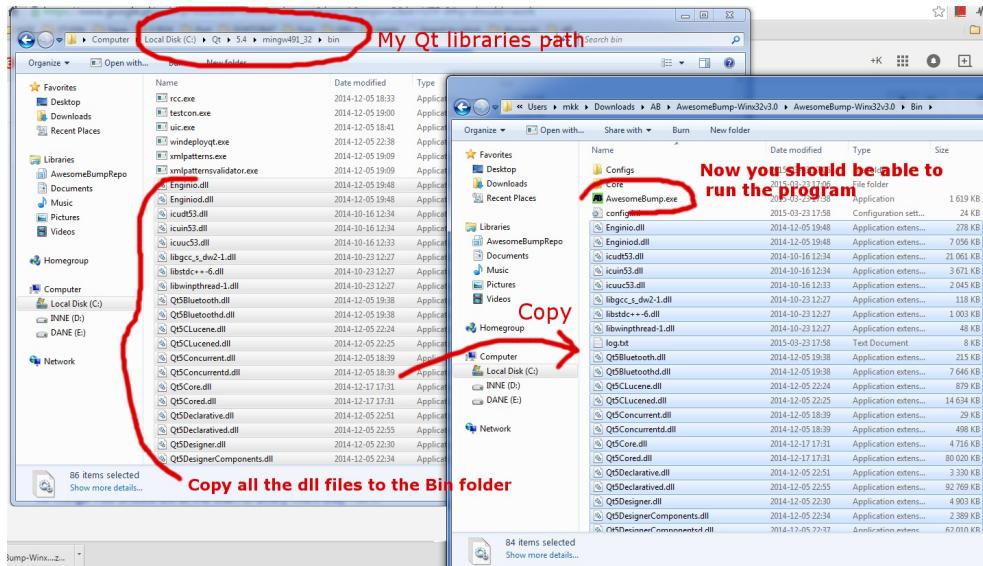
**Step 13.** Copy the builded program (**AwesomeBump.exe**) to the **Bin** folder. You can find exe file in the build location you set in **step 8**. See example screen of the folder structure.



**Step 14.** Paste copied exe file to Bin folder then try to run it you will see following error. This basically means that program needs additional libraries to run. The simplest solution is to copy **all Qt libraries** to this folder.



**Step 15.** Navigate to the Qt installation location (In my case C:/Qt/... see the example screen) and copy all the dll files to the **Bin/** folder. Actually, you don't have to copy all the dll files but only selected ones. To see which libraries you need to run the program you can download AB binaries from github and compare files.



**Step 16.** Copy additional libraries to **Bin/** folder (see image below). Now you can make a **shortcut** to the .exe file and run it from the Desktop. Finito!

