

Check to see if you have OpenGL 3.0 support using GPU Caps Viewer

[http://www.ozone3d.net/gpu\\_caps\\_viewer/](http://www.ozone3d.net/gpu_caps_viewer/)

Version 1.15 can be found from here:

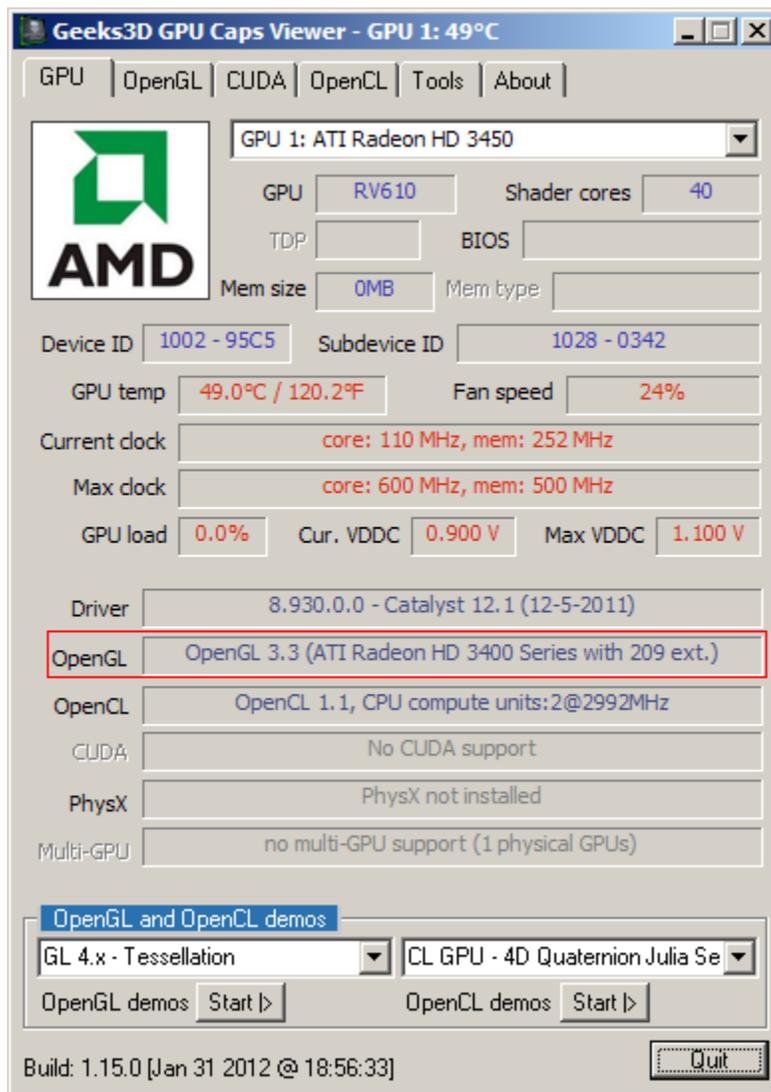
<http://www.geeks3d.com/20120202/gpu-caps-viewer-1-15-0-opengl-opencl-cuda-graphics-card-utility/>

In the middle of the page you will see the download link as

Download



Select to download the win32 version.

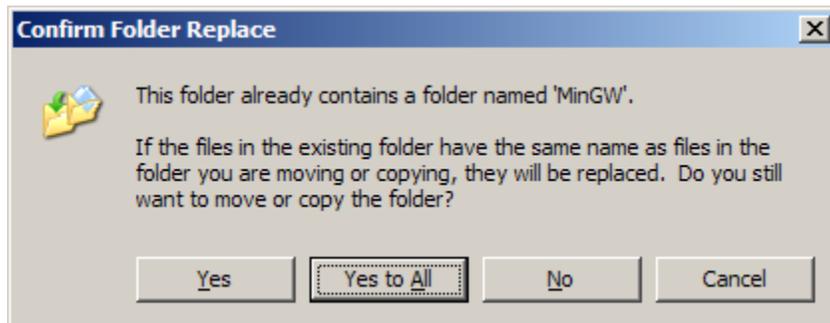


**This shows the graphics card has OpenGL 3.3 support.**

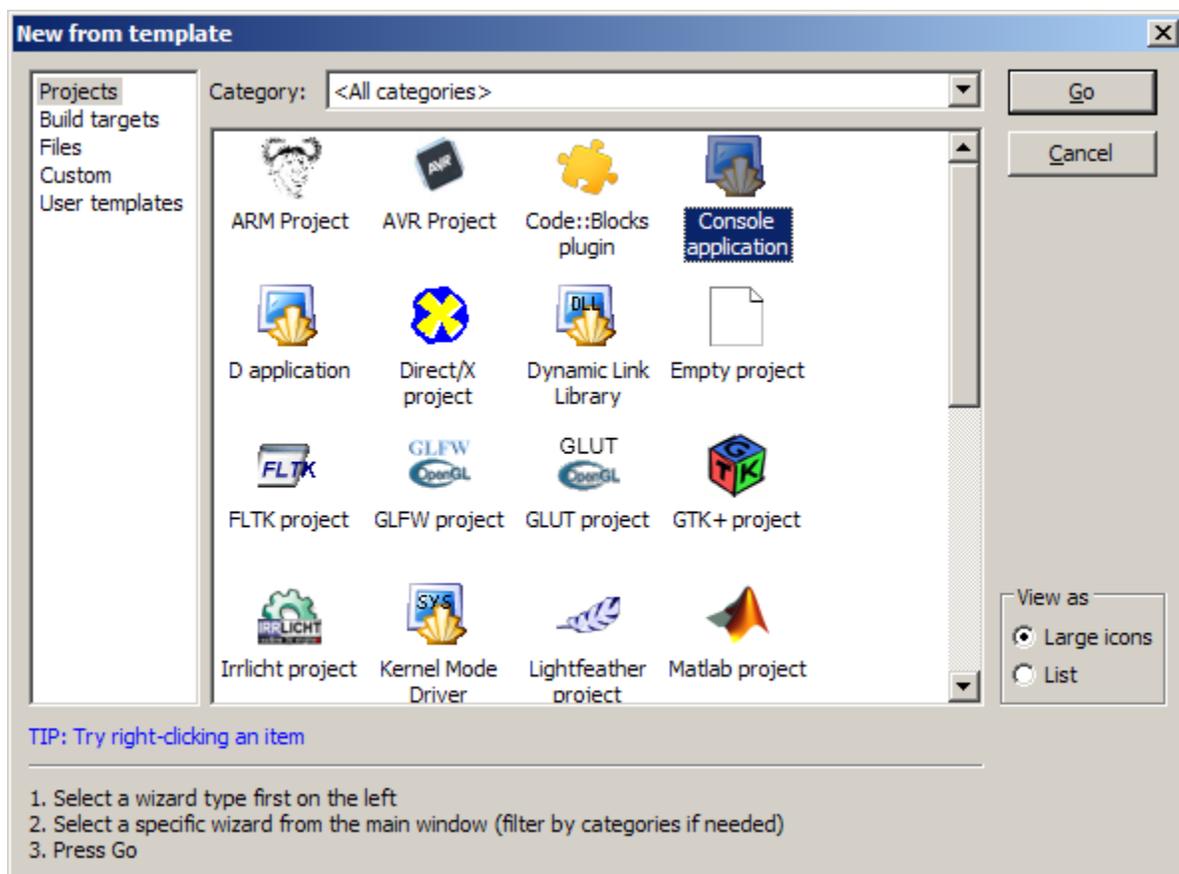
If you don't have at least OpenGL 3.0, get the Windows drivers for your graphics card from here:

[http://www.opengl.org/wiki/Getting\\_started#Windows](http://www.opengl.org/wiki/Getting_started#Windows)

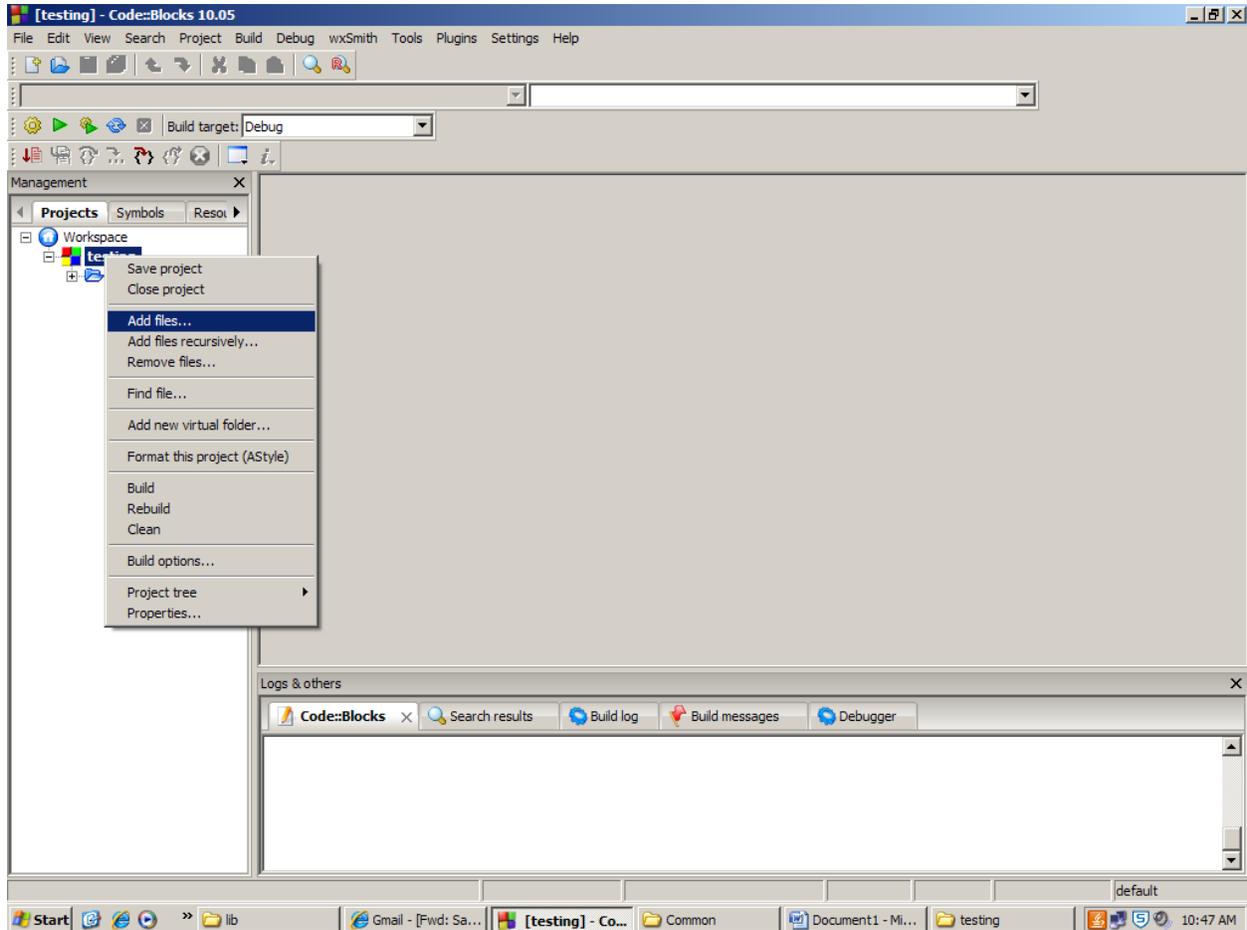
From the **code** zip file you downloaded, copy the **MinGW** directory To **C:\Program Files\CodeBlocks** (or whichever directory you placed MinGW). Overwrite the files that you have in your MinGW directory:



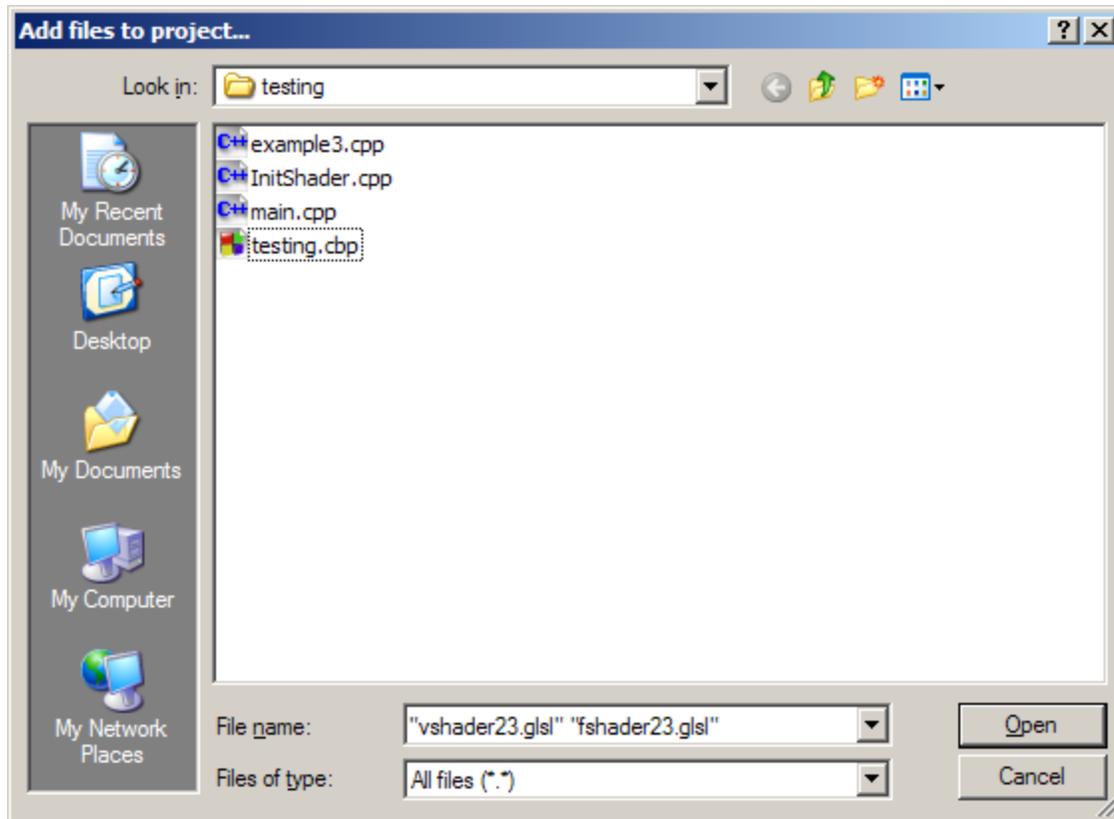
In Code::Blocks, make a **new console application**.



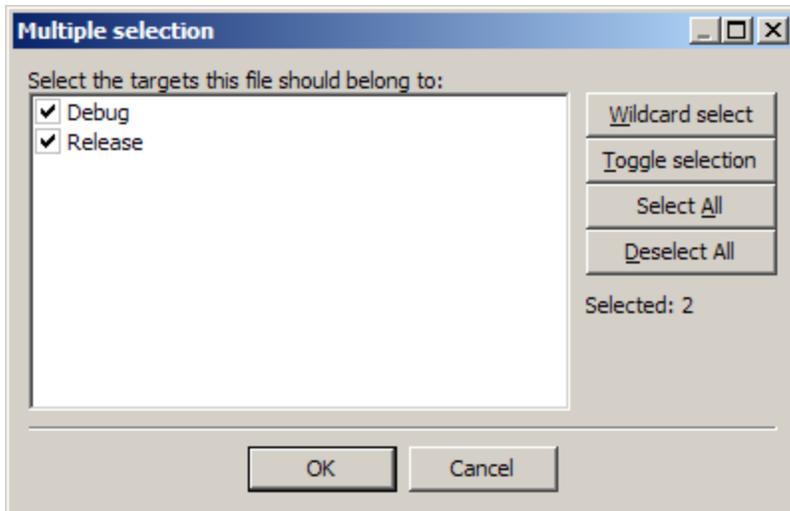
Once you have created your project you should copy **InitShader.cpp** from the **code** zip file in the **common** directory to your project's directory. Add that file to your project by right clicking on the project's name and selecting to **Add files**.



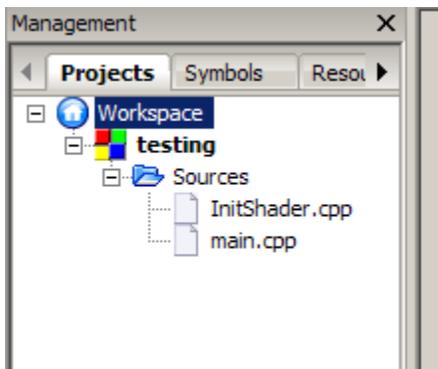
Select **InitShader.cpp** and then select **Open**.



Press OK



Now **InitShader.cpp** is in your project.



Select a sample project to work from. Replace the code in main.cpp with whichever sample project you decide to work with. In our example, we will be working with

**CHAPTER02\_CODE\WINDOWS\_VERSIONS\ example3.cpp**

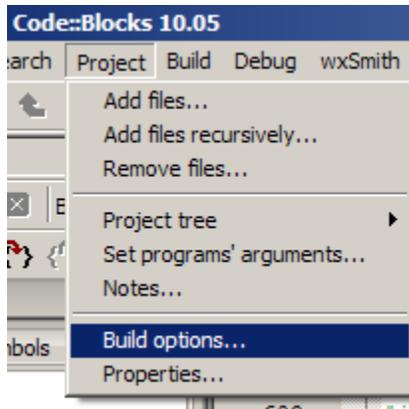
Once you have copied this file into main.cpp locate the following lines:

```
// Load shaders and use the resulting shader program
GLuint program = InitShader( "vshader23.glsl", "fshader23.glsl" );
```

This tells the InitShader to make use of the following files **vshader23.glsl** and **fshader23.glsl**. You need to have them in your project directory. Please copy them to the directory where you stored your main.cpp file. Each program will use different shader files, so please make sure the proper files are copied before you run your program or you will get runtime errors.

- main.cpp
- testing.cbp
- InitShader.cpp
- fshader23.glsl
- vshader23.glsl

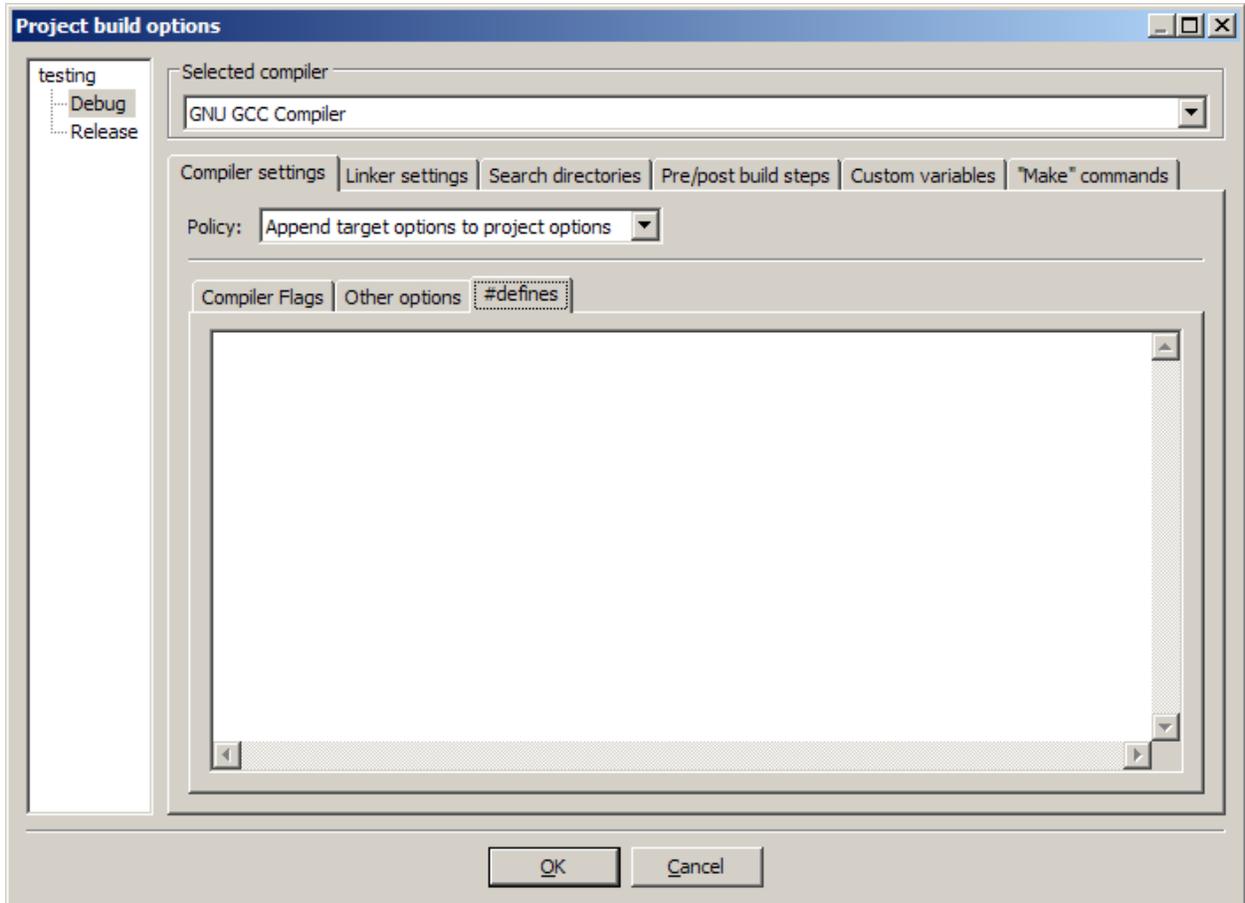
From the Code::Blocks menu select Project, Build Options.



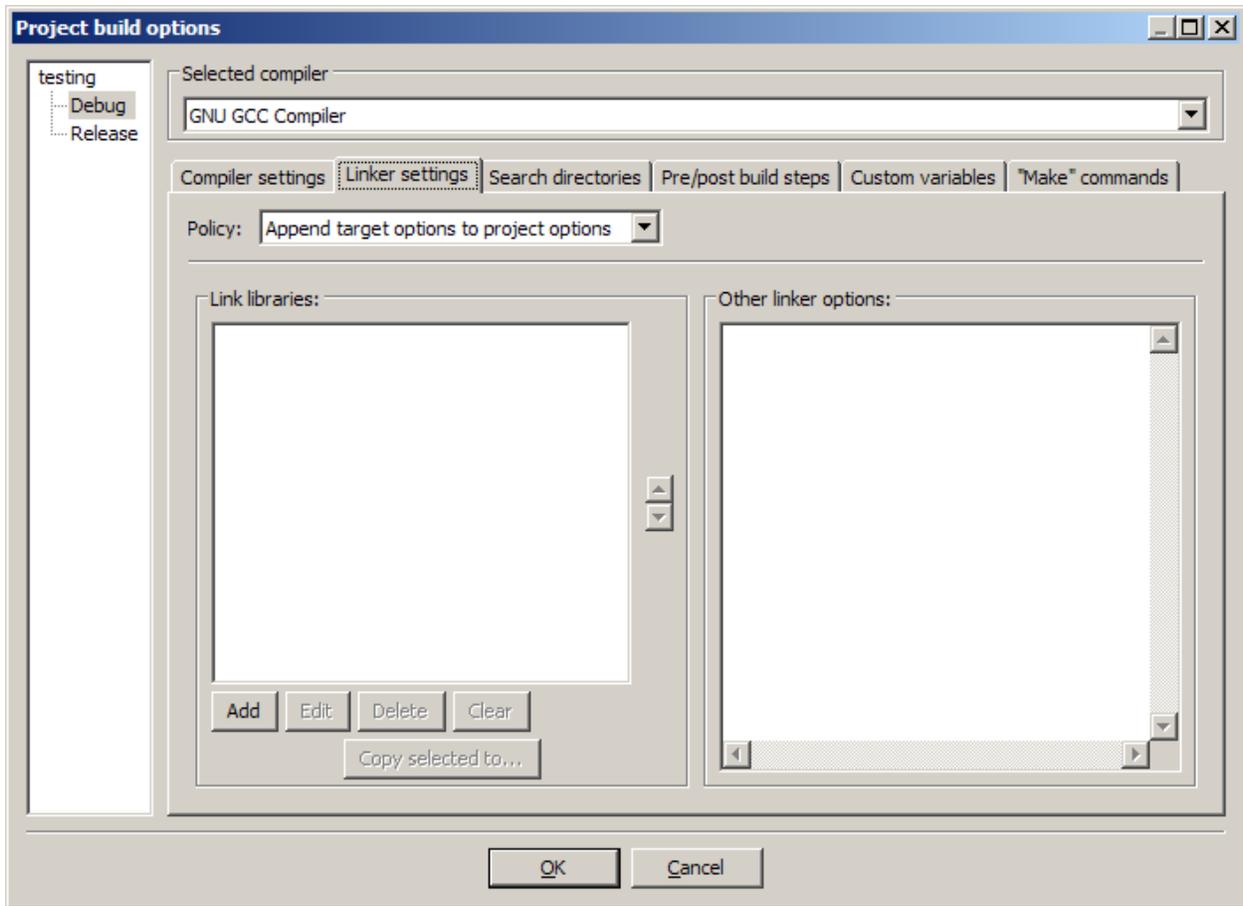
From the Build Options select #defines and type into the box:

FREEGLUT\_STATIC

GLEW\_STATIC



In the linker settings tab, select to Add.

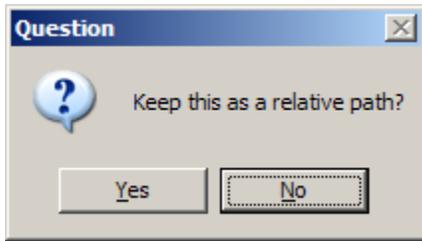


**For the W.E.B. Building on Campus (or Windows 7), you add the following libraries:**

C:\Program Files (x86)\CodeBlocks\MinGW\lib\windows\libfreeglut.a  
C:\Program Files (x86)\CodeBlocks\MinGW\lib\windows\libglew32.a  
C:\Program Files (x86)\CodeBlocks\MinGW\lib\libopengl32.a  
C:\Program Files (x86)\CodeBlocks\MinGW\lib\libgdi32.a  
C:\Program Files (x86)\CodeBlocks\MinGW\lib\libwinmm.a

If you are on XP, Vista, or a system that uses the path C:\Program Files, for CodeBlocks, add in the following libraries **instead**:

C:\Program Files\CodeBlocks\MinGW\lib\windows\libfreeglut.a  
C:\Program Files\CodeBlocks\MinGW\lib\windows\libglew32.a  
C:\Program Files\CodeBlocks\MinGW\lib\libopengl32.a  
C:\Program Files\CodeBlocks\MinGW\lib\libgdi32.a  
C:\Program Files\CodeBlocks\MinGW\lib\libwinmm.a



Select **No**.

When done press **OK**.

Test the project by pressing F9. Hopefully you get the following window

Simple GLSL example

