2023 Starting a new OpenGL project in Visual Studio 2022

miercuri, 22 februarie 2023 10:20

Draft version.
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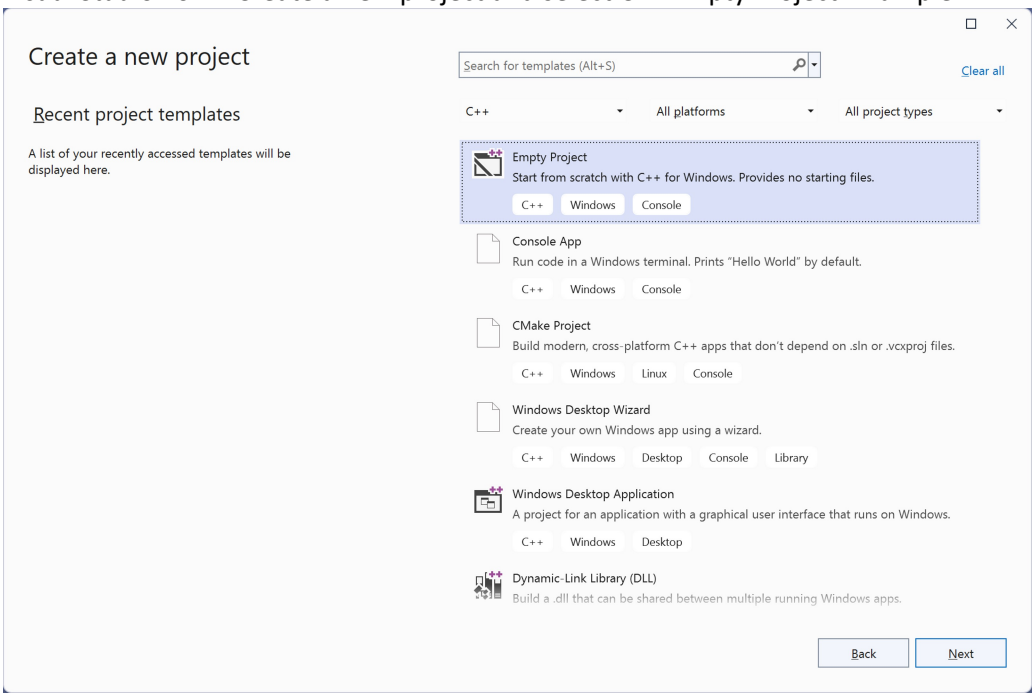
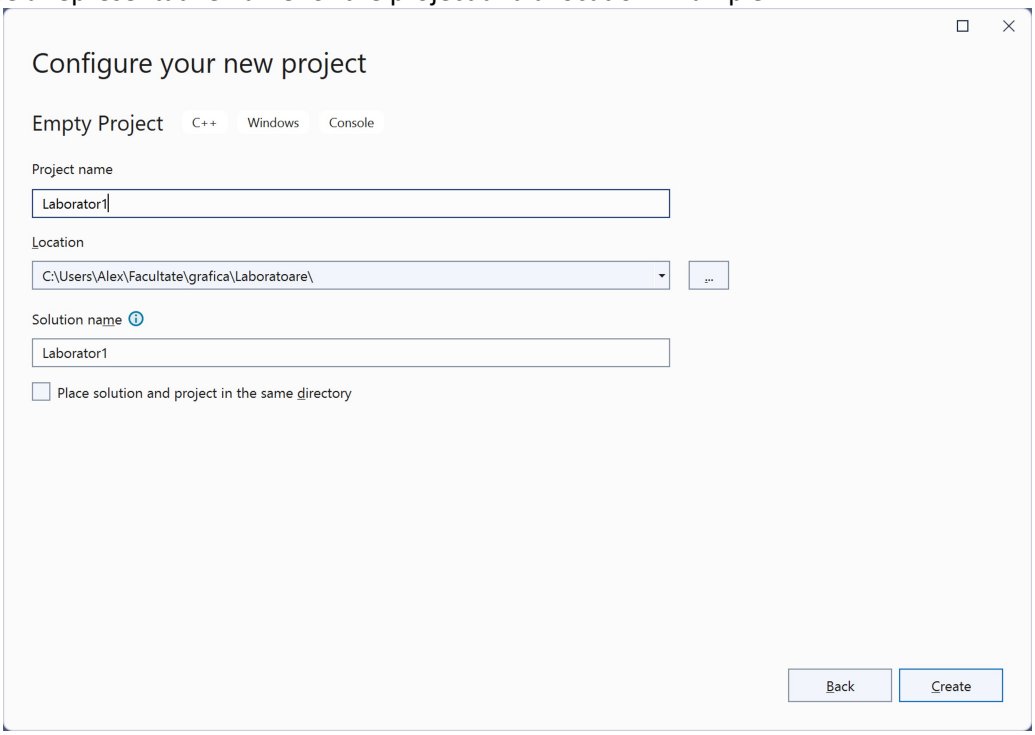
1. Create the project

Open *Visual Studio 2022*. Create a new project and select C++ Empty Project. Example:

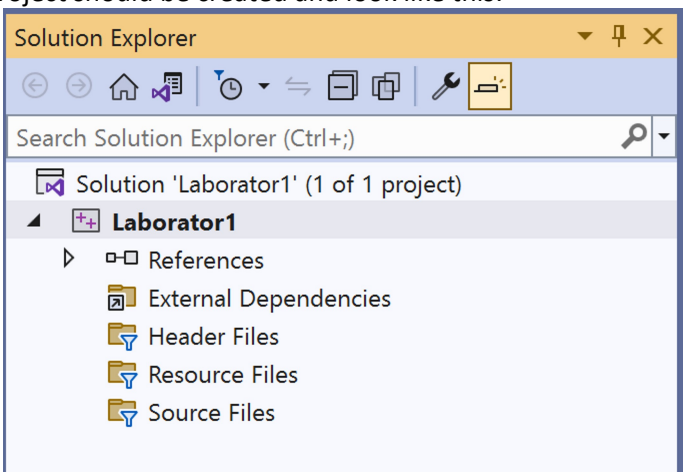


Click the *Next* button.
Choose a representative name for the project and a location. Example:

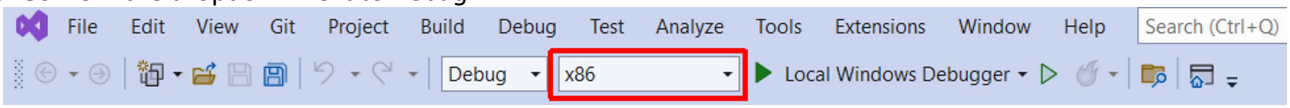


Make sure you group the lab projects together in the same base folder, so you can present them when asked.
Click *Create*.

The project should be created and look like this:



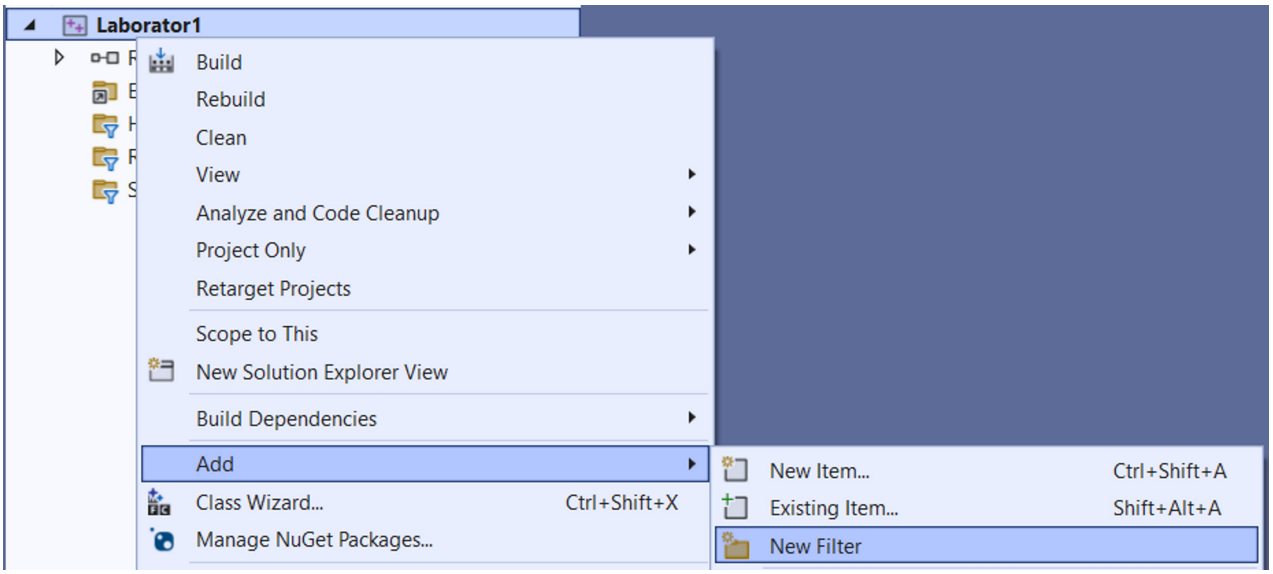
Select **x86** from the dropdown next to *Debug*



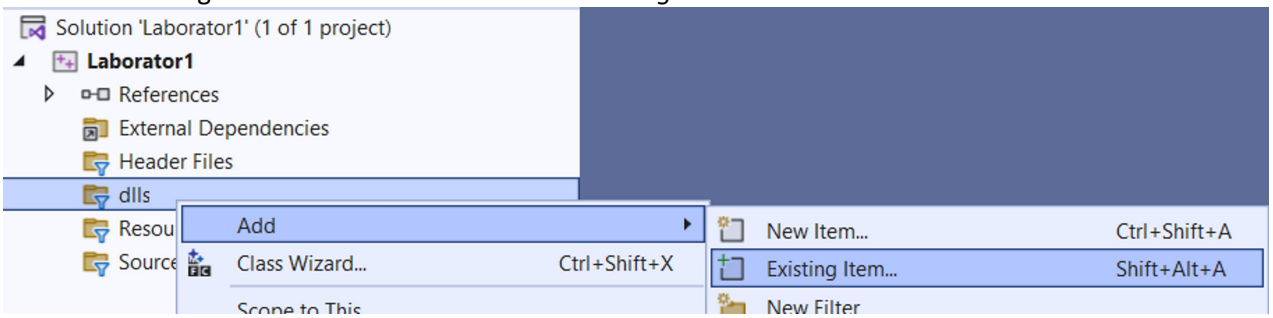
2. Add the external files

Unzip the content of the archive with the header+lib+dll files in the project folder (NOT the solution folder). The project files should look like this now:

Right click the solution and *Add->New Filter*:

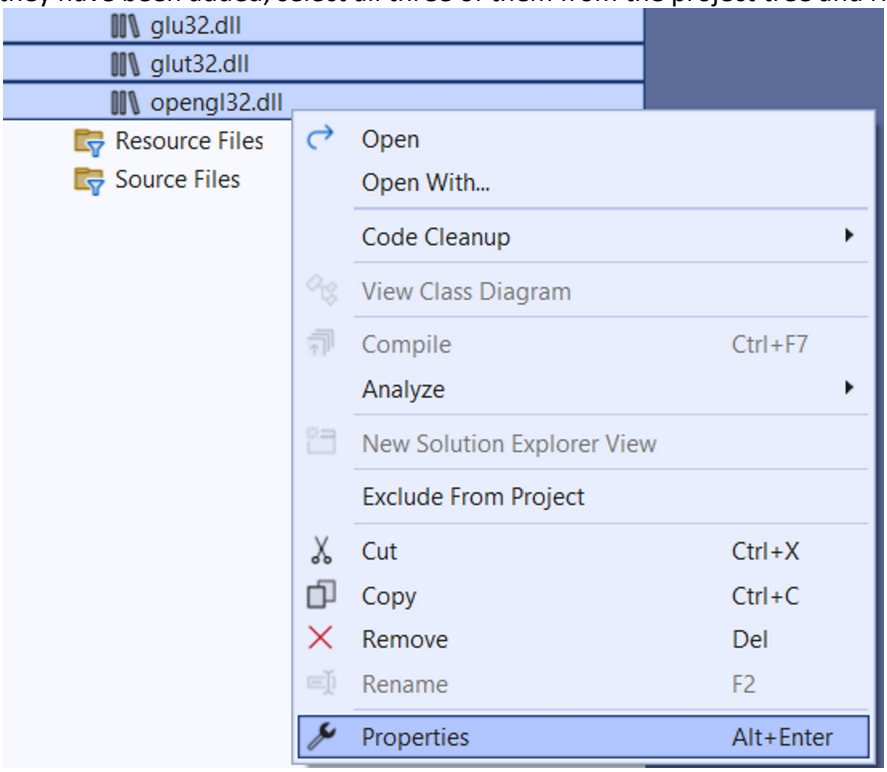


Name the filter **dlls**. Right click the *dlls* filter and *Add->Existing Item…*

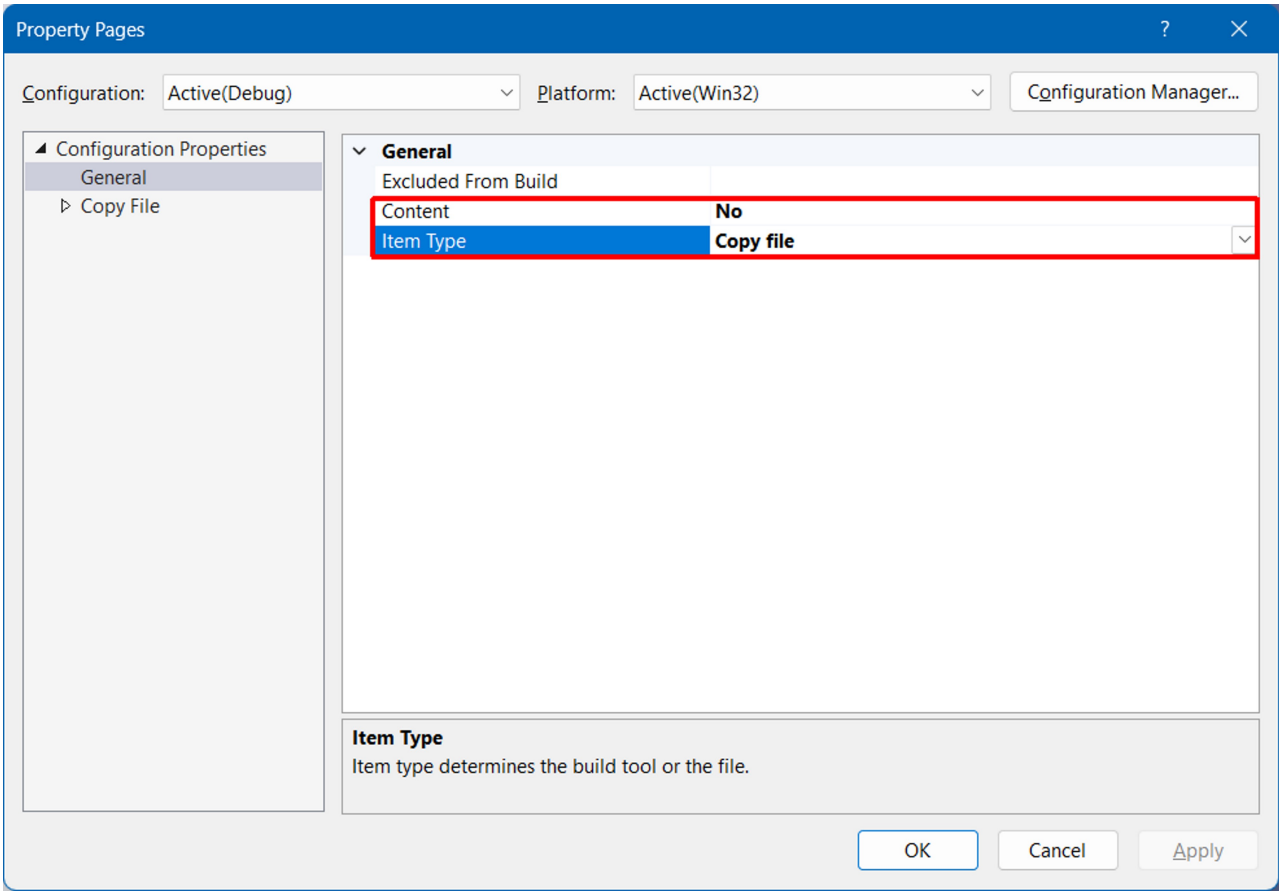


Select the three existing dlls from the project *dlls* folder: *glu32.dll, glut32.dll, opengl32.dll*

After they have been added, select all three of them from the project tree and right click -> *Properties*

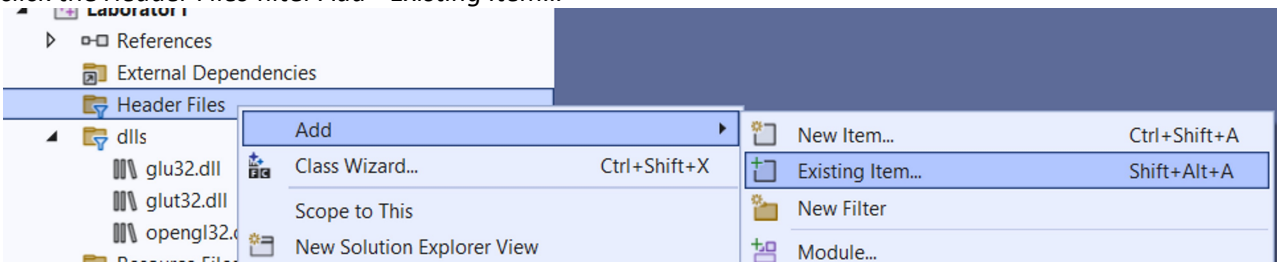


Select *Content*->**No** and *Item Type*->**Copy file**:



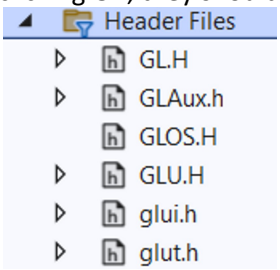
Click *OK* to close the modal.

Right click the *Header Files* filter *Add->Existing Item…*

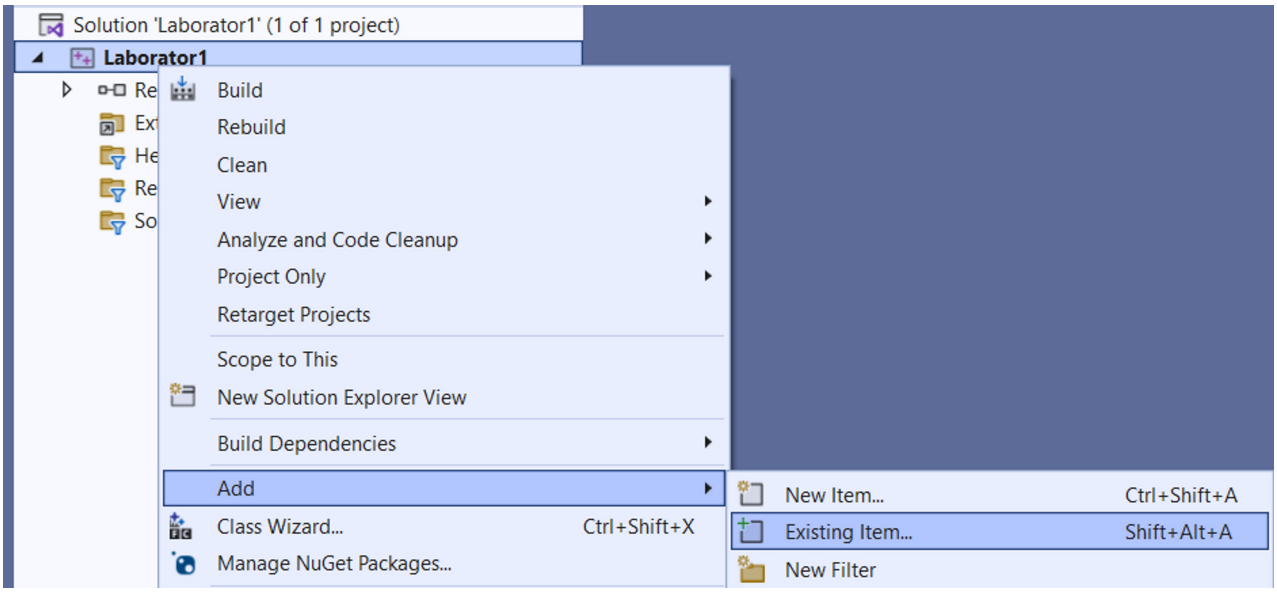


Select the existing header files: *GL.H, GLAux.h, GLOS.H, GLU.H, glui.h, glut.h*

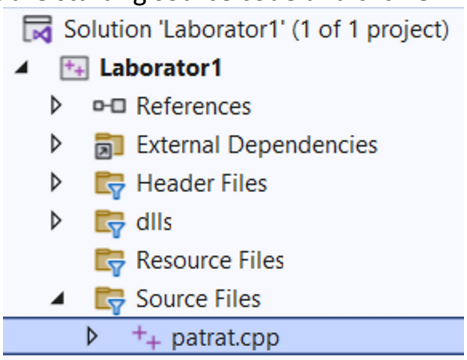
After clicking OK, they should appear in the project tree.



Copy in the project folder the source code for the project start, ex: patrat.cpp
Right click the solution -> *Add -> Existing item*

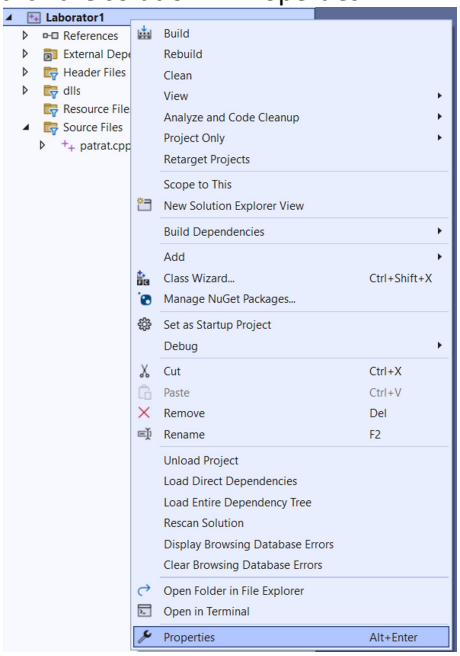


Select the starting source code and click OK. The file should appear under the *Source Files* filter

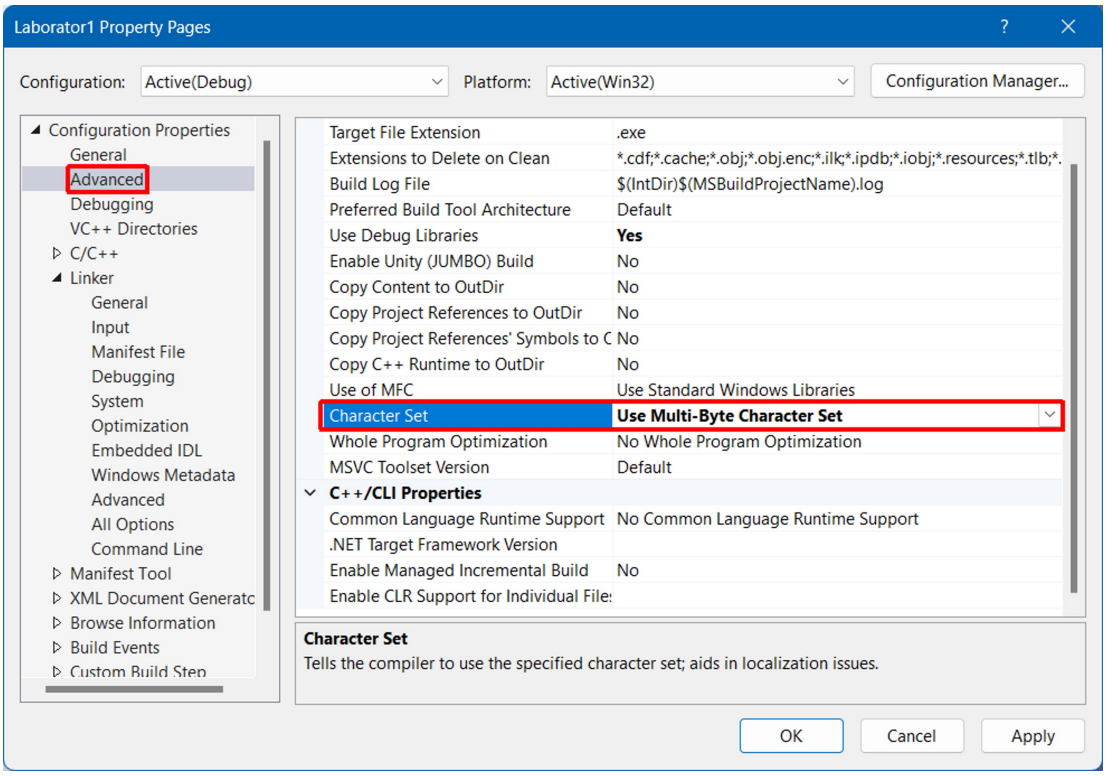


3. Configure the project

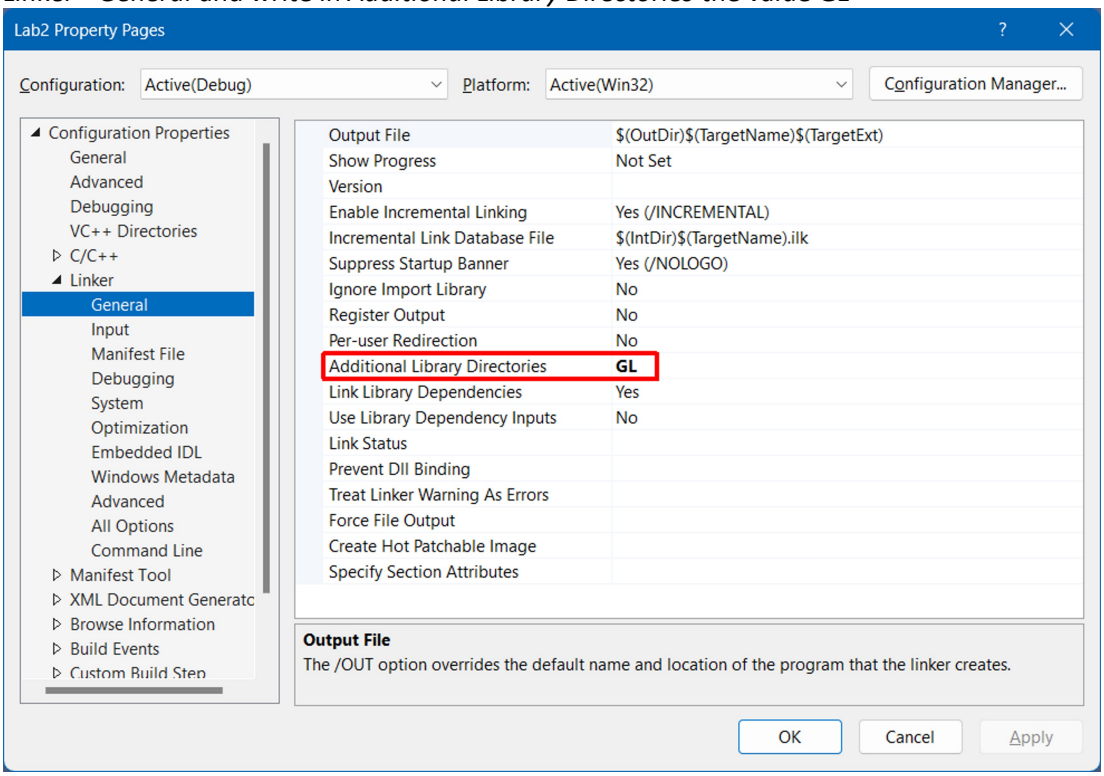
Right click the solution -> Properties



Go to *Advanced* and select *Character Set*: **Use Multi-Byte Character Set**

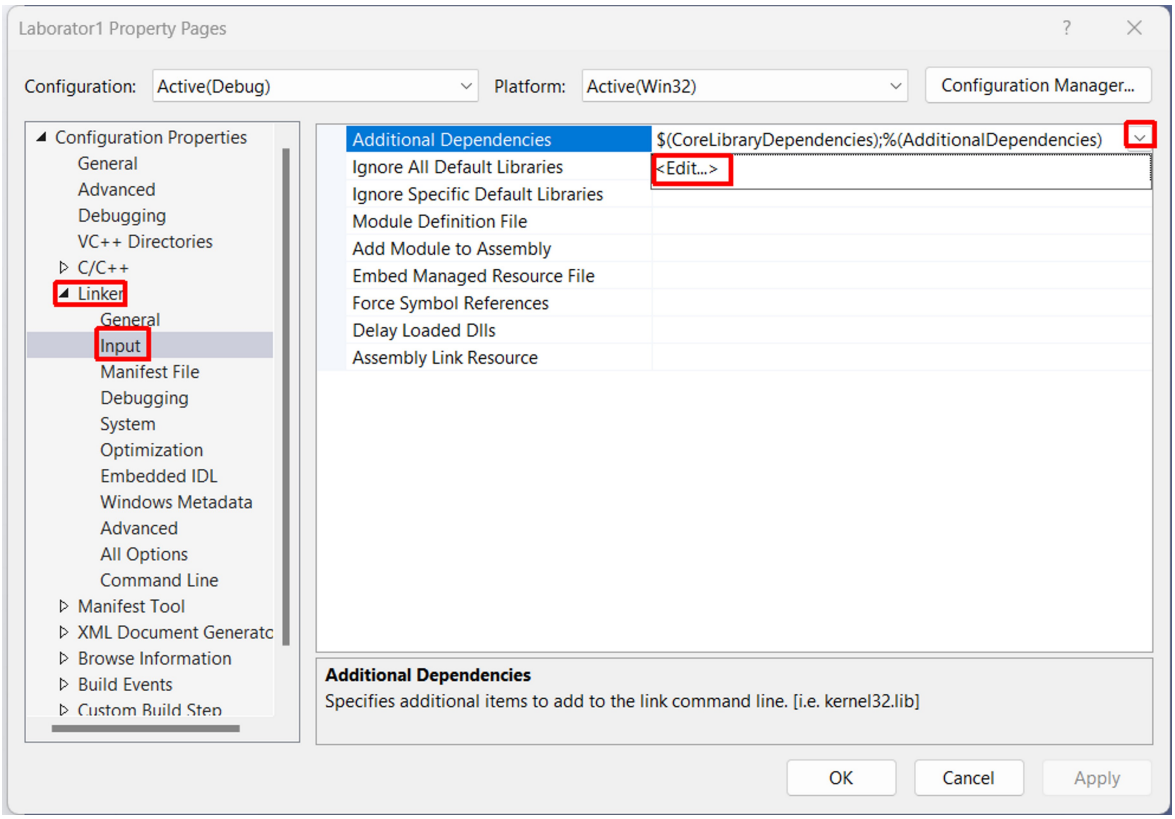


Go to *Linker->General* and write in *Additional Library Directories* the value **GL**

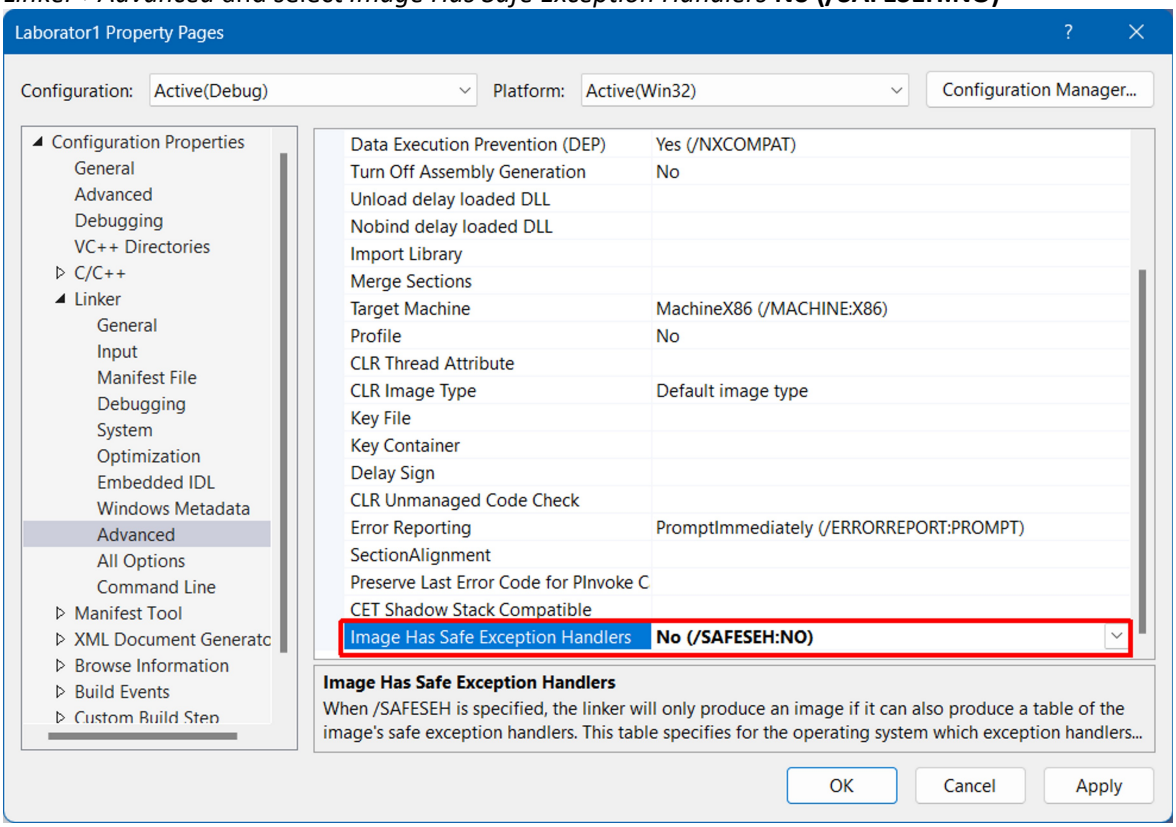


Go to *Linker->Input* and add the 6 following *Additional Dependencies*:

```
glu32.lib
glut32.lib
glui32.lib
opengl32.lib
glaux.lib
legacy_stdio_definitions.lib
```



Go to *Linker->Advanced* and select *Image Has Safe Exception Handlers* **No (/SAFESEH:NO)**



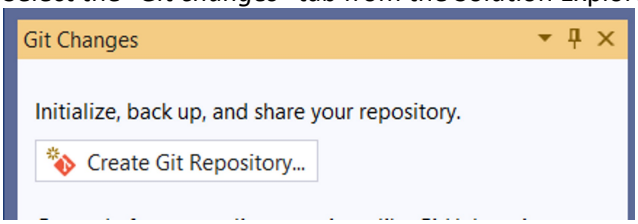
Click OK to save the configuration.

4. Test the project

Test that the project now builds and runs:

5. Create a repository

Select the "*Git changes*" tab from the Solution Explorer area. Click the *Create Git Repository* button.



Select a representative *Repository name* then click *Create and Push*. Example: