UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

FACULTAD DE INGENIERÍA

Subject: Computación Gráfica e Interacción Humano Computadora

Group: 5

Semester: 2022-2

Technical Manual for project configuration

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What is this manual for?

This manual is written with the intention of carrying out a correct initial configuration so that the program works properly and that it meets the objectives that were intended when programming and testing it, as well as the requirements and definitions necessary for this program to be able to be executed in the end user's computer.

This manual is NOT designed to solve doubts or problems regarding the behavior of the program or its operation; That's what the user manual is for, which covers those topics.

Requirements for installation from files downloaded with Drive

- A computer with a minimum Windows 7 operating system (supported up to Windows 11).
- Visual Studio in its 2017 or 2019 versions. **

**: The program may work in other versions of Visual Studio than those mentioned, but this is not guaranteed, in addition to the fact that this manual will take the 2019 version as an example, so it is highly recommended to use this version by above any other.

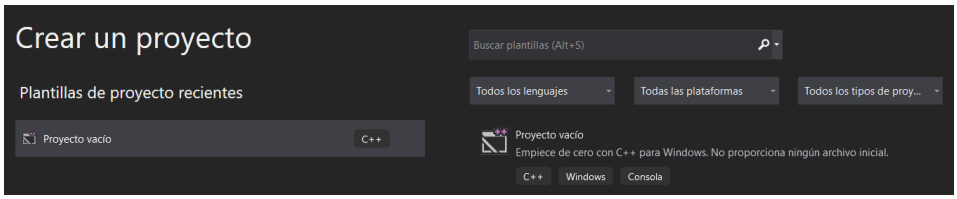
Environment settings

This manual is written with the intention of carrying out a correct initial configuration so that the program works properly and that it meets the objectives that were intended when programming and testing it, as well as the requirements and necessary adjustments so that this program can be executed in the end user's computer.

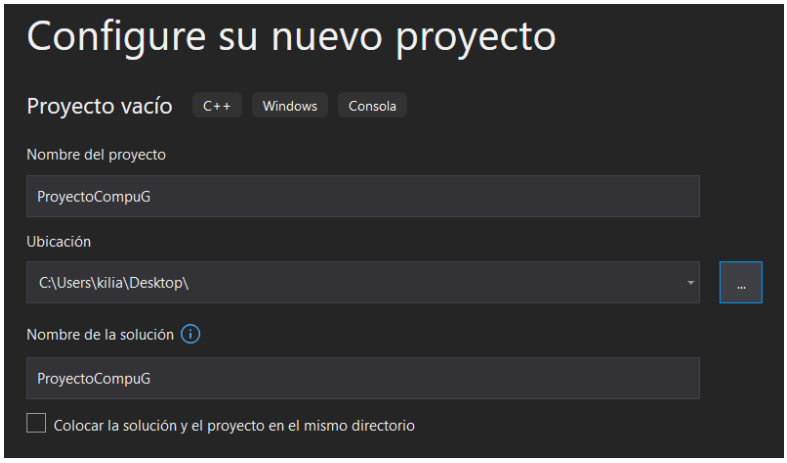
Open VS in its 2017 or 2019 version.

Select the box **«Create a new project».**

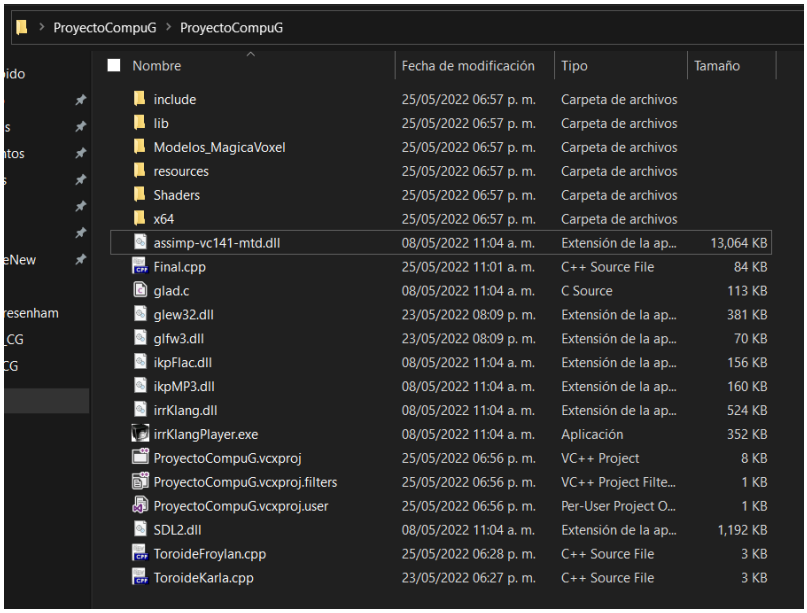
Select Empty Visual C++ Project



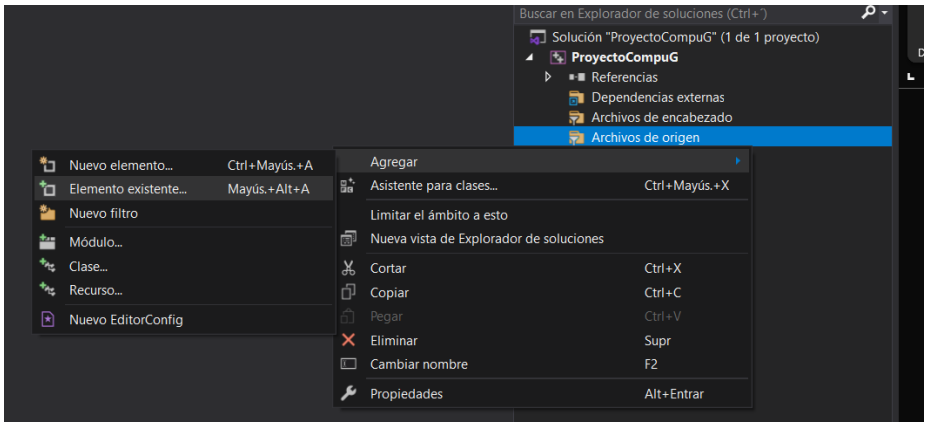
Place a name and the location you want and click **<<Create>>.**



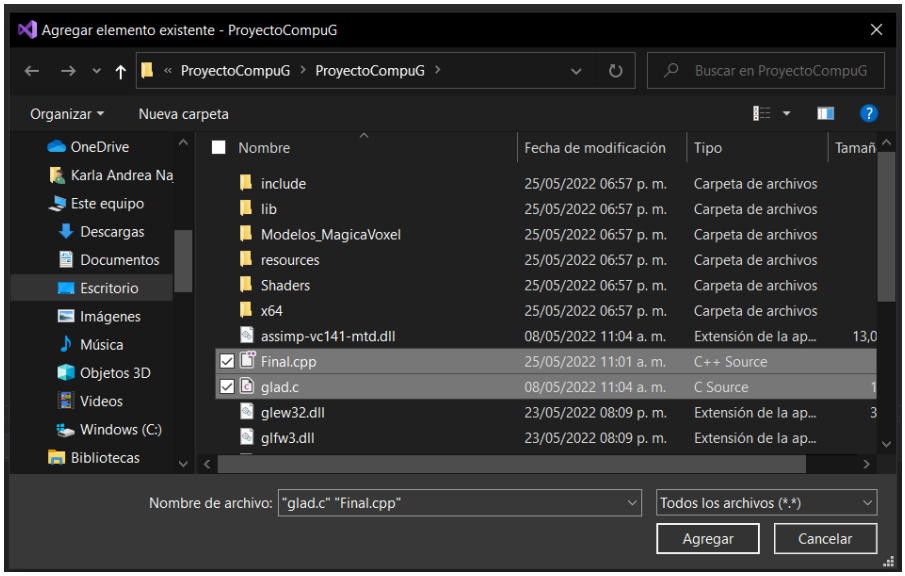
Once the solution is created, place the sent zip files in the folder where the files with the .vcxproj extension are located



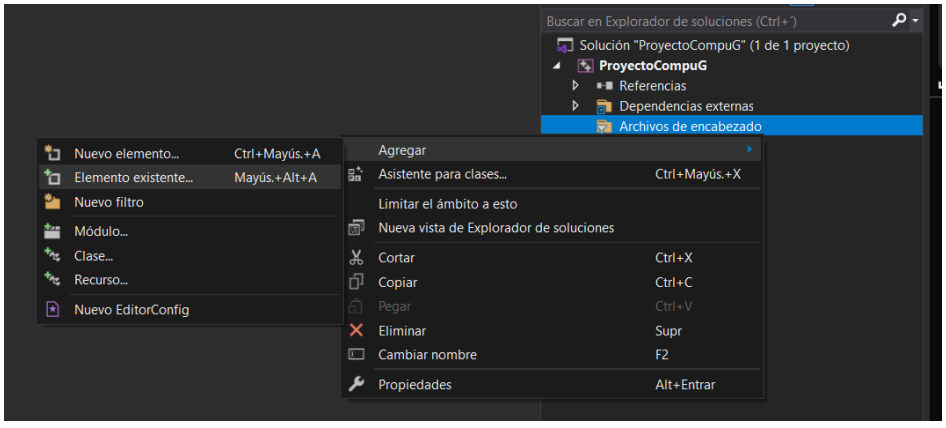
In Visual Studio, in the Solution Explorer window, add item in Source Files (by right-clicking on **Source Files**).

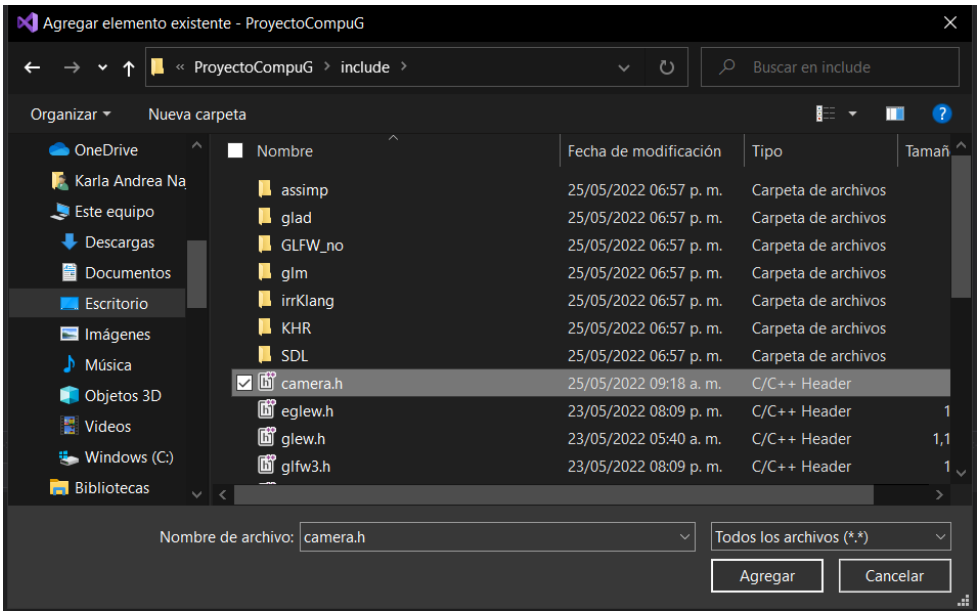


Add the code files named **Final.cpp** and **glad.c** (If the code files are not found in the window, you made the mistake of putting the files in a different location in the previous steps).

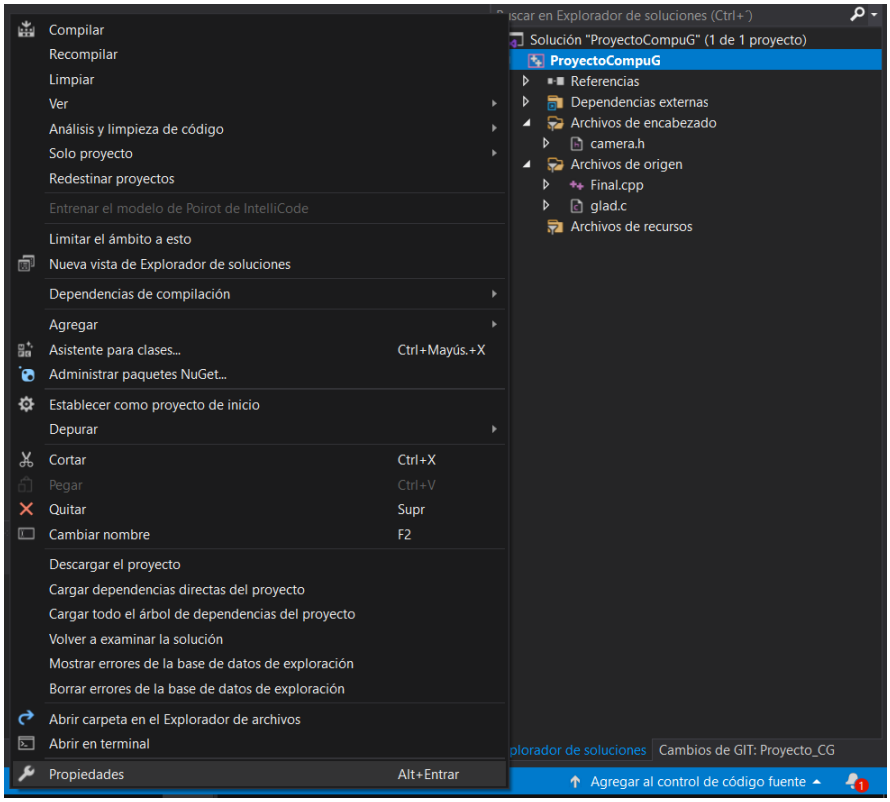


Add another element, but now in **Header Files**. This time, the **camera.h** file is added. This is in the **include** folder.

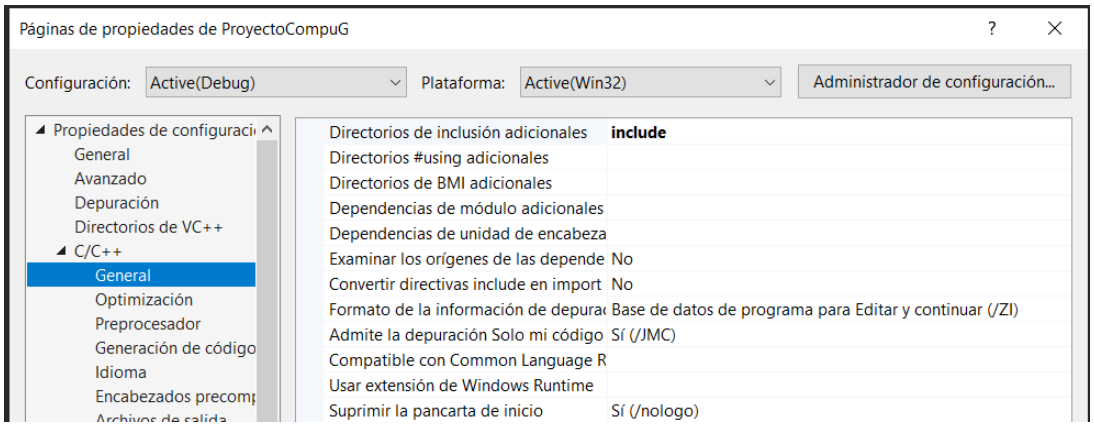




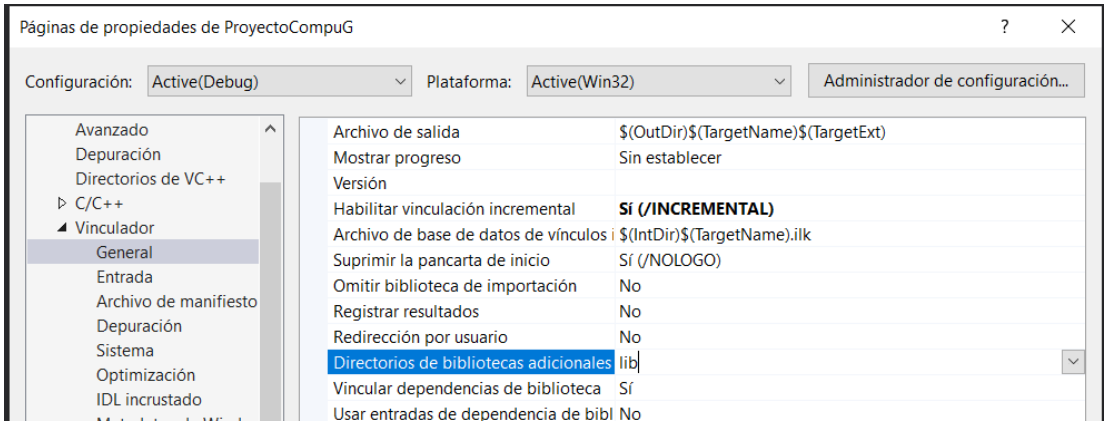
Open the properties of the project (by right-clicking on the name of the project that we created in the Solution Explorer, the name of ProyectoCompuG appears in blue in the image).



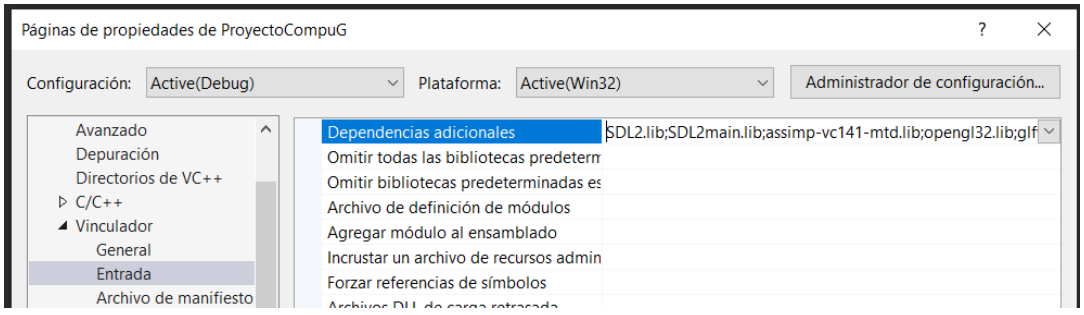
In the Properties Window, go to C/C++ > General, on the left side locate Additional Include Directories, and add include. Also, leave the settings as indicated in the following image:



In the Properties Window, go to Linker > General, on the right hand side locate Additional Library Directories, and add lib.



In the Properties Window, go to Linker > Input, on the right hand side locate Additional Dependencies, and add **SDL2.lib;SDL2main.lib;assimp-vc141-mtd.lib;opengl32.lib;glfw3.lib;** (Respect the elements that already exist). Don't forget to click OK when you're done with these changes.



Once this is done, the file should be able to compile and run without errors.

Requirements for installation with Github

- A computer with a minimum Windows 7 operating system (supported up to Windows 11).
- Visual Studio in its 2017 or 2019 versions. **
- **It is not a requirement, but it is recommended to have an AMD Ryzen series processor, since we have detected that there are problems in some Intel processors to show the project.**
- The link to the repository that contains the entire project. This link is: https://github.com/suadero99/ProyectoCG and also be a collaborator to have access to said repository.

**: The program may work in other versions of Visual Studio other than those mentioned, but this is not guaranteed, in addition to the fact that this manual will take the 2019 version as an example, so it is highly recommended to use this version by above any other.

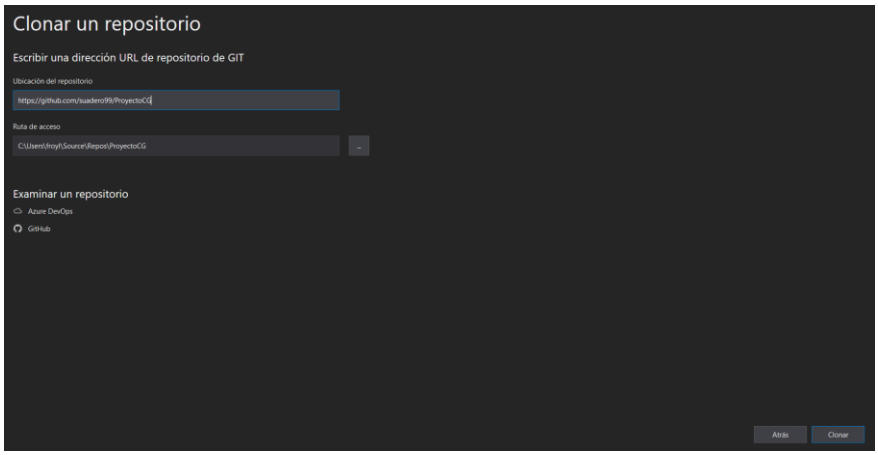
Environment settings

Note: For reference, screenshots of Visual Studio 2019 (hereinafter referred to as VS) in Spanish will be used.

Open VS in its 2017 or 2019 version.

Select the "**Clone a repository**" option.

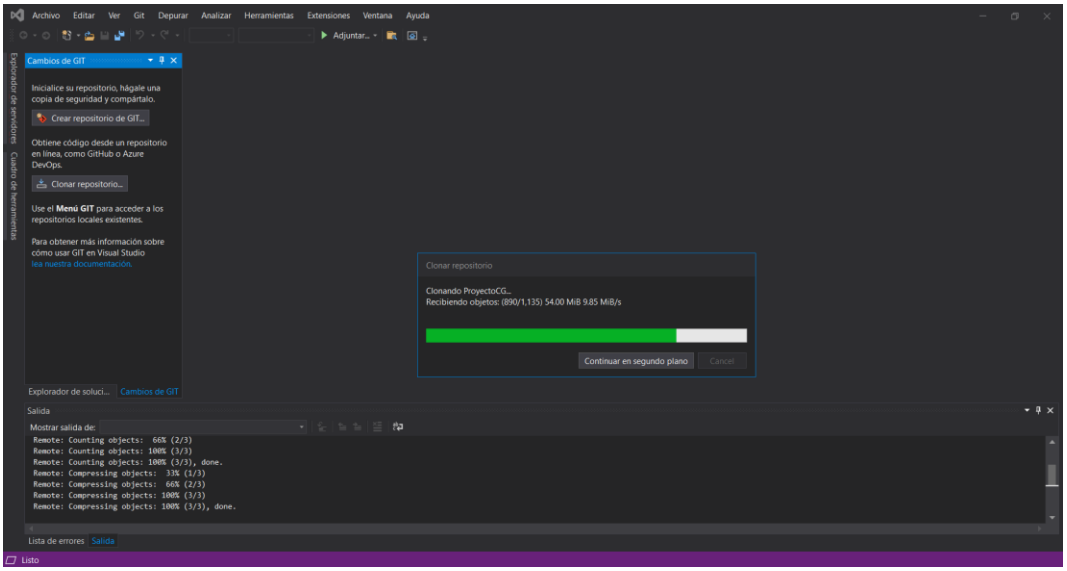
The following screen is displayed.



Copy the repository link into the box that says "**Repository location**" and select a path (where you want to save the project). Once both fields are filled in, click the "Clone" button.

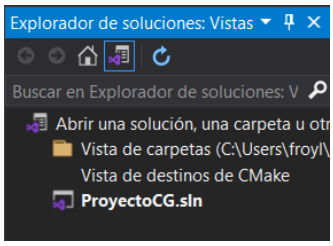
The repository link is ***https://github.com/suadero99/ProyectoCG***

If everything was entered correctly, you will have a screen like the following:

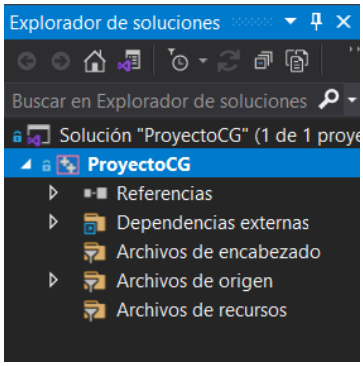


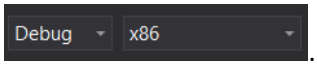
After waiting for the download of the project, we proceed to make the initial configuration.

In the solution explorer, we proceed to double-click on the bold letters "**ProyectoCG.sln**".

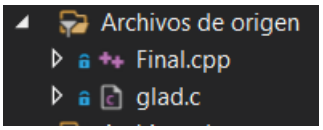


You will have the following screen in the solution explorer:

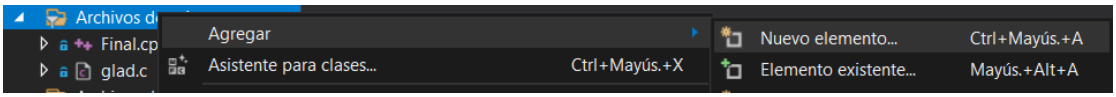


We make sure that at the top it says 

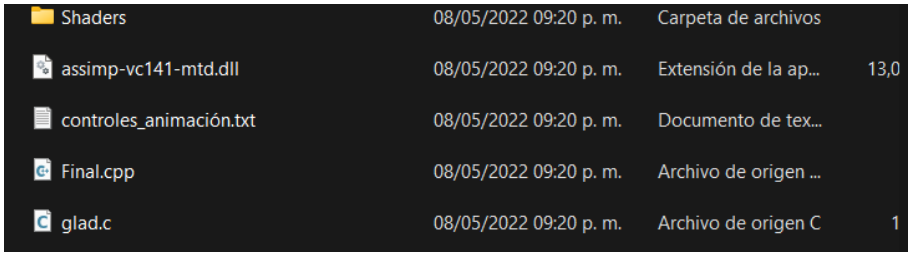
. Just as we make sure that in Source Files the following 2 files appear:



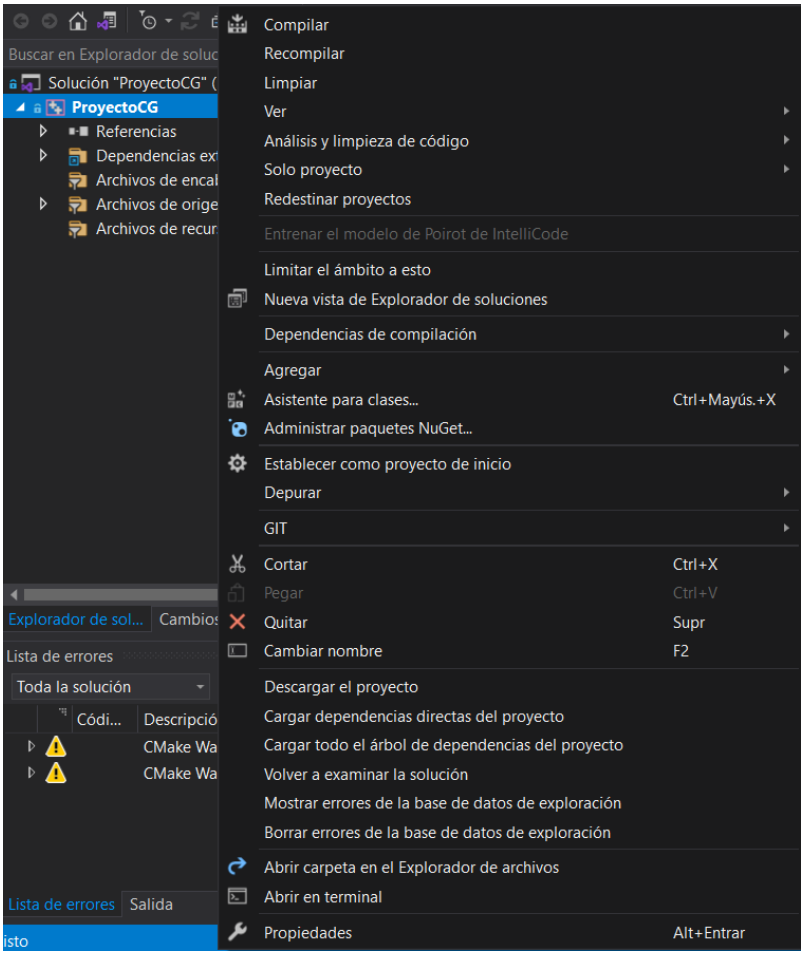
If this is not the case, we right-click on Source Files>Add>Existing Item…



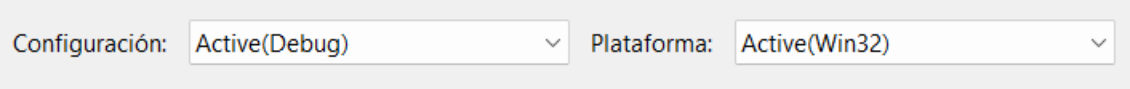
And we proceed to search for the files mentioned before, select them and add them. If they are not found, make sure you have successfully downloaded the project from the repository.



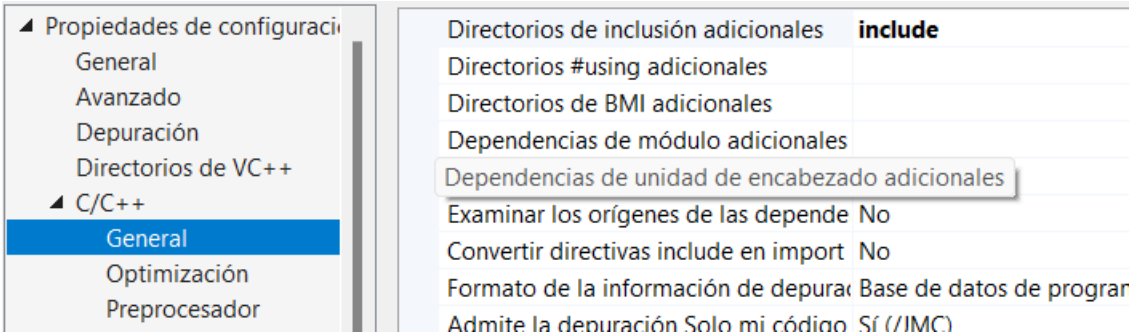
After this, we right click on the bold text **«ProyectoCG»** in the solution explorer. We select **"Properties".**



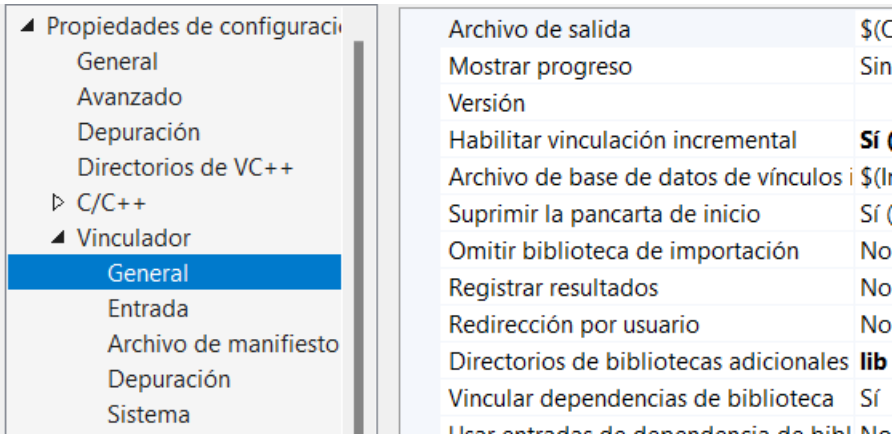
In the new window, at the top, we make sure that Debug appears in Configuration and Win32 in Platform:



Let's go to C/C++ > General. We make sure that under “Additional include directories” it says “include”. Do not move any other parameters.

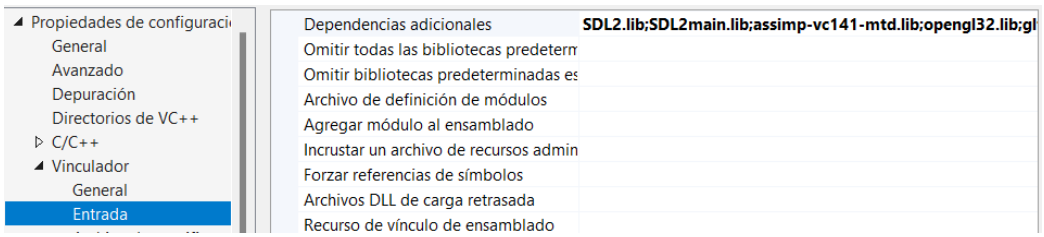


We go to Linker> General. We make sure again that under "Additional Library Directories" it says "lib". Do not move another parameter.



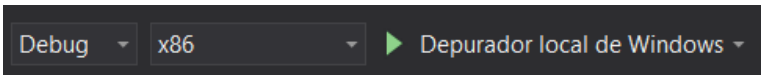
Let's go to Linker > Input. We copy the following text between quotes (DO NOT COPY THE QUOTES): “**SDL2.lib;SDL2main.lib;assimp-vc141-mtd.lib;opengl32.lib;glfw3.lib;kernel32.lib;user32.lib;gdi32.lib; winspool.lib;comdlg32.lib;advapi32.lib;shell32.lib;ole32.lib;oleaut32.lib;uuid.lib;odbc32.lib;odbccp32.lib;%(AdditionalDependencies)**”

In Additional dependencies we paste and replace all the text with the one copied before.



Click on the “Accept” button.

The project already has everything it needs to run. Now, at the top, just click on “Local Windows Debugger”.



If you have followed all the steps so far correctly, the program will now run without a hitch.

Run from .exe file

Once the entire repository has been downloaded from GitHub or Drive, it is possible to simply run the project executable.

To do this, inside the project elements folder, click on ProyectoCG.exe and wait for the program to be executed. Note that the background music starts before the view is loaded.

Note: It is possible that on an Intel processor there may be errors in this step. If this is the case, the first method must be used to configure the build environment.