Setting up OpenGL, GLUT & GLEW for Visual C++ in Windows
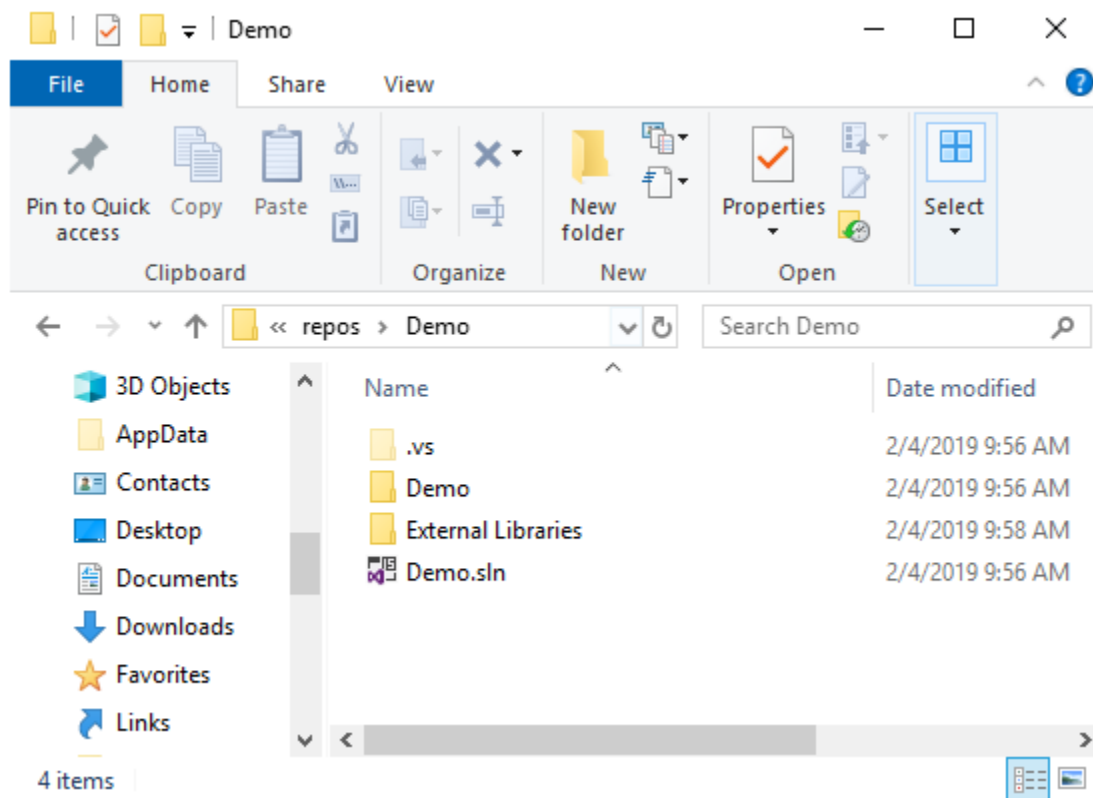
Estimated time for installation: ~15 minutes

REQUIREMENTS
This guide assumes you have a functioning **Operating System** as well as **Visual Studio** installed. You can get a free version of visual studio at this link.

Step 1: Create a new project

Create a new project in Visual Studio ("Console Application") and navigate to it using the File Explorer.

Create a folder called *External Libraries* .

Step 2: Download dependencies

Download FreeGLUT from [this website](). Make sure you get the **MSVC** package.
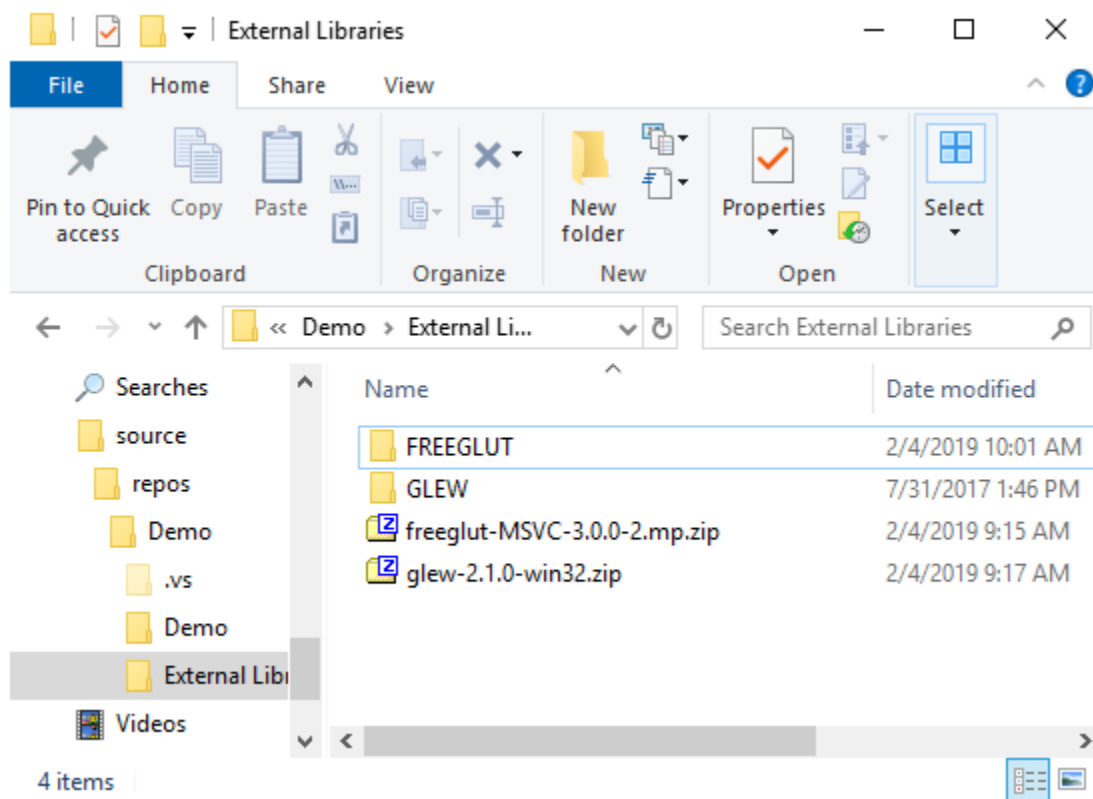*Note: the current version of freeglut is 3.0.0*
Download the latest GLEW **windows binaries** from [this website]().
Note: the current version of GLEw is 2.1.0

Step 3: Copy the Libraries

Extract the downloaded libraries to the previously created folder `External Libraries`.
Rename the folders to **GLEW** and **FREEGLUT** respectively.

Step 4: Linking the libraries to the project

Open the project settings page (Project -> Properties). Choose **All Configurations** in the Configuration dropdown and **x64** for the Platform.
Go to the Configuration Properties > Linker > General tab.
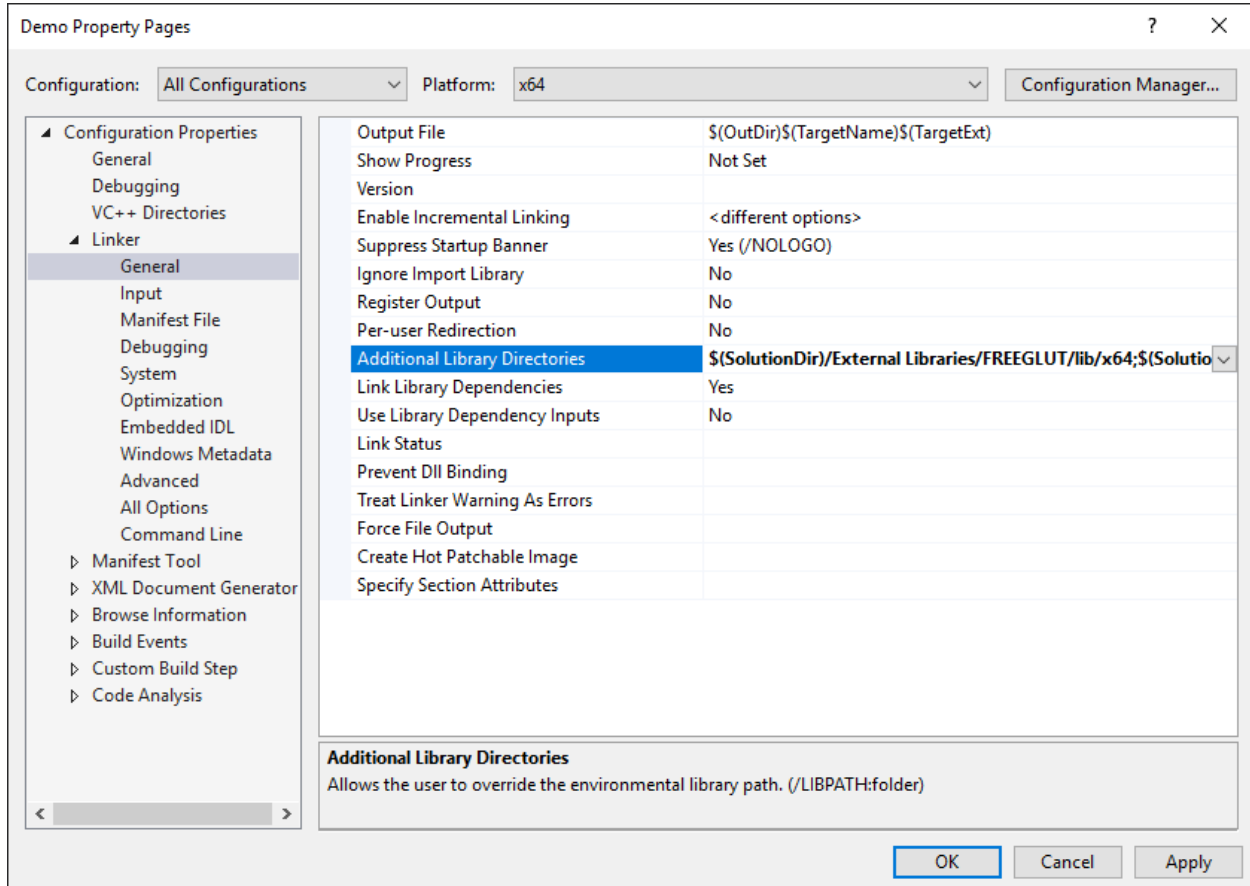
In the field **Additional Library Directories**, add the following values:

For FreeGLUT: $(SolutionDir)/External Libraries/FREEGLUT/lib/x64
For GLEW: $(SolutionDir)/External Libraries/GLEW/lib/Release/x64

Note: for a x86 configuration, the values would be the following :
*   FreeGLUT: $(SolutionDir)/External Libraries/FREEGLUT/lib/*
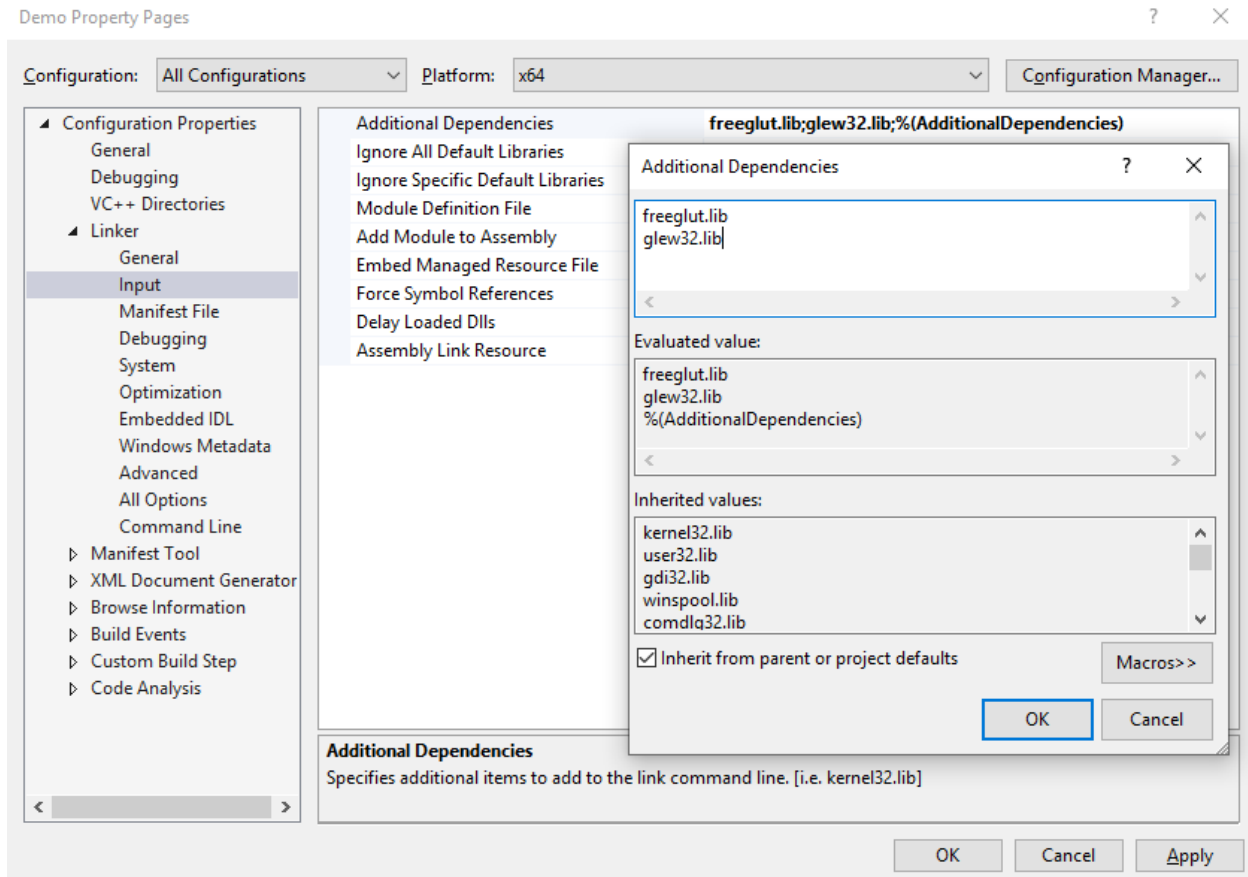*   GLEW: $(SolutionDir)/External Libraries/GLEW/lib/Release/Win32*

Note 2: Make sure these path are correct to the version of the library you have downloaded.
They may have changed !

> **Tip** $(SolutionDir) *is a variable which points to the folder containing the* <project name>.sln *config file.*

Go to the Input tab (Configuration Properties > Linker > Input) and under the Additional Dependencies, add the following values:
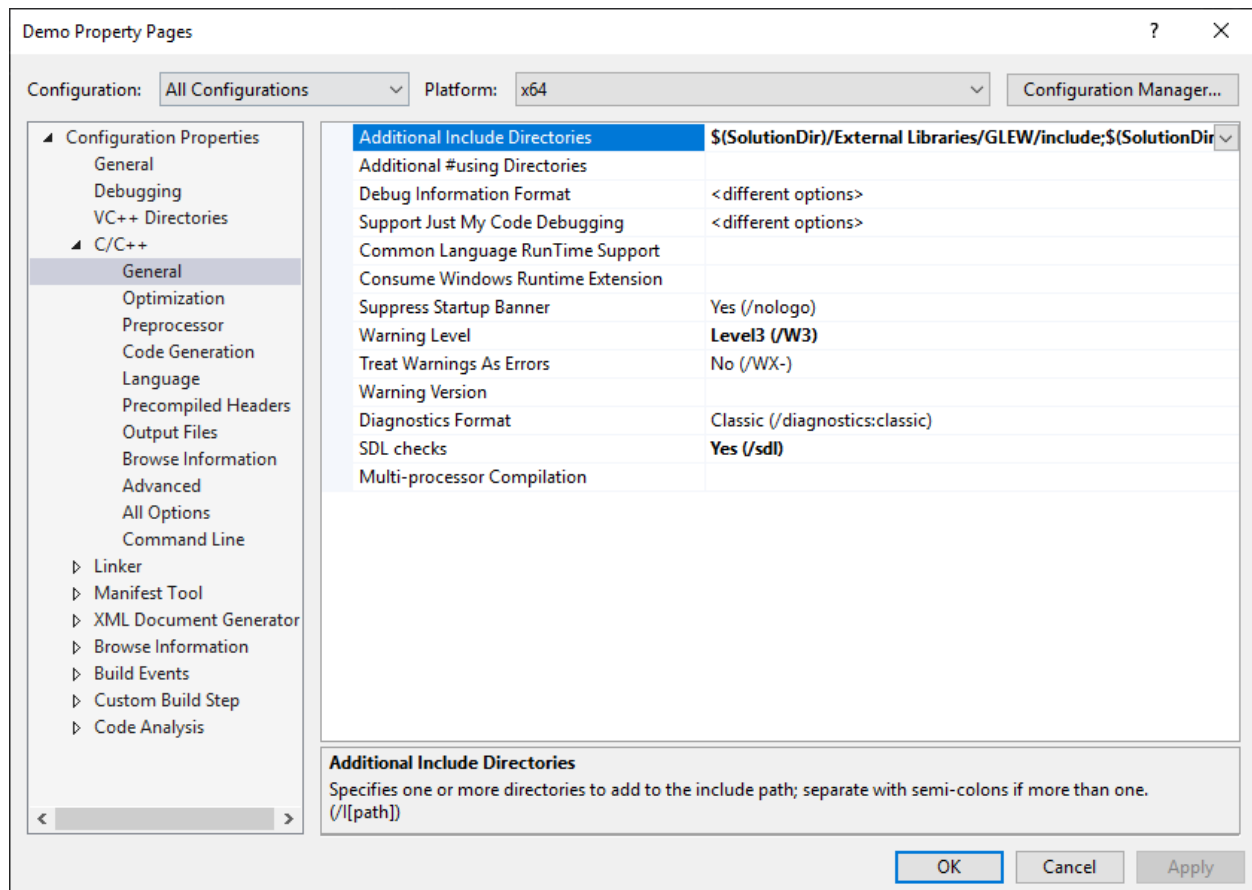
freeglut.lib

glew32.lib

Step 5: Linking the headers to the project

Go to the Configuration Properties > C/C++ > General tab.
Under the **Additional Include Directories** field, add the following paths :
       $(SolutionDir)/External Libraries/FREEGLUT/include
       $(SolutionDir)/External Libraries/GLEW/include

Step 6: Add DLL files

Add the x64/freeglut.dll to C:\Windows\System32
Add the x64/glew32.dll to C:\Windows\System32