

Author: Hooman Salamat

## Installing SFML 2.5.1 in Visual Studio 2017

First, you must download the SFML SDK from the [download page](#).

You must download the package that matches your version of Visual C++. Indeed, a library compiled with VC++ 10 (Visual Studio 2010) won't be compatible with VC++ 12 (Visual Studio 2013) for example. If there's no SFML package compiled for your version of Visual C++, you will have to [build SFML yourself](#).

We will be using 64 bit version VC++ 15 (2017). On Windows, choosing 32 or 64-bit libraries should be based on which platform you want to compile for, not which OS you have. Indeed, you can perfectly compile and run a 32-bit program on a 64-bit Windows. So you might want to target 32-bit platforms, to have the largest possible audience. Choose 64-bit packages only if you have good reasons.

You can then unpack the SFML archive wherever you like. Copying headers and libraries to your installation of Visual Studio is not recommended, it's better to keep libraries in their own separate location, especially if you intend to use several versions of the same library, or several compilers. In my case, I renamed the unpacked folder to SFML-2.5.1 and leave it outside my project folder that I am going to create “next”.

The image shows two screenshots of the Visual Studio Explorer interface. The top screenshot shows the 'Week1' folder containing 'SFML-2.5.1' and 'SFMLWeek1- Project 0'. The bottom screenshot shows the contents of the 'SFML-2.5.1' folder, including 'bin', 'doc', 'examples', 'include', 'lib', 'license.md', and 'readme.md'.

**Top Screenshot: Week1 Explorer**

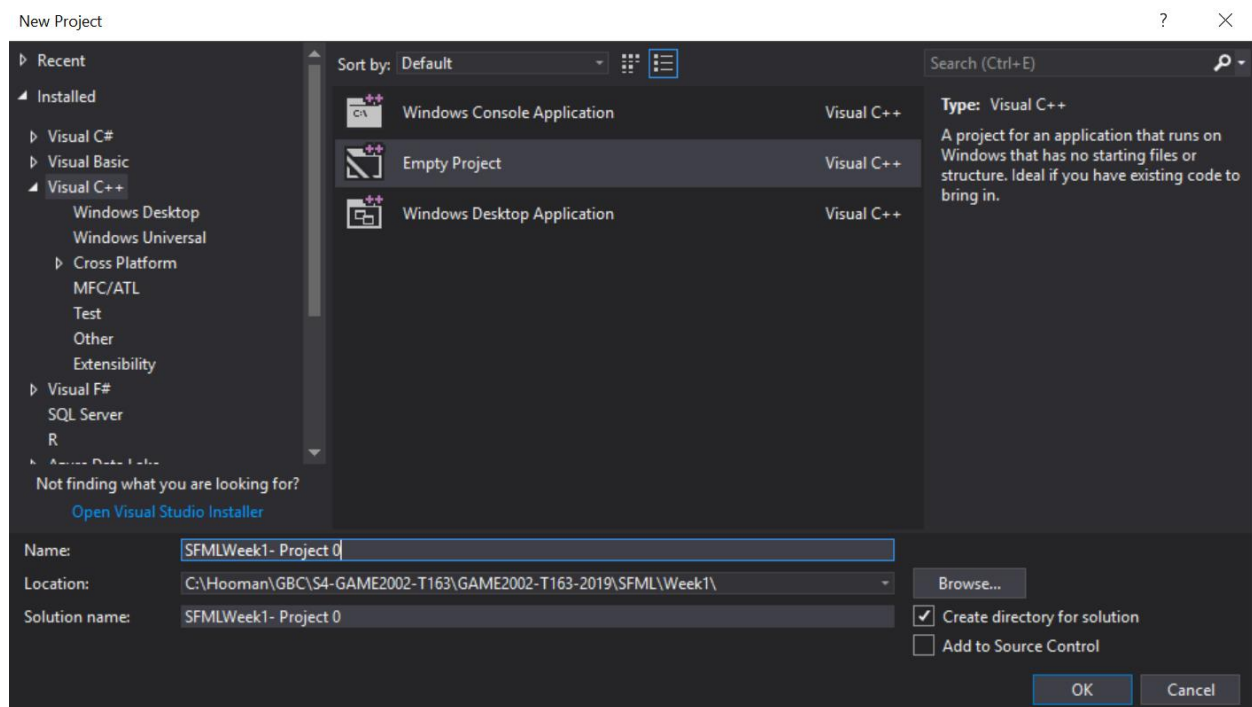
Name	Date modified	Type	Size
SFML-2.5.1	2019-01-05 12:28 PM	File folder	
SFMLWeek1- Project 0	2019-01-05 12:53 PM	File folder	

**Bottom Screenshot: SFML-2.5.1 Explorer**

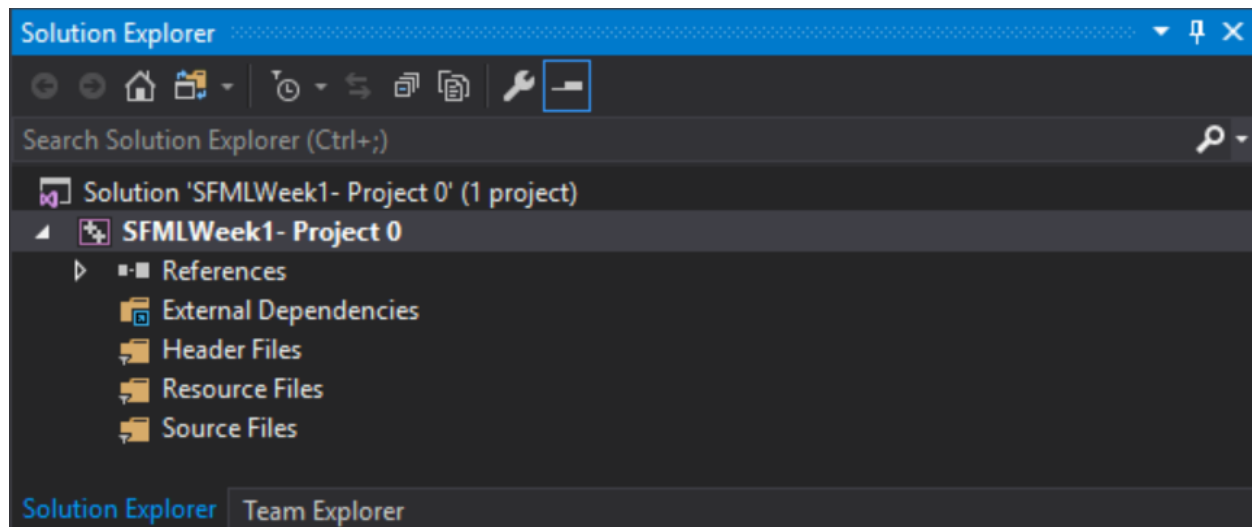
Name	Date modified	Type	Size
bin	2019-01-05 12:28 PM	File folder	
doc	2019-01-05 12:28 PM	File folder	
examples	2019-01-05 12:28 PM	File folder	
include	2019-01-05 12:28 PM	File folder	
lib	2019-01-05 12:28 PM	File folder	
license.md	2019-01-05 12:27 PM	MD File	
readme.md	2019-01-05 12:27 PM	MD File	

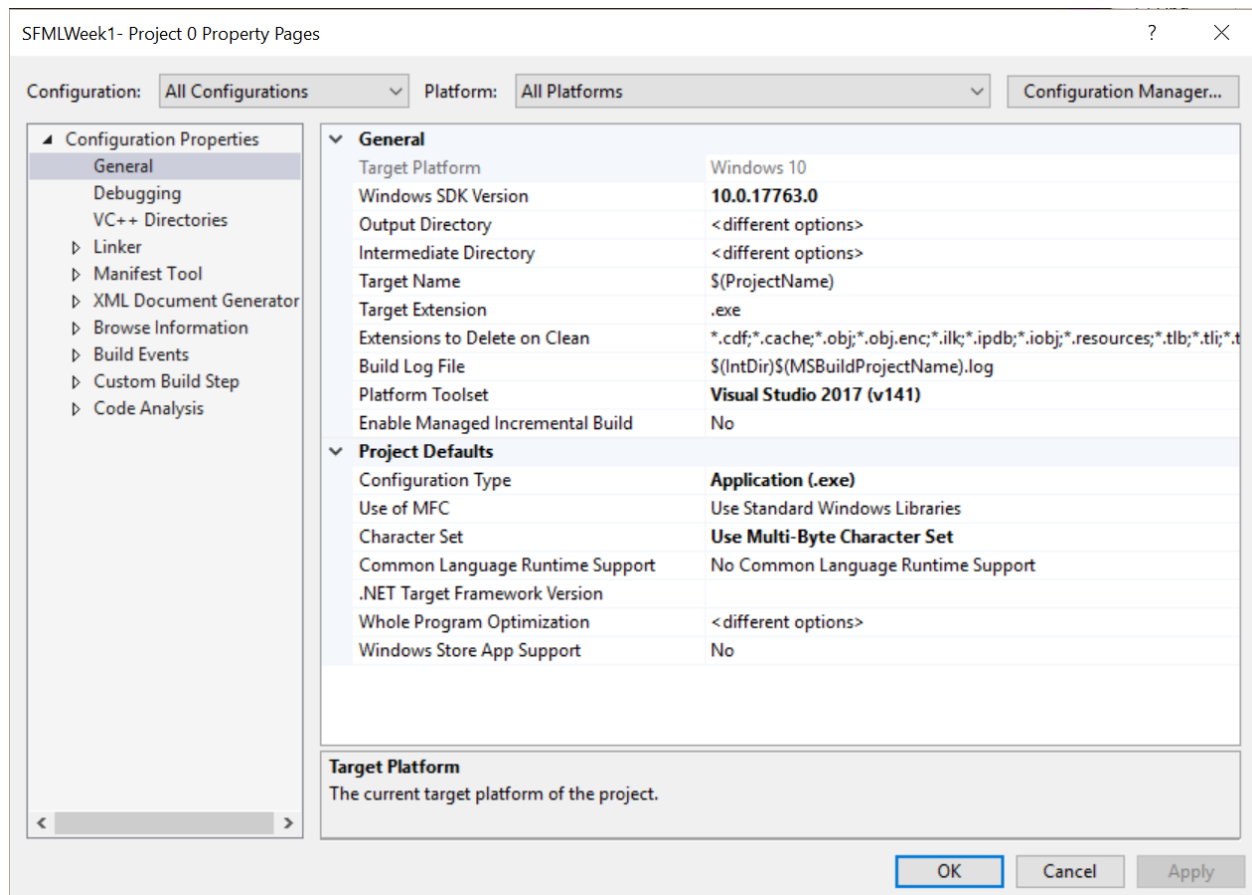
# Creating and configuring a SFML project

1. Open Visual Studio 2017 and Create a new Visual C++ → General → Empty Project

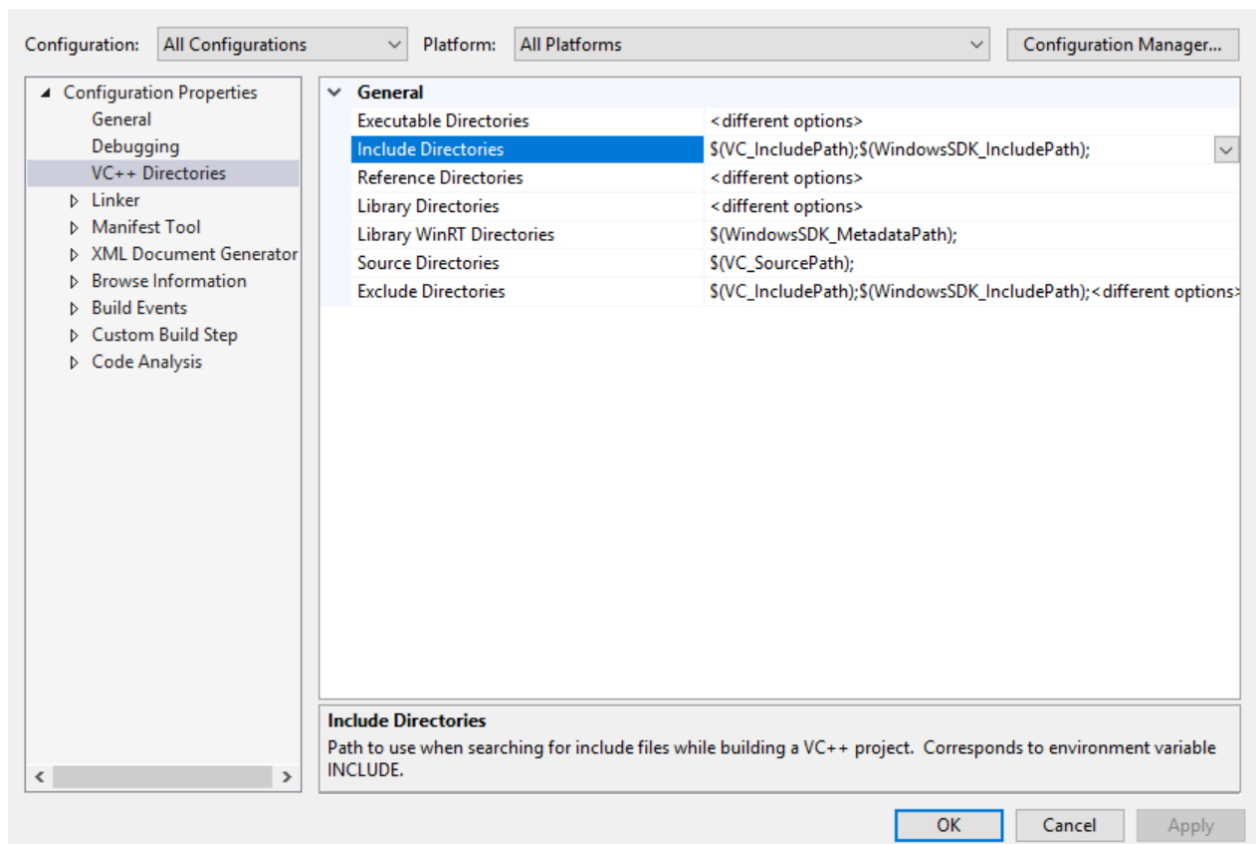


2. Right Click on the Project → Select Properties → Select “All Configuration” in Configuration combo box → Select “All Platforms” in Platform combo box:





- Under Configuration Properties , VC++ Directories → Add the sfml include folder to “Include Directories”



Include Directories

?

×



`$(SolutionDir)/../..../SFML-2.5.1/include`

Evaluated value:

`E2002-T163\GAME2002-T163-2019\SFML\Week1\SFMLWeek1- Project 0\../..../SFML-2.5.1/include`

Inherited values:

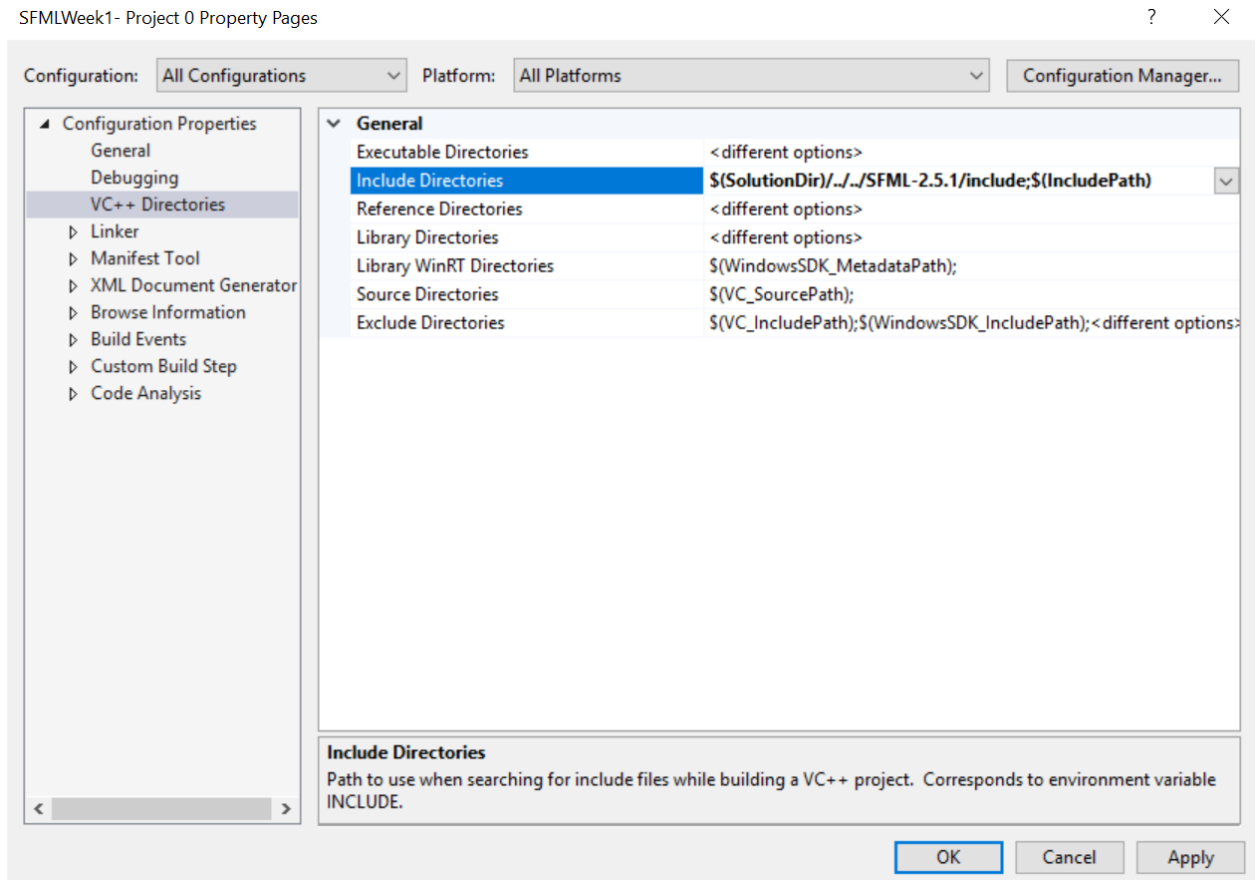
`$(VC_IncludePath)`  
`$(WindowsSDK_IncludePath)`

☒ Inherit from parent or project defaults

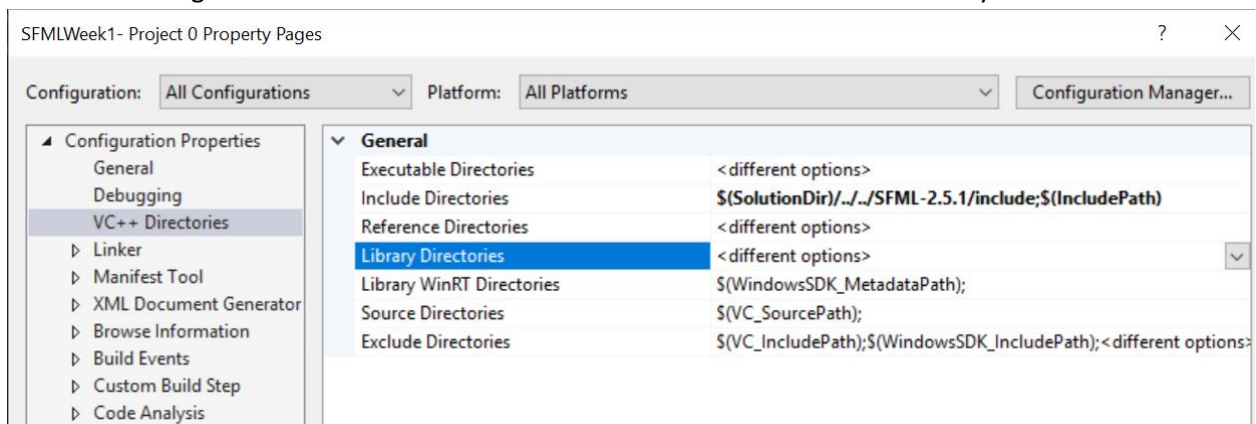
Macros>>

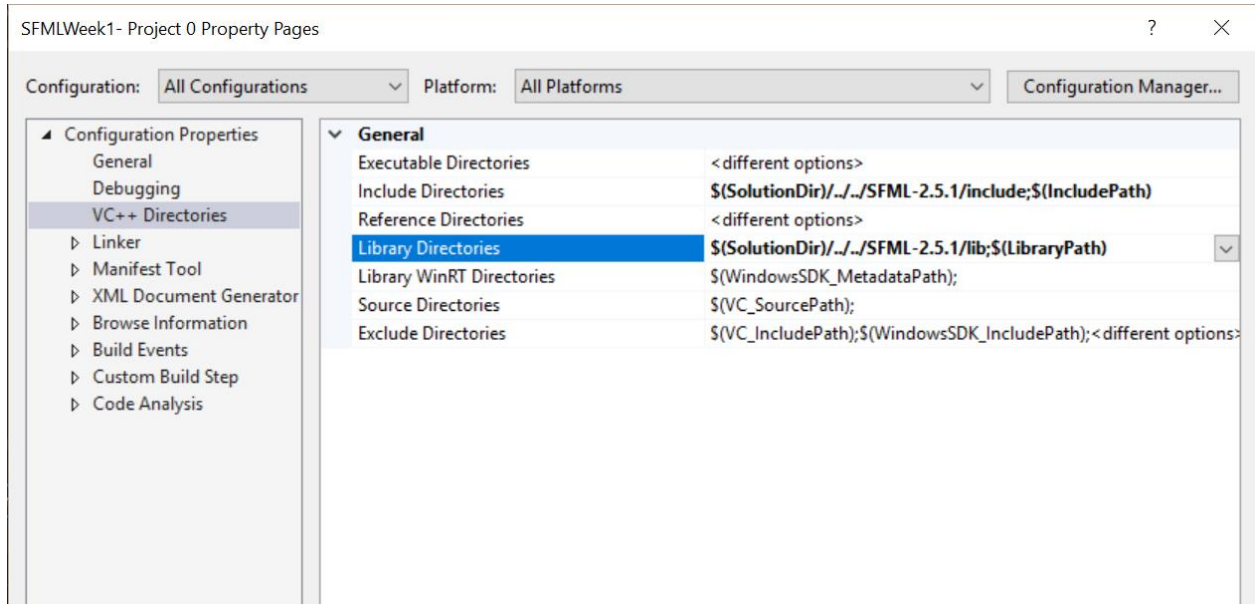
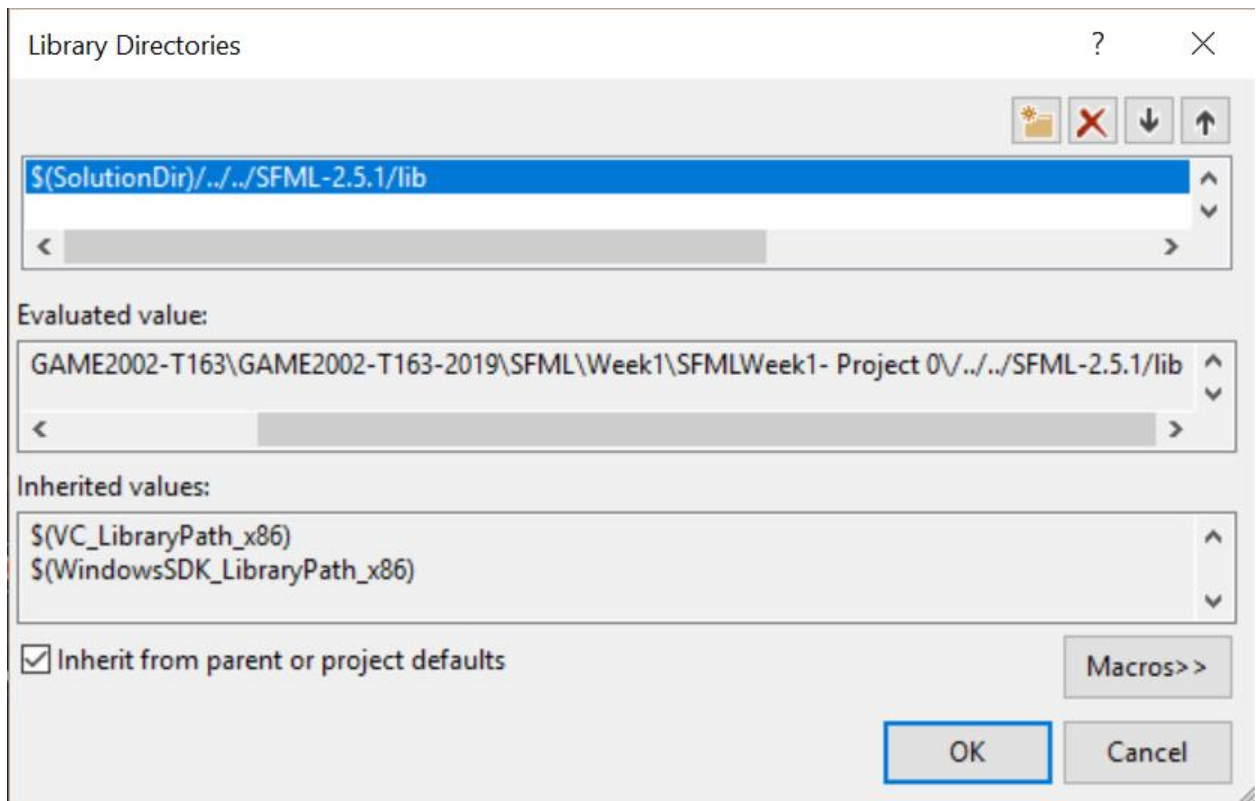
OK

Cancel



4. Go to "All Configuration" → VC++ Directories → Add the sfml lib folder to "Library Directories"





5. Choose "Debug" Configuration from "Configuration" combo box → Go to "Configuration Properties" → "Linker" → "Input" → Additional Dependencies → And Add all the SFML libraries that you need, for example "sfml-graphics-d.lib", "sfml-window-d.lib" and "sfml-system-d.lib". We are going to add all the debug SFML libraries (hence -d).

- sfml-system-d.lib
- sfml-window-d.lib
- sfml-graphics-d.lib
- sfml-audio-d.lib
- sfml-network-d.lib

Additional Dependencies ? X

sfml-system-d.lib  
sfml-window-d.lib  
sfml-graphics-d.lib  
sfml-audio-d.lib  
sfml-network-d.lib

Evaluated value:

sfml-system-d.lib  
sfml-window-d.lib  
sfml-graphics-d.lib  
sfml-audio-d.lib  
sfml-network-d.lib  
%(AdditionalDependencies)

Inherited values:

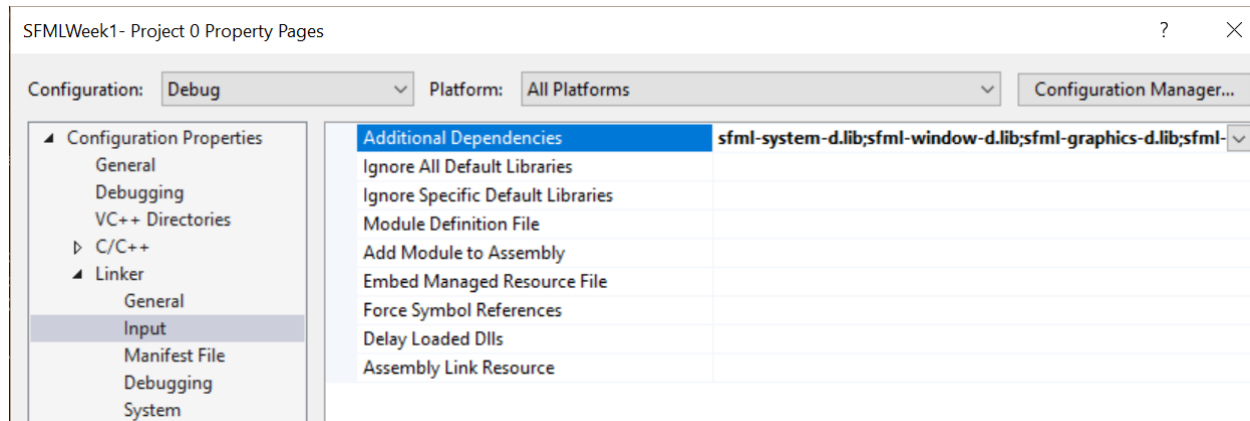
kernel32.lib  
user32.lib  
gdi32.lib  
winspool.lib  
comdlg32.lib  
advapi32.lib  
shell32.lib

☒ Inherit from parent or project defaults

Macros>>

OK Cancel





Note: It is important to link to the libraries that match the configuration: "sfml-xxx-d.lib" for Debug, and "sfml-xxx.lib" for Release.

6. Go to "Release Configuration" ➔ "Linker" ➔ "Input" ➔ Additional Dependencies ➔ And Add all the SFML libraries that you need, for example "sfml-graphics.lib", "sfml-window.lib" and "sfml-system.lib".

Additional Dependencies

? X

sfml-system.lib  
sfml-window.lib  
sfml-graphics.lib  
sfml-audio.lib  
sfml-network.lib

Evaluated value:

sfml-system.lib  
sfml-window.lib  
sfml-graphics.lib  
sfml-audio.lib  
sfml-network.lib  
%(AdditionalDependencies)

Inherited values:

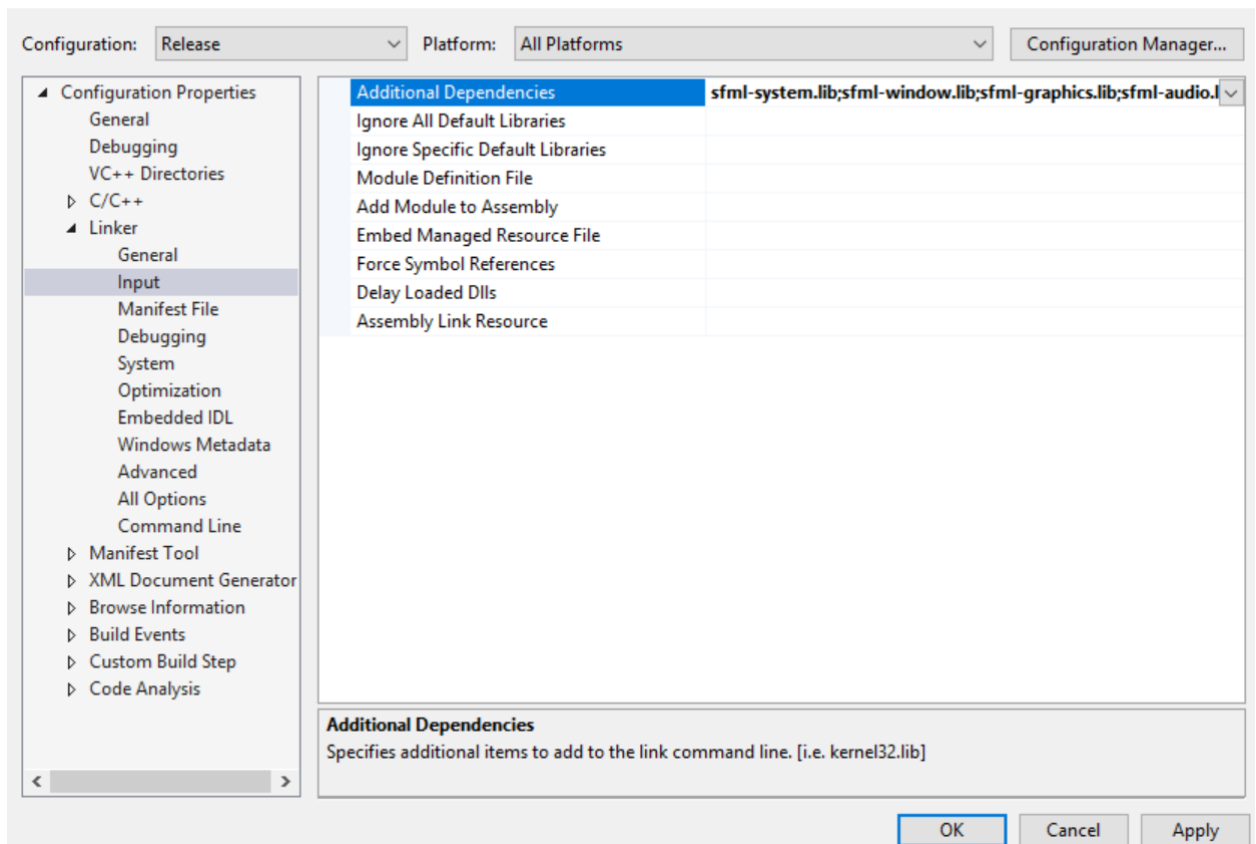
kernel32.lib  
user32.lib  
gdi32.lib  
winspool.lib  
comdlg32.lib  
advapi32.lib  
shell32.lib

☒ Inherit from parent or project defaults

Macros>>

OK

Cancel



7. Make sure all the SFML dll files are copied to your project folder. Go to SFML library "bin" folder and copy everything under your project folder.












re















View

GAME2002-T163-2019 &gt; SFML &gt; SFML-2.5.1 &gt; bin

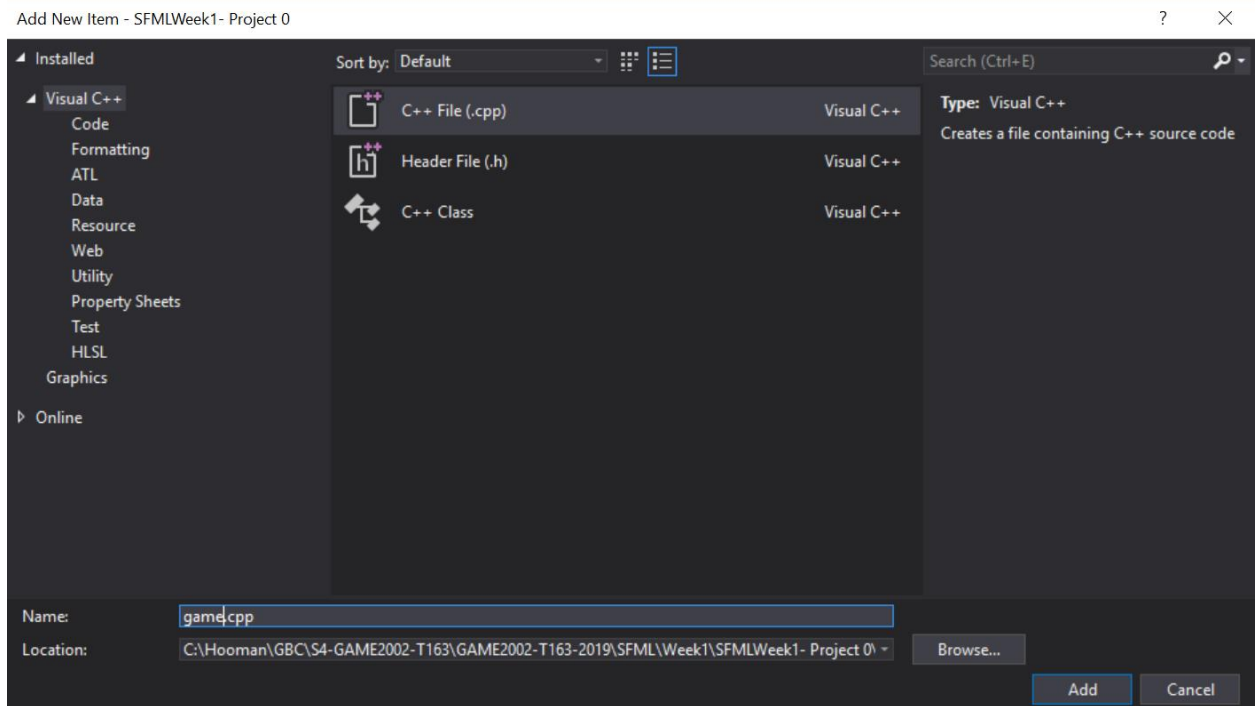


Search bin

Name	Date modified	Type	Size
 opengl32.dll	2019-01-05 12:28 PM	Application extension	
 sfml-audio-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-audio-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-graphics-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-graphics-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-network-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-network-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-system-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-system-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-window-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-window-d-2.dll	2019-01-05 12:28 PM	Application extension	

Week1 > SFMLWeek1- Project 0 > SFMLWeek1- Project 0			Search SFMLWeek1- Project
Name	Date modified	Type	
 openal32.dll	2019-01-05 12:28 PM	Application extension	
 sfml-audio-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-audio-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-graphics-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-graphics-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-network-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-network-d-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-system-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-system-d-2.dll	2019-01-05 12:28 PM	Application extension	
 SFMLWeek1- Project 0.vcxproj	2019-01-05 1:19 PM	VC++ Project	
 SFMLWeek1- Project 0.vcxproj.filters	2019-01-05 1:19 PM	VC++ Project Filters F...	
 SFMLWeek1- Project 0.vcxproj.user	2019-01-05 1:19 PM	Per-User Project Opti...	
 sfml-window-2.dll	2019-01-05 12:28 PM	Application extension	
 sfml-window-d-2.dll	2019-01-05 12:28 PM	Application extension	

- Go to “Source Files” folder in Visual Studio “Solution Explorer” and add a C++ file, call it game.cpp



9. Copy and Paste the following code inside the game.cpp file:

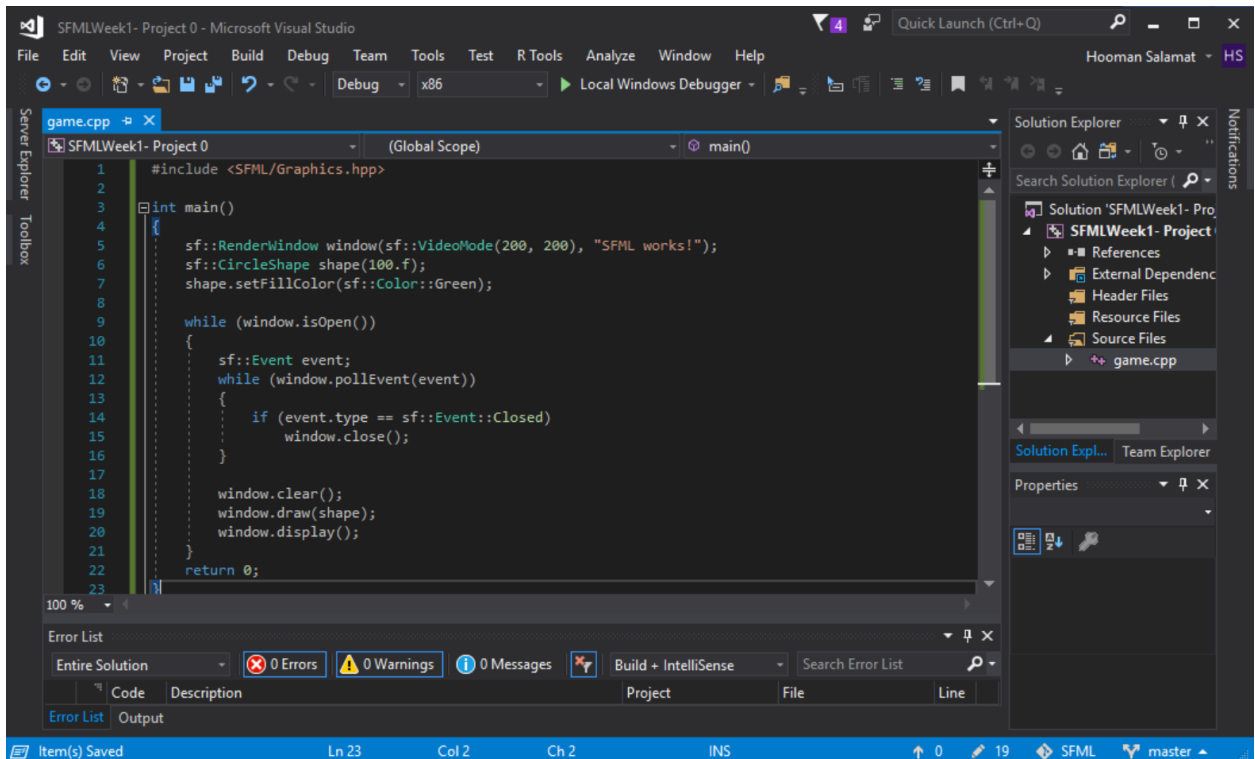
```
#include <SFML/Graphics.hpp>

int main()
{
    sf::RenderWindow window(sf::VideoMode(200, 200), "SFML works!");
    sf::CircleShape shape(100.f);
    shape.setFillColor(sf::Color::Green);

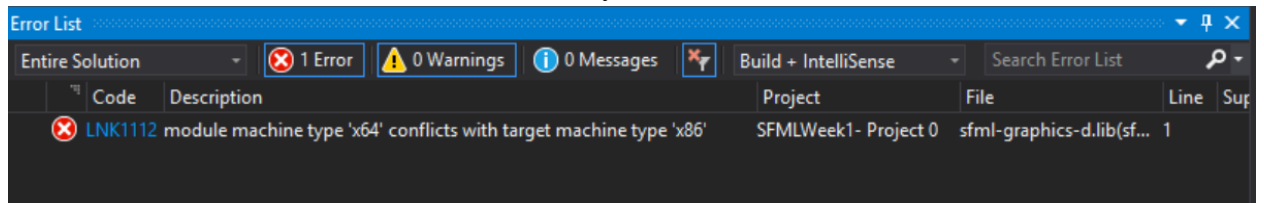
    while (window.isOpen())
    {
        sf::Event event;
        while (window.pollEvent(event))
        {
            if (event.type == sf::Event::Closed)
                window.close();
        }

        window.clear();
        window.draw(shape);
        window.display();
    }

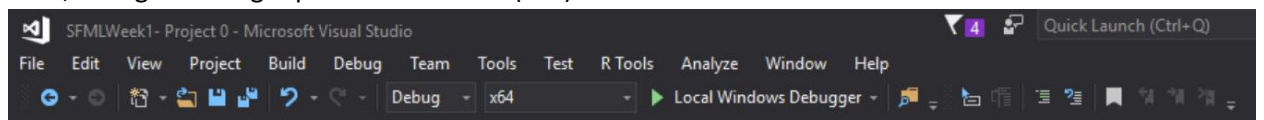
    return 0;
}
```



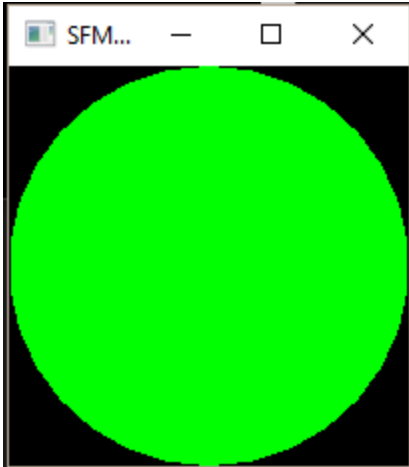
10. Compile and run the project. Oops, we are getting an error. Well, remember, we downloaded the 64-bit version of SFML library.



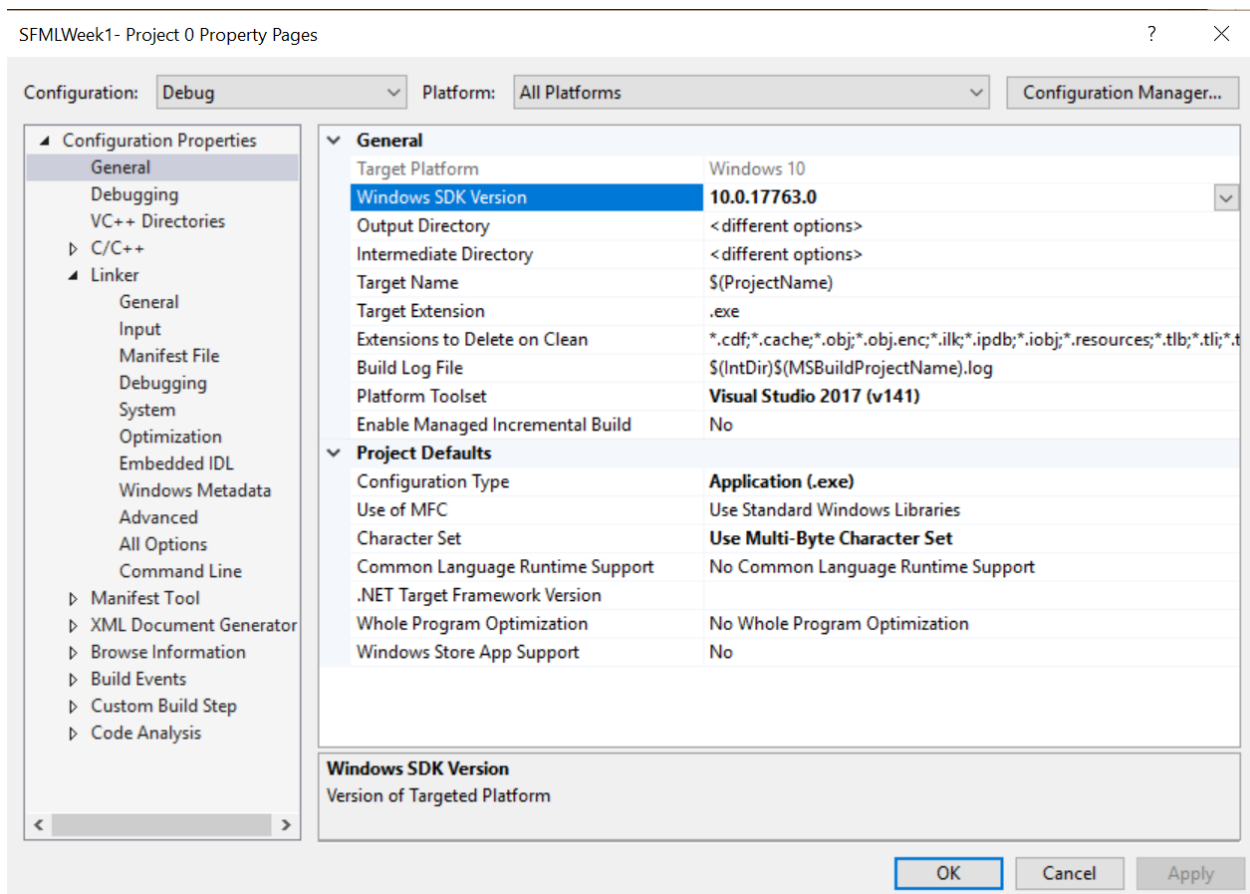
11. Now, change the target platform to 64 bit (x64)



12. Now compile and run.

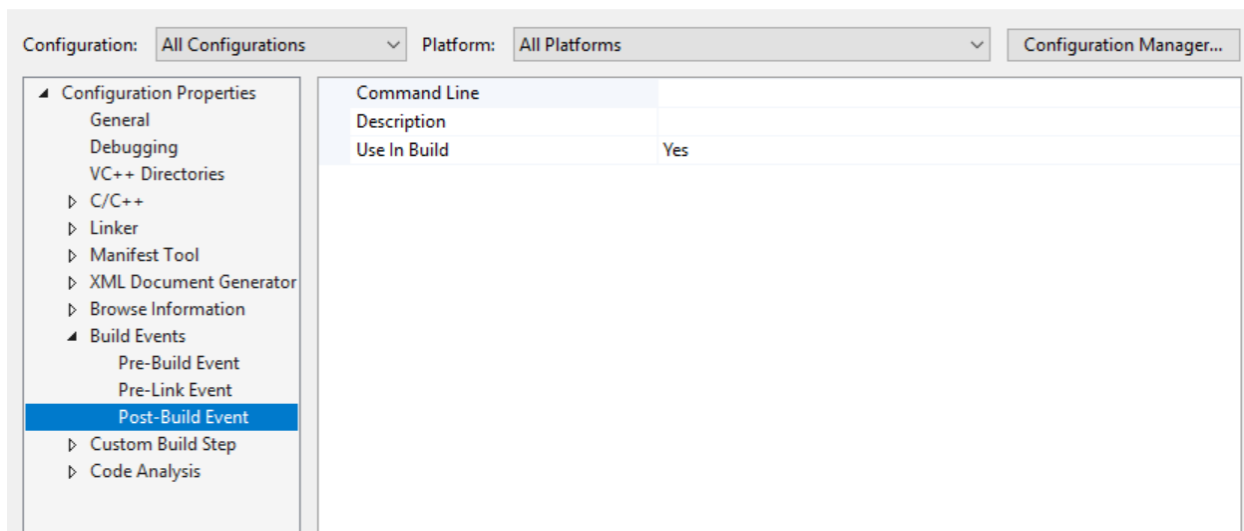


13. If you are still getting an error, because you just copy the project from github and didn't follow the above steps, check your Windows SDK version! Probably yours is different than mine. Nota problem. Just change it to the one you have!



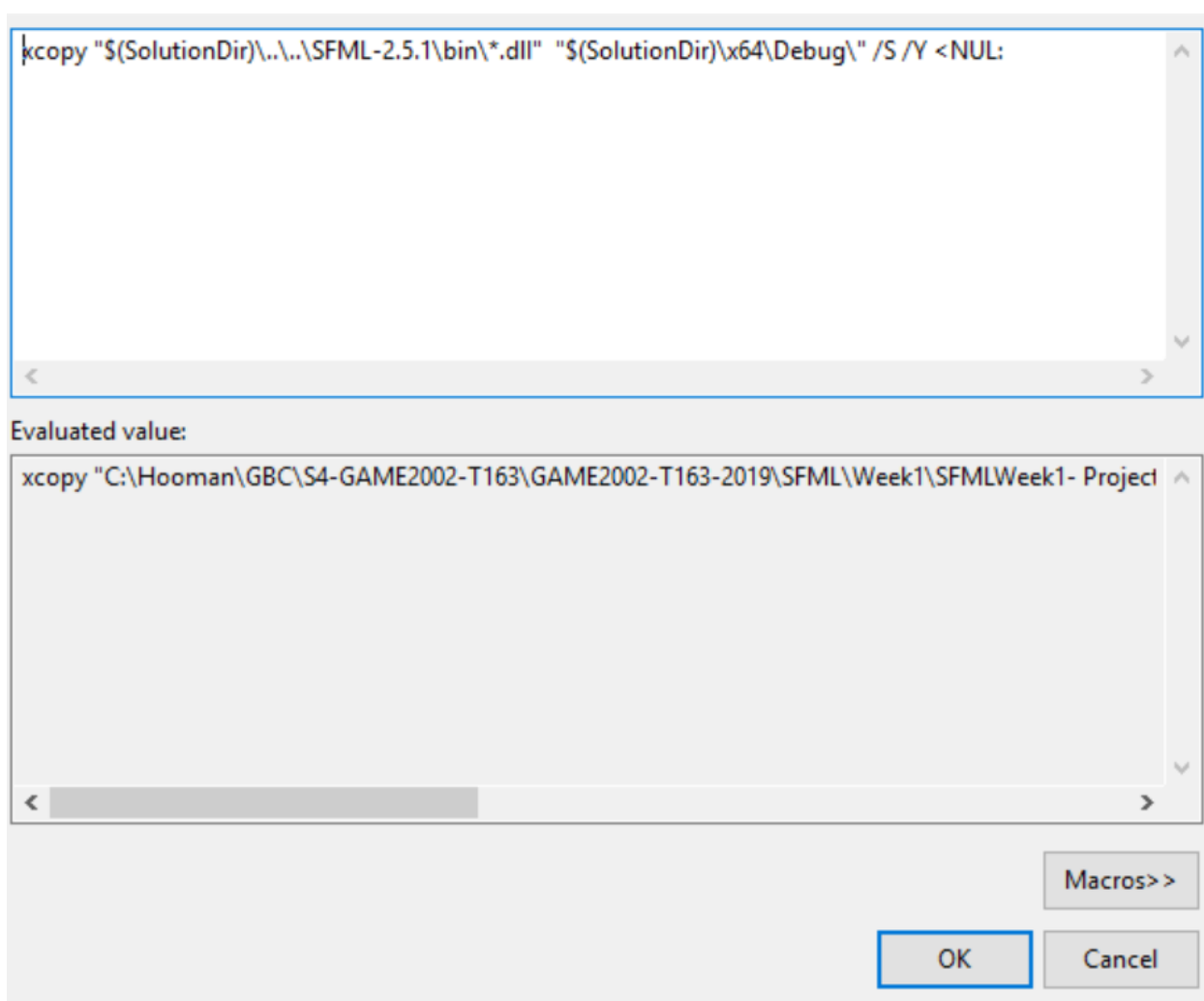
14. Since you linked to the dynamic version of SFML, you copied the SFML DLLs (they are in `<sfml-install-path/bin>`) to the project directory. You can also use a post-build action in your project, and add the commands to copy the bin folder DLLs to the "debug folder". The post-build action will be written as a batch script.





## Command Line

? X



15. Create a new command line and add the following line:

```
xcopy "$(SolutionDir)\..\..\SFML-2.5.1\bin\*.dll" "$(SolutionDir)\x64\Debug\" /S /Y <NUL:
```

