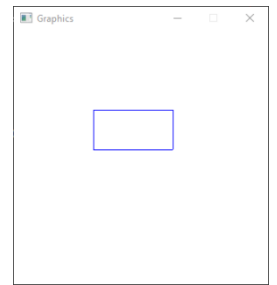


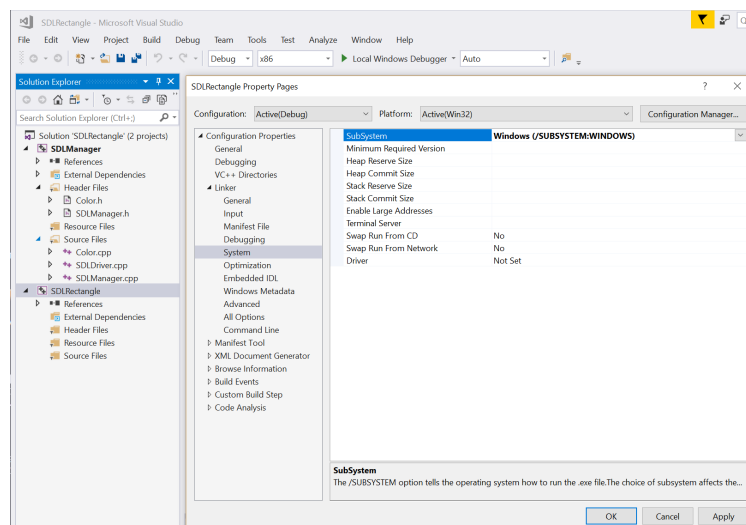
SDL Lab Using the SDL Manager

The goal for today's lab is to produce the following SDL picture:

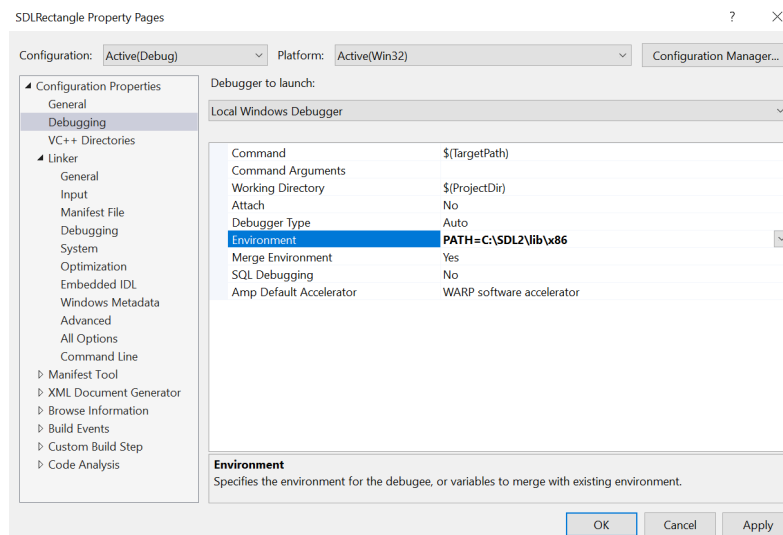


You are going to be working in the SDLManagerV1.2 solution. There is currently one project in this solution named (SDLManager).

1. Add a **Visual C++ | General | Empty** Project named SDLRectangle.
2. **Link SDLRectangle to SDLManager and SDL2:**
 - a. Right-click on the project SDLRectangle. Go to **Properties | Configuration Properties | Linker | System | SubSystem** and select Windows (/SUBSYSTEM:WINDOWS)



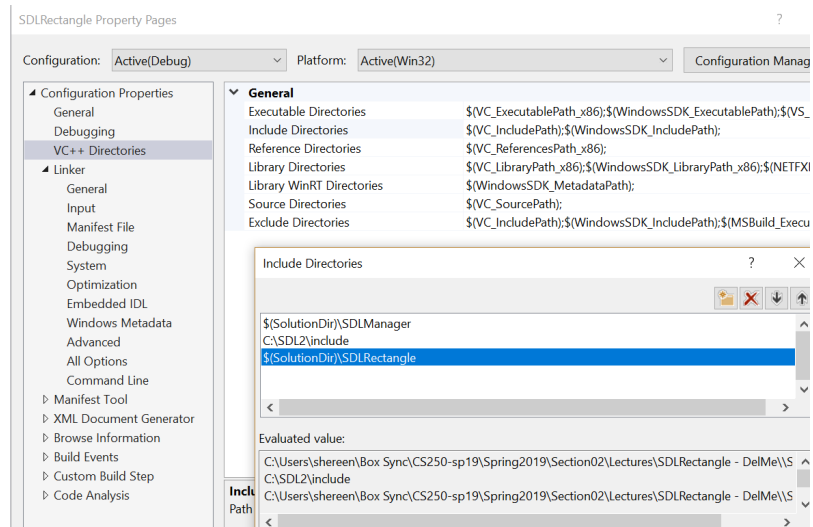
- b. Go to **Properties | Configuration Properties | Debugging**. Set Environment to (PATH=C:\SDL2\lib\x86).



c. Go to **Properties|Configuration Properties|VC++ Directories** then set:

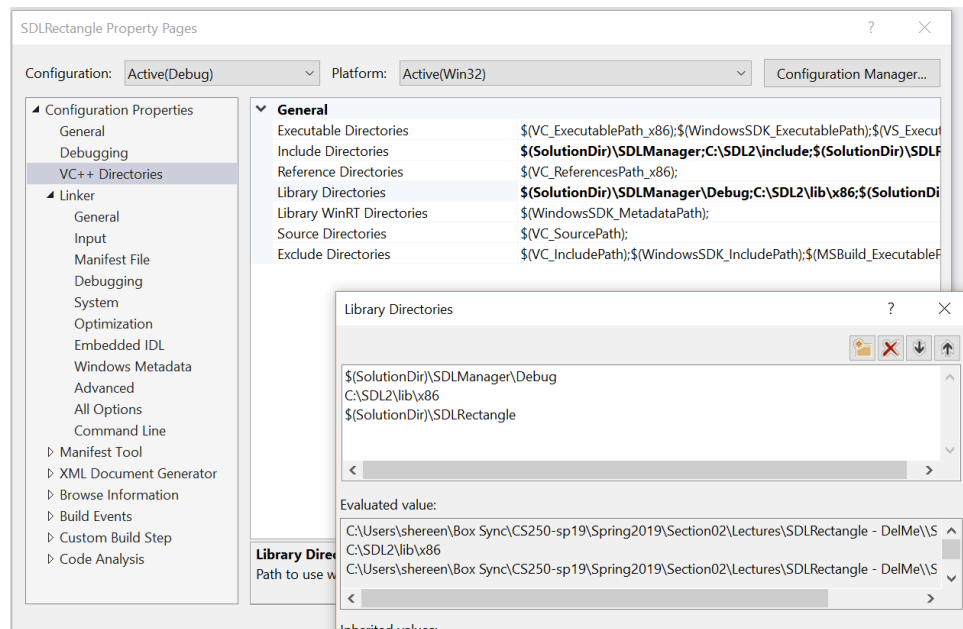
i. Include Directories:

- `$(SolutionDir)\SDLManager`
- `C:\SDL2\include`
- `$(SolutionDir)\SDLRectangle`

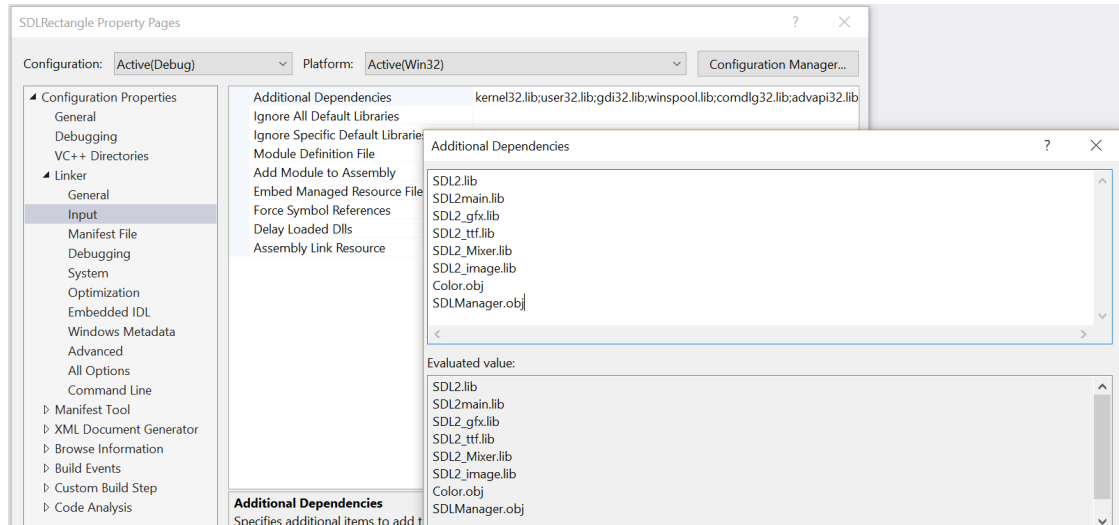


ii. Library Directories:

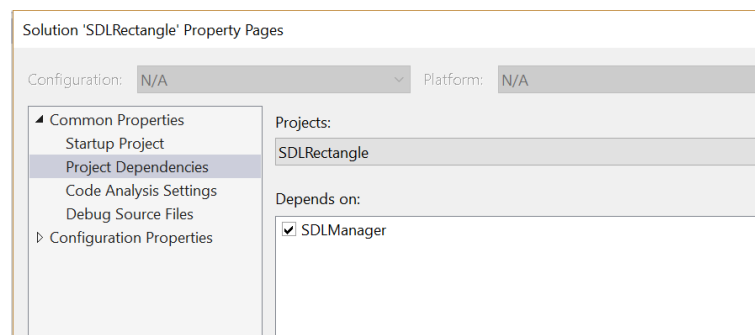
- `$(SolutionDir)\SDLManager\Debug`
- `C:\SDL2\lib\x86`
- `$(SolutionDir)\SDLRectangle`



- d. Go to **Properties|Configuration Properties|Linker|Input**. Set Additional Dependencies to:
- SDL2.lib
 - SDL2main.lib
 - SDL2_gfx.lib
 - SDL2_ttf.lib
 - SDL2_Mixer.lib
 - SDL2_image.lib
 - Color.obj
 - SDLManager.obj



3. **Set project dependencies.** Right-click on Solution and select Properties. Go to **Common Properties|Project Dependencies**. Select the project SDLRectangle from the drop-down box. Check the box marked SDLManager.



4. Create a driver called SDLRectangleDriver.cpp in the SDLRectangle project Source Files. Copy the source code from SDLDriver.cpp in the SDLManager project into SDLRectangleDriver.cpp. Set SDLRectangle as the StartUp project. Build and run.
5. Add an SDLRectangle interface in SDLRectangle.h as follows:

```

//*****
// File name:  Rectangle.h
// Author:     Computer Science, Pacific University
// Date:      3/23/2018
// Class:     CS 250
// Assignment: SDLRectangle Lab
// Purpose:   Declaration for a SDLRectangle class
//*****

#pragma once
#include "SDLManager.h"
#include "Color.h"

class SDLRectangle
{
public:
    SDLRectangle (int xPos = 50, int yPos = 50, int length = 5, int height = 5,
                 const Color &rcColor = Color::BLUE);
    void draw (SDLManager &rcSDLManager);

private:
    int mXPos;
    int mYPos;
    int mLength;
    int mHeight;
    Color mcColor;
};

```

6. Write the implementation for SDLRectangle.h in SDLRectangle.cpp
7. Create and display a Rectangle on the screen as shown in the window at the top of this lab. The window is at location (100, 100) with a size of 320x320. The rectangle is at location (100, 100) with length 100, height 50, and color BLUE.