## **SCC210 Group Project**

## How to set up example code in Visual Studio

The main idea of this example code is to show you how to display and draw things on a 2D screen. The code is very simple, and has many components that you may find useful. This document tells you how to set up the example code in Visual Studio, so if you already know how to do this, you may not need this file.

## Setting Up Visual Studio, Directory, and Files

Microsoft Visual Studio 2012 is available on the lab machines. If you are using your laptops, you can download it here: <a href="http://www.lancs.ac.uk/iss/software/">http://www.lancs.ac.uk/iss/software/</a>. Choose Microsoft Development Software (DreamSpark), and this version: Microsoft Visual Studio Professional 2012. You can use other versions such as 2010 that you already have. The Mac version is also there. Some of the settings below might be slightly different if you use other versions. It may take a while to download and install the 2012 version.

Open Microsoft Visual Studio. The first time you do this, you will see a "Choose Default Environment Settings" screen. Select these:

Choose your default environment settings: Visual C++ Development Settings Local Help Documentation: None

Once Visual Studio is opened, click on "FILE", then "New", then "Project..." On the following screen: on the left side, choose Installed > Templates > Visual C++. In the middle, choose "Win32 Console Application". And for:

Name: example\_code (... or some name for a new directory with your code)
Location: click Browse... and choose the directory location that you want. The system will
create a folder called "example\_code" in that directory and put all the associated files in
there.

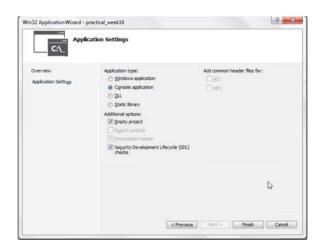
See the following screenshot (leave the "Create directory for solution" box **unchecked**):



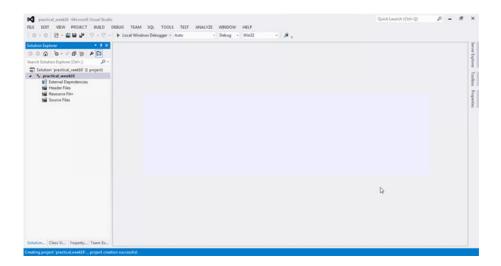
Click OK. You get the following screen. Click "Next >"



Check the "Empty project" box. You should have the following screen:

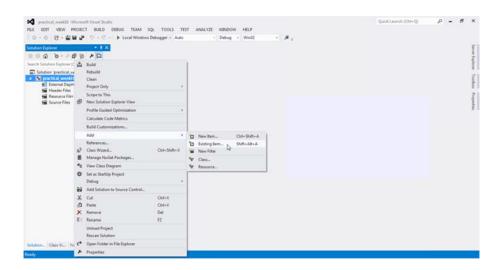


Click "Finish". You will now see this (there may also be a start page on the right):

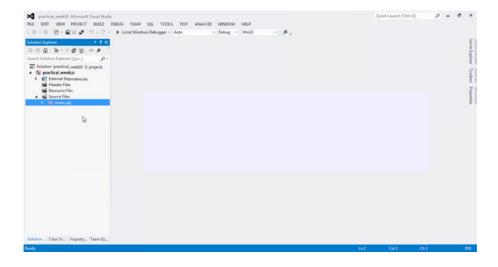


You will find these files (main.cpp, glut32.dll, DevIL.dll, example\_sprite\_00.png, example\_sprite\_01.png) on Moodle. "main.cpp" is the main C++ file that has the source code. "glut32.dll" and "DevIL.dll" are additional library files that the system needs. Place these files in the same directory as the folder that was just created. Once you have things working, you can move the png files into a separate folder if you want (if you have many of them).

Then, right click on your folder's name as shown below, choose "Add", "Existing Item...":



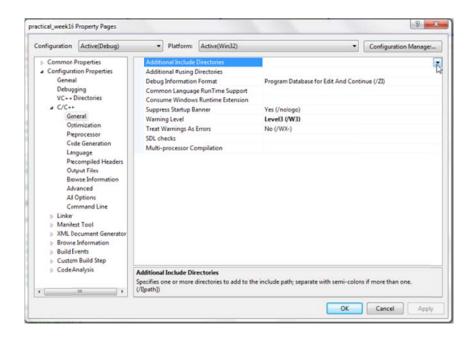
Another screen will pop up. Browse to your new directory, and select main.cpp, and then click "Add". You should now see this:



Double click on "main.cpp" to open it on the right side.

On Moodle, there is another file called "glut\_files.zip". Unzip it to the same directory as your new folder to create a folder called "glut\_files" (inside your new folder). Check that the folder "glut\_files" has one "include" folder and one "lib" folder (and other files inside them). The unzipping may not have created these file structures. If not, you can manually move them to have this structure.

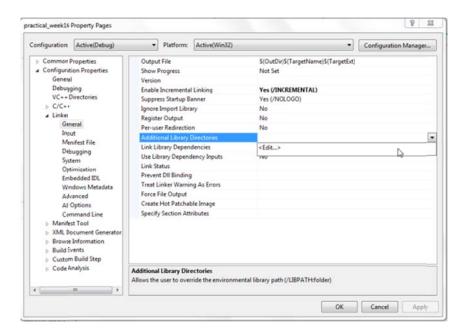
Back in Visual Studio, on the top row, click on "PROJECT", "(name you chose) Properties..." Click on the left side to navigate to this screen (C/C++, General):



Choose the Additional Include Directories, and <Edit...>

On the new pop-up screen, click on the "New Line" icon to add a line below, then click on that line to add a folder. Browse to the "glut\_files" folder, choose the "include" folder, and click "Select Folder". Press "OK", and then Press "Apply", to accept this setting.

Now, click on the left side to navigate to this screen (Linker, General):



Choose the Additional Library Directories, and <Edit...>

On the new pop-up screen, click on the "New Line" icon to add a line below, then click on that line to add a folder. Browse to the "glut\_files" folder, and choose the "lib" folder this time, and click "Select Folder". Press "OK", and then Press "OK" again, to accept this setting.

Repeat the same steps as above for the "DevIL-SDK-x86-1.7.8.zip" file. Unzip it into your folder, and then adding an "include" directory and a "library" directory for it.

If you have done all of the above, you can now press F7 to compile/build the code. And then press Ctrl-F5 to run the code.