CSci 515 Setting Up Visual Studio Express 2010

Spring 2015

1 Line Numbers

I prefer to always have line numbers enabled in my source code editor as most compiler errors/warnings refer to specific line numbers in the source file, and thus it is easier to quicly determine the potential location of problems if line numbers are visible. For Visual Studio Express 2010 you can enable line numbers like this:

1. Tools → Options
2. In Options Dialog, select Text Editor → C/C++ → General
3. Enable the Line Numbers checkbox

2 Program Indentation and Tab Settings

For this class, you are required to correctly and consistently indent your code according to the Deitel good programming guidelines, and our class coding/formatting guidelines. You can have Visual Studio Express 2010 automatically set your indentation for you by changing the following settings:

1. Tools → Options
2. In Options Dialog, select Text Editor → C/C++ → Tabs
3. Set Indenting to Smart
4. Set Tab size to 2
5. Set indent size to 2
6. Select Insert Spaces (rather than Keep tabs)

The last step will keep you from creating files with hardcoded, embedded tabs, which will not display properly in other editors.

3 Display/Undisplay Invisible (space) Characters

If you still have problems with getting hardcoded tabs in your source files, most programming editors have a command that makes normally invisible whitespace characters become visible, using symbols for the different types of characters (space, tab, etc.). To toggle the display of invisible whitespace characters on and off, you can:

3.1 Method 1

1. Turn on advanced settings from Tools → Settings → Expert Settings
2. Toggle display of white space on/off from Edit → Advanced → View Whitespace

3.2 Method 2

The keyboard shortcut for this toggle is Ctrl-R Ctrl-W.

4 Cause Terminal/Console to Persist after Program Execution

You are forbidden to include statements in your submitted programs whose sole purpose is to keep the terminal from closing upon program completion, before you can see the output. Statements like `system("pause")` or `getch()` are hacks, and are often not portable to other enviornments or IDE systems. When using Visual Studio Express 2010 you can have your IDE keep the console up in the following 2 ways:

4.1 Method 1

Simple use of debugger. You can simply set a debug breakpoint on the closing brace of your main function. Then whenever you run your program (using Debug → Start Debugging or equivalently using the `F5` function key), your program will run till it hits this breakpoint, and you can then look at the terminal output.

4.2 Method 2

You can also set a property for console applications, so that if you run without debugging, Visual Studio keeps the terminal open until you press a key. You need to set the following property for each project you create (Visual Studio doesn't enable this by default on new projects):

1. Project → Properties
2. In the Project Property Pages dialog select Configuration Properties → Linker → System
3. In the Linker System options, pull down the SubSystem property and select Console (/SUBSYSTEM:CONSOLE)
4. Hit OK or Apply to have your property setting saved (for this particular Project only, you have to do this for every project you create).

Now if you run your program with debugging (Debug → Start Without Debugging or equivalently `Shift-F5`), your terminal will be paused when the program completes execution.

5 Increase/Decrease Editor Font Size

For readability, you can increase/decrease the font size of the Visual Studio programming editor. Use ˜Ctrl-Shift-,˜ to increase font size, and ˜ Ctrl-Shift-. ˜ to decrease text size. You can also directly set the zoom level in the lower left of the editor frame.