

CS 1044 IDE

The only supported compiler/IDE (Integrated Development Environment) for this course is Microsoft Visual Studio 2008 Express C++. A student may choose to use another existing ANSI standard C++ compiler/IDE if they wish. However, it is the student's responsibility to ensure that their programs compile and run under the Microsoft Visual Studio 2008 Express C++ environment. TAs will only be supporting the Microsoft Visual Studio 2008 Express C++ IDE. This means that students who choose to use other compilers cannot expect the TAs to help them with specific compiler problems, (e.g., interface questions, compiler messages, warnings or errors). Instructors and TAs will be prepared to help students that use the required compiler. Students that use another compiler do so at their own risk.



The following discussion is based on an actual install session for the Microsoft Visual Studio 2008 Express C++. The menu selections and options illustrated here do not conform to earlier versions of Visual C++. Please note the disclaimer above regarding compiler selection.

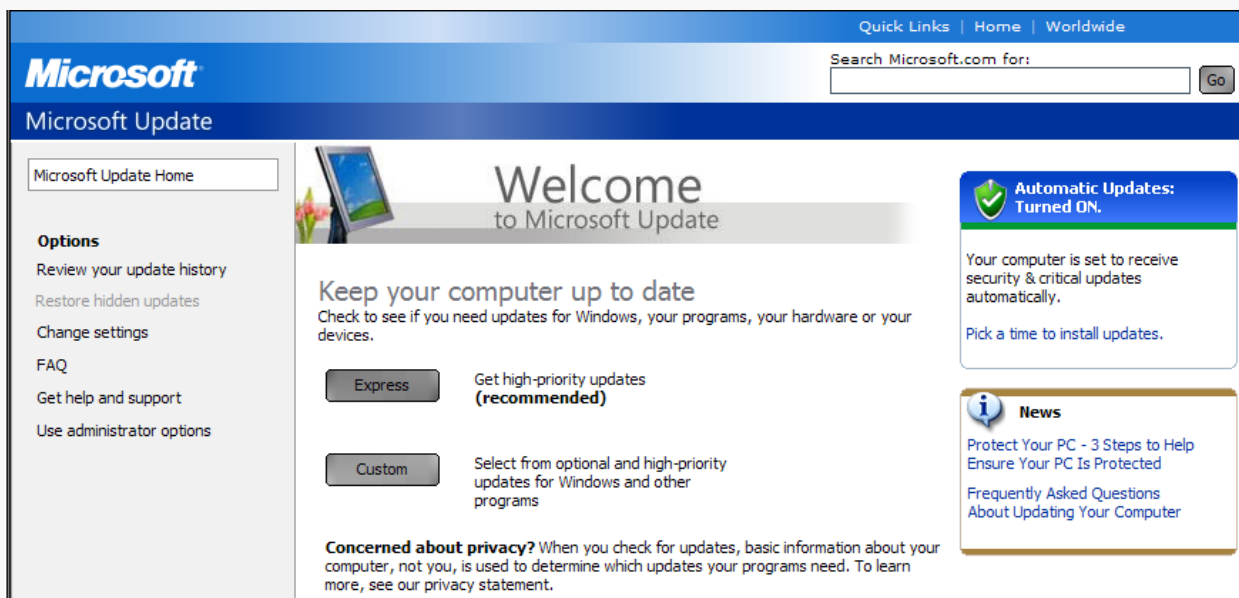
Update **virus, malware & spyware and perform scans** before installation.

Visit www.antivirus.vt.edu for VT site lisc. (free to students) software.

Ad-Aware (www.lavasoft.com) and Spybot Search & Destroy (www.safer-networking.org) offer free malware & spyware detection/removal software.

Perform a **system update** : <http://windowsupdate.microsoft.com/>

As a general rule, you should install all the critical updates that are reported.



The screenshot shows the Microsoft Update website. At the top, there is a blue header with the Microsoft logo and a search bar. Below the header, the page is titled "Microsoft Update". On the left, there is a navigation menu with options like "Review your update history", "Restore hidden updates", "Change settings", "FAQ", "Get help and support", and "Use administrator options". The main content area features a "Welcome to Microsoft Update" message and a "Keep your computer up to date" section. This section offers two update options: "Express" (recommended) and "Custom". A "News" section on the right highlights "Automatic Updates: Turned ON" and provides a link to "Pick a time to install updates".

Click the Visual C++ 2010 Express Edition link:

Microsoft® Visual Studio® 2010 Express

Unleash your Creativity!

The Visual Studio® 2010 Express is a set of **free** tools which offers you an exciting experience with the new integrated development environment, a new editor built in Windows® Presentation Foundation (WPF) and support for the new .NET Framework 4.

Powerful Set of Free Tools

Choose the language that's right for you.

~~Microsoft® Visual Basic® 2010 Express is ideal for the developer learning to program on Microsoft® Windows®.~~

~~Microsoft® Visual C#® 2010 Express offers a great combination of power and productivity for Windows developers building on .NET.~~

Microsoft® Visual C++® 2010 Express provides developers the horsepower with a finer degree of control than the other Visual Studio Express productions.

Features

Visual Studio® 2010 Express supports the new .NET Framework 4.

New Start Page

Basic and Expert Settings

C++
install
link

Ignore the Basic & C# links.

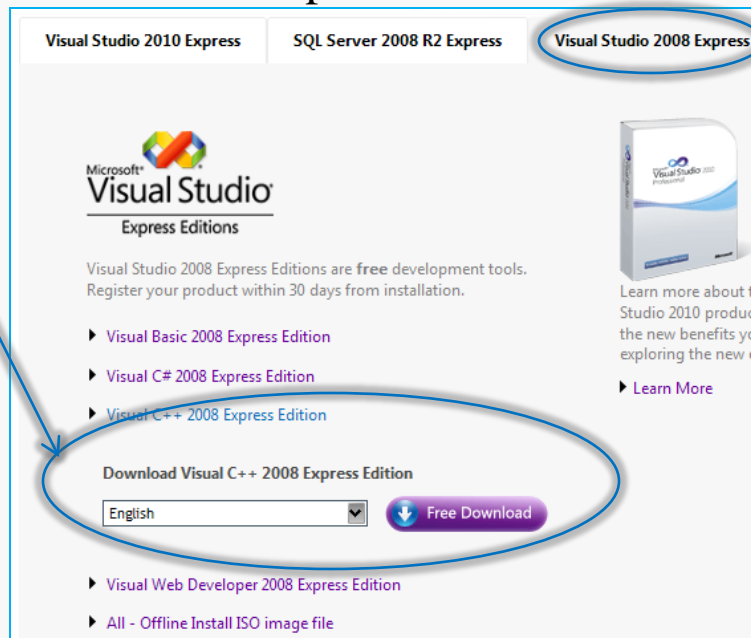
Click the rightmost VS 2008 Express tab:

<http://www.microsoft.com/express/Downloads/#2008-Visual-CPP>

Your first option is to do a web-based install; do **not** choose this option unless you have a stable, high-speed internet connection.

Click the Visual C++ 2008 Express Edition download link:

*Web
install
link*



2008 tab

You should see a dialog box asking what to do with the vcsetup.exe file; choose Run or Save. Once the file has downloaded, double-click it to run it.

The remainder of the process should be very similar to what is shown beginning on slide 8.

Web surf to the MS Visual Studio Express web site.

<http://www.microsoft.com/express/download/default.aspx>

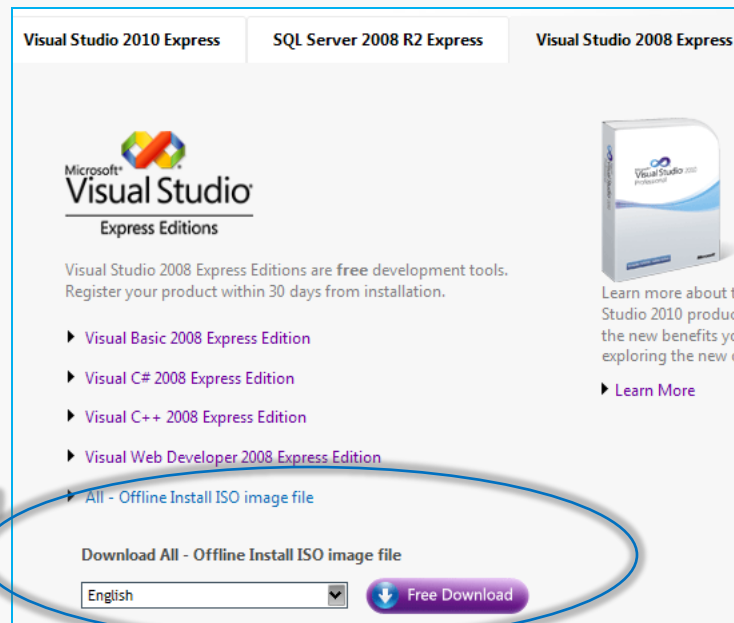
(It is NOT necessary to install MS Silverlight to download the software.)

Click the rightmost VS 2008 Express tab:

<http://www.microsoft.com/express/Downloads/#2008-Visual-CPP>

Scroll down and select the Offline Install download link (at the bottom of the page where it states "Click here for instructions on burning the Visual Studio Express Editions DVD.").

**Offline
install
link**



This will download an ISO file to your computer, named something like:

VS2008ExpressWithSP1ENUX1504728.iso

Be sure you notice where the file is saved!

Once the "VS2008ExpressENUX1397868.iso" DVD file image has been downloaded, use an image mounting tool to make the VS2008ExpressENUX1397868.iso file appear to be a hard drive to the operating system.

Download and install the free

[SlySoft.com Virtual Clone Drive software](http://www.slysoft.com):

VIRTUAL CLONEDRIVE



Virtual CloneDrive

Virtual CloneDrive works and behaves just like a physical CD/DVD drive, however it exists only virtually. Image files generated with CloneDVD or CloneCD can be mounted onto a virtual drive from your hard-disk or from a network drive and used in the same manner as inserting them into a normal CD/DVD drive.



DOWNLOAD

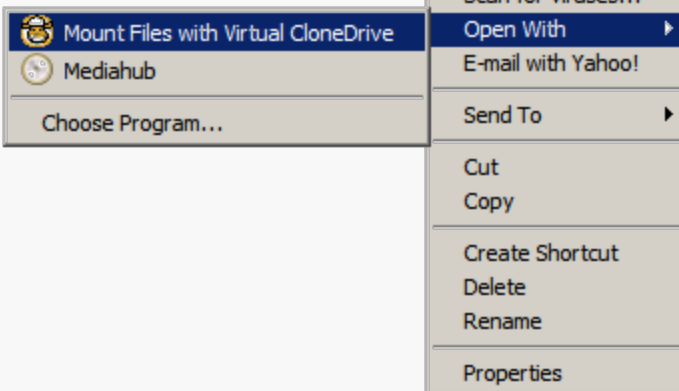
Probably the best virtual drive software, Virtual CloneDrive allows you to enjoy the freedom of a virtual drive and is completely free.



Virtual Desktop Manager
PowerToy for Windows XP.msi
Windows Installer Package



VS2008ExpressENUX1397868....
Virtual CloneDrive
916,122 KB

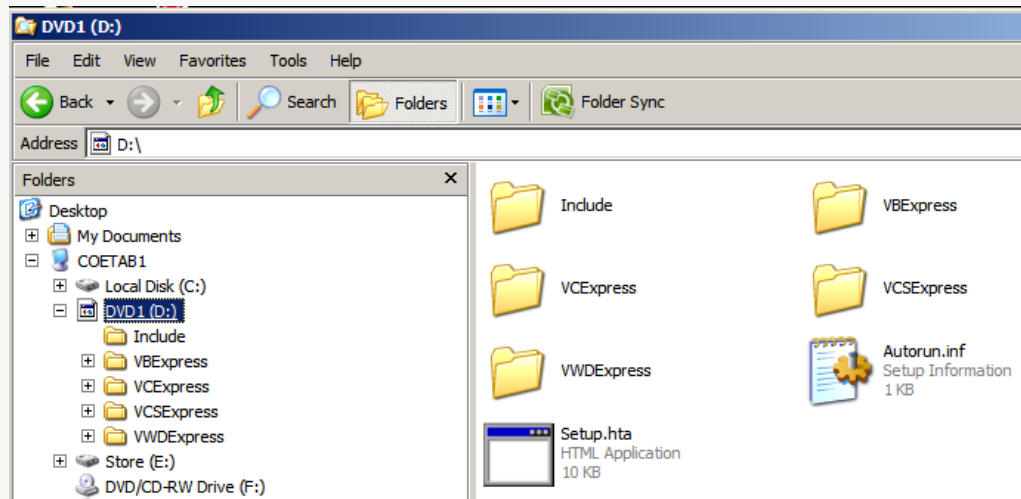


Once Virtual Clone Drive is installed, right-click on the VS2008ExpressENUX1397868.iso file and select "Open With > Mount Files with Virtual CloneDrive".

Execute the VS Express C++ installer

The VS Express installer should run automatically after mounting is complete.

If it does not, open the mounted drive in Windows and double click on the Auto.inf/Setup.hta file as shown below:



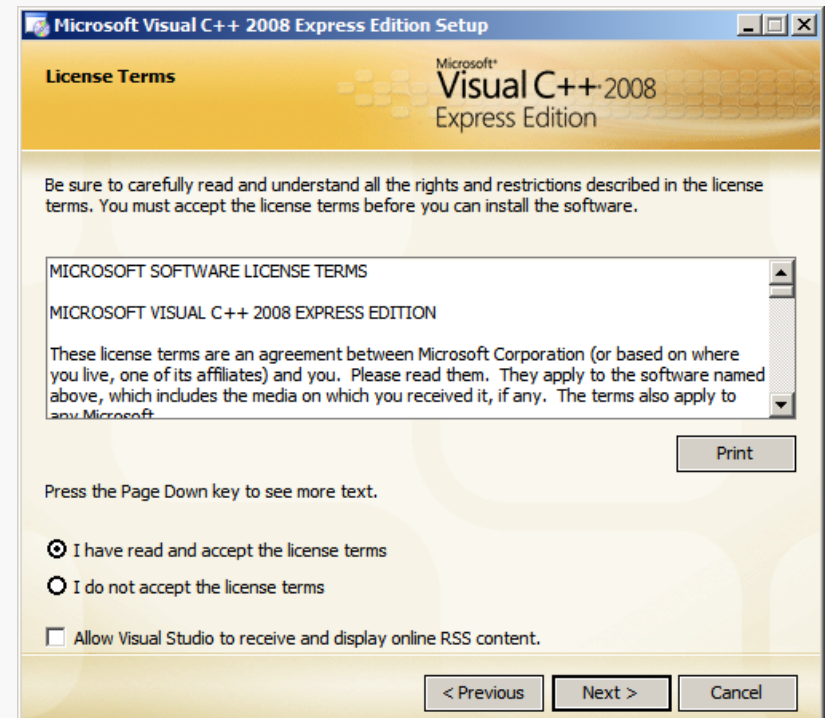
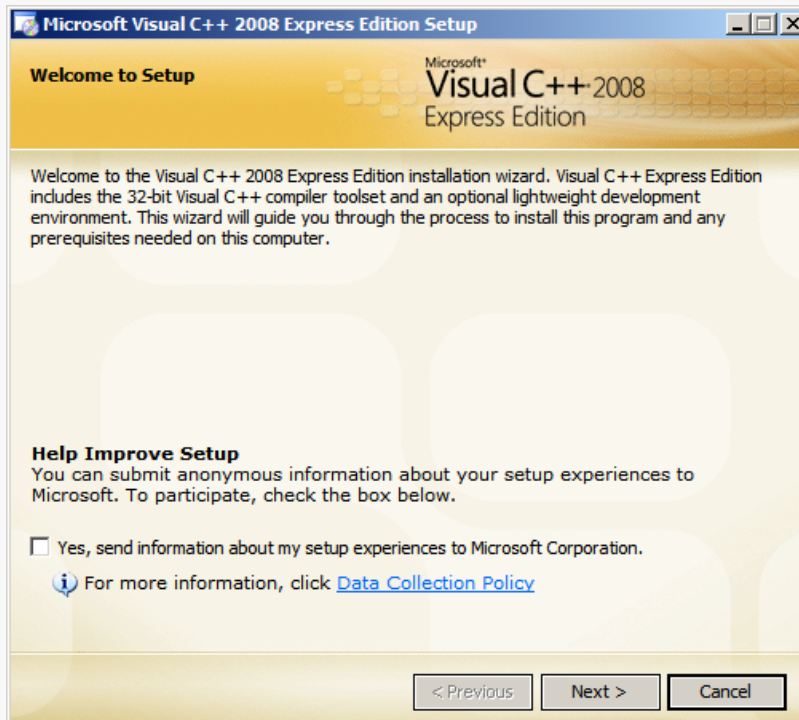
Install only C++

The VS Express installer contains several programming language packages. You need only install the C++ compiler for your work in CS 1044. Installing the other Visual Studio tools will consume large amounts of drive space. The C++ only install requires approximately 1 GB of free disk space.



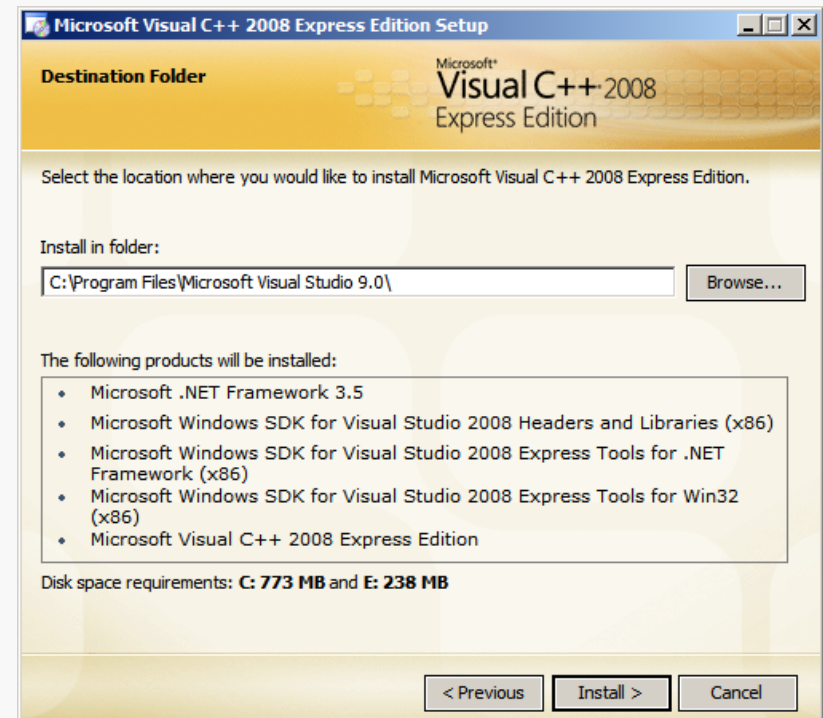
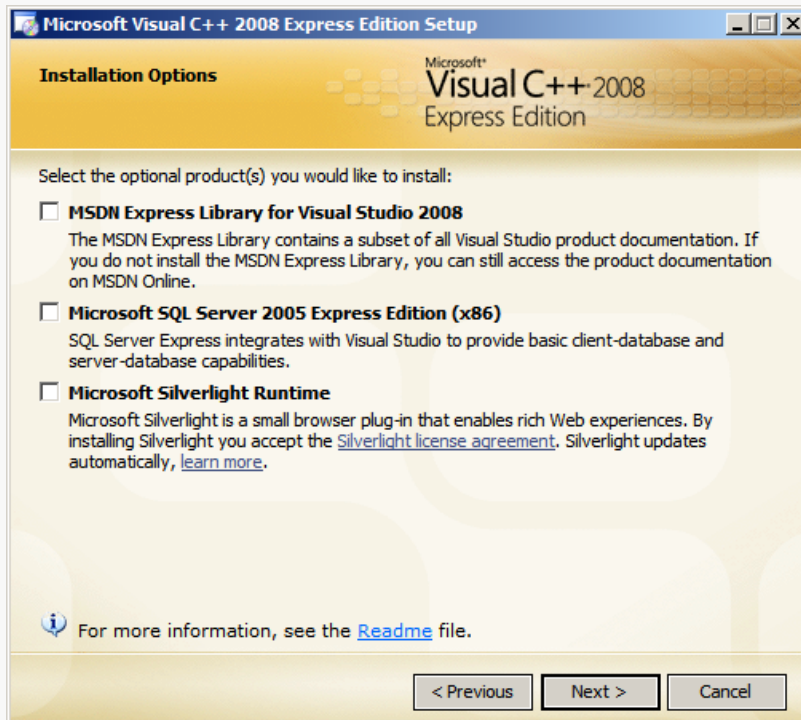
Visual C++ install wizard

The first two screens are simply help and license information.

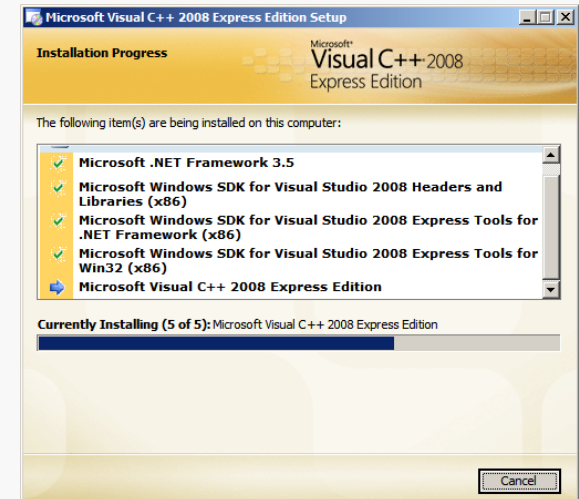
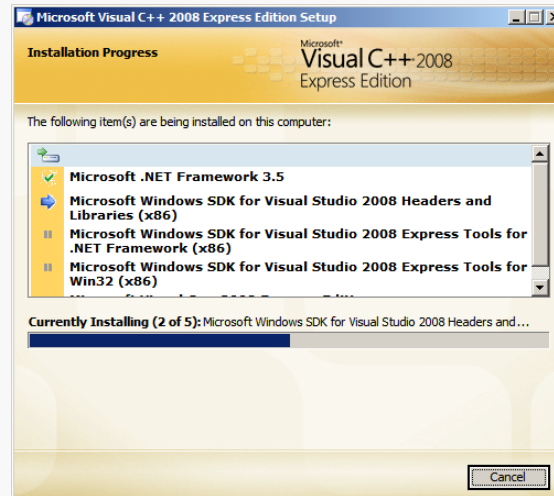
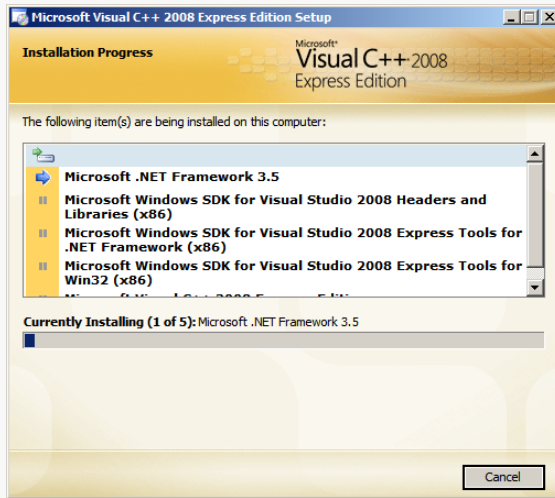


Select options & directory

Deselect all of the installation options. Accept the default folder location for compiler.

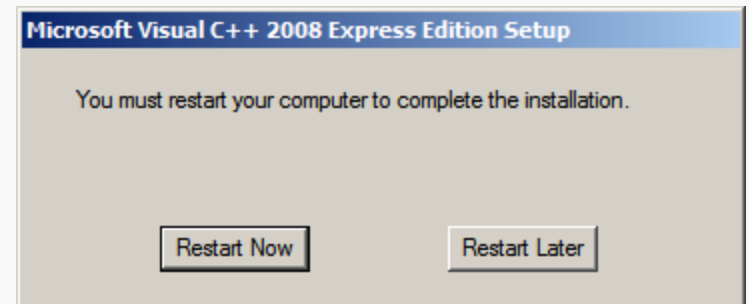


Wait for the installation to complete



Exit & Reboot

Exit the completed installer and restart your machine when prompted.



Problems Installing or Executing MS Visual Studio Express

If your installation of MS Visual Studio Express was not successful then you will need to uninstall it & re-install it. Unfortunately in most cases that will result in an identical corrupted installation. (Corrupted installs of MS VS Express don't happen that often - MS VS Express is widely used around the world.)

The problem is usually a result of a corrupted MS Windows registry, (in short the registry is a database in Windows keeping track of a lot of system information). There are a couple of possible solutions:

Use registry cleaner software to attempt to 'fix' the registry. (You would do this before reinstalling MS VS.NET.) There are a lot of registry cleaner programs available - some are definitely better than others. This approach is not without risk. A poor registry cleaner program might just make things worse. Here are some registry cleaners. (I don't recommend them. I just list them here for your possible use. They seem to get the better ratings of registry cleaner software.)

[Registry Repair \(free\)](#)

[Tweak Now \(free\)](#)

[CCleaner \(free\)](#)

[Registry Mechanic \(\\$30\)](#)

[Advanced System Optimizer \(\\$30\)](#)

Errors Installing or Executing MS Visual Studio Express

Re-install MS Windows. Sometimes the only real way to fix a registry is to reinstall the Operating System (OS). This is not a simple process. Seek help if you have never done it before. It involves first backing up all of your data and also re-installing all of your software after the OS has been re-installed.

Unfortunately correcting registry problems is difficult and time-consuming. It is not part of this course and thus the CS 1044 TAs & instructor(s) do **NOT** offer registry support.