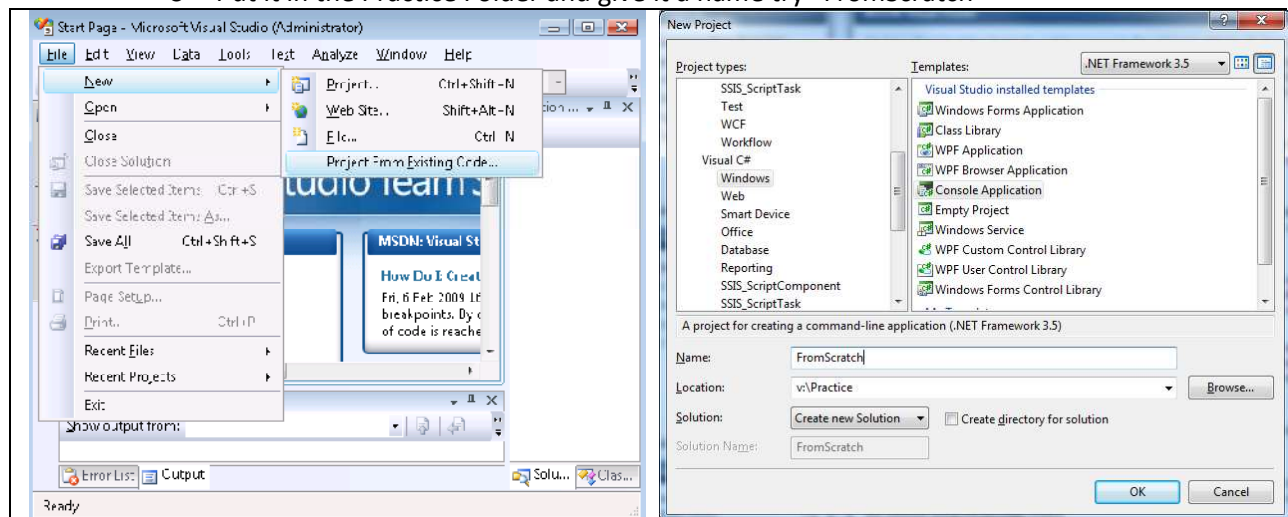


Making a simple program in Visual Studio:

Visual Studio helps you make and manage source code. We made some source code last class. Remember ICan.cs? We used the csc command to change that source code into an executable program that we can run and interact with. Visual Studio manages source code and the compiling process through *Projects*. A project is a collection of source code files and, in more advanced programs, a variety of other resources including web data files, previously written programs, and configuration instructions.

Perform and understand the following steps:

- Map drive v: to your class work area
 - o Open a command prompt (Start → Run cmd press enter)
 - o Type: Net use v: \\bus\storage\ClassFolders\2009_Fall\BA272\001\yourONIDID
 - o Press enter. That runs the “Net” program, passing in 3 parameters (use, v:, and \\bus\storage\ClassFolders.....)
 - o Actually you can paste the command into the command prompt window: select the text above (Net use ...) and do ctrl-c for copy, click on the c:\ icon in the command prompt window and select edit/paste
- DON'T FORGET, YOU HAVE TO USE YOUR ONIDID in place of “yourONIDID”
- Make sure you have a Practice folder
- Open Visual Studio 2008
- Start → All Programs → Microsoft Software → Microsoft Visual Studio 2008 (the folder) → Microsoft Visual Studio 2008 (the icon)
- Have Visual Studio Create a new Console Application Project
 - o File → New → Project
 - o Make it a Visual C# Console Application
 - o Put it in the Practice Folder and give it a name try “FromScratch”



- You may get a security warning. You should wind up with a code window something like this:

```
using System;  
using System.Collections.Generic;
```

```

using System.Linq;
using System.Text;

namespace FromScratch
{
    class Program
    {
        static void Main(string[] args)
        {
        }
    }
}

```

- Look in the folder. Note that it made you a new folder for your application. And it put a bunch of stuff there. A solution (details stored in the .sln file) can hold one or more projects. The project file (.csproj) contains data about the project's files and settings. The sub folders store various related files.
- Learn to pin and unpin the Solution Explorer - it shows you what you have to work with.
- Rename the Program to be called FromScratch. Right click on Program.cs in the Solution Explorer and tell it to rename. Call it FromScratch and tell it you do want to rename all references. That will not only rename the file in your directory (check!) it will also change the code to say `class FromScratch` instead of `class Program`. If you weren't using a tool like Visual Studio, you would have to make that change in several places.
- Try undocking and docking the Solution Panel.
- Double click on the project's properties in the solution explorer. You will see that there is a wide variety of possible settings. We will just use the defaults for simple programs.
- Make the program do what the first day's program did:
 - o Have it display something. Start typing console and see how it helps you. That is called *intellisense*.
 - o Type `Console.WriteLine` instead of `WriteLine` and see how it warns you. You might have to work at it, it likes to fix this sort of thing.
 - o It also makes an error visible on the error tab below. If you click on the error it will take you to the corresponding place in the code.
 - o Click Build Solution on the Build Menu then (in windows explorer) look in the bin\debug folder – now there is an exe.
 - o A bit fancier (yet another thing you may not understand just yet) – put in this code:


```

string sWhatTheyTyped = Console.ReadLine();
Console.WriteLine(sWhatTheyTyped)

```
 - o Type it don't paste it. I made up the name `sWhatTheyTyped` - do you see that intellisense even helped you with stuff you made up?
 - o Click the Green button to run it.
 - o Do `cd v:\Practice\FromScratch\bin\Debug` in an open cmd window.
 - o Type `dir *.*` - it shows you `FromScratch.exe`
 - o Type `FromScratch`.
 - o See how it runs!
 - o Go back to Visual Studio and click the green button. It runs again. But if you don't have a `Console.ReadLine();` at the end the screen goes away before you can see it.
 - o Click in the gutter to get a red ball (stopping point), click the green button, click step next. That can help you debug.