Install & Configure Visual Studio 2019

Set Up First C# Project

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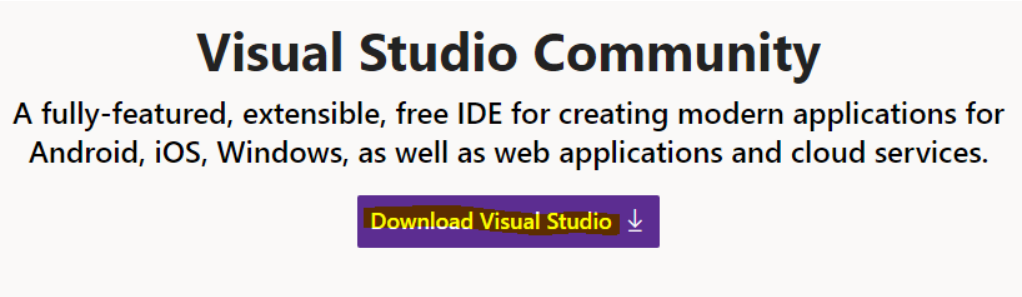
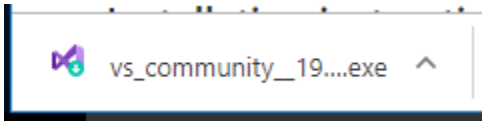
ttps://visualstudio.microsoft.com/vs/community/

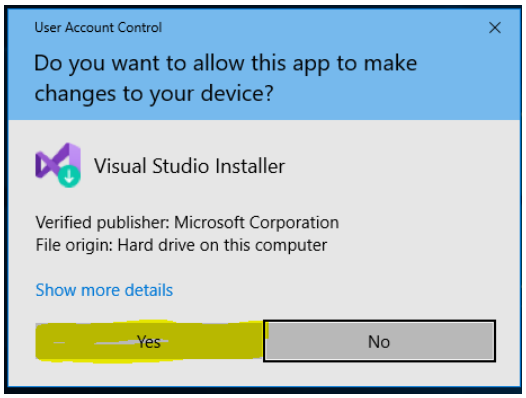
1] Navigate to the link above. Push the Download button.



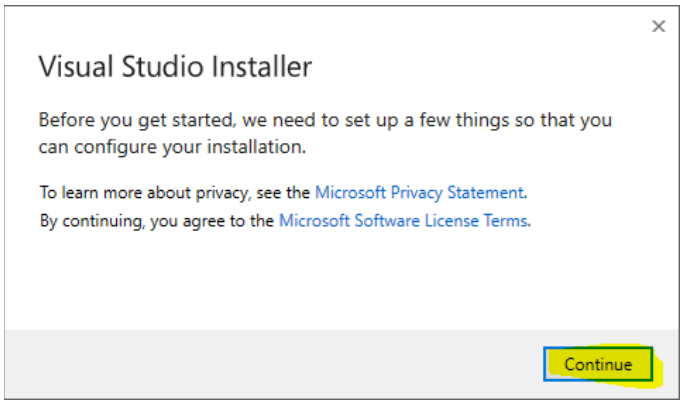
2] Double-click on the Installer



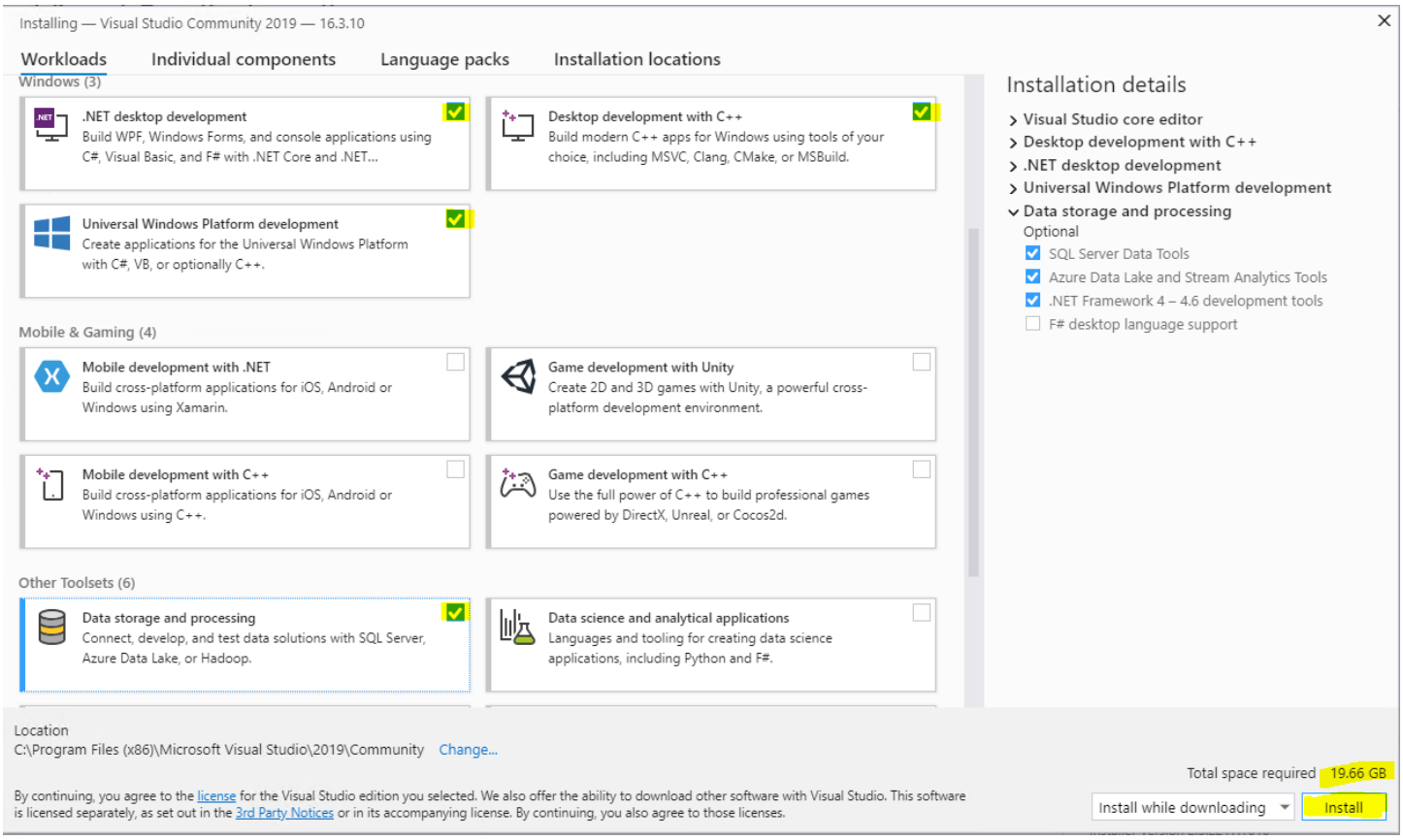
3] Push the Yes Button.



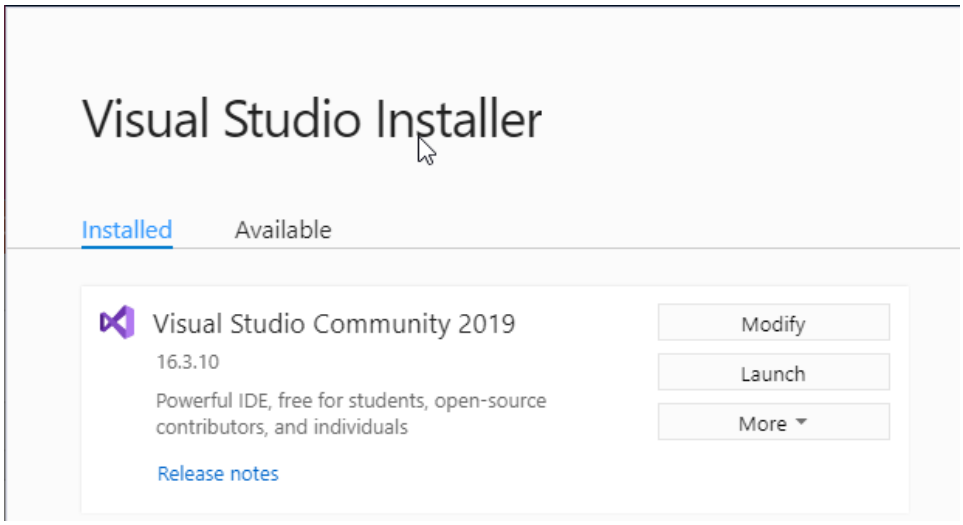
4] Push the Continue Button.



5] Select the components you wish to install. I often go through the Installation Details (right) and select everything; this takes a lot of time and requires about 60 GB of disk space. I would recommend that you select the four major components shown below (about 20 GB).

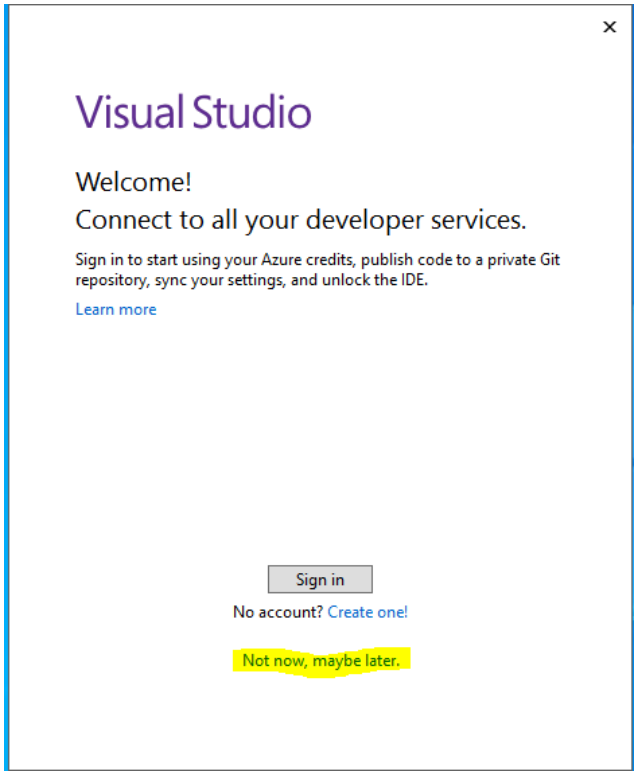


6] You can always return to this installer to add additional components.

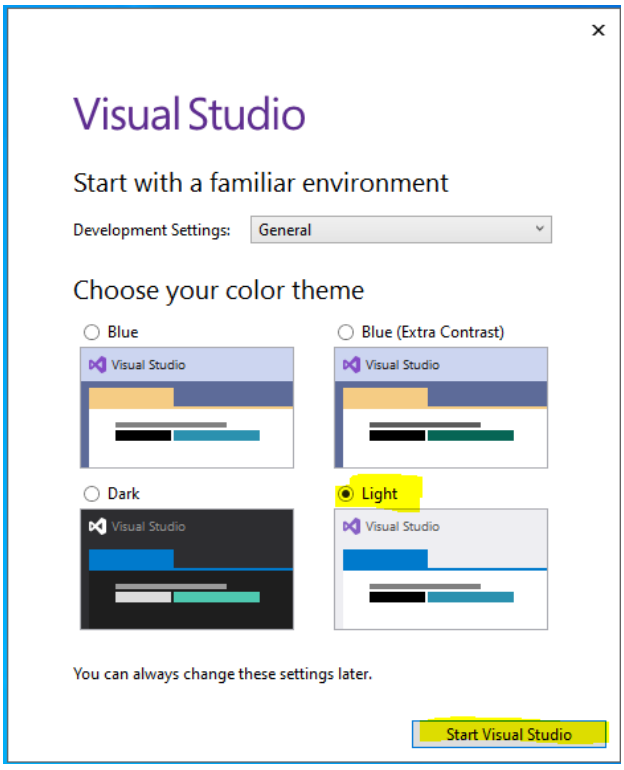


Start A C# Project

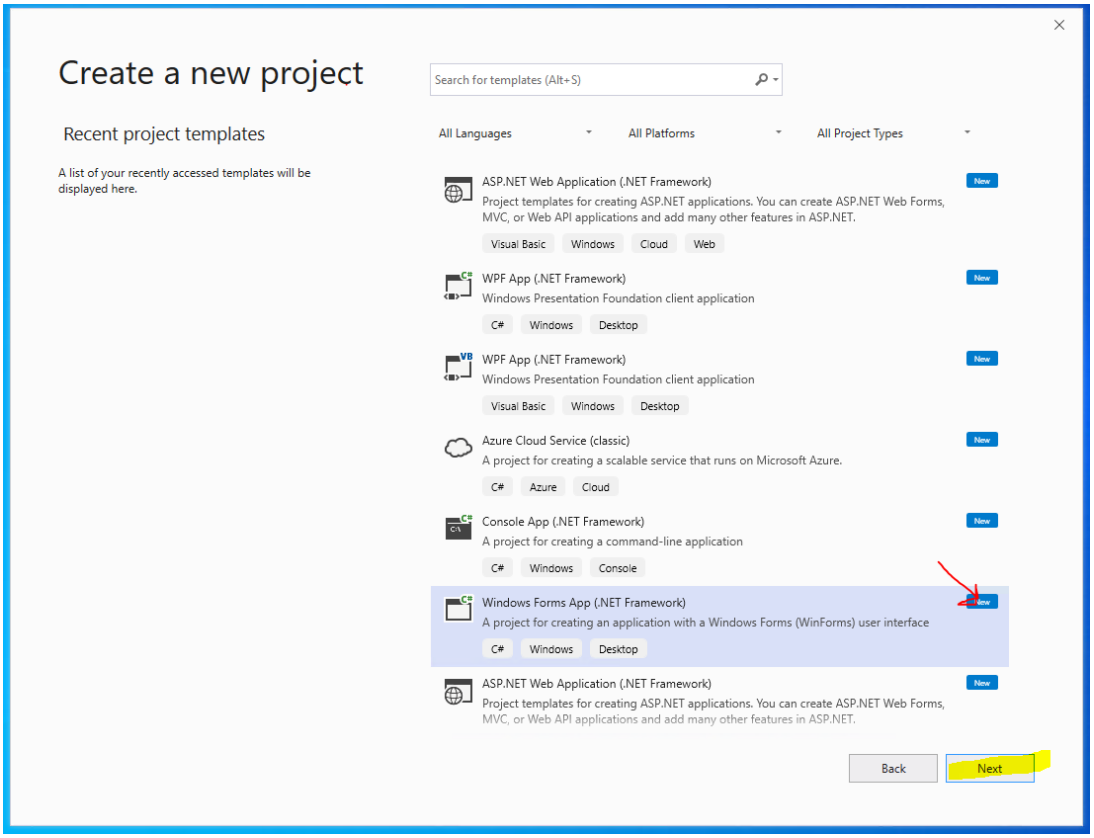
1] Start Visual Studio 2019



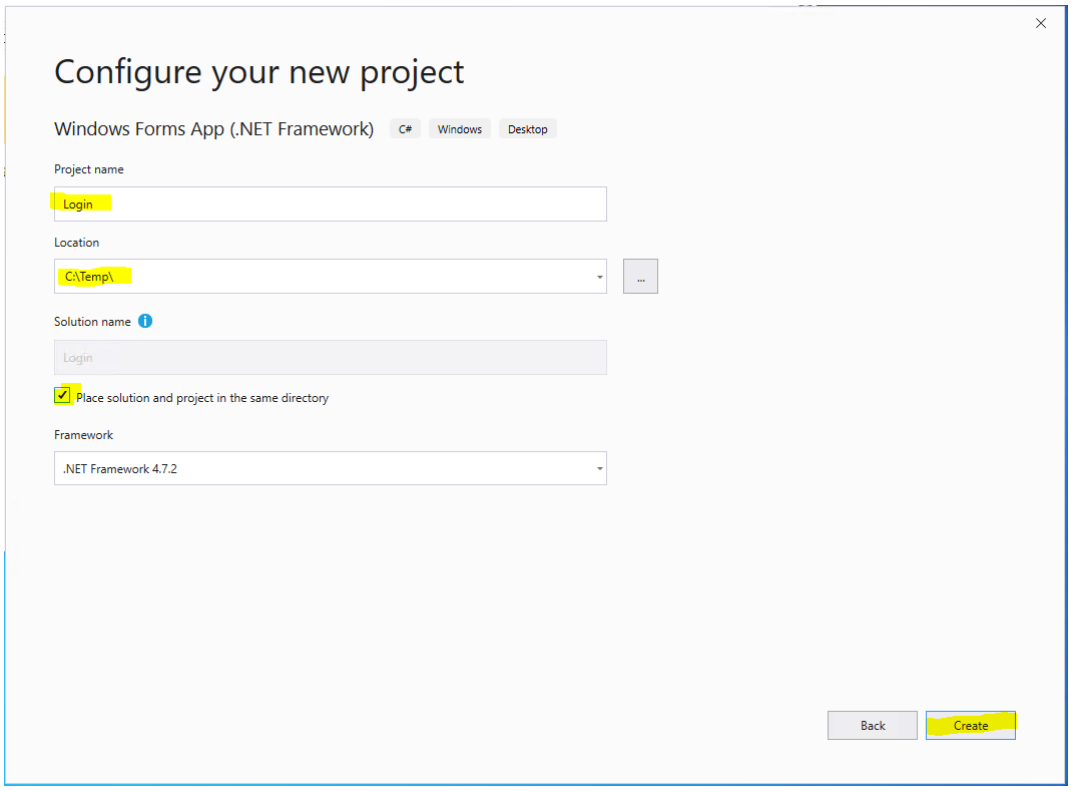
2] Select your color scheme. I will take Light.



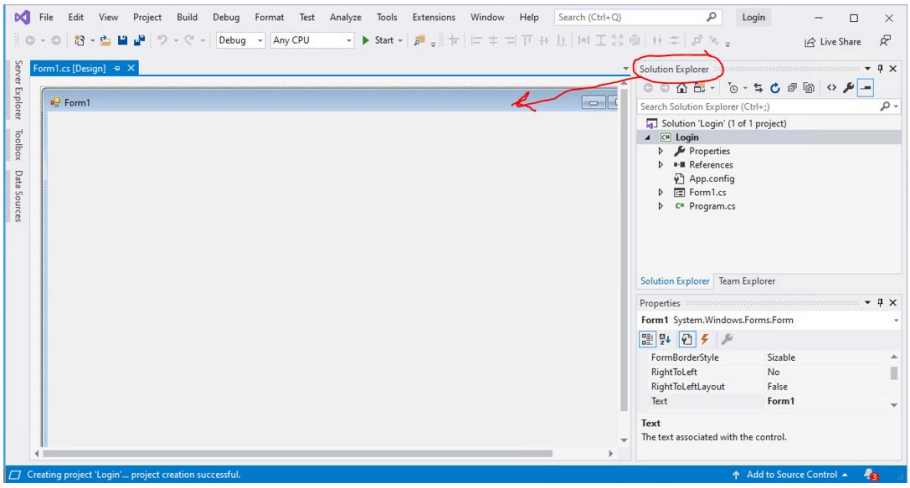
3] Select the C# Forms App ➔ Push the Next Button or double-click on New.



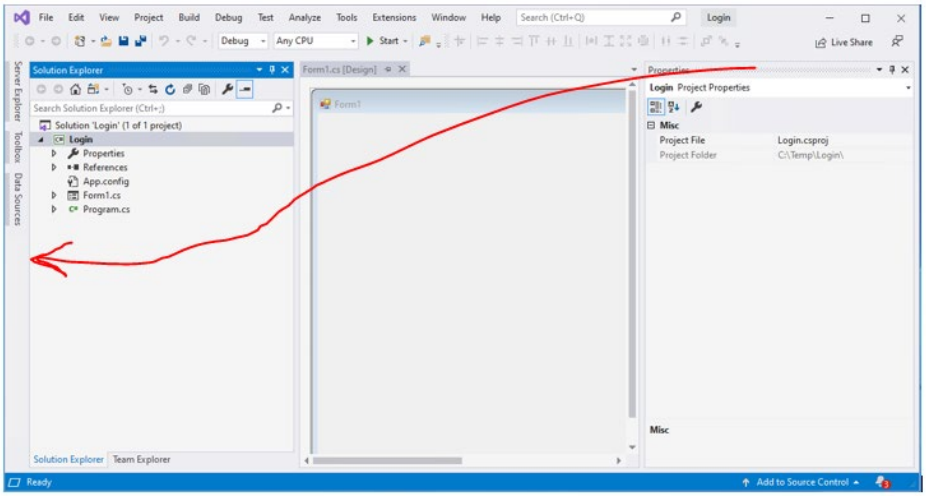
4] Enter a project name : Login. Select a folder in which to install the project: C:\Temp. Check to place all in the same directory. Push the Create Button.



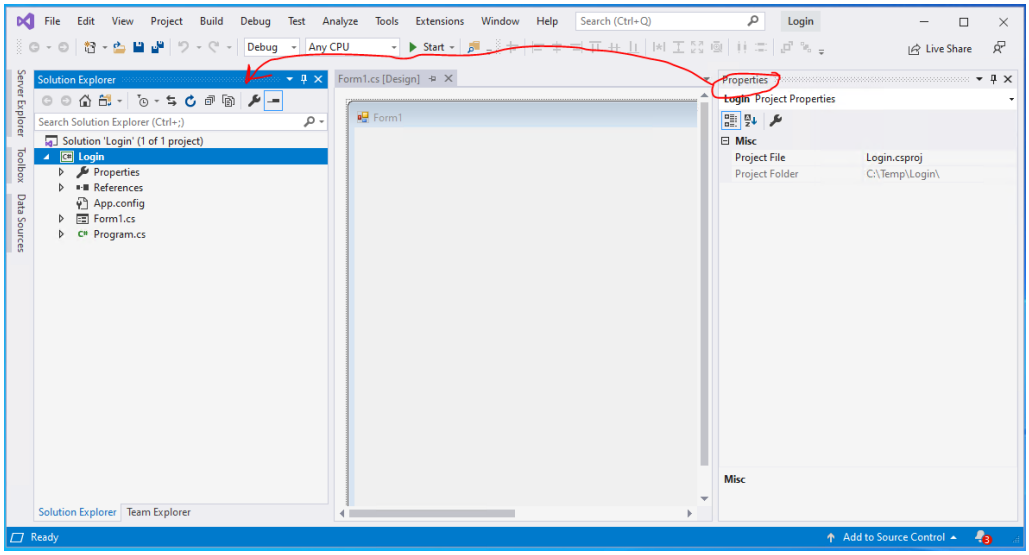
5] All of the menu controls are on the left. I am going to move my menu controls to the left. I have found it most productive to have my Menu options on the left.



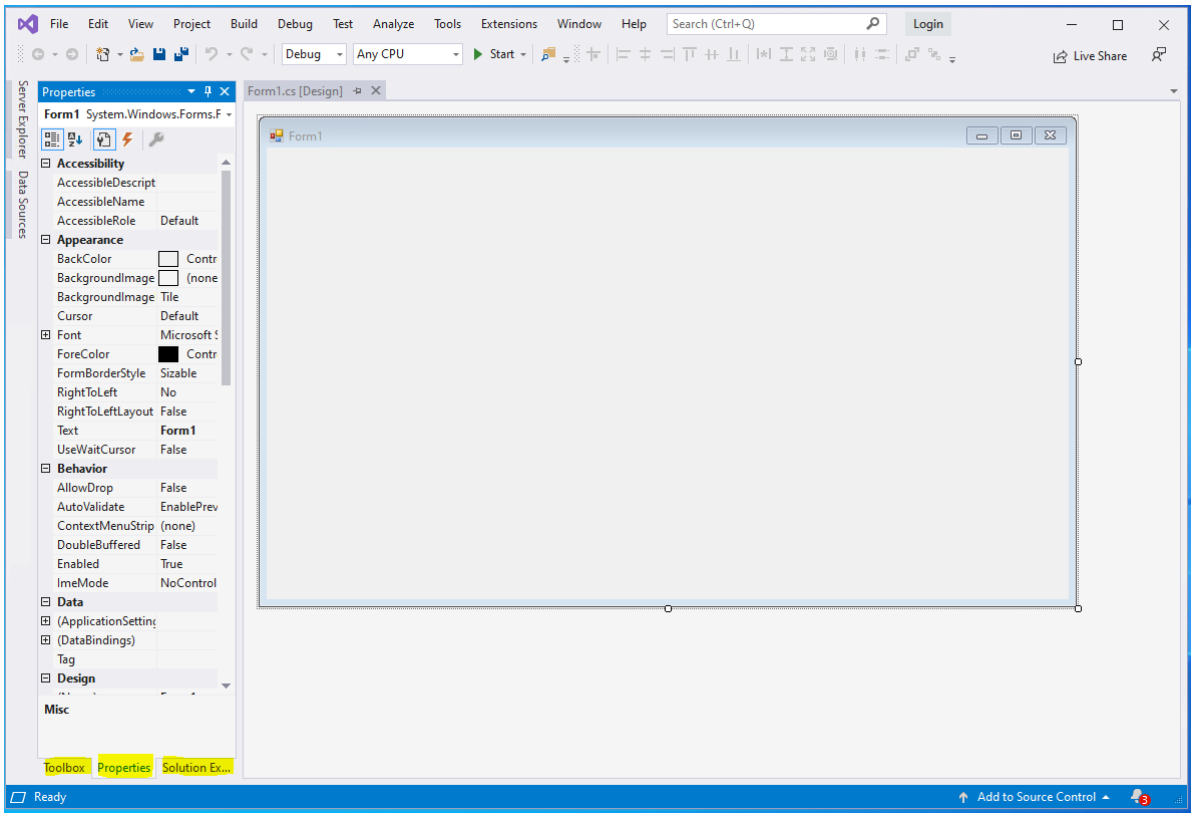
6] The early visual studio applications and many of the tutorials place the controls on the left. Drag the Solution Explorer to the right docking port.



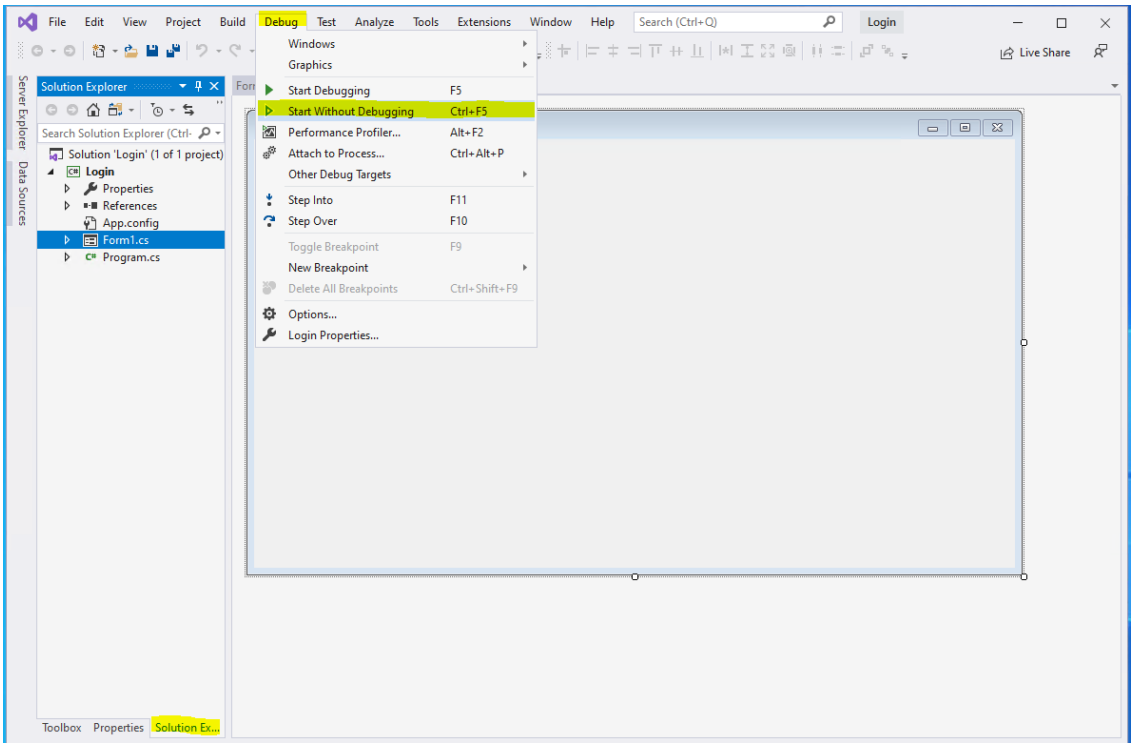
7] Drag the Properties (right) On Top Of The Solution Explorer (left) .



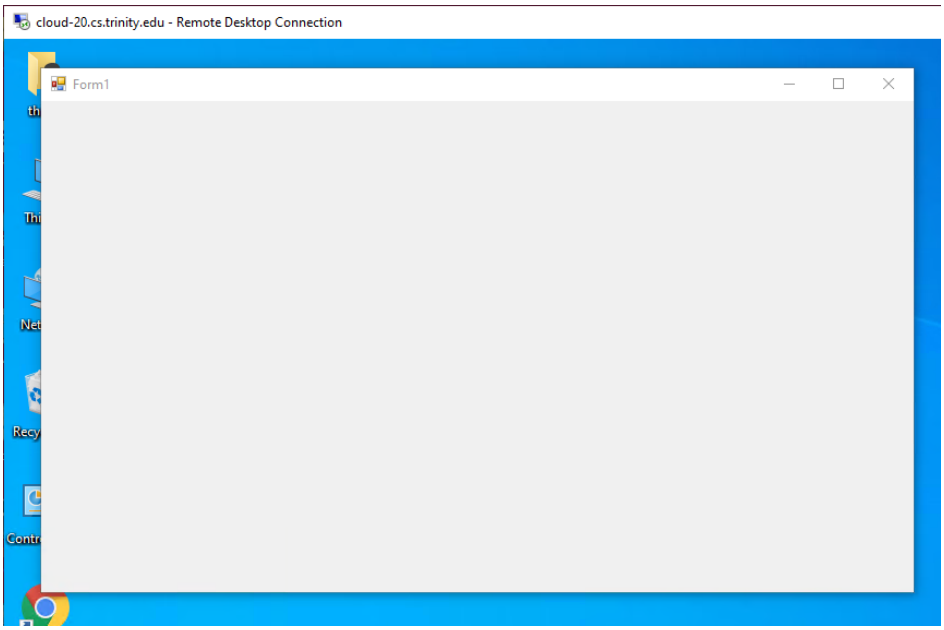
8] The Three MenuStrips that I use the most are Properties, ToolBox, and the Solutions Explorer. You can see that I have docked all three of them on the left. Why don't you do the same; it will make walking through the tutorials easier..



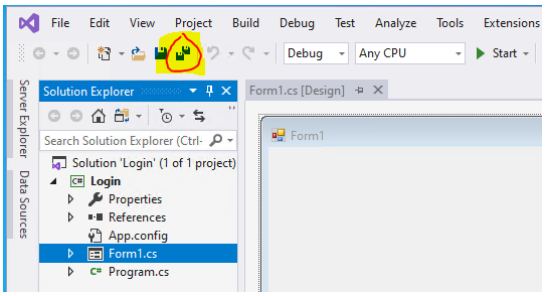
9] Hold down the Debug Menu ➔ Select Start Without Debugging.



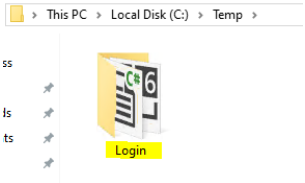
10] Our Visual Studio C# application verifies that our Visual Studio 2019 is working correctly.



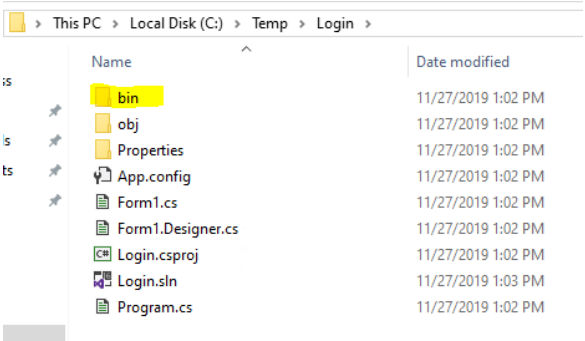
11] Save everything & Exit Visual Studio.



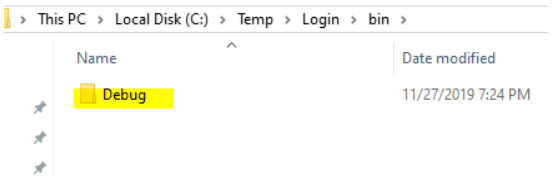
12] Open folder **C:\Temp**. Note that our Login folder is there. Using the mouse, double-click on the **Login** folder.



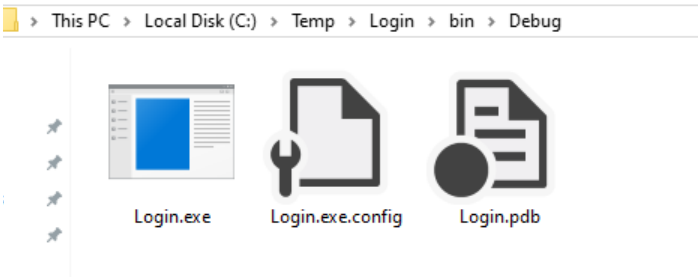
13] Open folder **C:\Temp\Login**. All of the folders, and files, that make up the **Login** project are there. The binary application is buried in the **binb** folder. Using the mouse, double-click on the **bin** folder.



14] Open folder **C:\Temp\Login\bin**. A **Debug** folder is there. Using the mouse, double-click on the **Debug** folder.

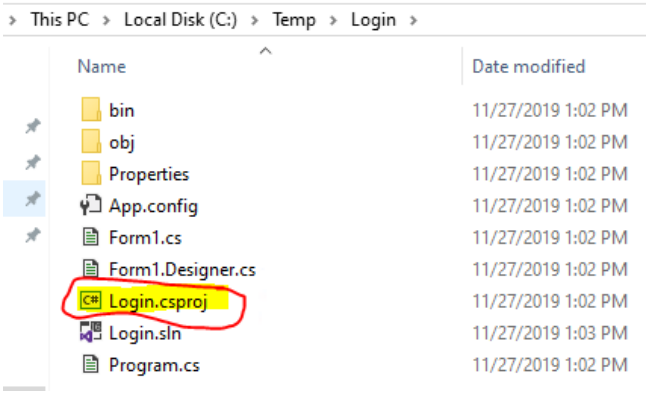


15] Open folder **C:\Temp\Login\bin\Debug**. This folder contains the executable application. If you double-click on Login.exe, it will start our mundane application.

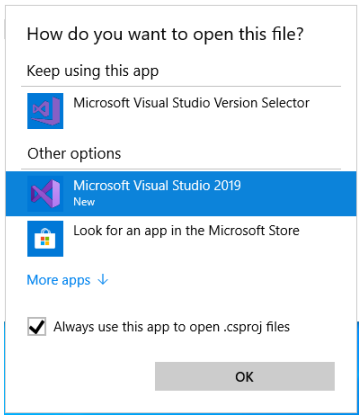


16] There is a Visual Studio Run-Time that is already installed on millions of applications. It is free. It is installed as part of tens of thousands of applications. It installs in seconds. Any computer, that has the Visual Studio Run-Time can run the Login.exe without having Visual Studio present on their computer.

17] This Login Application is far from done. When you are ready to continue working on the Login project, open the Login folder. Using the mouse, double-click on the file with the **.csproj** extension.



18] If you plan to use multiple versions of Visual Studio on your computer, you should continue letting Microsoft Visual Studio Selector determine which version you should use. Since this is the only version I plan to install, I am going to force all projects to use Visual Studio 2019 by my choices below. This could be changed later, but it will make things simpler.



Software Engineering Tutorials

1] Historically, some students have come into Software Engineering with very little experience in Windows This semester, we will be developing projects in Microsoft Visual Studio 2019.

Install-Configure-Visual-Studio.pdf

2] Database is an essential design component in today's software engineering. Well over 90% of applications utilize database; many of you will use it in internships and beyond. Since we do not have a required course in database the department has asked those teaching (1) CSCI-2320 to include at least 6 hours of database and (2) CSCI-3321 to include at least 8 hours of database. This fits very nicely in the design aspects of Software Engineering. We will begin with MySQL. Since some of you may choose to integrate portions of it with your Final Project, we are going to utilize MySQL in Windows.

Install-Configure-MySQL-Windows.pdf

3] Last year, I had some students with very little Windows Experience; they spent the first two-three weeks trying to get a Windows environment that they could use without coming to our labs.

4] WHAT DO I DO IF I DON"T HAVE A Windows 10 System?

A) You could come to the labs

B) If you are a MAC user, you could
1] Set up boot-camp (free) and run both Mac & Windows (if you have enough hard disk space). With this solution, you can run in both Windows & Mac OS but it requires a reboot. Easy to configure – check out YouTube for help.
2] Buy Parallels (educational $40-50) – allows you to run in both Windows & Mac at same time (if you have enough hard disk space). I use this myself.
3] Install VirtualBox on your Mac and create a Windows Virtual Image.

C) If you are a LINUX user, you could
1] Partition your hard drive (if you have enough hard disk space) into two major portions – one for LINUX and one for Windows, Hard to configure – check out YouTube for help.
2] Install VirtualBox on your LINUZ and create a Windows Virtual Image.

D) You can come to me and I will give you remote access to one of my systems.

5] Several of my MAC and LINUX users during the past few years have chosen to do Virtual Box. Many of them had no experience with Virtualization. Installing VirtualBox is extremely easy (no-brainer). I have a tutorial that will help you set up a Windows Image.

Preparing-VirtualBox-Windows-10.pdf

6] Each of the approaches requires setting up Windows 10 from iso or cd. I have designed a tutorial to help. This tutorial would be worth reviewing if you are not comfortable with all of the following

A. Install Windows 10
B. Place Icons On Desktop
C. Configure File View
D. Download & Install Chrome
E. Download & Install Notepad ++
F. Add Snipping Tool To Taskbar
G. Run Automatic Update
H. Create Windows Share Folders
I. Configure Share Access To Your Computer
J. Set Your Computer Name
K. Configure Remote Desktop

Install-Configure-Windows-10.pdf

7] Your system could be a desktop that you remote into – if that is the case, make sure you have checked with IT to get a Windows 10 Professional or Windows 10 Enterprise version. The Home Versions just don't work.

8] If you want to do everything on your personal computer, you will need Microsoft Office. The Installation is so simple, it hardly justifies a tutorial.

Install-Microsoft-Office.pdf