# Software Engineering 3

**Practical No 1**

The purpose of this practical is to get you started with Visual Studio 2019 and the using the Windows Presentation Foundation (WPF) to create a C# windows app.

It is assumed that you have previously used C# and .NET. If you have not, speak to your tutor.

First watch the introductory video.

Note the following points from the video:

* .NET requires that all your code is written within a project
* Projects are grouped together into solutions
* You should store your solution in a folder on your C: drive.

***If you are using PCs in a university lab, please remember to copy your work onto your H: DRIVE after each session because the data on all local drives will be deleted after you log off.***

* WPF projects store forms as XAML
* Controls and event handlers are very similar to those encountered using Windows forms applications within the SD2 module.

# Your Task:

1 .Create a WPF application with the following form layout:



Save

Clear

Name

Text box

Age

Text box

Address

Text box

When you click save it should validate the contents of the 3 text boxes as follows:

Name- not blank

Age- in the range 0-100 Address- not blank

If any field is not validated, show an error message.

Once validated the name, age and address should be appended to a comma- separated text file (.csv)- see then example code at the end to demonstrate how to write to a text file.

Pressing the Clear button should remove the contents of the 3 text boxes.

For more information on creating .WPF applications have a look at <http://msdn.microsoft.com/en-us/library/ms754130.aspx>.

2. If you have finished task 1, amend your application as follows; firstly add a load button. When the load button is pressed load the names, ages and addresses from your CSV file. Now add a button called Next, when the next button is clicked show the next set of details in the file. **HINT:** You will need to perform some web searches in order to find out how to read a text file.

Good Luck!

Sample code for writing to a file:

// A string of data

string line = "This will be appended to a file";

// Write the string to a file.

System.IO.StreamWriter file = new System.IO.StreamWriter("c:\\test.txt",true); file.WriteLine(lines);

file.Close();