**Data Binding**

There are two types of data bindings.

1. One Way Data Binding
2. Two Way Data Binding

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**Input in WPF:**

1. **WPFMouseInput**.
   * MouseEnter
   * MouseLeave
   * MouseMove
   * MouseDown
2. **WPFKeyboardInput**
   * KeyDown
   * KeyUp
   * TextInput etc.
3. **WPFCommandsInput**.
   * Open
   * Save
   * New

**Command Line Argument:**

Steps:

1. Create MainWindow.xaml window
2. Now subscribe the Startup event in App.xaml file as shown below.
3. Given below is the implementation of the app\_Startup event in App.xaml.cs which will get the command line arguments.
4. Now, in the MainWindow class, the program will open the txt file and write all the text on textbox.
5. If there is some error found, then the program will display an error message on textbox.
6. When the above code is compiled and executed, it will produce a blank window with a textbox because this program needs a command line argument. So Visual Studio provides an easy way to execute your application with command line parameters.
7. Right click on your WPF project in the solution explorer and select properties, it will display the following window.
8. Select Debug option and write the file path in the Command line argument.
9. Create a txt file with Test.txt and write some text in that file and save it on any location. In this case, the txt file is saved on “**D:\**” hard drive.
10. Save the changes in your project and compile and execute your application now. You will see the text in TextBox which the program reads from the Text.txt file.
11. Now let’s try and change the file name on your machine from **Test.txt** to **Test1.txt** and execute your program again, then you will see that error message in the text box.

**Resources**

Resources can be of two types −

* StaticResource
* DynamicResource

**Template**

There are two types of templates which are most commonly used −

* Control Template
* Data Template

**Style**

Styles can be defined on the following levels –

* control level
* Layout level
* Windows level
* Application level

**Triggers**

There are three types of triggers –

* Property Triggers
* Data Triggers
* Event Triggers ( used for animation)

**Debugging in C#**