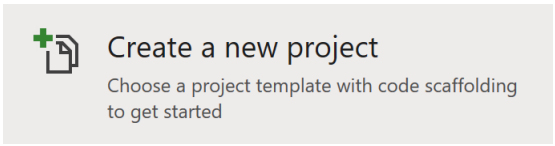
Universal Windows Platform – Data Input

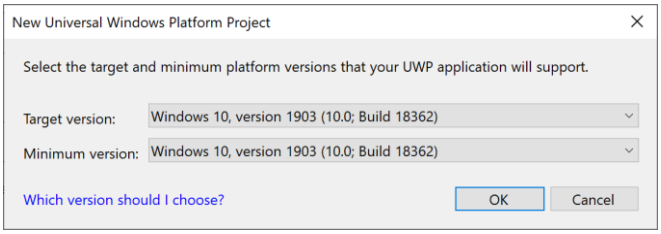
Data Input shows how to use **InputScope** for on-screen Keyboards where supported and and loading **ApplicationData**

Step 1



Follow **Setup and Start** on how to Install and/or Get Started with **Visual Studio 2019** if not already or in **Windows 10** choose **Start**, find and select **Visual Studio 2019** then from the **Get started** screen select **Create a new project**

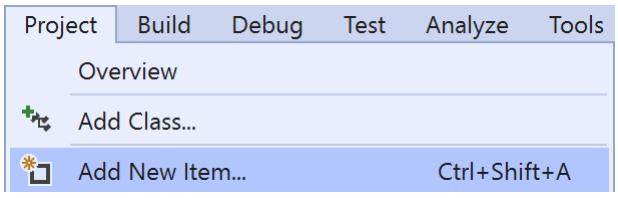
Then choose **Blank App (Universal Windows)** and select **Next** and then in **Configure your new project** enter the **Project name** as **DataInput** and select **Create**



Finally, in **New Universal Windows Platform Project** pick the **Target version** and **Minimum version** to be at least **Windows 10, version 1903 (10.0; Build 18362)** and then select **OK**

Target Version will control the most recent features of Windows 10 your application can use. To make sure you always have the most recent version, check for any Notifications or Updates in Visual Studio 2019

Step 2



Choose **Project** then **Add New Item...** from the **Menu** in **Visual Studio 2019**

Step 3

Then choose **Code File** from **Add New Item** in **Visual Studio 2019**, enter the **Name** as **Library.cs** and select **Add**

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Step 4

In the **Code** View of **Library.cs** will be displayed and in this the following should be entered:

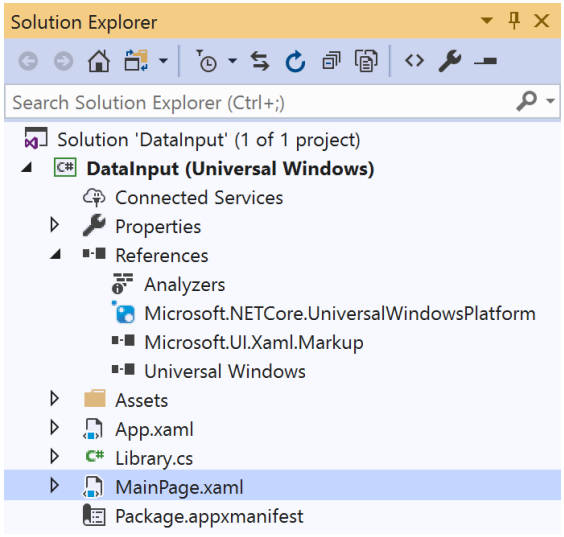
```
using Windows.Storage;

public class Library
{
    public string LoadSetting(string key)
    {
        return (string)(ApplicationData.Current.LocalSettings.Values[key]
        ?? string.Empty);
    }

    public void SaveSetting(string key, string value)
    {
        ApplicationData.Current.LocalSettings.Values[key] = value;
    }
}
```

There is a `using` statement to include functionality from `Windows.Storage`. `LoadSetting(...)` method takes a `string` parameter to `return` the `LocalSettings` with the `key` if present and using the null coalesce or `??` operator will be `string.Empty` if it is not. `SaveSetting(...)` method takes two `string` parameters to set the `LocalSettings` to be returned later with the `key` and `value` passed in

Step 5



In the **Solution Explorer** of **Visual Studio 2019** select **MainPage.xaml**

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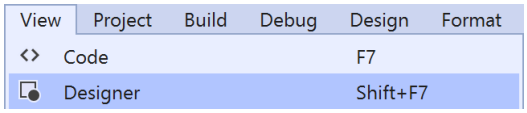
Step 6



Choose **View** then **Designer** from the **Menu** in **Visual Studio 2019**

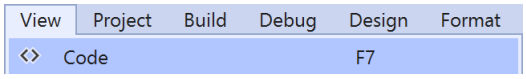
Step 7

In the **Design** View and **XAML** View of **Visual Studio 2019** will be displayed, and in this between the **Grid** and **/Grid** elements enter the following **XAML**:

```
<StackPanel>
    <TextBox Name="Email" PlaceholderText="Email"
    InputScope="EmailSmtpAddress" Margin="20"/>
    <TextBox Name="Website" PlaceholderText="Website"
    InputScope="Url" Margin="20"/>
    <TextBox Name="Telephone" PlaceholderText="Telephone"
    InputScope="TelephoneNumber" Margin="20"/>
</StackPanel>
<CommandBar VerticalAlignment="Bottom">
    <AppBarButton Icon="Page2" Label="New" Click="New_Click"/>
    <AppBarButton Icon="OpenLocal" Label="Open" Click="Open_Click"/>
    <AppBarButton Icon="Save" Label="Save" Click="Save_Click"/>
</CommandBar>
```

The first block of XAML comprises of TextBox Controls which will show the relevant on-screen Keyboard InputScope if supported. The second block of XAML is the CommandBar containing the operations

Step 8



Choose **View** then **Code** from the **Menu** in **Visual Studio 2019**

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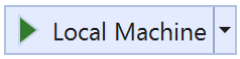
Step 9

Once in the **Code** View, below the end of **`public MainPage() { ... }`** the following Code should be entered:

```
Library library = new Library();

private void New_Click(object sender, RoutedEventArgs e)
{
    Email.Text = string.Empty;
    Website.Text = string.Empty;
    Telephone.Text = string.Empty;
}

private void Open_Click(object sender, RoutedEventArgs e)
{
    Email.Text = library.LoadSetting("Email");
    Website.Text = library.LoadSetting("Website");
    Telephone.Text = library.LoadSetting("Telephone");
}

private void Save_Click(object sender, RoutedEventArgs e)
{
    library.SaveSetting("Email", Email.Text);
    library.SaveSetting("Website", Website.Text);
    library.SaveSetting("Telephone", Telephone.Text);

}
```

Below the MainPage(...) method an instance of the **`Library`** Class is created. In the **`New_Click(...)`** Event handler the TextBox Controls have their Text property set to an Empty String. The **`Open_Click(...)`** Event handler uses the **`LoadSetting`** method to load a value that has been previously Saved and the **`Save_Click(...)`** Event handler will use **`SaveSetting`** to store a value to be loaded later

Step 10



That completes the **Universal Windows Platform** Application, in **Visual Studio 2019** select **Local Machine** to run the Application

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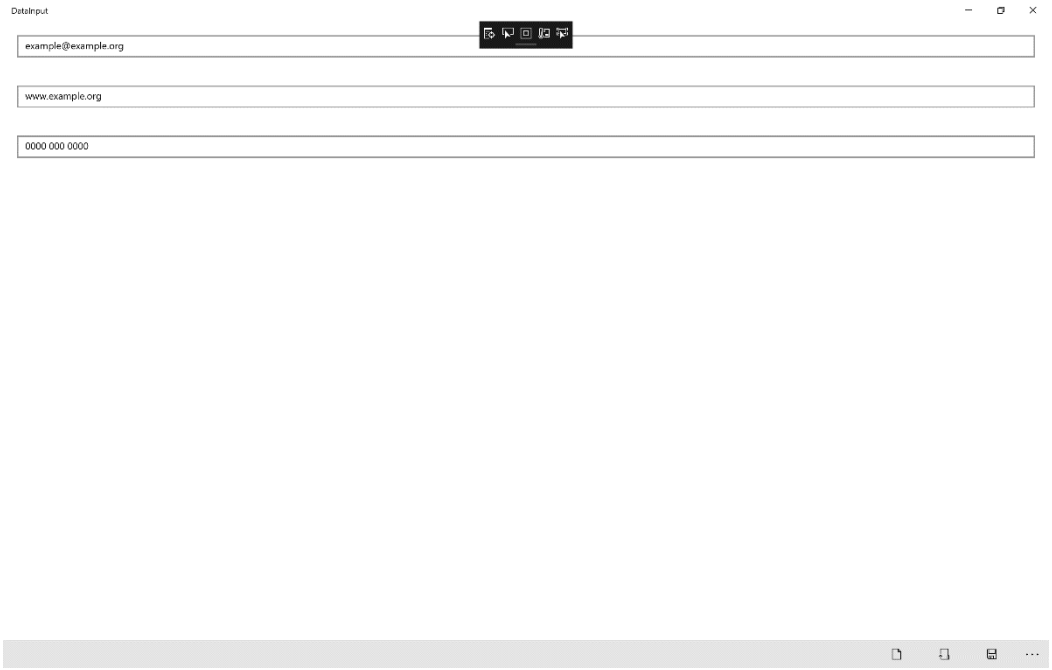
Step 11

Once the Application is running you can then input some data such as an **Email Address**, **Website** and **Telephone Number** then store using the **Save** button and recall the data with the **Open** button or reset with the **New** button



Step 12

To Exit the Application, select the **Close** button in the top right of the Application