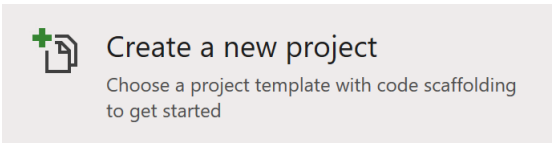
# Universal Windows Platform – ParallaxView Effect

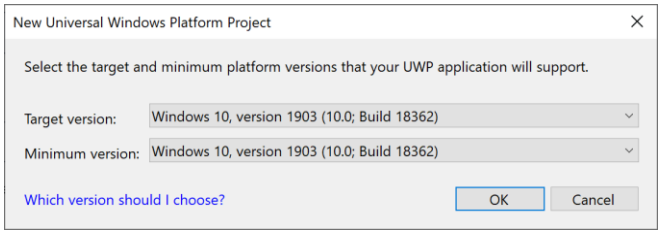
**ParallaxView Effect** shows how to use the **ParallaxView** Control which is part of the **Fluent Design System** in **Windows 10**

## 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**

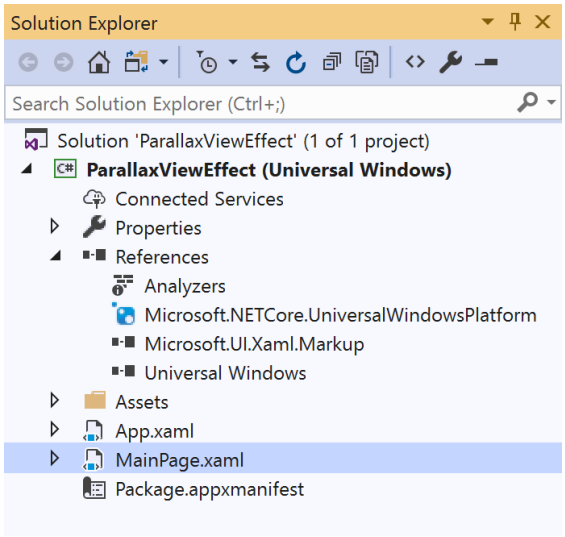

Then choose **Blank App (Universal Windows)** and select **Next** and then in **Configure your new project** enter the **Project name** as **ParallaxViewEffect** and select **Create**




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**

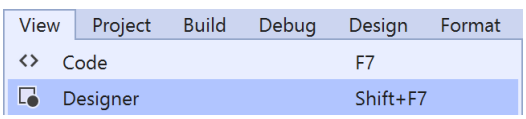
Target Version will control the most recent features of Windows 10 your application can use. To make sure you always have the most recent version, check for any Notifications or Updates in Visual Studio 2019

## Step 2




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

## Step 3




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

# Universal Windows Platform – ParallaxView Effect

## Step 4

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**:

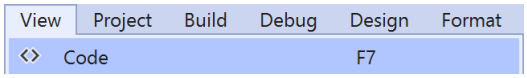
```
<Grid Margin="50">
    <Grid.RowDefinitions>
        <RowDefinition Height="Auto"/>
        <RowDefinition Height="*"/>
    </Grid.RowDefinitions>
    <AutoSuggestBox Grid.Row="0" Name="Value"
    QueryIcon="Add" QuerySubmitted="Value_QuerySubmitted"/>
    <Grid Grid.Row="1">
        <ParallaxView Source="{x:Bind Display}" VerticalShift="100">
            <StackPanel Spacing="5"
            Orientation="Vertical"
            HorizontalAlignment="Center">
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Black"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Gray"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Red"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Orange"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Yellow"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Green"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Cyan"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Blue"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Magenta"/>
                <Rectangle Margin="10" Width="75"
                Height="75" Fill="Purple"/>
            </StackPanel>
        </ParallaxView>
        <!-- ListView -->

    </Grid>
</Grid>
```

Then below the **<!-- Viewbox -->** line the following **XAML** should be entered:

```
        <ListView x:Name="Display">
            <ListView.ItemTemplate>
                <DataTemplate>
                    <Grid>
                        <Grid.ColumnDefinitions>
                            <ColumnDefinition Width="*"/>
                            <ColumnDefinition Width="Auto"/>
                        </Grid.ColumnDefinitions>
                        <TextBlock Grid.Column="0"
                        Text="{Binding Text}"
                        VerticalAlignment="Center"/>
                        <AppBarButton Grid.Column="1"
                        Icon="Remove" Label="Remove"
                        Tag="{Binding}" Click="Remove_Click"/>
                    </Grid>
                </DataTemplate>
            </ListView.ItemTemplate>
            <ListView.ItemContainerStyle>
                <Style TargetType="ListViewItem">
                    <Setter Property="HorizontalContentAlignment"
                    Value="Stretch" />
                </Style>
            </ListView.ItemContainerStyle>
        </ListView>
```

The main block of XAML is a Grid with two Rows, the first Row contains an AutoSuggestBox and the second Row contains a ParallaxView which itself contains a StackPanel of Rectangle Controls and a ListView Control with a DataTemplate with a Grid of a TextBlock and a AppBarButton

## Step 5




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

# Universal Windows Platform – ParallaxView Effect

## Step 6

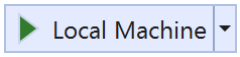
Once in the **Code** View, below the end of **`public MainPage() { ... }`** the following Code should be entered:

```
private class Item
{
    public Guid Id { get; set; } = Guid.NewGuid();
    public string Text { get; set; } = string.Empty;
}

private void Value_QuerySubmitted(AutoSuggestBox sender,
    AutoSuggestBoxQuerySubmittedEventArgs args)
{
    Display.Items.Add(new Item { Text = Value.Text });
}

private void Remove_Click(object sender, RoutedEventArgs e)
{
    Item item = (Item)((AppBarButton)sender).Tag;
    Display.Items.Remove(item);
}
```

`Item` is a class with a `Guid` Id and `string` Text then the `Value_QuerySubmitted` event hanlder responds when something has been entered in the `AutoSuggestBox` by adding an `Item` to the `ListBox` Control and `Remove_Click` will allow an `Item` to be removed from the `ListBox`

# Universal Windows Platform – ParallaxView Effect

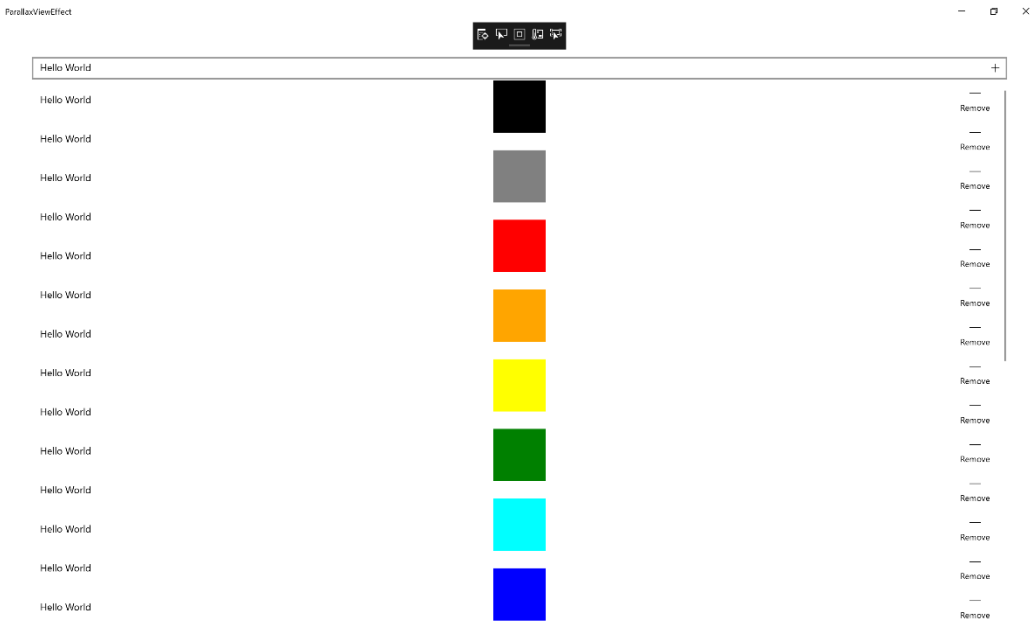
## Step 7




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

## Step 8

Once the Application is running you can use the **AutoSuggestBox** to add multiple items in the **ListBox** and when this is scrolled the **Rectangle** Controls will move in relation to the list to create a **ParallaxView Effect**




## Step 9

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