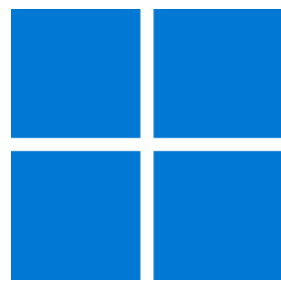# tutorial

Windows App SDK

Custom RatingControl

Custom RatingControl

Custom RatingControl shows how to create a **Style** for a **RatingControl** using **Windows App SDK**
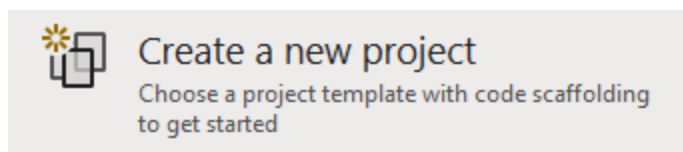
Step 1

Follow **Setup and Start** on how to get **Setup** and **Install** what you need for **Visual Studio 2022** and **Windows App SDK**.
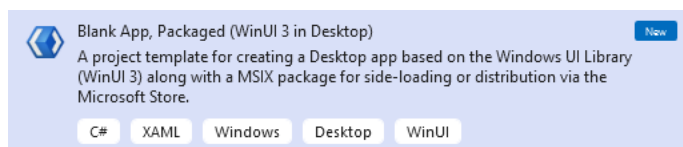
In **Windows 11** choose **Start** and then find or search for **Visual Studio 2022** and then select it.
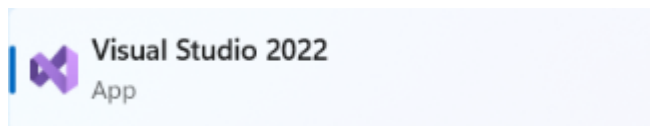
Once **Visual Studio 2022** has started select **Create a new project**.

Then choose the **Blank App, Packages (WinUI in Desktop)** and then select **Next**.

After that in **Configure your new project** type in the **Project name** as *CustomRatingControl*, then select a Location and then select **Create** to start a new **Solution**.
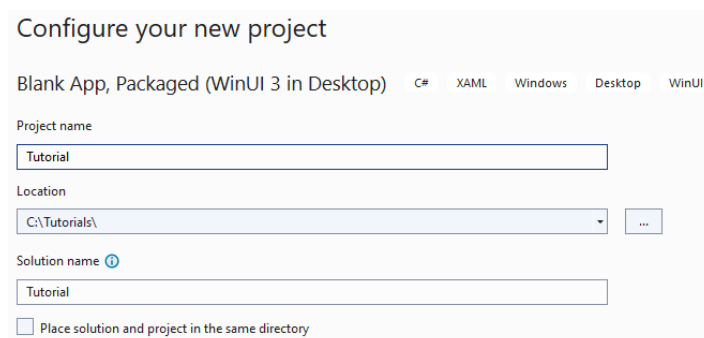
Step 2

Then in **Visual Studio** within **Solution Explorer** for the **Solution** double-click on **App.xaml** to see the **XAML** for the **Project**.

Step 3

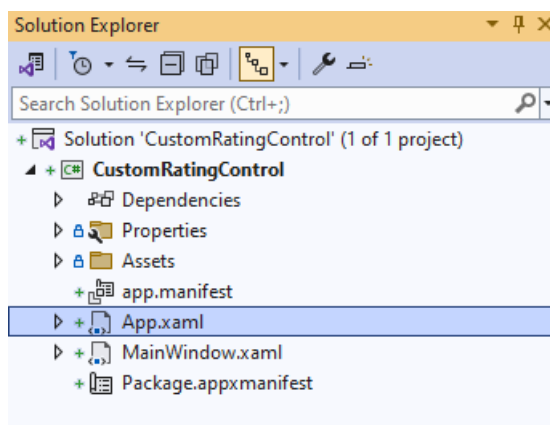In the **XAML** for **App.xaml** below the **Comment** of `<!-- Other app resources here -->` type in the following **XAML**:

```xml
<RatingItemFontInfo x:Key="RatingControlFontInfo" Glyph="&#xE00B;"/>
<Style x:Key="CustomRatingControl" TargetType="RatingControl">
    <Setter Property="Foreground"
    Value="{ThemeResource RatingControlCaptionForeground}"/>
    <Setter Property="UseSystemFocusVisuals"
    Value="{StaticResource UseSystemFocusVisuals}"/>
    <Setter Property="FontFamily"
    Value="Segoe MDL2 Assets"/>
    <Setter Property="ItemInfo"
    Value="{StaticResource RatingControlFontInfo}"/>
    <Setter Property="Template">
        <Setter.Value>
            <ControlTemplate TargetType="RatingControl">
                <Grid x:Name="LayoutRoot">
                    <!-- Visual State Groups -->

                    <!-- Content -->

                </Grid>
            </ControlTemplate>
        </Setter.Value>
    </Setter>
</Style>
```

This **XAML** is part of a **Style** of **CustomRatingControl** that will be used to target a **RatingControl** which will contain some **Visual State Groups** and **Content** for the **Custom RatingControl** along with a **RatingItemFontInfo** which will set the **Glyph** will be used for the **Custom RatingControl**.

Step 4

While still in the **XAML** for **App.xaml** below the **Comment** of `<!-- Visual State Groups -->` type the following **XAML**:

```xml
<VisualStateManager.VisualStateGroups>
    <VisualStateGroup x:Name="CommonStates">
        <VisualState x:Name="Disabled">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="{ThemeResource
                RatingControlDisabledSelectedForeground}"/>
            </VisualState.Setters>
        </VisualState>
        <VisualState x:Name="Placeholder">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="Goldenrod"/>
            </VisualState.Setters>
        </VisualState>
        <VisualState x:Name="PointerOverPlaceholder">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="{ThemeResource
                RatingControlPointerOverPlaceholderForeground}"/>
            </VisualState.Setters>
        </VisualState>
        <VisualState x:Name="PointerOverUnselected">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="{ThemeResource
                RatingControlPointerOverUnselectedForeground}"/>
            </VisualState.Setters>
        </VisualState>
        <VisualState x:Name="Set">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="Salmon"/>
            </VisualState.Setters>
        </VisualState>
        <VisualState x:Name="PointerOverSet">
            <VisualState.Setters>
                <Setter Target="ForegroundContentPresenter.Foreground"
                Value="Gold"/>
            </VisualState.Setters>
        </VisualState>
    </VisualStateGroup>
</VisualStateManager.VisualStateGroups>
```

This **XAML** is for the **Visual State Groups** that will represent the **States** for the `RatingControl` used in the **Custom RatingControl**.

Step 5

Then in the **XAML** for **App.xaml** below the **Comment** of `<!-- Content -->` type the following **XAML**:

```xml
<StackPanel Margin="-20,-20,-20,-20" Orientation="Horizontal" Grid.Row="0">
    <StackPanel x:Name="RatingBackgroundStackPanel"
    Background="Transparent" Margin="20,20,0,20"
    Orientation="Horizontal"/>
    <TextBlock x:Name="Caption" AutomationProperties.AccessibilityView="Raw"
    Height="32" IsHitTestVisible="False" Margin="4,9,20,0"
    AutomationProperties.Name="RatingCaption"
    Style="{ThemeResource CaptionTextBlockStyle}"
    TextLineBounds="TrimToBaseline" Text="{TemplateBinding Caption}"
    VerticalAlignment="Center"/>
</StackPanel>
<ContentPresenter x:Name="ForegroundContentPresenter"
    IsHitTestVisible="False" Grid.Row="0">
    <StackPanel Margin="-40,-40,-40,-40"
        Orientation="Horizontal">
        <StackPanel x:Name="RatingForegroundStackPanel"
        IsHitTestVisible="False" Margin="40,40,40,40"
        Orientation="Horizontal"/>
    </StackPanel>
</ContentPresenter>
```

This **XAML** is the **Content** for the layout of a `RatingControl` when the **Style** is applied for the **Custom RatingControl**.

Step 6

Within **Solution Explorer** for the **Solution** double-click on **MainWindow.xaml** to see the **XAML** for the **Main Window**.
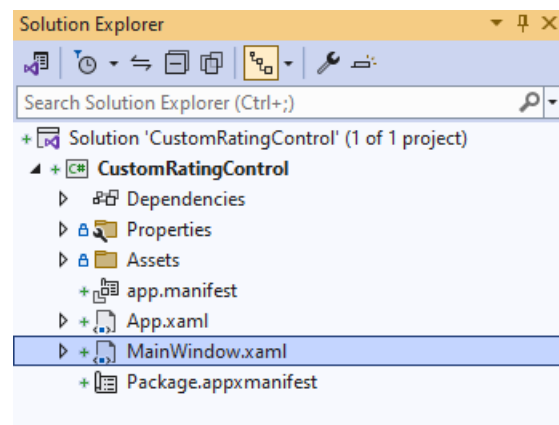
Step 7

In the **XAML** for **MainWindow.xaml** there be some **XAML** for a **StackPanel**, this should be **Removed** by removing the following:

```xml
<StackPanel Orientation="Horizontal"
HorizontalAlignment="Center" VerticalAlignment="Center">
    <Button x:Name="myButton" Click="myButton_Click">Click Me</Button>
</StackPanel>
```

Step 8

While still in the **XAML** for **MainWindow.xaml** above **</Window>**, type in the following **XAML**:

```xml
<Viewbox>
    <RatingControl Margin="50" Name="Rating"
    Style="{StaticResource CustomRatingControl}"/>
</Viewbox>
```

This **XAML** contains a **ViewBox** with a **RatingControl** with **Style** set to the **StaticResource** of **CustomRatingControl** from **App.xaml**.

Step 9

Then, within **Solution Explorer** for the **Solution** select the arrow next to **MainWindow.xaml** then double-click on **MainWindow.xaml.cs** to see the **Code** for the **Main Window**.
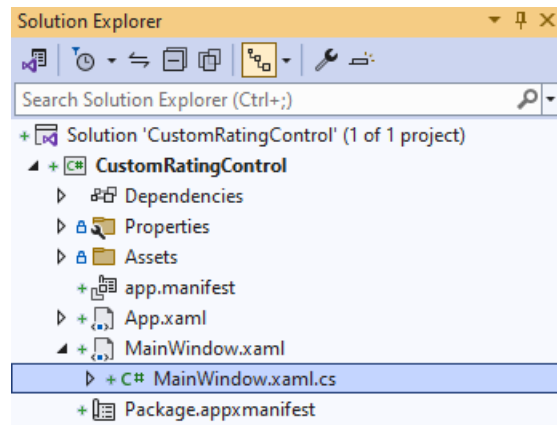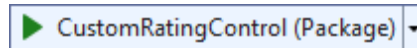
Step 10

In the **Code** for **MainWindow.xaml.cs** there be a **Method** of **myButton_Click(...)** this should be **Removed** by removing the following:

```csharp
private void myButton_Click(object sender, RoutedEventArgs e)
{
    myButton.Content = "Clicked";
}
```
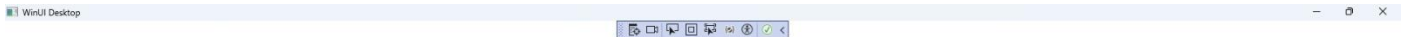
Step 11

That completes the **Windows App SDK** application. In **Visual Studio 2022** from the **Toolbar** select **CustomRatingControl (Package)** to **Start** the application.

> ▶ CustomRatingControl (Package) ▾

Step 12

Once running you will see the **Custom RatingControl** displayed where you can select a **Value**.

Step 13

To **Exit** the **Windows App SDK** application, select the **Close** button from the top right of the application as that concludes this **Tutorial** for **Windows App SDK** from tutorialr.com!