tutorial

Windows App SDK

Custom Slider

Custom Slider

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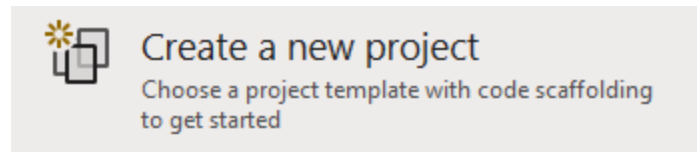
Step 1

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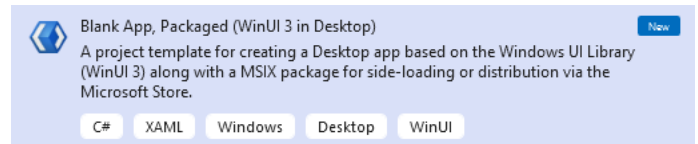
In **Windows 11** choose **Start** and then find or search for **Visual Studio 2022** and then select it.
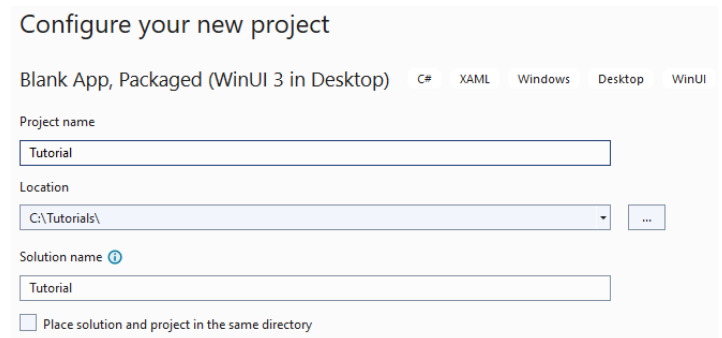
Once **Visual Studio 2022** has started select **Create a new project**.

Then choose the **Blank App, Packages (WinUI in Desktop)** and then select **Next**.
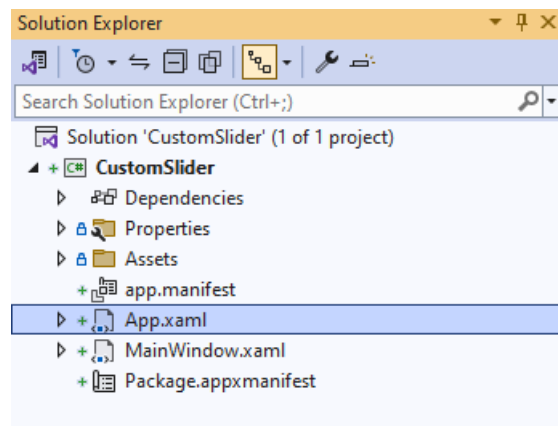
After that in **Configure your new project** type in the **Project name** as *CustomSlider*, then select a Location and then select **Create** to start a new **Solution**.

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
<Style x:Key="CustomSlider" TargetType="Slider">
    <Setter Property="Background" Value="LightSalmon"/>
    <Setter Property="BorderBrush" Value="Salmon"/>
    <Setter Property="BorderThickness" Value="2"/>
    <Setter Property="Foreground" Value="Gold"/>
    <Setter Property="Template">
        <Setter.Value>
            <ControlTemplate TargetType="Slider">
                <Grid Margin="{TemplateBinding Padding}">
                    <Grid.Resources>
                        <Style x:Key="SliderThumbStyle" TargetType="Thumb">
                            <Setter Property="BorderThickness" Value="2"/>
                            <Setter Property="BorderBrush" Value="Goldenrod"/>
                            <Setter Property="Foreground" Value="Gold"/>
                            <Setter Property="Template">
                                <Setter.Value>
                                    <ControlTemplate TargetType="Thumb">
                                        <Ellipse StrokeThickness="2"
                                        Stroke="{TemplateBinding BorderBrush}"
                                        Fill="{TemplateBinding Foreground}"/>
                                    </ControlTemplate>
                                </Setter.Value>
                            </Setter>
                        </Style>
                    </Grid.Resources>
                    <Grid.RowDefinitions>
                        <RowDefinition Height="Auto"/>
                        <RowDefinition Height="*"/>
                    </Grid.RowDefinitions>
                    <Grid x:Name="SliderContainer"
                    Background="Transparent" Grid.Row="1">
                        <!-- Horizontal Template -->

                        <!-- Vertical Template -->

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

This **XAML** is part of a **Style** of **CustomSlider** that will be used to target a **Slider** which will contain a **Template** for when it is **Horizontal** or **Vertical** for the **Custom Slider**.

Step 4

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

```xml
<Grid x:Name="HorizontalTemplate">
    <Grid.ColumnDefinitions>
        <ColumnDefinition Width="Auto"/>
        <ColumnDefinition Width="Auto"/>
        <ColumnDefinition Width="*"/>
    </Grid.ColumnDefinitions>
    <Grid.RowDefinitions>
        <RowDefinition Height="17"/>
        <RowDefinition Height="Auto"/>
        <RowDefinition Height="17"/>
    </Grid.RowDefinitions>
    <Rectangle x:Name="HorizontalTrackRect"
    Grid.ColumnSpan="3" Fill="{TemplateBinding Background}"
    Grid.Row="1" Height="10" RadiusX="5" RadiusY="5"/>
    <Rectangle x:Name="HorizontalDecreaseRect"
    Fill="{TemplateBinding Background}"
    Grid.Row="1" Height="10" RadiusX="5" RadiusY="5"/>
    <Rectangle x:Name="HorizontalBorder"
    Grid.ColumnSpan="3" Grid.Row="1"
    Stroke="{TemplateBinding BorderBrush}"
    StrokeThickness="{TemplateBinding BorderThickness}"
    Height="10" RadiusX="5" RadiusY="5"/>
    <Thumb x:Name="HorizontalThumb"
    AutomationProperties.AccessibilityView="Raw"
    Background="{ThemeResource SliderThumbBackgroundThemeBrush}"
    Grid.Column="1" DataContext="{TemplateBinding Value}"
    Grid.Row="1" Style="{StaticResource SliderThumbStyle}"
    Height="25" Width="25"/>
</Grid>
```

This **XAML** is for the **Horizontal Template** when the `Slider` is **Horizontal** for the **Custom Slider**.

Step 5

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

```xaml
<Grid x:Name="VerticalTemplate" Visibility="Collapsed">
    <Grid.ColumnDefinitions>
        <ColumnDefinition Width="17"/>
        <ColumnDefinition Width="Auto"/>
        <ColumnDefinition Width="17"/>
    </Grid.ColumnDefinitions>
    <Grid.RowDefinitions>
        <RowDefinition Height="*"/>
        <RowDefinition Height="Auto"/>
        <RowDefinition Height="Auto"/>
    </Grid.RowDefinitions>
    <Rectangle x:Name="VerticalTrackRect" Grid.Column="1"
    Fill="{TemplateBinding Background}" Grid.RowSpan="3"
    Width="10" RadiusX="5" RadiusY="5"/>
    <Rectangle x:Name="VerticalDecreaseRect" Grid.Column="1"
    Fill="{TemplateBinding Background}" Grid.Row="2"/>
    <Rectangle x:Name="VerticalBorder" Grid.RowSpan="3"
    Grid.Column="1"  Stroke="{TemplateBinding BorderBrush}"
    StrokeThickness="{TemplateBinding BorderThickness}"
    Width="10" RadiusX="5" RadiusY="5" />
    <Thumb x:Name="VerticalThumb" AutomationProperties.AccessibilityView="Raw"
    Background="{ThemeResource SliderThumbBackgroundThemeBrush}"
    Grid.Column="1" DataContext="{TemplateBinding Value}" Grid.Row="1"
    Style="{StaticResource SliderThumbStyle}" Height="25" Width="25"/>
</Grid>
```
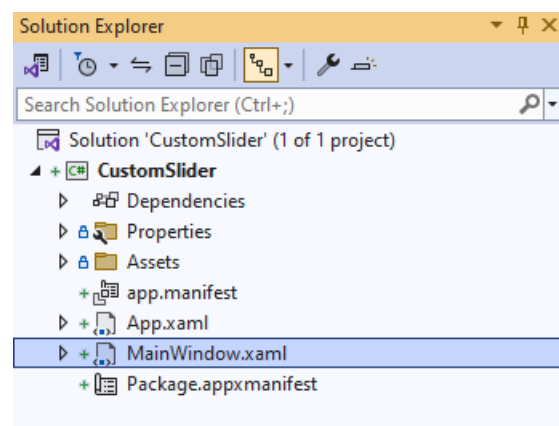
This **XAML** is for the **Vertical Template** when the `Slider` is **Vertical** for the **Custom Slider**.

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>
```
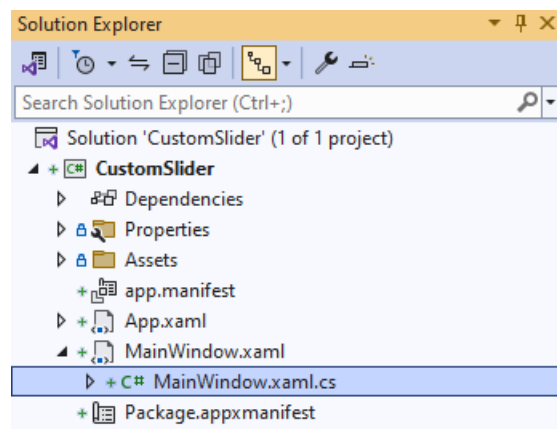
Step 8

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

```xml
<Slider Margin="50" VerticalAlignment="Center"
Style="{StaticResource CustomSlider}"/>
```

This **XAML** contains a `Slider` with `Style` set to the `StaticResource` of `CustomSlider` 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**.
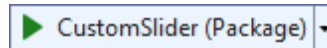
Step 10

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";
}
```
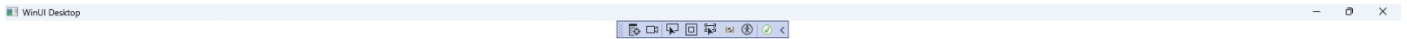
Step 11

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

Step 12

Once running you will see the **Custom Slider** displayed.

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!