# Mastering Control Templates



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#### Module Outline



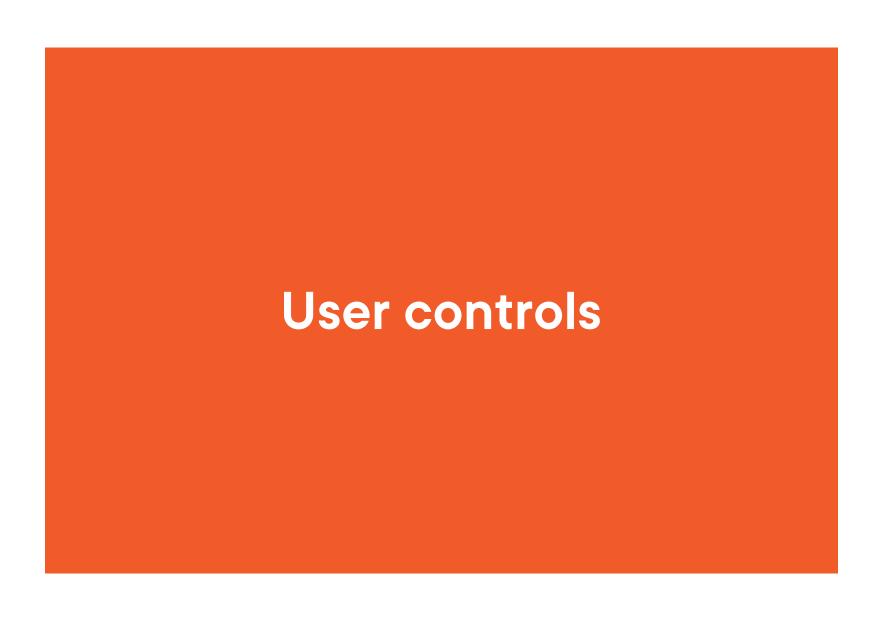
#### Define the look of a custom control

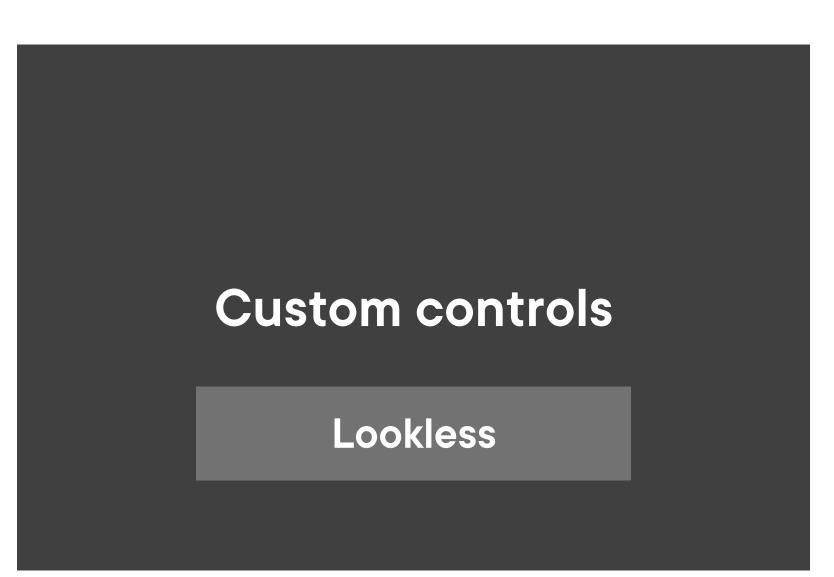
# Create a control template for the CheckBox

- Adjust the size of the CheckBox



#### Define the Look of a Custom Control



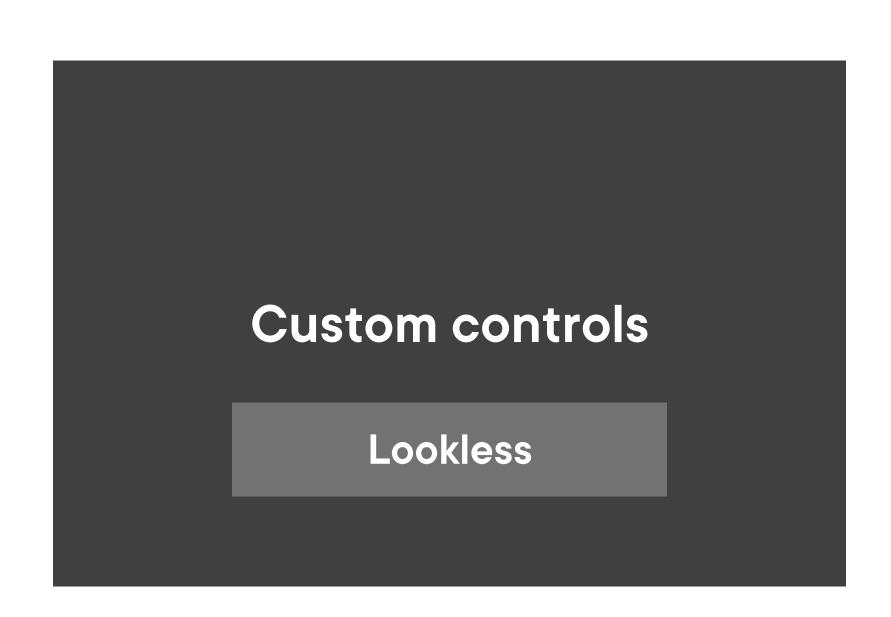




#### Define the Look of a Custom Control

User interface is defined in a **ControlTemplate** 

Can be changed by setting the **Template** property



# All WPF controls are implemented as custom controls



# When you build a WPF app, you usually create user controls



```
<Button Width="50" Height="50">
```

</Button>











```
<Button Width="50" Height="50" Background="Blue">
     <Button.Template>
        <ControlTemplate TargetType="Button">
             <Ellipse Fill="{TemplateBinding Background}"/>
             </ControlTemplate>
        </Button.Template>
</Button>
```







```
<Button Width="50" Height="50">
  <Button.Template>
    <ControlTemplate TargetType="Button">
      <Ellipse Fill="Orange" x:Name="ellipse"/>
      <ControlTemplate.Triggers>
        <Trigger Property="IsMouseOver" Value="True">
          <Setter Property="Fill" Value="Green"</pre>
                  TargetName="ellipse"/>
        </Trigger>
      </ControlTemplate.Triggers>
    </ControlTemplate>
  </Button.Template>
</Button>
```

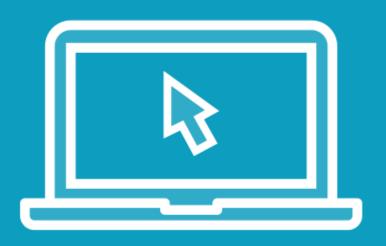


```
<Style TargetType="Button">
  <Setter Property="Template">
    <Setter.Value>
      <ControlTemplate TargetType="Button">
        <Ellipse Fill="Orange" x:Name="ellipse"/>
        <ControlTemplate.Triggers>
          <Trigger Property="IsMouseOver" Value="True">
            <Setter Property="Fill" Value="Green"</pre>
                    TargetName="ellipse"/>
          </Trigger>
        </ControlTemplate.Triggers>
      </ControlTemplate>
    </Setter.Value>
  </Setter>
</Style>
```

Instead of creating a control template from scratch, you usually create a copy of the default control template



#### Demo



Create a control template for the CheckBox



#### Demo



Adjust the size of the CheckBox



#### Summary



#### User controls and custom controls

- User controls are the components that you build in your application
- All WPF controls are custom controls

#### Change the look of a custom control

- Set the Template property
- Create a copy of the control template
- Adjust the control template

Up Next: Validating User Input

