

Templates

Introduction

- ❖ Using a template we define the pieces of a new control.
- ❖ The template is defined using the `ControlTemplate` XML element.
- ❖ We should place within the `ControlTemplate` XML element various child elements in order to represent the various parts of the defined template (e.g. `ContentPresenter`, `Triggers` and others).

Introduction

```
<Window xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
xmlns:sys="clr-namespace:System;assembly=mscorlib"
x:Class="gaga.MainWindow" Width="800" Height="200"
Icon="pixpix.png">
```

```
<Window.Resources>
```

```
<ControlTemplate x:Key="ellipse_bt" TargetType="Button">
  <Grid>
    <Ellipse Fill="BurlyWood">
    </Ellipse>
    <ContentPresenter Name="cp_content" Opacity="0.6"
      VerticalAlignment="Center" HorizontalAlignment="Center"/>
  </Grid>
  <ControlTemplate.Triggers>
    <Trigger Property="IsMouseOver" Value="True">
      <Setter TargetName="cp_content" Property="Opacity"
        Value="0.2"/>
    </Trigger>
    <Trigger Property="IsPressed" Value="True">
      <Setter TargetName="cp_content" Property="Opacity"
        Value="1.0"/>
    </Trigger>
```

Introduction

```
        <Trigger Property="IsDefaulted" Value="True">
            <Setter TargetName="cp_content" Property="Opacity"
                Value="0.6"/>
        </Trigger>
    </ControlTemplate.Triggers>
</ControlTemplate>

</Window.Resources>

<WrapPanel>

    <WrapPanel.Resources>
        <Style TargetType="Button">
            <Setter Property="Width" Value="110"/>
            <Setter Property="Margin" Value="10"/>
            <Setter Property="Template"
                Value="{StaticResource elipse_bt}"/>
        </Style>
    </WrapPanel.Resources>
    <Button Name="ok_button" Click="bt_handle">OK</Button>

</WrapPanel>

</Window>
```

Introduction



Content Presenter

- ❖ The content presenter is an object that WPF provides for displaying the content.
- ❖ The content will be displayed where we place the content presenter XML element.

Content Presenter

```
<Window xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
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        x:Class="gaga.MainWindow" Width="800" Height="200" Icon="pixpix.png">

    <Window.Resources>
        <ControlTemplate x:Key="important_label" TargetType="Label">
            <Border BorderBrush="Purple" BorderThickness="2">
                <ContentPresenter/>
            </Border>
        </ControlTemplate>
    </Window.Resources>

    <WrapPanel>
        <WrapPanel.Resources>
            <Style TargetType="Label">
                <Setter Property="Template" Value="{StaticResource important_label}"/>
                <Setter Property="FontSize" Value="20"/>
            </Style>
        </WrapPanel.Resources>
        <Label Name="my_label">This is Simple Label</Label>
    </WrapPanel>

</Window>
```

Content Presenter



Template Control Binding

- ❖ When defining our template we can bind any of its properties with the values set in the code that creates the control.

Template Control Binding

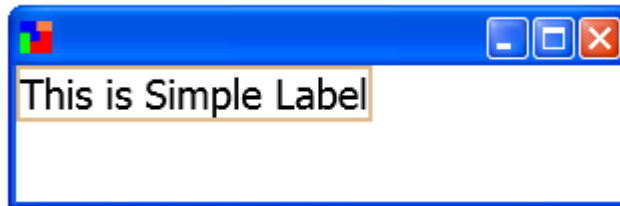
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<Window xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        xmlns:sys="clr-namespace:System;assembly=mscorlib"
        x:Class="gaga.MainWindow" Width="800" Height="200" Icon="pixpix.png">

    <Window.Resources>
        <ControlTemplate x:Key="important_label" TargetType="Label">
            <Border BorderBrush="{TemplateBinding BorderBrush}" BorderThickness="2">
                <ContentPresenter/>
            </Border>
        </ControlTemplate>
    </Window.Resources>

    <WrapPanel>
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            <Style TargetType="Label">
                <Setter Property="Template" Value="{StaticResource important_label}"/>
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            </Style>
        </WrapPanel.Resources>
        <Label Name="my_label" BorderBrush="BurlyWood">This is Simple Label</Label>
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Template Control Binding



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