MVA jumpstart

05 | Working with Resources, Styles, and Templates

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Module Agenda

- Resources
- Styles
- Templates

Resources

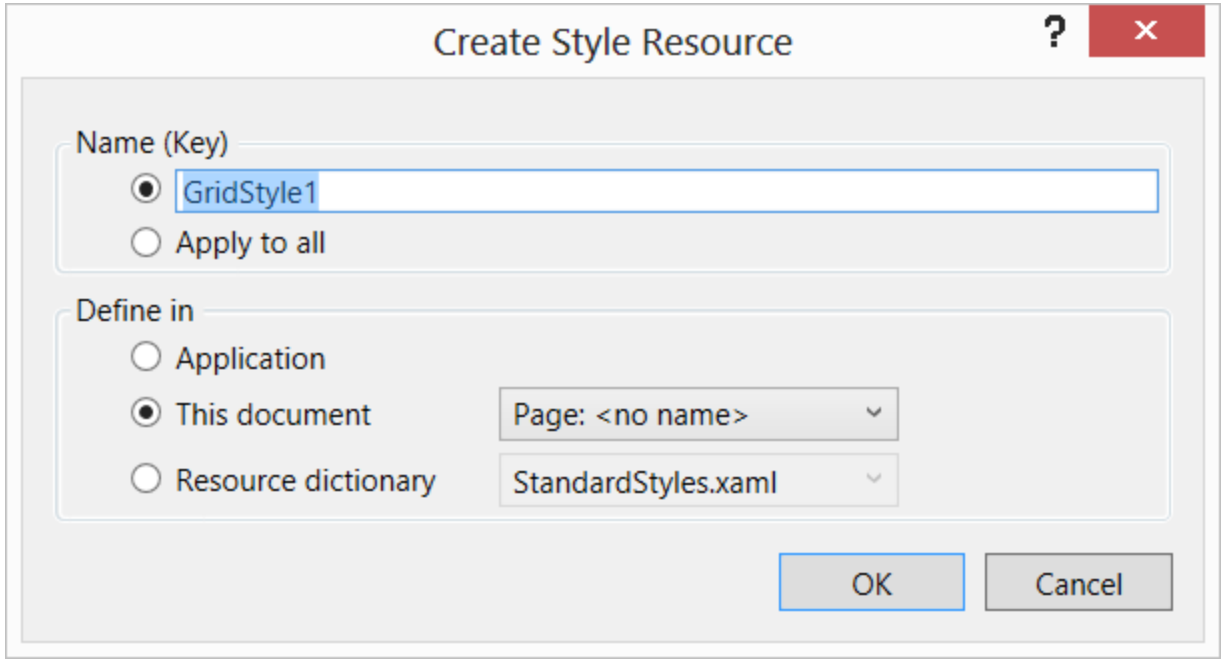
MVA Microsoft Virtual Academy

Microsoft

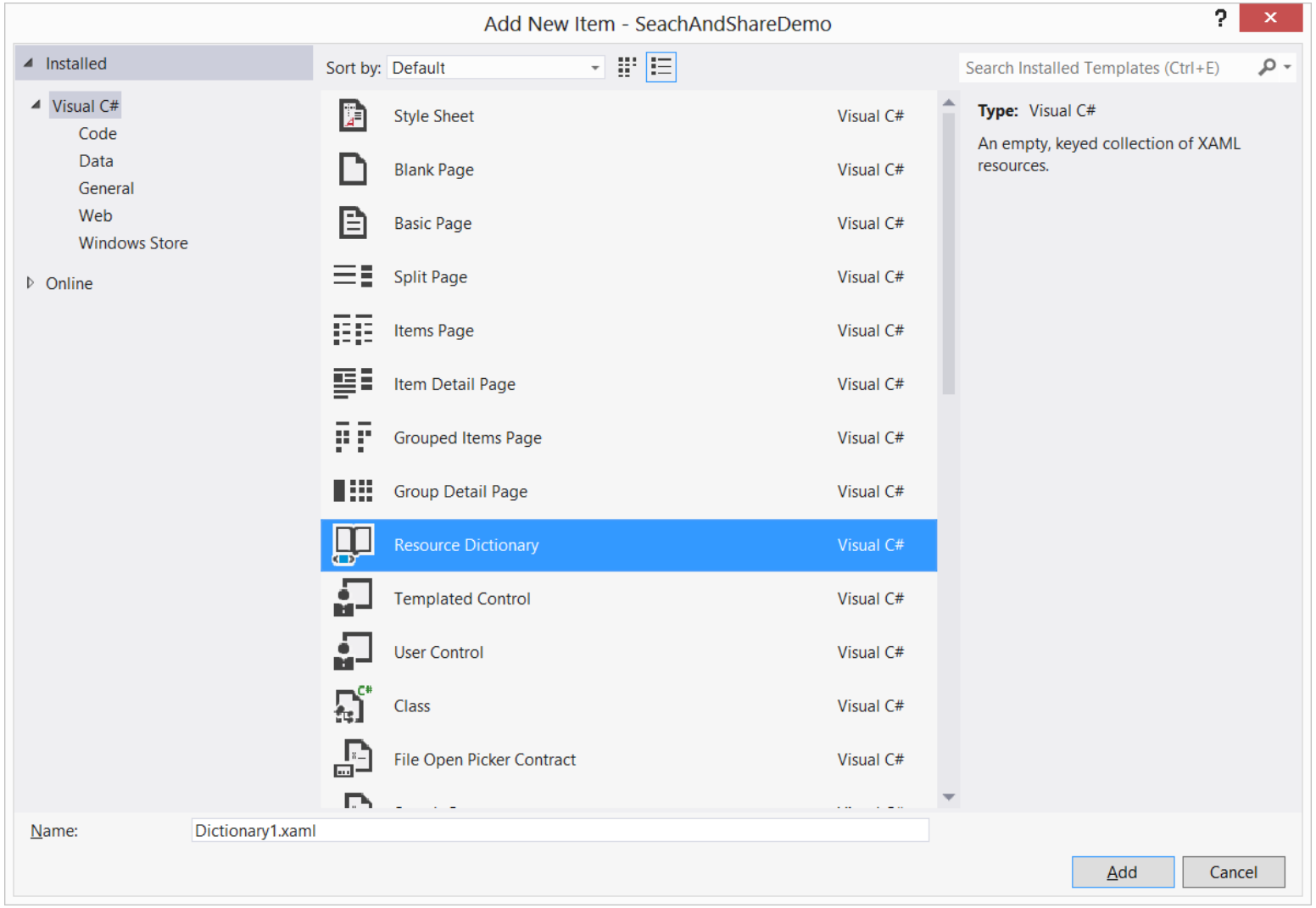
What is a resource?

- Types of resources
  - Constants
    - Colors
    - Font sizes
    - More…
  - Styles
  - Templates
    - Control templates
    - Data templates

Resource Scope



Resource Dictionary



Merged Dictionaries

```
<Application.Resources>

    <ResourceDictionary>

        <ResourceDictionary.MergedDictionaries>

            <!-- standard resource file -->
            <ResourceDictionary Source="Common/StandardStyles.xaml"/>

            <!-- custom resource file -->
            <ResourceDictionary Source="Common/CustomStyles.xaml"/>

        </ResourceDictionary.MergedDictionaries>

    </ResourceDictionary>

</Application.Resources>
```

Styles

Typed Styles

```
<Grid>
    <Grid.Resources>

        <Style TargetType="TextBox">
            <Setter Property="Background" Value="Blue" />
            <Setter Property="Foreground" Value="White" />
        </Style>

    </Grid.Resources>

    <TextBox Text="Hello World"
             Foreground="Yellow" />

</Grid>
```

Named Styles

```
<Grid>
    <Grid.Resources>

        <Style TargetType="TextBox" x:Name="MyRedTextBox">
            <Setter Property="Background" Value="Blue" />
            <Setter Property="Foreground" Value="White" />
        </Style>

    </Grid.Resources>

    <TextBox Text="Hello World"
             Style="{StaticResource MyRedTextBox}" />

</Grid>
```

Based On Styles

```
<Style TargetType="TextBox" x:Name="MyTextBoxBase">
    <Setter Property="FontFamily" Value="Segoe UI" />
    <Setter Property="FontSize" Value="35" />
</Style>

<Style TargetType="TextBox" x:Name="MyRedTextBox"
       BasedOn="{StaticResource MyTextBoxBase}">
    <Setter Property="Foreground" Value="Red" />
    <Setter Property="Background" Value="White" />
</Style>

<Style TargetType="TextBox" x:Name="MyWhiteTextBox"
       BasedOn="{StaticResource MyTextBoxBase}">
    <Setter Property="Background" Value="White" />
    <Setter Property="Foreground" Value="Black" />
</Style>
```

Complex Styles

```
<Style TargetType="TextBox" x:Name="MyTextBox">
    <Setter Property="Text" Value="Hello World" />
    <Setter Property="Template">
        <Setter.Value>
            <ControlTemplate>
                <!-- TODO -->
            </ControlTemplate>
        </Setter.Value>
    </Setter>
    <Setter Property="FontSize" Value="35" />
</Style>
```

DEMO

Microsoft

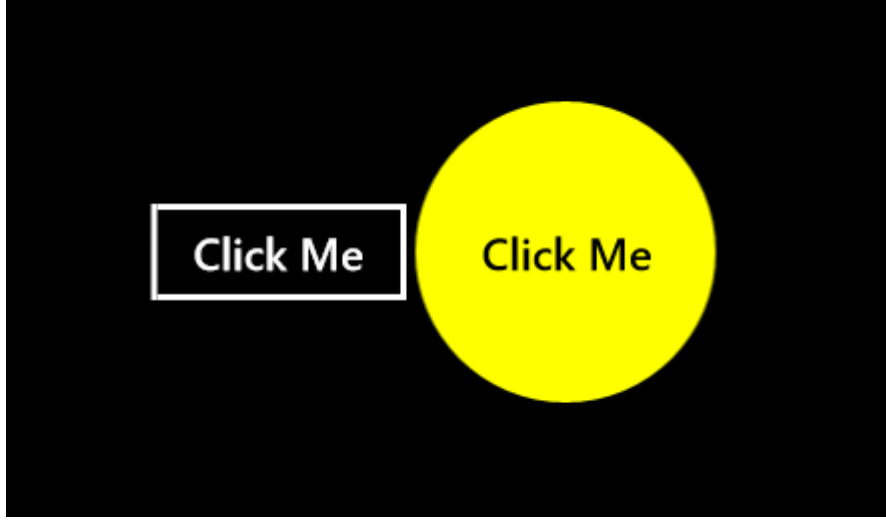
Styles

Templates

Composing controls

- Control Style
- Control Template
- Item Data Template
- Items Panel Template
- GroupStyle Templates
  - Header
  - Panel
- More …

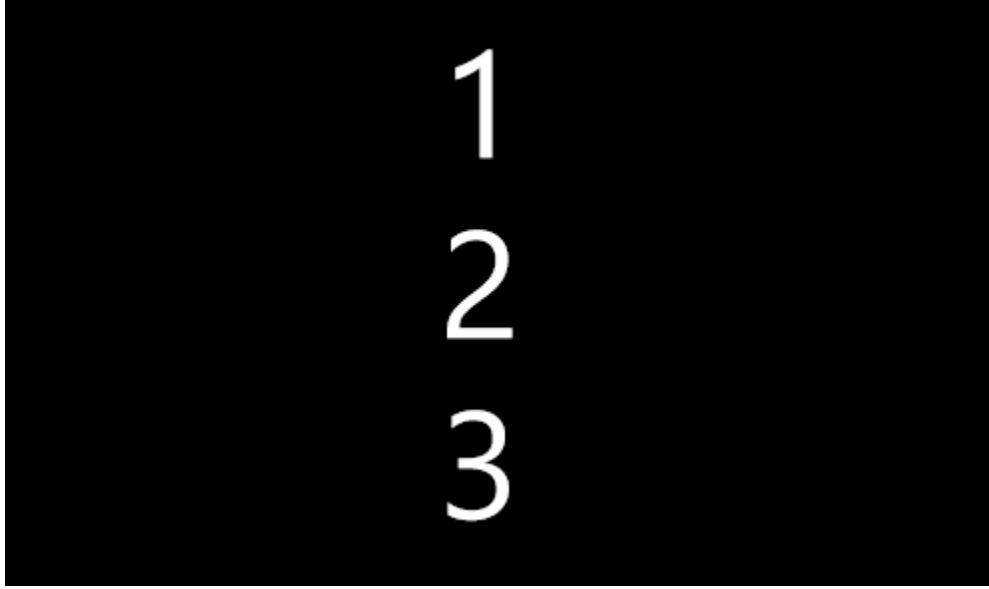
Control template




```
<!-- button 1 -->
<Button Content="Click Me" />

<!-- button 2 -->
<Button Content="Click Me">
    <Button.Template>
        <ControlTemplate>
            <Grid>
                <Ellipse Height="100" Width="100" Fill="Yellow" />
                <ContentPresenter Content="{Binding}" />
            </Grid>
        </ControlTemplate>
    </Button.Template>
</Button>
```

Data Template




```
<ItemsControl>
    <ItemsControl.ItemTemplate>
        <!-- data template -->
        <DataTemplate>
            <TextBlock FontSize="50" Text="{Binding}" />
        </DataTemplate>
    </ItemsControl.ItemTemplate>
    <x:Int32>1</x:Int32>
    <x:Int32>2</x:Int32>
    <x:Int32>3</x:Int32>
</ItemsControl>
```

Items Panel Template

123

```
<ItemsControl>
    <ItemsControl.ItemsPanel>
        <!-- items panel template -->
        <ItemsPanelTemplate>
            <StackPanel Orientation="Horizontal" />
        </ItemsPanelTemplate>
    </ItemsControl.ItemsPanel>
    <ItemsControl.ItemTemplate>
        <DataTemplate>
            <TextBlock FontSize="50" Text="{Binding}" />
        </DataTemplate>
    </ItemsControl.ItemTemplate>
    <x:Int32>1</x:Int32>
    <x:Int32>2</x:Int32>
    <x:Int32>3</x:Int32>
</ItemsControl>
```

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Templates & GridView

Module Recap

- Resources
- Styles
- Templates

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