

绑定 (二)

Juster zhu (朱震)

Microsoft MVP | Huawei HCDE | GeneralUpdate Owner

本期内容

1. 深入学习绑定语法

```
<TextBox x:Name="InputBox"></TextBox>
<TextBlock
  Classes.class1="{Binding IsClass1 }"
  Classes.class2="{Binding !IsClass1 }"
  Text="{Binding Path=Text,
  Mode=TwoWay,
  Delay= 100,
  UpdateSourceTrigger=PropertyChanged,
  StringFormat=Pattern,
  ElementName=InputBox,
  RelativeSource={RelativeSource Mode=FindAncestor, AncestorType={x:Type TextBox}}},
  Converter={StaticResource BagConverter},ConverterParameter='MM/dd/yyyy'}" />
```

绑定语法-示例1

控件绑定

```
<TextBox x:Name="InputBox"></TextBox>  
<TextBlock Text="{Binding Path=Text,ElementName=InputBox}" />
```

转换器设置

```
<TextBlock Text="{Binding Path=Text}" Converter={StaticResource BagConverter},ConverterParameter='MM/dd/yyyy'" />
```

格式设置

```
<TextBlock Text="{Binding Animals.Count, StringFormat='{{0}} animals live in the farm.'}" />
```

相对资源设置

```
<TextBlock Text="{Binding Path=Text, RelativeSource={RelativeSource Mode=FindAncestor, AncestorType={x:Type TextBox}}}/>
```

绑定语法-示例2

集合绑定

```
public class ViewModel : ObservableObject
{
    private ObservableCollection<string> _items;

    public ObservableCollection<string> Items
    {
        get { return _items; }
        set { SetProperty(ref _items, value); }
    }

    public ViewModel()
    {
        Items = new ObservableCollection<string> { "Item 1", "Item 2", "Item 3" };
    }
}
```

```
<ListBox ItemsSource="{Binding Items}"/>
```

绑定语法-示例3

绑定模式、数据通知设置

```
<TextBlock Text="{Binding  
Path=Text,Mode=TwoWay,UpdateSourceTrigger=PropertyChanged}/>
```

样式绑定

```
<StackPanel Margin="20">  
  <ListBox ItemsSource="{Binding ItemList}">  
    <ListBox.Styles>  
      <Style Selector="TextBlock.class1">  
        <Setter Property="Background" Value="OrangeRed" />  
      </Style>  
    </ListBox.Styles>  
    <ListBox.ItemTemplate>  
      <DataTemplate>  
        <StackPanel>  
          <TextBlock  
            Classes.class1="{Binding IsClass1 }"  
            Classes.class2="{Binding !IsClass1 }"  
            Text="{Binding Title}"/>  
        </StackPanel>  
      </DataTemplate>  
    </ListBox.ItemTemplate>  
  </ListBox>  
</StackPanel>
```

绑定语法-示例4

图像绑定

```
<Grid ColumnDefinitions="*,*,*" RenderOptions.BitmapInterpolationMode="HighQuality">  
  <Image Grid.Column="0" Source="avares://LoadingImages/Assets/abstract.jpg" MaxWidth="300" />  
  <Image Grid.Column="1" Source="{Binding ImageFromBinding}" MaxWidth="300" />  
  <Image Grid.Column="2" Source="{Binding ImageFromWebsite^}" MaxWidth="300" />  
</Grid>
```

命令绑定

```
<Button Command="{Binding ExampleCommand}" CommandParameter="{Binding}">Run the example</Button>
```

可观察绑定

```
<TextBlock Text="{Binding Name^.Length}"/>
```

绑定语法-示例5

多项绑定

```
<StackPanel HorizontalAlignment="Center" VerticalAlignment="Center" Spacing="8">
  <NumericUpDown x:Name="red" Minimum="0" Maximum="255" Increment="20" Value="0" Foreground="Red" />
  <NumericUpDown x:Name="green" Minimum="0" Maximum="255" Increment="20" Value="0" Foreground="Green" />
  <NumericUpDown x:Name="blue" Minimum="0" Maximum="255" Increment="20" Value="0" Foreground="Blue" />

  <TextBlock Text="MultiBinding Text Color!" FontSize="24">
    <TextBlock.Foreground>
      <MultiBinding Converter="{StaticResource RgbToBrushMultiConverter}">
        <Binding Path="Value" ElementName="red" />
        <Binding Path="Value" ElementName="green" />
        <Binding Path="Value" ElementName="blue" />
      </MultiBinding>
    </TextBlock.Foreground>
  </TextBlock>
</StackPanel>
```


绑定语法-示例6

任务绑定

```
public Task<string> MyAsyncText => GetTextAsync();
```

```
private async Task<string> GetTextAsync()  
{  
    await Task.Delay(1000); // 仅为演示目的而进行延迟  
    return "Hello from async operation";  
}
```


```
<TextBlock Text="{Binding MyAsyncText^, FallbackValue='Wait a second'}" />
```


集合绑定


(1) `<ListBox ItemsSource="{Binding People}"/>`

(2) `ObservableCollection<T> People {get; set;}`

 桌面

 下载

 文档

 图片

 音乐

 视频

集合绑定

指定对象属性

```
<TextBlock Text="{Binding Student.Name}"/>
```

指定集合元素属性

```
<TextBlock Text="{Binding Students[0].Name}"/>
```

小结

- 1.了解绑定语法
- 2.集合绑定