

Reusable UI With Content Views in .NET MAUI Labs

Perform these labs on your own computer using Visual Studio 2022 or later to ensure you understand the lessons presented in the corresponding videos and lectures.

Lab 1: Create a Header View

Stop the application.

Right mouse-click on the project and add a new folder named **ViewsPartial**.

Right mouse-click on the **ViewsPartial** folder and select **Add | New Item | .NET MAUI | .NET MAUI ContentView (XAML)...** from the context-sensitive menu.

Set the name of the ContentView to **HeaderView**.

Delete the `<VerticalStackLayout>` and all XAML within it and replace it with the following XAML.

```
<Grid RowDefinitions="Auto,Auto,Auto">
  <Label Grid.Row="0"
        Text="{Binding Path=ViewTitle}"
        HorizontalOptions="Center"
        FontSize="Title" />
  <Label Grid.Row="1"
        Grid.ColumnSpan="2"
        Text="{Binding Path=ViewDescription}"
        HorizontalOptions="Center"
        FontSize="Body" />
  <BoxView Grid.Row="2"
        Margin="0,0,0,20"
        HeightRequest="1"
        Color="Black" />
</Grid>
```

Create Bindable Properties

Open the **ViewsPartial\HeaderView.xaml.cs** file and add two bindable properties just below the constructor.

```
public string ViewTitle
{
    get { return (string)GetValue(ViewTitleProperty); }
    set { SetValue(ViewTitleProperty, value); }
}

public static readonly BindableProperty
ViewTitleProperty =
BindableProperty.Create("ViewTitle", typeof(string),
typeof(HeaderView), string.Empty);

public string ViewDescription
{
    get { return
(string)GetValue(ViewDescriptionProperty); }
    set { SetValue(ViewDescriptionProperty, value); }
}

public static readonly BindableProperty
ViewDescriptionProperty =
BindableProperty.Create("ViewDescription",
typeof(string), typeof(HeaderView), string.Empty);
```

Modify the constructor to set the **BindingContext** of this ContentView to itself and to initialize these two bindable properties to default string values.

```
public HeaderView()
{
    InitializeComponent();

    ViewTitle = "View Title";
    ViewDescription = "View Description";
    this.BindingContext = this;
}
```

Lab 2: Add Header to the User Detail View

Open the **Views\UserDetailView.xaml** file and add a namespace within the `<ContentPage...>`.

```
xmlns:partial="clr-  
namespace:AdventureWorks.MAUI.ViewsPartial"
```

Remove two "Auto,Auto" from the RowDefinitions attribute.

Delete the first three rows in the `<Grid>` and replace it with the following.

```
<partial:HeaderView Grid.Row="0"  
                    Grid.ColumnSpan="2"  
                    ViewTitle="User Information"  
                    ViewDescription="Use this screen to  
modify user information." />
```

Renumber the remaining rows in the `<Grid>` by reducing each by 2.

Try It Out

Run the application and click on **Users | Navigate to Detail** to view this page with the new reusable header.

Lab 3: Add Header to the Login View

Open the **LoginView.xaml** file and add a namespace within the `<ContentPage...>`.

```
xmlns:partial="clr-  
namespace:AdventureWorks.MAUI.ViewsPartial"
```

Delete the `<Label>` element and add the following XAML where the `<Label>` was.

```
<Grid RowDefinitions="Auto,Auto,Auto,Auto"
      ColumnDefinitions="Auto,*"
      Style="{StaticResource Grid.Page}">

  <partial:HeaderView Grid.Row="0"
    Grid.ColumnSpan="2"
    ViewTitle="Login"
    ViewDescription="Use this screen to login to this
application." />

  <Label Grid.Row="1"
    Text="Login ID" />
  <Entry Grid.Row="1"
    Grid.Column="1"
    Text="" />
  <Label Grid.Row="2"
    Text="Password" />
  <Entry Grid.Row="2"
    Grid.Column="1"
    IsPassword="True" />
  <HorizontalStackLayout Grid.Row="3"
    Grid.Column="1">
    <Button Text="Login" />
    <Button Text="Cancel" />
  </HorizontalStackLayout>
</Grid>
```

Try It Out

Run the application and click on the **Login** menu to view this page.

Lab 4: Add Header to the Product Detail View

Open the **ProductDetailView.xaml** file and add a namespace within the `<ContentPage...>`.

```
xmlns:partial="clr-
namespace:AdventureWorks.MAUI.ViewsPartial"
```

Delete the `<Label>` and add the following XAML where the `<Label>` was.

```
<Grid
RowDefinitions="Auto,Auto,Auto,Auto,Auto,Auto,Auto,Auto,
Auto,Auto,Auto,Auto,Auto,Auto"
    ColumnDefinitions="Auto,*"
    Style="{StaticResource Grid.Page}">

    <partial:HeaderView Grid.Row="0"
        Grid.ColumnSpan="2"
        ViewTitle="Product Information"
        ViewDescription="Use this screen to modify product
        information." />

    <Label Text="Product Name"
        Grid.Row="1" />
    <Entry Grid.Column="1"
        Grid.Row="1" />
    <Label Text="Product Number"
        Grid.Row="2" />
    <Entry Grid.Row="2"
        Grid.Column="1" />
    <Label Text="Color"
        Grid.Row="3" />
    <Entry Grid.Row="3"
        Grid.Column="1" />
    <Label Text="Cost"
        Grid.Row="4" />
    <Entry Grid.Row="4"
        Grid.Column="1" />
    <Label Text="Price"
        Grid.Row="5" />
    <Entry Grid.Row="5"
        Grid.Column="1" />
    <Label Text="Size"
        Grid.Row="6" />
    <Entry Grid.Row="6"
        Grid.Column="1" />
    <Label Text="Weight"
        Grid.Row="7" />
    <Entry Grid.Row="7"
        Grid.Column="1" />
    <Label Text="Category"
        Grid.Row="8" />
    <Entry Grid.Row="8"
        Grid.Column="1" />
    <Label Text="Model"
        Grid.Row="9" />
    <Entry Grid.Row="9"
```

```
        Grid.Column="1" />
    <Label Text="Selling Start Date"
        Grid.Row="10" />
    <Entry Grid.Row="10"
        Grid.Column="1" />
    <Label Text="Selling End Date"
        Grid.Row="11" />
    <Entry Grid.Row="11"
        Grid.Column="1" />
    <Label Text="Discontinued Date"
        Grid.Row="12" />
    <Entry Grid.Row="12"
        Grid.Column="1" />
    <HorizontalStackLayout Grid.Row="13"
        Grid.Column="1">
        <Button Text="Save" />
        <Button Text="Cancel" />
    </HorizontalStackLayout>
</Grid>
```

Try It Out

Run the application and click on the **Products** menu to view this page.

Don't worry if some of the page runs off the bottom of the window, you will fix this later.