

您

C# MAUI 7.0 ListView 基本範例

Copilot

Sure! Here's a basic example of how to use a `ListView` in a .NET MAUI 7.0 application:

1. Create a new .NET MAUI project:

```
dotnet new maui -n ListViewExample
```

2. Add a `ListView` to your XAML file (e.g., `MainPage.xaml`):

```
<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
              xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
              x:Class="ListViewExample.MainPage">

    <StackLayout>
        <Label Text="ListView Example"
              VerticalOptions="CenterAndExpand"
              HorizontalOptions="CenterAndExpand" />

        <ListView x:Name="MyListView">
            <ListView.ItemTemplate>
                <DataTemplate>
                    <TextCell Text="{Binding Name}" Detail="{Binding Detail}" />
                </DataTemplate>
            </ListView.ItemTemplate>
        </ListView>
    </StackLayout>
</ContentPage>
```

3. Define the data model (e.g., `Item.cs`):

```
public class Item
{
    public string Name { get; set; }
    public string Detail { get; set; }
}
```

4. Populate the `ListView` with data in the code-behind file (e.g., `MainPage.xaml.cs`):

```
public partial class MainPage : ContentPage
{
    public MainPage()
    {
        InitializeComponent();

        var items = new List<Item>
        {
            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail = "This is item 2" },
            new Item { Name = "Item 3", Detail = "This is item 3" }
        };

        MyListView.ItemsSource = items;
    }
}
```

This example demonstrates a simple `ListView` that displays a list of items with a name and detail. You can customize the `ListView` further by defining custom cells, adding headers and footers, and more.

If you have any specific requirements or need further customization, feel free to ask!

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就上面的範例 如何加上 當`ListView` 項目被選擇時 文字變成紅色 背景變成藍色

Copilot

你可以使用 `VisualStateManager` 來改變 `ListView` 項目被選擇時的文字顏色和背景顏色。以下是如何在上面的範例中實現這一點：

1. 更新 XAML 文件 (`MainPage.xaml`):

```
<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
              xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
              x:Class="ListViewExample.MainPage">

    <StackLayout>
        <Label Text="ListView Example"
              VerticalOptions="CenterAndExpand"
              HorizontalOptions="CenterAndExpand" />

        <ListView x:Name="MyListView" SelectionMode="Single">
            <ListView.ItemTemplate>
                <DataTemplate>
                    <ViewCell>
                        <ViewCell.View>
                            <StackLayout>
                                <Label Text="{Binding Name}" />
                                <Label Text="{Binding Detail}" />
                            </StackLayout>
                        </ViewCell.View>
                        <VisualStateManager.VisualStateGroups>
                            <VisualStateGroup Name="CommonStates">
                                <VisualState Name="Normal" />
                                <VisualState Name="Selected">
                                    <VisualState.Setters>
                                        <Setter Property="ViewCell.View.BackgroundColor" Value="Blue" />
                                        <Setter Property="Label.TextColor" Value="Red" />
                                    </VisualState.Setters>
                                </VisualState>
                            </VisualStateGroup>
                        </VisualStateManager.VisualStateGroups>
                    </ViewCell>
                </DataTemplate>
            </ListView.ItemTemplate>
        </ListView>
    </StackLayout>
</ContentPage>
```

```

        </VisualState>
        </VisualStateManager.VisualStateGroups>
    </ViewCell>
</DataTemplate>
</ListView.ItemTemplate>
</ListView>
</StackLayout>
</ContentPage>

```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```

public partial class MainPage : ContentPage
{
    public MainPage()
    {
        InitializeComponent();

        var items = new List<Item>
        {
            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail = "This is item 2" },
            new Item { Name = "Item 3", Detail = "This is item 3" }
        };

        MyListView.ItemsSource = items;
    }
}

```

這樣，當你選擇 ListView 中的一個項目時，該項目的背景顏色會變成藍色，文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！

您

上面範例在編譯時出現 ‘VisualStateGroups’ 不可附加到類型 ‘ViewCell’ 的元素 錯誤

Copilot

你是對的，VisualStateGroups 不能直接附加到 ViewCell。我們可以改用 CollectionView，它支持 VisualStateManager。以下是更新後的範例：

1. 更新 XAML 文件 (MainPage.xaml):

```

<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
    xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
    x:Class="ListViewExample.MainPage">

    <StackLayout>
        <Label Text="CollectionView Example"
            VerticalOptions="CenterAndExpand"
            HorizontalOptions="CenterAndExpand" />

        <CollectionView x:Name="MyCollectionView" SelectionMode="Single">
            <CollectionView.ItemTemplate>
                <DataTemplate>
                    <Grid>
                        <Grid.Resources>
                            <Style TargetType="Grid">
                                <Setter Property="VisualStateManager.VisualStateGroups">
                                    <VisualStateManager.VisualStateGroups>
                                        <VisualStateGroup Name="CommonStates">
                                            <VisualState Name="Normal" />
                                            <VisualState Name="Selected">
                                                <VisualState.Setters>
                                                    <Setter Property="BackgroundColor" Value="Blue" />
                                                </VisualState.Setters>
                                            </VisualState>
                                        </VisualStateGroup>
                                    </VisualStateManager.VisualStateGroups>
                                </Setter>
                            </Style>
                            <Style TargetType="Label">
                                <Setter Property="VisualStateManager.VisualStateGroups">
                                    <VisualStateManager.VisualStateGroups>
                                        <VisualStateGroup Name="CommonStates">
                                            <VisualState Name="Normal" />
                                            <VisualState Name="Selected">
                                                <VisualState.Setters>
                                                    <Setter Property="TextColor" Value="Red" />
                                                </VisualState.Setters>
                                            </VisualState>
                                        </VisualStateGroup>
                                    </VisualStateManager.VisualStateGroups>
                                </Setter>
                            </Style>
                        </Grid.Resources>
                        <StackLayout>
                            <Label Text="{Binding Name}" />
                            <Label Text="{Binding Detail}" />
                        </StackLayout>
                    </Grid>
                </DataTemplate>
            </CollectionView.ItemTemplate>
        </CollectionView>
    </StackLayout>
</ContentPage>

```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```

public partial class MainPage : ContentPage
{
    public MainPage()
    {
        InitializeComponent();

        var items = new List<Item>
        {
            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail = "This is item 2" },
            new Item { Name = "Item 3", Detail = "This is item 3" }
        };
    }
}

```

```
});  
    MyCollectionView.ItemsSource = items;  
}  
}
```

這樣，當你選擇 `CollectionView` 中的一個項目時，該項目的背景顏色會變成藍色，文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！

您

上面範例 選擇時 背景會變成藍色 但是文字不會變色 要如何解決

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要解決這個問題，我們需要確保 `Label1` 的 `VisualStateManager` 正確應用於 `Selected` 狀態。以下是更新後的範例：

1. 更新 XAML 文件 (MainPage.xaml):

```
<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"  
             xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"  
             x:Class="ListViewExample.MainPage">  
  
    <StackLayout>  
        <Label Text="CollectionView Example"  
              VerticalOptions="CenterAndExpand"  
              HorizontalOptions="CenterAndExpand" />  
  
        <CollectionView x:Name="MyCollectionView" SelectionMode="Single">  
            <CollectionView.ItemTemplate>  
                <DataTemplate>  
                    <Grid>  
                        <Grid.Resources>  
                            <Style TargetType="Grid">  
                                <Setter Property="VisualStateManager.VisualStateGroups">  
                                    <VisualStateGroupList>  
                                        <VisualStateGroup Name="CommonStates">  
                                            <VisualState Name="Normal" />  
                                            <VisualState Name="Selected">  
                                                <VisualState.Setters>  
                                                    <Setter Property="BackgroundColor" Value="Blue" />  
                                                </VisualState.Setters>  
                                            </VisualState>  
                                        </VisualStateGroup>  
                                    </VisualStateGroupList>  
                                </Setter>  
                            </Style>  
                            <Style TargetType="Label">  
                                <Setter Property="VisualStateManager.VisualStateGroups">  
                                    <VisualStateGroupList>  
                                        <VisualStateGroup Name="CommonStates">  
                                            <VisualState Name="Normal" />  
                                            <VisualState Name="Selected">  
                                                <VisualState.Setters>  
                                                    <Setter Property="TextColor" Value="Red" />  
                                                </VisualState.Setters>  
                                            </VisualState>  
                                        </VisualStateGroup>  
                                    </VisualStateGroupList>  
                                </Setter>  
                            </Style>  
                        </Grid.Resources>  
                        <StackLayout>  
                            <Label Text="{Binding Name}" />  
                            <Label Text="{Binding Detail}" />  
                        </StackLayout>  
                    </Grid>  
                </DataTemplate>  
            </CollectionView.ItemTemplate>  
        </CollectionView>  
    </StackLayout>  
</ContentPage>
```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```
public partial class MainPage : ContentPage  
{  
    public MainPage()  
    {  
        InitializeComponent();  
  
        var items = new List<Item>  
        {  
            new Item { Name = "Item 1", Detail = "This is item 1" },  
            new Item { Name = "Item 2", Detail = "This is item 2" },  
            new Item { Name = "Item 3", Detail = "This is item 3" }  
        };  
  
        MyCollectionView.ItemsSource = items;  
    }  
}
```

這樣，當你選擇 `CollectionView` 中的一個項目時，該項目的背景顏色會變成藍色，文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！

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上面範例 選擇時 背景會變成藍色 但是文字不會變色 要如何解決

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要解決這個問題，我們需要確保 `Label1` 的 `VisualStateManager` 正確應用於 `Selected` 狀態。以下是更新後的範例：

1. 更新 XAML 文件 (MainPage.xaml):

```

<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
              xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
              x:Class="ListViewExample.MainPage">

    <StackLayout>
        <Label Text="CollectionView Example"
              VerticalOptions="CenterAndExpand"
              HorizontalOptions="CenterAndExpand" />

        <CollectionView x:Name="MyCollectionView" SelectionMode="Single">
            <CollectionView.ItemTemplate>
                <DataTemplate>
                    <Grid>
                        <Grid.Resources>
                            <Style TargetType="Grid">
                                <Setter Property="VisualStateManager.VisualStateGroups">
                                    <VisualStateGroupList>
                                        <VisualStateGroup Name="CommonStates">
                                            <VisualState Name="Normal" />
                                            <VisualState Name="Selected">
                                                <VisualState.Setters>
                                                    <Setter Property="BackgroundColor" Value="Blue" />
                                                </VisualState.Setters>
                                            </VisualState>
                                        </VisualStateGroup>
                                    </VisualStateGroupList>
                                </Setter>
                            </Style>
                            <Style TargetType="Label">
                                <Setter Property="VisualStateManager.VisualStateGroups">
                                    <VisualStateGroupList>
                                        <VisualStateGroup Name="CommonStates">
                                            <VisualState Name="Normal" />
                                            <VisualState Name="Selected">
                                                <VisualState.Setters>
                                                    <Setter Property="TextColor" Value="Red" />
                                                </VisualState.Setters>
                                            </VisualState>
                                        </VisualStateGroup>
                                    </VisualStateGroupList>
                                </Setter>
                            </Style>
                        </Grid.Resources>
                        <StackLayout>
                            <Label Text="{Binding Name}" />
                            <Label Text="{Binding Detail}" />
                        </StackLayout>
                    </Grid>
                </DataTemplate>
            </CollectionView.ItemTemplate>
        </CollectionView>
    </StackLayout>
</ContentPage>

```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```

public partial class MainPage : ContentPage
{
    public MainPage()
    {
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        var items = new List<Item>
        {
            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail is "This is item 2" },
            new Item { Name = "Item 3", Detail is "This is item 3" }
        };

        MyCollectionView.ItemsSource = items;
    }
}

```

這樣，當你選擇 CollectionView 中的一個項目時，該項目的背景顏色會變成藍色，文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！

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上面範例 當我選擇到 Grid 會觸發 Grid的VisualStateGroupList 設定 如果此時 也要連帶觸發Label的VisualStateGroupList 的設定 要如何時做

Copilot

要同時觸發 Grid 和 Label 的 VisualStateGroupList 設定，可以使用 Triggers 來監聽 Grid 的狀態變化，並相應地改變 Label 的狀態。以下是更新後的範例：

1. 更新 XAML 文件 (MainPage.xaml):

```

<ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
              xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
              x:Class="ListViewExample.MainPage">

    <StackLayout>
        <Label Text="CollectionView Example"
              VerticalOptions="CenterAndExpand"
              HorizontalOptions="CenterAndExpand" />

        <CollectionView x:Name="MyCollectionView" SelectionMode="Single">
            <CollectionView.ItemTemplate>
                <DataTemplate>
                    <Grid>
                        <Grid.Resources>
                            <Style TargetType="Grid">
                                <Setter Property="VisualStateManager.VisualStateGroups">
                                    <VisualStateGroupList>
                                        <VisualStateGroup Name="CommonStates">
                                            <VisualState Name="Normal" />
                                            <VisualState Name="Selected">
                                                <VisualState.Setters>
                                                    <Setter Property="BackgroundColor" Value="Blue" />

```

```

        </VisualState.Setters>
    </VisualState>
</VisualStateGroup>
</VisualStateGroupList>
</Setter>
</Style>
<Style TargetType="Label">
    <Setter Property="VisualStateManager.VisualStateGroups">
        <VisualStateGroupList>
            <VisualStateGroup Name="CommonStates">
                <VisualState Name="Normal" />
                <VisualState Name="Selected">
                    <VisualState.Setters>
                        <Setter Property="TextColor" Value="Red" />
                    </VisualState.Setters>
                </VisualState>
            </VisualStateGroupList>
        </Setter>
    </Style>
</Grid.Resources>
<StackLayout>
    <Label Text="{Binding Name}">
        <Label.Triggers>
            <DataTrigger TargetType="Label" Binding="{Binding Source={x:Reference MyCollectionView}, Path=SelectedItem}" Value="{Binding Name}">
                <Setter Property="TextColor" Value="Red" />
            </DataTrigger>
        </Label.Triggers>
    </Label>
    <Label Text="{Binding Detail}">
        <Label.Triggers>
            <DataTrigger TargetType="Label" Binding="{Binding Source={x:Reference MyCollectionView}, Path=SelectedItem}" Value="{Binding Detail}">
                <Setter Property="TextColor" Value="Red" />
            </DataTrigger>
        </Label.Triggers>
    </Label>
</StackLayout>
</Grid>
</DataTemplate>
</CollectionView.ItemTemplate>
</CollectionView>
</StackLayout>
</ContentPage>

```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```
public partial class MainPage : ContentPage
{
    public MainPage()
    {
        InitializeComponent();

        var items = new List<Item>
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            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail = "This is item 2" },
            new Item { Name = "Item 3", Detail = "This is item 3" }
        };

        MyCollectionView.ItemsSource = items;
    }
}
```

這樣，當你選擇 `CollectionView` 中的一個項目時，`Grid` 的背景顏色會變成藍色，並且 `Label` 的文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！

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上面範例中 Label Binding Source 如何替換成Grid

Copilot

要將 Label 的 Binding Source 替換成 Grid，我們可以使用 RelativeSource 綁定。這樣可以確保 Label 的 VisualStateManager 會根據 Grid 的狀態變化而觸發。以下是更新後的範例：

1. 更新 XAML 文件 (MainPage.xaml):

[illegible]

```

        <VisualStateGroup Name="CommonStates">
            <VisualState Name="Normal" />
            <VisualState Name="Selected">
                <VisualState.Setters>
                    <Setter Property="TextColor" Value="Red" />
                </VisualState.Setters>
            </VisualState>
        </VisualStateGroupList>
    </Setter>
</Style>
</Grid.Resources>
<StackLayout>
    <Label Text="{Binding Name}">
        <Label.Triggers>
            <DataTrigger TargetType="Label" Binding="{Binding Source={RelativeSource AncestorType={x:Type Grid}}, Path=BackgroundCo
            <Setter Property="TextColor" Value="Red" />
        </DataTrigger>
    </Label.Triggers>
</Label>
    <Label Text="{Binding Detail}">
        <Label.Triggers>
            <DataTrigger TargetType="Label" Binding="{Binding Source={RelativeSource AncestorType={x:Type Grid}}, Path=BackgroundCo
            <Setter Property="TextColor" Value="Red" />
        </DataTrigger>
    </Label.Triggers>
</Label>
</StackLayout>
</Grid>
</DataTemplate>
</CollectionView.ItemTemplate>
</CollectionView>
</StackLayout>
</ContentPage>

```

2. 更新代碼後端文件 (MainPage.xaml.cs):

```

public partial class MainPage : ContentPage
{
    public MainPage()
    {
        InitializeComponent();

        var items = new List<Item>
        {
            new Item { Name = "Item 1", Detail = "This is item 1" },
            new Item { Name = "Item 2", Detail = "This is item 2" },
            new Item { Name = "Item 3", Detail = "This is item 3" }
        };

        MyCollectionView.ItemsSource = items;
    }
}

```

這樣，當你選擇 CollectionView 中的一個項目時，Grid 的背景顏色會變成藍色，並且 Label 的文字顏色會變成紅色。如果你有其他需求或需要進一步的自定義，隨時告訴我！