

.NET MAUI Templates Pack

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Introduction

This VS extension is loaded with Project, Item Templates and Code Snippets for working with .NET MAUI in Visual Studio 2022.

Project Templates

- .NET MAUI App – All All-in-One App Project Template. For more details check out this [blog post](#)
- .NET MAUI Class Library
- Shared Class Library (targeting both Xamarin.Forms and .NET MAUI)

Item Templates

Made available in the section titled **MAUI** in the **Add New Item** dialog.

ContentPage in XAML, C#, and Razor and has been named as:

- Content Page (.NET MAUI)
- Content Page (C#) (.NET MAUI)
- Content Page (Razor) (.NET MAUI)
- Content Page with ViewModel (.NET MAUI)
- Content Page (C#) with ViewModel (.NET MAUI)

ContentView in XAML, C#, and Razor and has been named as:

- Content View (.NET MAUI)
- Content View (C#) (.NET MAUI)
- Content View (Razor) (.NET MAUI)

Shell, in both XAML and C#, a page for defining app visual hierarchy along with navigation.

ResourceDictionary, a page for managing resources, available in both the formats, with C# code-behind file and XAML only (as its the C# code-behind is used rarely).

Templates for creating a Custom View definition:

- Custom View and Handler (Regular) (.NET MAUI)
- Custom View and Handler (Cond.) (.NET MAUI)
- Custom View and Renderer (Regular) (.NET MAUI)
- Custom View and Renderer (Cond.) (.NET MAUI)
- **Regular type template** generates the Handler / Renderer source files in the Platforms folder whereas **Cond. type template** houses all of them in a single folder.
- *For conditional type format, ensure Conditional Compilation is configured in the project file for the build to succeed. An additional option is provided during project creation (in both VS IDE and CLI)(or manually thereafter). Check out this [readme](#) for further details.*

Partial Class, a C# class (partial), useful for defining *ViewModel type* with the *MVVM Toolkit*, Made available in the section titled **Code**.

Code Snippets

For XAML

In the XAML page, type the short name and hit the Tab key twice to insert the snippet.

Snippets mentioned in bold-face also works as a **SurroundWith** snippet too (from **Xaml** section).

In the Output Format column, text highlighted in different colors infer the following:

- **Yellow** color are placeholders where user can modify the values
- **Green** color are derived values, can't be modified. For example, containing class name
- **Turquoise** color are reflected values, where the placeholder value is filled-in

| Snippet | Short Name | Output Format |
|--------------------|--------------|--|
| Grid | grid1 | <Grid ColumnDefinitions="" RowDefinitions=""> </Grid> |
| Flex Layout | flex | <FlexLayout> </FlexLayout> |

| Snippet | Short Name | Output Format |
|--------------------------------|---------------|--|
| Stack Layout | stack | <StackLayout> </StackLayout> |
| Horizontal Stack Layout | hstack | <HorizontalStackLayout> </HorizontalStackLayout> |
| Vertical Stack Layout | vstack | <VerticalStackLayout> </VerticalStackLayout> |
| Style | style | <Style TargetType="Page"> <Style> |
| Color | color | <Color x:Key="Success">Green</Color> |
| Resources | res | <ContentPage.Resources> <ResourceDictionary> </ResourceDictionary> </ContentPage.Resources> |
| Gestures | gesture | <Label.GestureRecognizers> </Label.GestureRecognizers> |
| Tap Gesture Recognizer | tap | <TapGestureRecognizer /> |
| Drag Gesture Recognizer | drag | <DragGestureRecognizer /> |
| Drop Gesture Recognizer | drop | <DropGestureRecognizer /> |
| Pan Gesture Recognizer | pan | <PanGestureRecognizer /> |
| Pinch Gesture Recognizer | pinch | <PinchGestureRecognizer /> |
| Pointer Gesture Recognizer | Pointer | <PointerGestureRecognizer /> |
| Swipe Gesture Recognizer | swipe | <SwipeGestureRecognizer /> |

| Snippet | Short Name | Output Format |
|----------------------------|------------|--|
| Blazor Web View | bwv | <pre><BlazorWebView HostPage="wwwroot/index.html"> <BlazorWebView.RootComponents> <RootComponent ComponentType="{x:Type }" Selector="#app" /> </BlazorWebView.RootComponents> </BlazorWebView></pre> |
| .NET MAUI Blazor Namespace | mb | <pre>xmlns:b="clr- namespace:Microsoft.AspNetCore.Components.WebView. Maui ;assembly=Microsoft.AspNetCore.Components.WebView. Maui"</pre> |
| WPF Blazor Namespace | wb | <pre>xmlns:b="clr- namespace:Microsoft.AspNetCore.Components.WebView. Wpf ;assembly=Microsoft.AspNetCore.Components.WebView. Wpf"</pre> |

For C#

In the C# code file, type the short name and hit the Tab key twice to insert the snippet.

Snippets mentioned in bold-face also works as a **SurroundWith** snippet too (from **CSharp** section).

In the Output Format column, text highlighted in different colors infer the following:

- **Yellow** color are placeholders where user can modify the values
- **Green** color are derived values, can't be modified. For example, containing class name
- **Turquoise** color are reflected values, where the placeholder value is filled-in

| Snippet | Short Name | Output Format |
|----------------------------|------------|---|
| Async Event Handler | aeH | <pre>private async void MyMethod(object sender, EventArgs e) { } </pre> |

| Snippet | Short Name | Output Format |
|----------------------|--|--|
| Attached Property | propap | <p>Here assuming MyClass is the containing type.</p> <pre> public static readonly BindableProperty NameProperty = BindableProperty.CreateAttached(nameof(NameProperty), typeof(string), typeof(MyClass), default(string)); public static string GetName(BindableObject bindable) => (string)bindable.GetValue(NameProperty); public static void SetName(BindableObject bindable, string value) => bindable.SetValue(NameProperty, value); </pre> |
| Bindable Property | propbp | <p>Here assuming MyClass is the containing type.</p> <pre> public static readonly BindableProperty NameProperty = BindableProperty.Create(nameof(Name), typeof(string), typeof(MyClass), default(string)); public string Name { get => (string)GetValue(NameProperty); set => SetValue(NameProperty, value); } </pre> |
| Comet Property (MVU) | <u>propc</u> (This has been shortened to propc from propcomet) | <pre> public string Name { get => GetProperty<string>(); set => SetProperty(value); } </pre> |
| Cross Platform | <u>cp</u> (This has been updated to cp from xplat) | <pre> #if ANDROID #elif IOS #elif MACCATALYST #elif TIZEN #elif WINDOWS #endif </pre> |

| Snippet | Short Name | Output Format |
|--|--|---|
| Event Handler | eh | private void MyMethod (object sender, EventArgs e) { } |
| Method | method | private void MyMethod () { } |
| Async Method | amethod | private async Task MyMethod () { } |
| Record (C# 9.0 or higher) | record | record MyRecord { } |
| Record Struct (C# 10.0 or higher) | <u>rstruct</u> (This has been updated to rstruct from recstruct) | record struct MyRecStruct { } |
| Observable Property (CommunityToolkit.Mvvm) | propop | [ObservableProperty] private string name ; |
| Relay Command (CommunityToolkit.Mvvm) | rcmd | [RelayCommand] private void DoSomething () { } |

| Snippet | Short Name | Output Format |
|---|------------|---|
| Async Relay Command <i>(CommunityToolkit.Mvvm)</i> | arcmd | <pre>[RelayCommand] private async Task DoSomethingAsync() { }</pre> |
| ViewModel Property | propvm | <pre>private string name; public string Name { get => name; set => SetProperty(ref name, value); }</pre> |
| C# Markup Extension Method | cmem | <pre>public static TBindable MyMethod<TBindable>(this TBindable bindable) where TBindable : BindableObject { return bindable; }</pre> |

Support

Currently, this VS extension can be installed on top of VS2022 17.3.0 or higher with .NET MAUI workload as its prerequisite (covering from .NET 6/7 GA and its Service Releases, .NET 8 Previews) and to support further changes in newer .NET MAUI releases, an update to this VS extension will be made available accordingly.

If you come across any issues or have suggestions to improve these templates, kindly log them as issues [here](#).