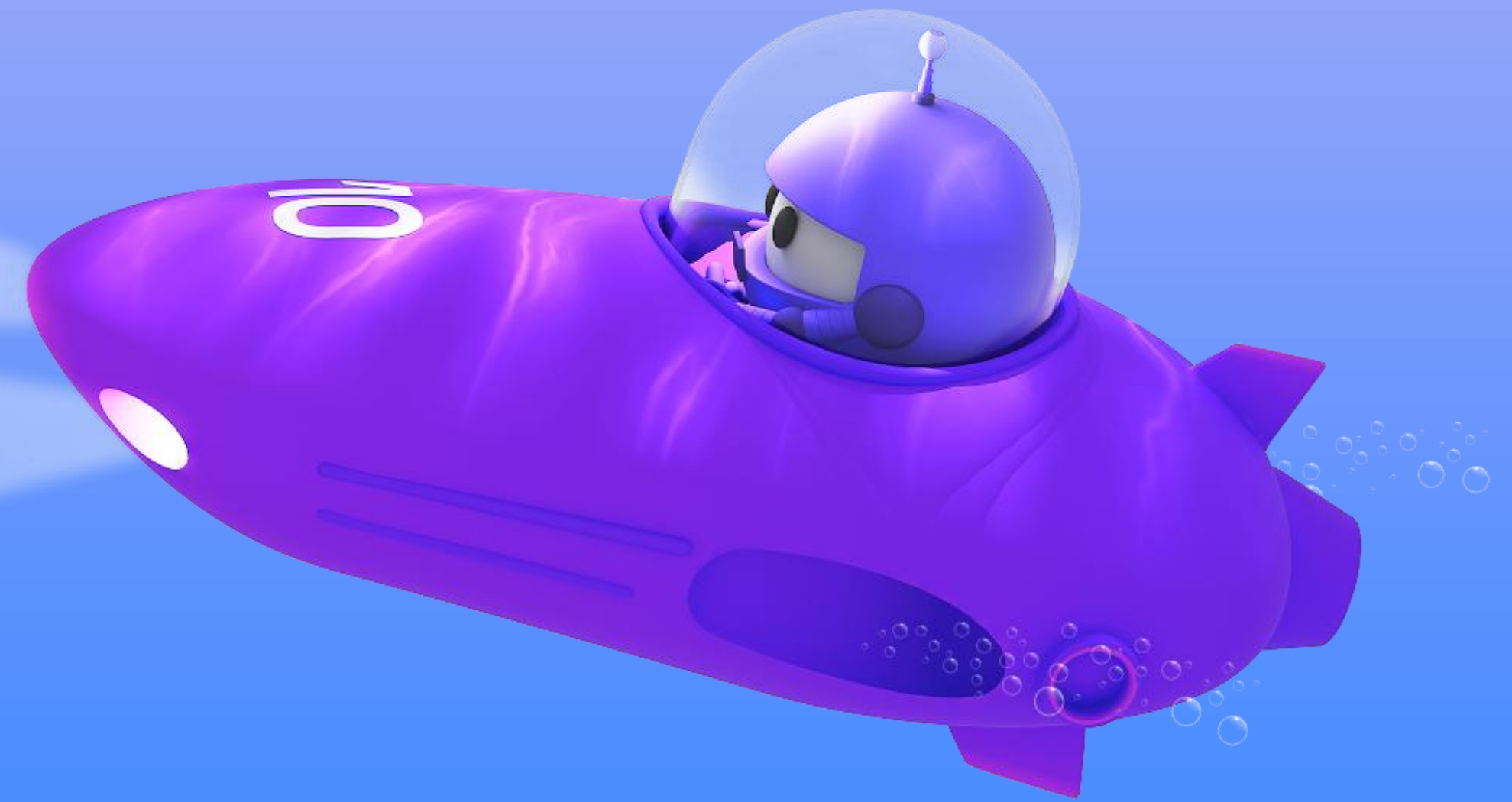


Community Toolkit Roundup

.NET



Who are we?

Michael A. Hawker

Windows Community Toolkit



Senior Software Engineer

Sergio Pedri

.NET Community Toolkit



Senior Software Engineer

Gerald Versluis

.NET MAUI Community Toolkit



Senior Software Engineer

And You!

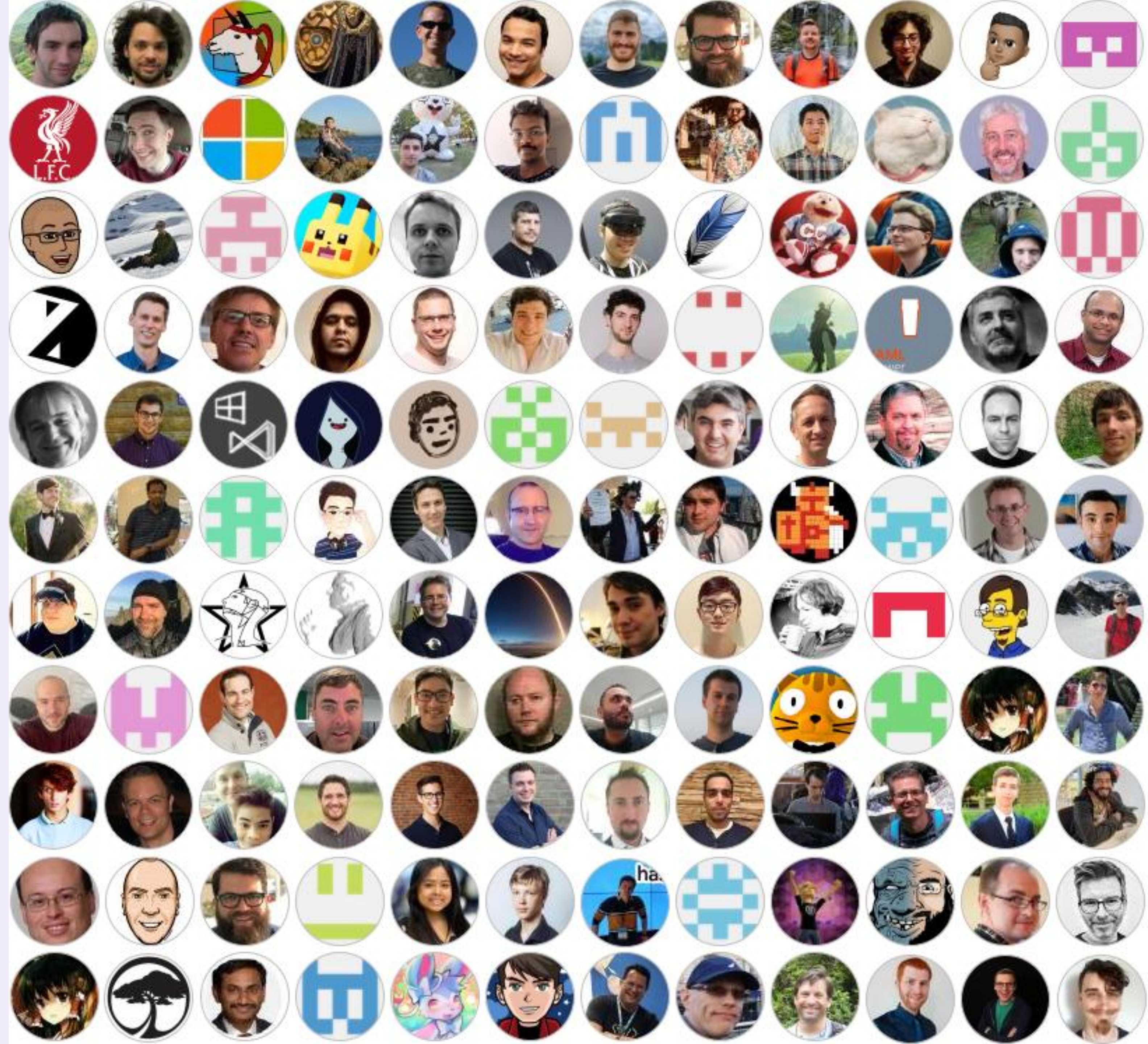
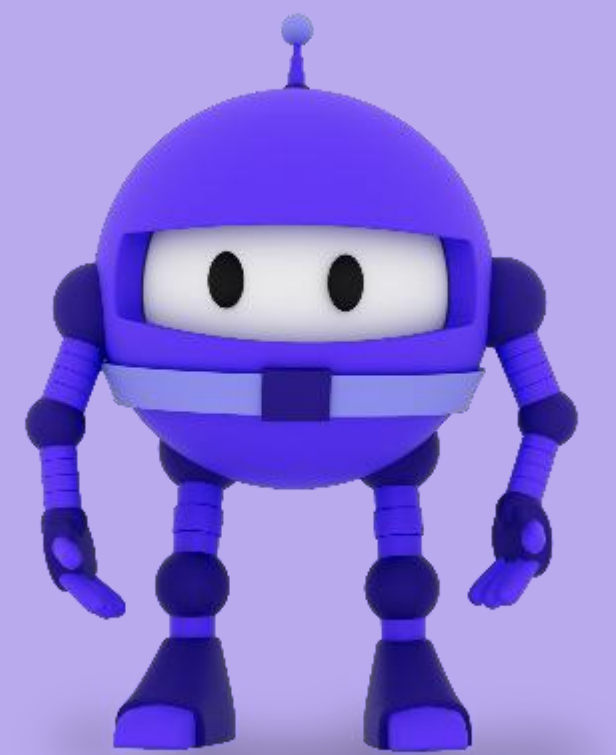


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- 06** Contributing

01 About the Toolkits



Community Toolkits



A collection of libraries that are:

- For .NET based technologies
- Open Source on GitHub
- MIT Licensed
- Part of the .NET Foundation



<https://aka.ms/toolkit>

Community Toolkits in Numbers

6+

Toolkit projects

170+

Packages on NuGet

76M+

Downloads on NuGet

16K+

Stars on GitHub

350+

Contributors

150+

Releases in 9 Years



CommunityToolkit

🔍 Type / to search



🏠 Overview

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🛡️ Security

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Community Toolkit

The Community Toolkit organization holds a collection of control & helper libraries and samples for various .NET technologies. Part of the .NET Foundation.

👥 1.5k followers

🔗 <https://learn.microsoft.com/dotnet/co...>

🌐 Part of .NET Foundation

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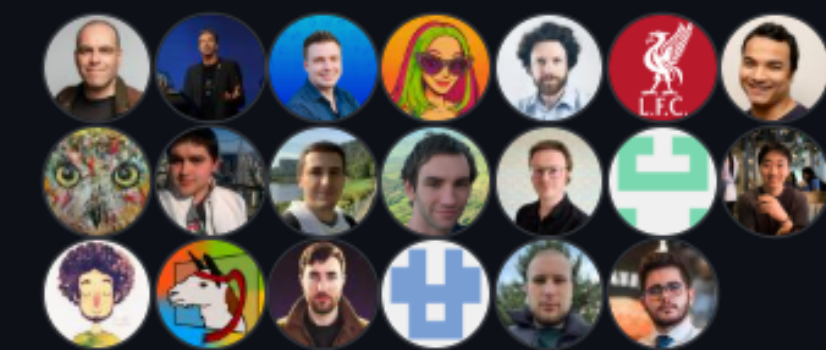
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Set up discussions to engage with your community!

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People



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dotnet

Public



.NET Community Toolkit is a collection of helpers and APIs that work for all .NET developers and are agnostic of any specific UI platform. The toolkit is maintained and published by Microsoft, and ...

● C# ☆ 3.5k 🍴 360



Windows

Public



Collection of controls, helpers and extension for WinUI 2, WinUI 3, and Uno Platform developers. Simplifies and demonstrates common developer tasks building experiences for Windows with .NET.

● C# ☆ 850 🍴 118



Maui

Public



The .NET MAUI Community Toolkit is a community-created library that contains .NET MAUI Extensions, Advanced UI/UX Controls, and Behaviors to help make your life as a .NET MAUI developer easier

● C# ☆ 2.6k 🍴 463



MVVM-Samples

Public



Sample repo for MVVM package

☆ 1.3k 🍴 252



Aspire

Public



A community project with additional components and extensions for .NET Aspire

● C# ☆ 503 🍴 133



Datasync

Public



A collection of libraries that implement a client-server system used for synchronizing data from a cloud-based database.

● C# ☆ 154 🍴 35



Repositories

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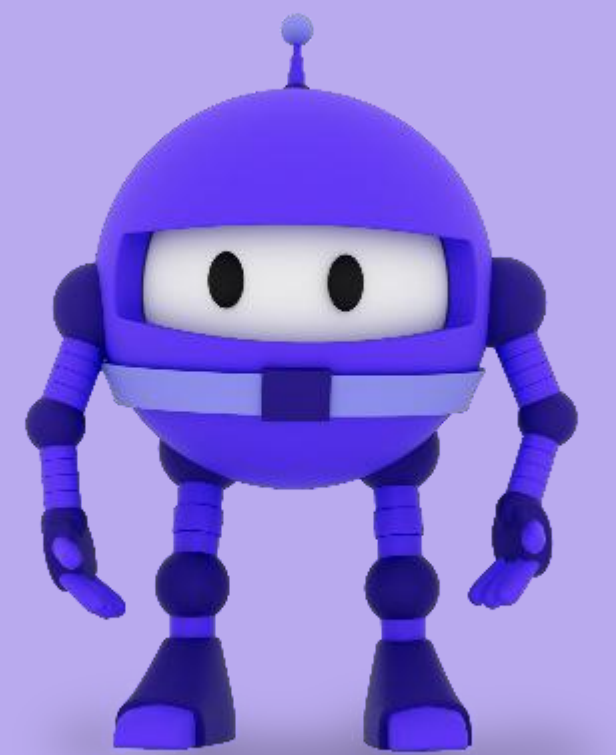
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02-05 The Toolkits



.NET

Community Toolkit

Collection of helpers and APIs that work for all .NET developers and are agnostic of any specific UI platform.

02

Latest: v8.4

Partial properties support for `[ObservableProperty]`

New `ReadOnlySequence<byte>.AsStream()` extension

Lots of new analyzers to write more robust MVVM code

Plenty of other improvements and small new features!

AOT support for UWP and WinUI 3 XAML applications

HighPerformance and Diagnostics packages too 

aka.ms/mvvmtoolkitapp

Aspire

Community Toolkit

Additional components and extensions for .NET Aspire
(Aspire provides tools, templates, and packages for building observable, production-ready distributed apps.)

Grown from ~12 integration to over 50

Over 50 contributors, with the majority being non-Microsoft

Extending built-in database integrations with more browser-based DB tools like DbGate

Aaron Powell



Principal Cloud Advocate

03

Latest: v9.9

Next: v13.0

Adopted and evolved the Dapr integration from Aspire

Covering a wide range of additional languages like Rust, Go, Java, Deno, and Bun

Actively working to support Aspire 13, with some features moving into Aspire directly

.NET MAUI

Community Toolkit

Community-created library that contains .NET MAUI Extensions, Advanced UI/UX Controls, and Behaviors.

04

Latest: v12.3.0

Completely new Popup implementation

CameraView video recording

Offline Speech Recognition

Loads of bugfixes

MediaElement on Media3 for Android

Continued efforts on stability and quality

Windows Community Toolkit

Collection of controls, helpers and extension for WinUI 2, WinUI 3, and Uno Platform developers.

05

Latest: v8.2

Native AOT and UWP Support for .NET 9+

DispatcherQueueTimer.Debounce

SwitchPresenter Improvements & SwitchConverter

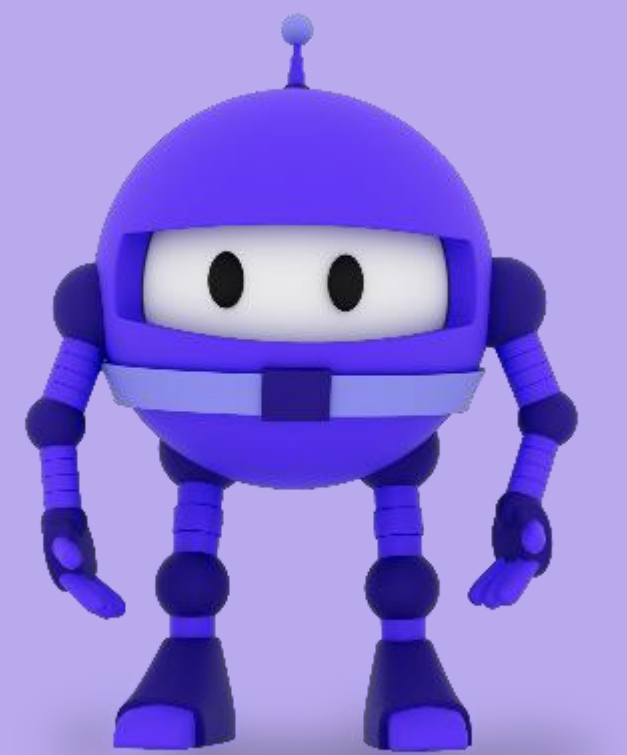
And much, much, more is here for WinUI devs!

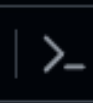
In-app AcrylicBrush for WinUI3

WCT Labs: *DependencyPropertyGenerator* & *OpacityMaskView*

aka.ms/windowstoolkitapp

06 Contributing





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C# 2.6k 463



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1.3k 252



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C# 154 35



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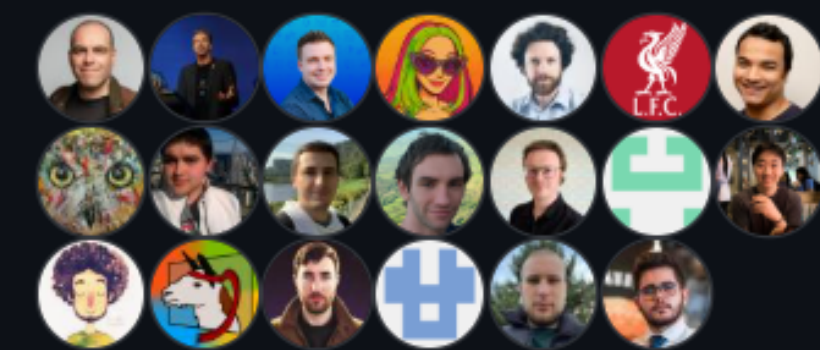
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Discussions

Set up discussions to engage with your community!

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[Proposal] CameraView minimal port #259

#1758

Detailed Design

CameraView.shared.cs

```
public class CameraView : View
{
    public static readonly BindableProperty IsCameraViewBusyProperty;
    public static readonly BindableProperty IsAvailableProperty;
    public static readonly BindableProperty FlashModeProperty;

    // Use WeakEventManager
    public event EventHandler<bool>? OnAvailable;
    public event EventHandler<MediaCapturedEventArgs>? MediaCaptured;
    public event EventHandler<string>? MediaCaptureFailed;

    public bool IsCameraViewBusy { get; }
    public bool IsAvailable { get; }
    public CameraOptions CameraOptions { get; set; }
    public void Shutter();
}
```

Usage Syntax

XAML Usage

```
<ContentPage xmlns="http://xamarin.com/schemas/2014/forms"
              xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
              xmlns:xct="http://xamarin.com/schemas/2020/toolkit"
              x:Class="MyLittleApp.MainPage">

    <StackLayout>
        <xct:CameraView
            x:Name="cameraView"
            FlashMode="On"
            MediaCaptured="CameraView_MediaCaptured"
            HorizontalOptions="FillAndExpand"
            VerticalOptions="FillAndExpand" />
    </StackLayout>
</ContentPage>
```

C# Usage

```
class MyPage : ContentPage
{
    public MyPage()
    {
        Content = new CameraView
```

New row not created for last child in WrapPanel when StretchChild=Last #743

Open

michael-hawker opened last week


Member

As I was writing up the [spec for the WinUI transfer](#) and looking at primitive examples and was a bit baffled at what was happening with StretchChild and my intuitive expectations...

Take this code:

```
<controls:WrapPanel Width="132" StretchChild="Last">
    <Rectangle Fill="Red" Width="45" Height="44"/>
    <Rectangle Fill="Blue" Width="44" Height="44"/>
    <Rectangle Fill="Green" Width="44" Height="44"/>
    <Rectangle Fill="Orange" Height="44"/>
</controls:WrapPanel>
```


This properly stretches the last item across the bottom:




However, if we make enough room for the green box on the first row (by making the red 44 width [only change])...

```
<controls:WrapPanel Width="132" StretchChild="Last">
    <Rectangle Fill="Red" Width="44" Height="44"/>
    <Rectangle Fill="Blue" Width="44" Height="44"/>
    <Rectangle Fill="Green" Width="44" Height="44"/>
    <Rectangle Fill="Orange" Height="44"/>
</controls:WrapPanel>
```

Actual: Then the Orange rect disappears entirely!



Expected: I would expect it to span the entire bottom row, like so:



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Sample Gallery

.NET MAUI Community Toolkit

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Community Toolkits for .NET Documentation

The home for Community Toolkits for .NET which are partnering the community with engineers, Microsoft MVPs, and the teams working on those technologies. The Community Toolkits offer a collection of reusable implementations that aim to simplify common development tasks for a variety of .NET frameworks.

.NET Community Toolkit

OVERVIEW

What is the .NET Community Toolkit?

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Introduction to the Diagnostics Package

Introduction to the High Performance Package

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.NET Aspire Community Toolkit

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.NET Aspire Community Toolkit overview

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SQLite Entity Framework Core

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.NET Aspire Community Toolkit GitHub repo

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.NET Multi-platform App UI (.NET MAUI) Community Toolkit

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.NET MAUI Native Library Interop

OVERVIEW

What is the Native Library Interop?

GET STARTED

Getting started with Native Library Interop

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Getting in Touch

GitHub!

.NET MAUI Community Standups

Windows App Community Discord

<https://windowsappcommunity.com/>

X/Twitter: **@XAMLLlama @SergioPedri @jfversluis**

Bluesky: **@xamllama.bsky.social @jfversluis.dev**

.NET MAUI Community Toolkit Discord

<https://aka.ms/mct/discord>

Resources

[**aka.ms/toolkit**](https://aka.ms/toolkit)

[**aka.ms/toolkit/docs**](https://aka.ms/toolkit/docs)

[**github.com/CommunityToolkit/Aspire**](https://github.com/CommunityToolkit/Aspire)

[**github.com/CommunityToolkit/dotnet**](https://github.com/CommunityToolkit/dotnet)

[**github.com/CommunityToolkit/Maui**](https://github.com/CommunityToolkit/Maui)

[**github.com/CommunityToolkit/Windows**](https://github.com/CommunityToolkit/Windows)

Thank you

