

# Cross-Platform App Development met .NET MAUI

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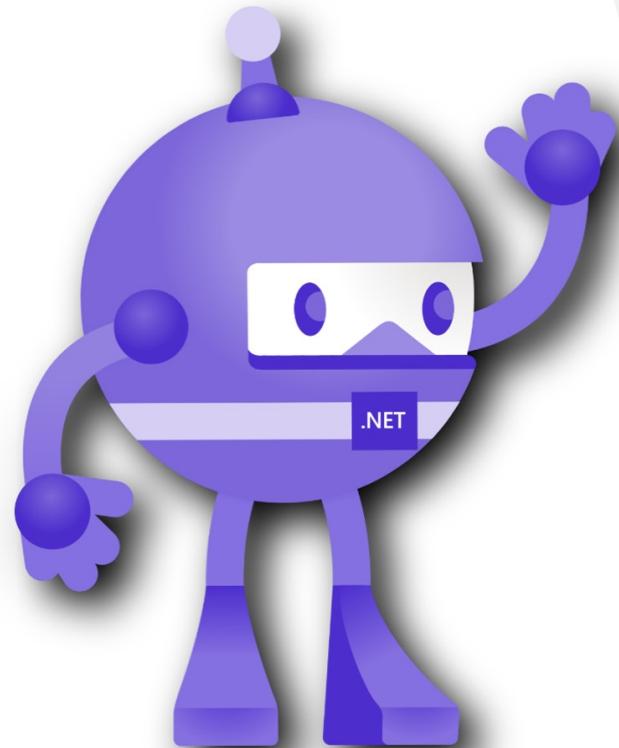
# Wat is .NET MAUI?

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Multi-platform App UI is released in mei 2022  
General Availability bij de launch van .NET 7

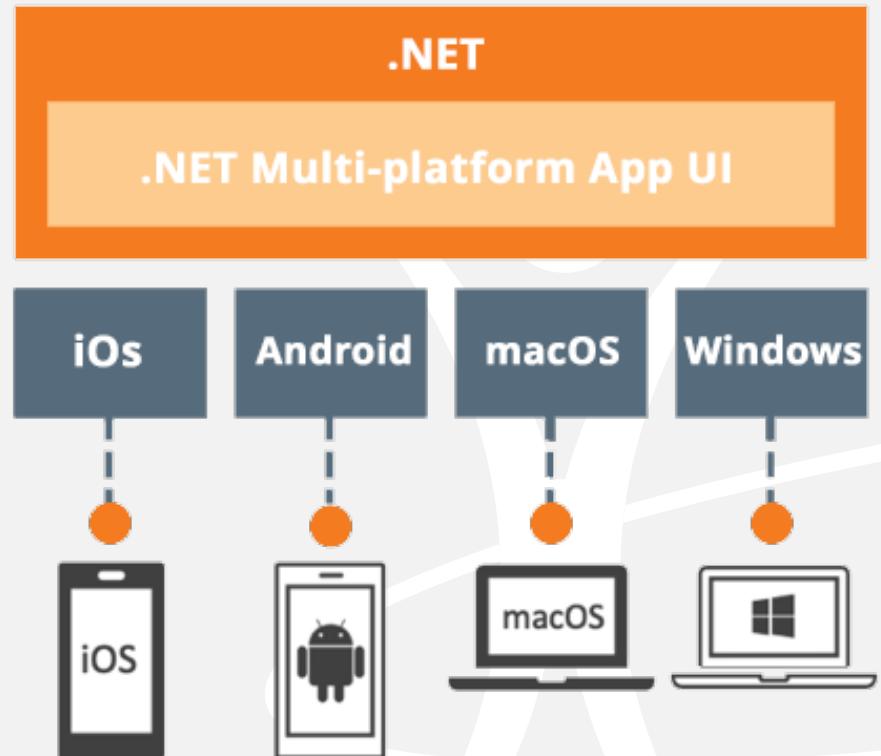
Cross platform native  
Desktop & Mobile Apps

XAML & Blazor



# Wat is .NET MAUI?

- Open Source
- Evolutie van Xamarin Forms
- Single Project
- Mogelijkheid tot toevoegen platform specifieke code



# .NET MAUI

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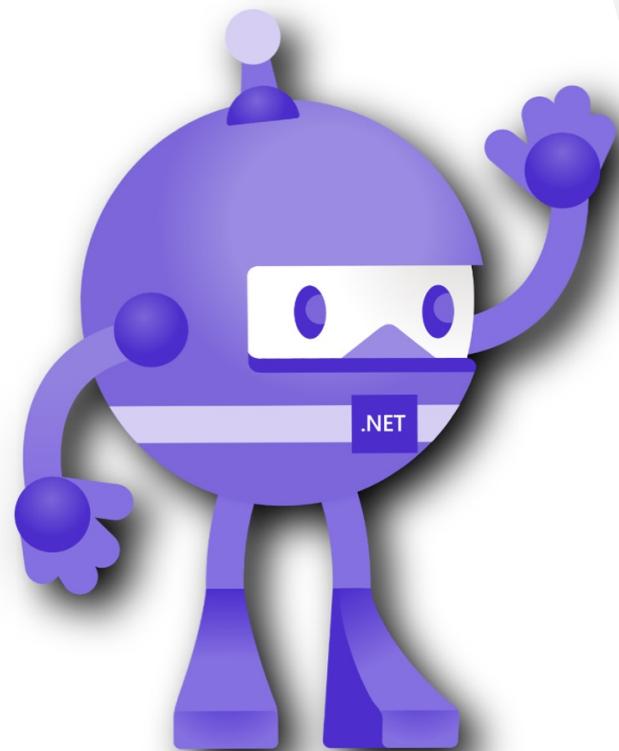
Cross-Platforms Apps (C#, .NET, Mono)

iOS, Android als hoofdmoott

Uitgebreid naar Tizen, ~~Linux~~, macOS, ~~WPF~~, ~~UWP~~, Windows UI

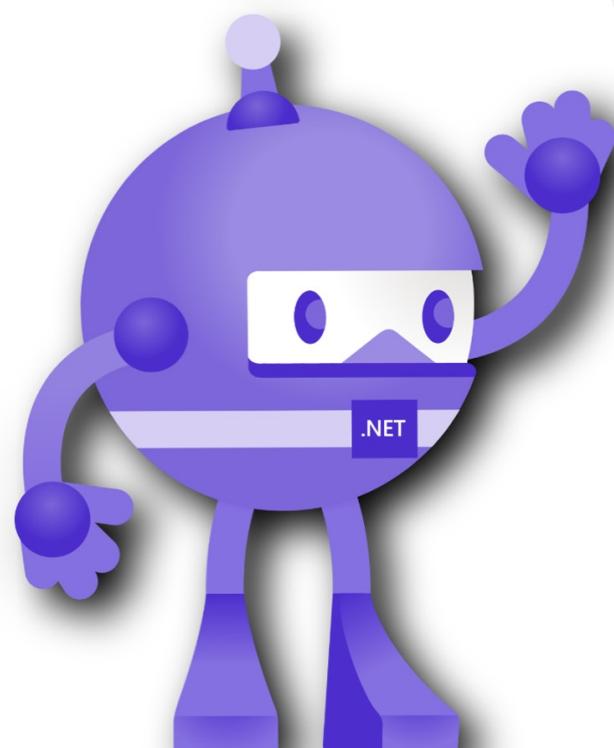
40+ Controls beschikbaar voor navigatie, maps, etc.

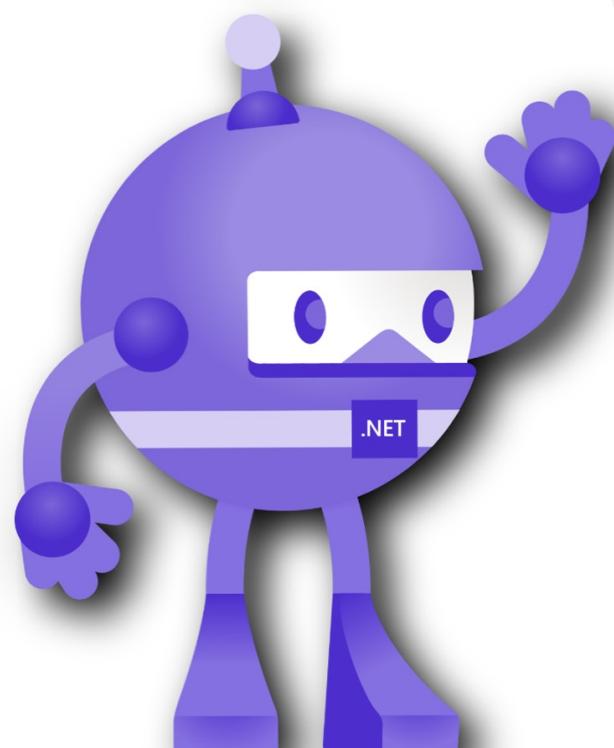
Community driven packages (NuGet)



# .NET MAUI vs. Xamarin Forms

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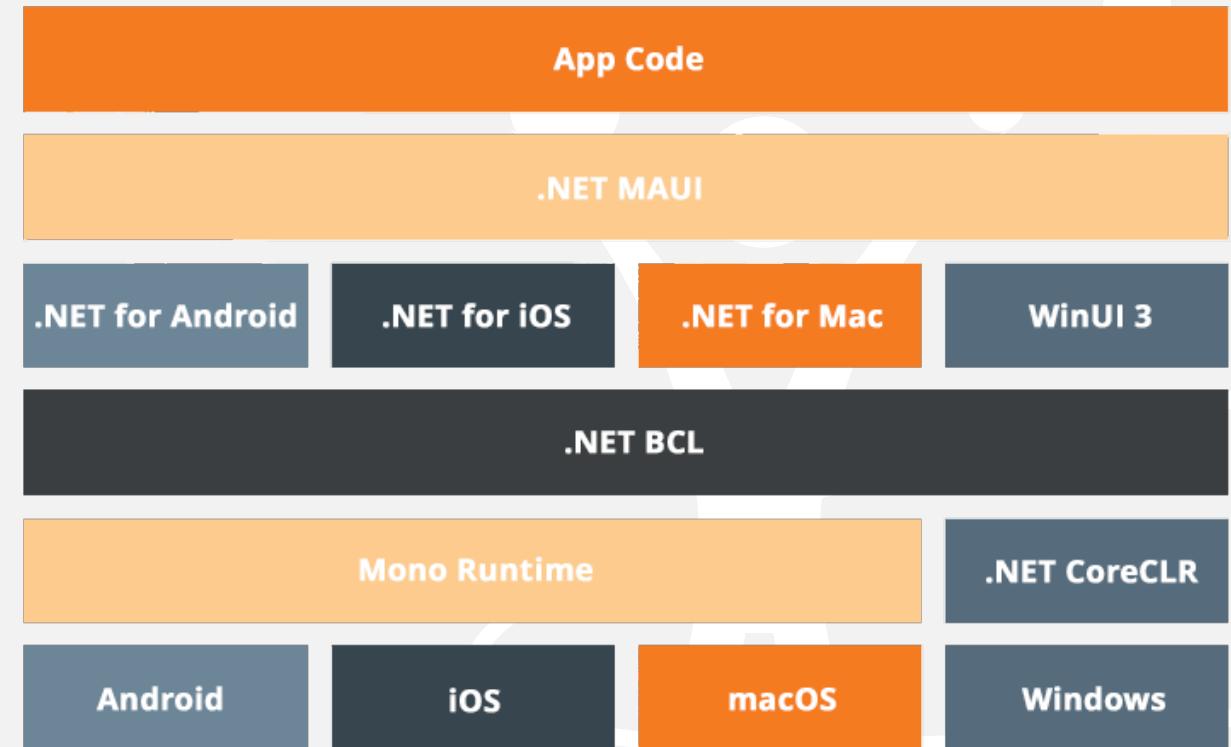
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1. Een project voor de verschillende platformen
  2. .NET 7 (gelanceerd voor .NET 6)
  3. Direct toegang tot de Graphic API's
  4. Hot Reload
  5. App Design en UI layout kan je delen over de platformen
  6. Loosely coupled, shared unitests
  7. Open Source



**.NET MAUI** is the most **productive** way to develop **native** apps that **perform** great on any device that runs Android, iOS, macOS, or Windows from a **single codebase**.

# Hoe werkt .NET MAUI

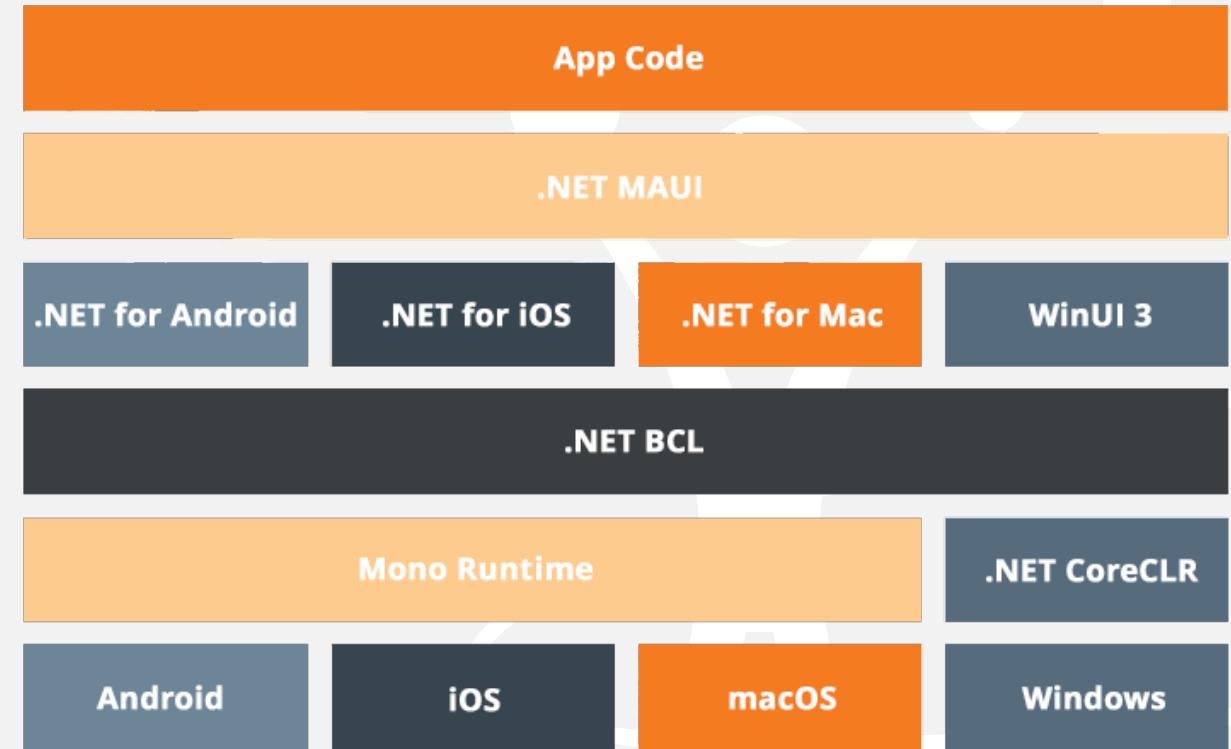
- Write once, run anywhere
- Toegang tot de native API's via de ".NET for"



# Hoe werkt .NET MAUI

Android

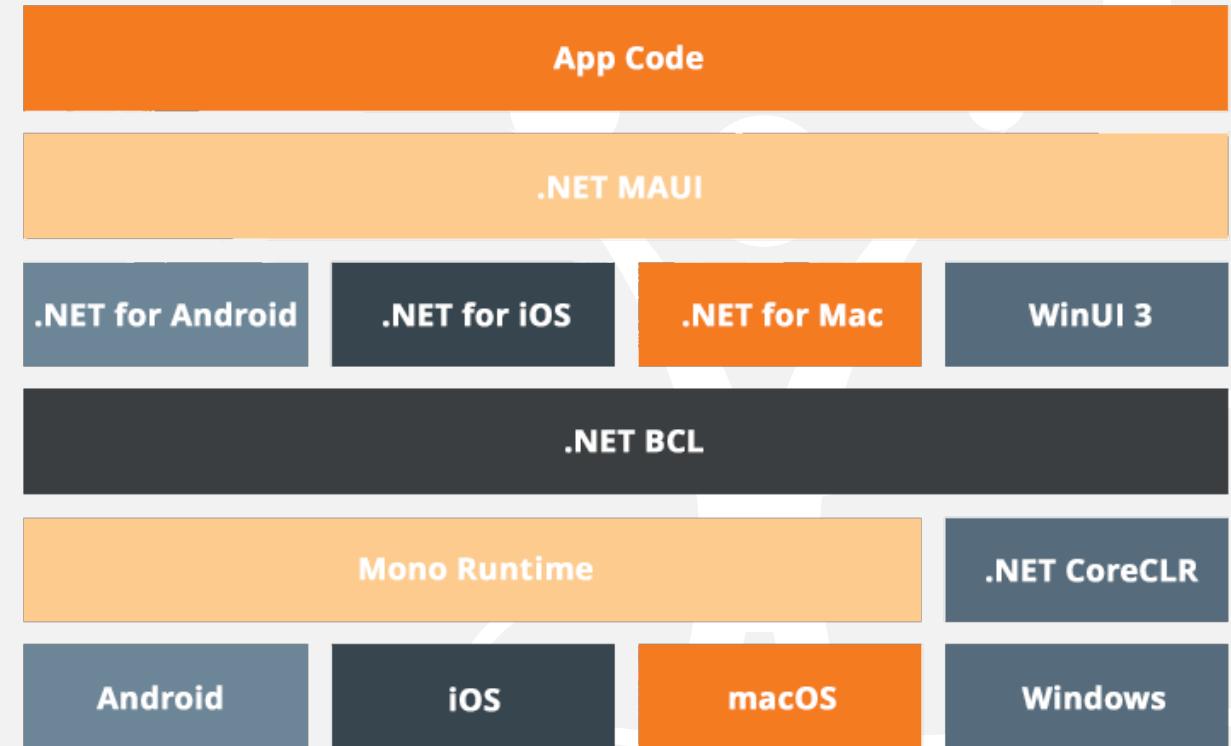
- C# compileerd naar IL
- IL roept via JIT mechanisme de native assemblies aan



# Hoe werkt .NET MAUI

iOS

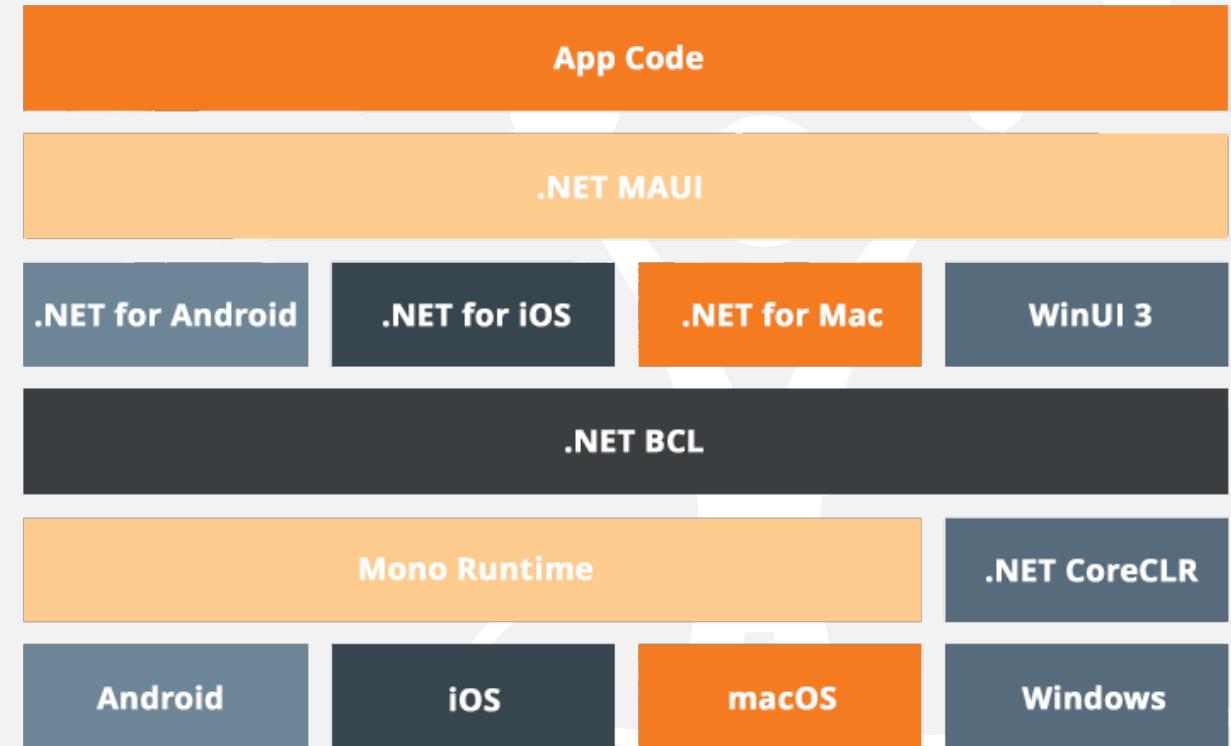
- AOT gecompileerd naar native ARM assemblies



# Hoe werkt .NET MAUI

macOS

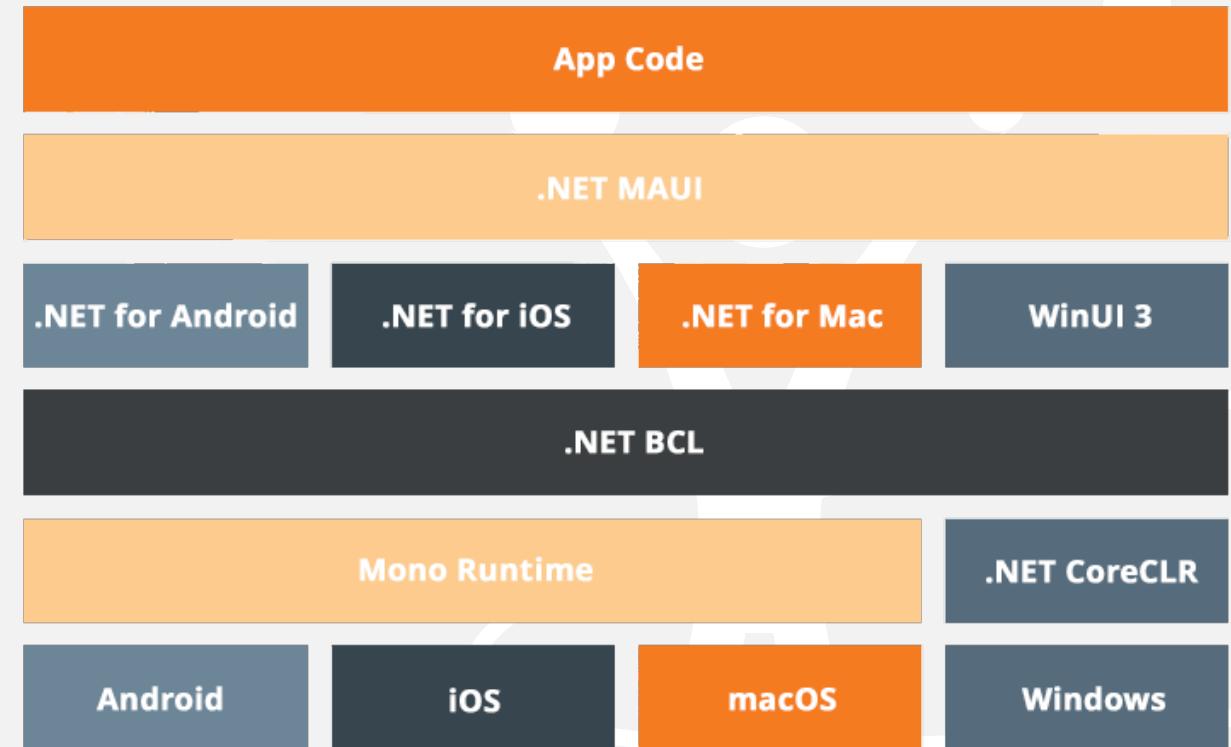
- Mac Catalyst als basis
- Gebruikt AppKit waar nodig



# Hoe werkt .NET MAUI

Windows apps

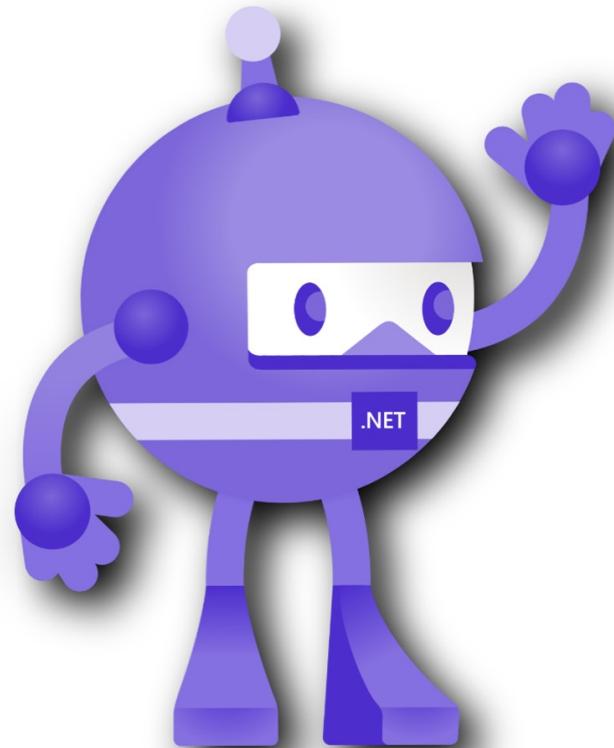
- Windows UI 3



# Aan de slag met .NET MAUI

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- Installatie
- Wat bevat een project?
- C# vs XAML



# Demo

Wat bevat een nieuw MAUI project?

# Native UI components

iOS – UIKit

Android – Widgets

macOS – Catalyst

Windows – App SDK & WinUI3



# Demo

.NET MAUI – Native Controls



## .NET MAUI + Blazor!?

- 100% Native
- Full platform device access
- Razor Class Libraries
- Hergebruik van je Razor-based web-applicatie
- Komt meer aan!

# Demo

.NET MAUI in actie





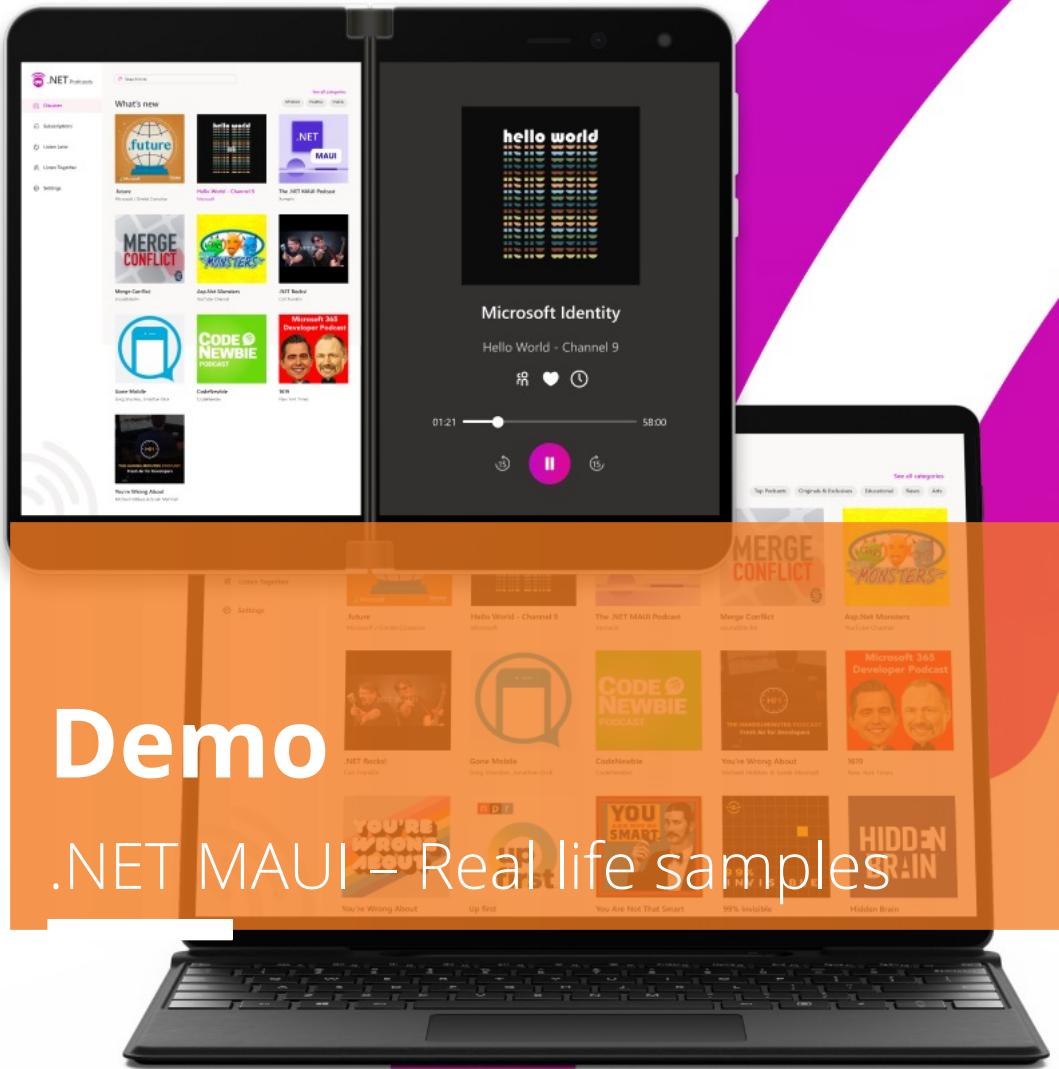
# .NET MAUI Podcast App

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De .NET Podcast app en omgeving gebouwd op .NET 7

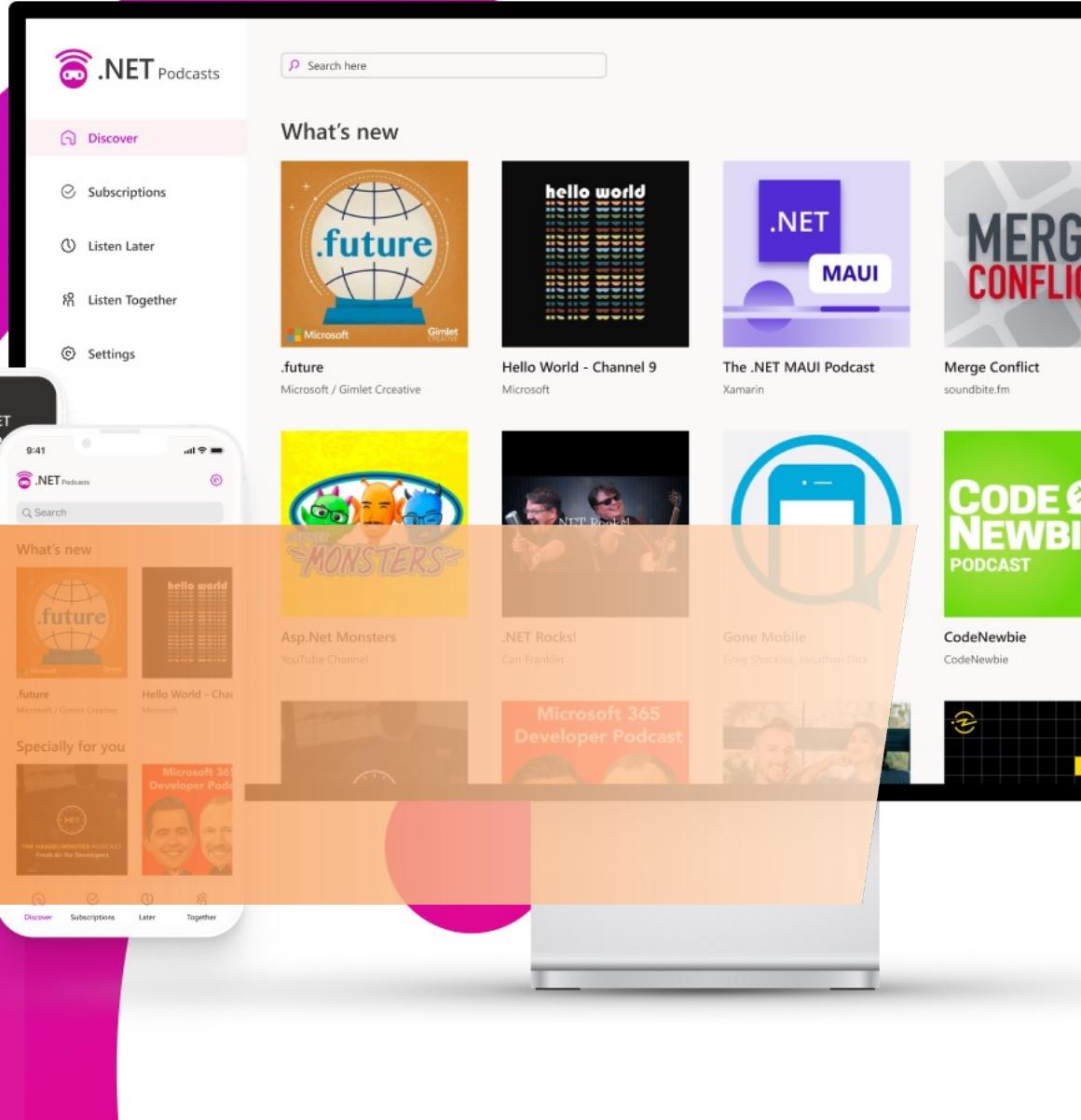
- ASP.NET Core (Infra)
- Blazor (Website)
- .NET MAUI (Desktop & Mobile app)

Open-source applicatie die fantastisch is ter referentie  
(voor eigenlijk alles .NET)



# Demo

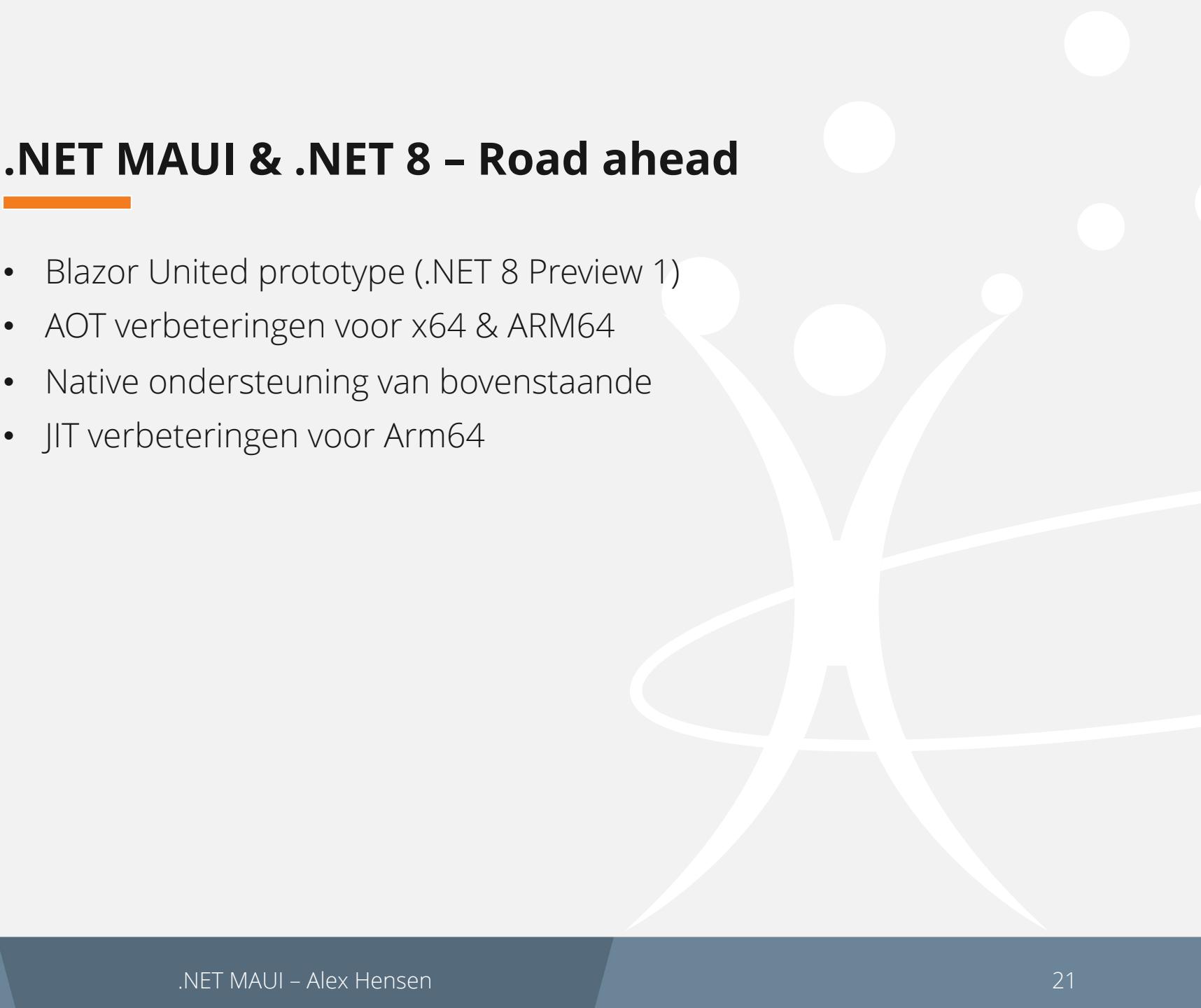
.NET MAUI – Real life samples





## .NET MAUI & .NET 8 – Road ahead

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- Blazor United prototype (.NET 8 Preview 1)
  - AOT verbeteringen voor x64 & ARM64
  - Native ondersteuning van bovenstaande
  - JIT verbeteringen voor Arm64
- 



## Take aways

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1. Evolutie van Xamarin.Forms
2. Globaal uitgebracht met .NET 7 & Visual Studio installer
3. Gedeeld project (mogelijkheid tot platform specifieke code)
4. Volledige debug ervaring vanuit Visual Studio & Hot Reload
5. Gedeelde resource files
6. (nog) geen Linux ondersteuning
7. (Geen) vervanging voor WPF

# Links

Presentatie + Samples

<https://github.com/alexhensen/dotnet-maui>

.NET MAUI documentatie

<https://microsoft.com/dotnet/maui>

.NET MAUI samples

<https://github.com/dotnet/maui-samples>

DotNet Podcast samples

<https://github.com/microsoft/dotnet-podcasts>

SpaceX History - EduardoReisDev

<https://github.com/EduardoReisDev/SpaceXhistory>

Weather 21' showcase – David Ortinau

<https://github.com/davidortinau/WeatherTwentyOne>

# Vragen



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Volg ons op

