



uno
P L A T F O R M

Overview

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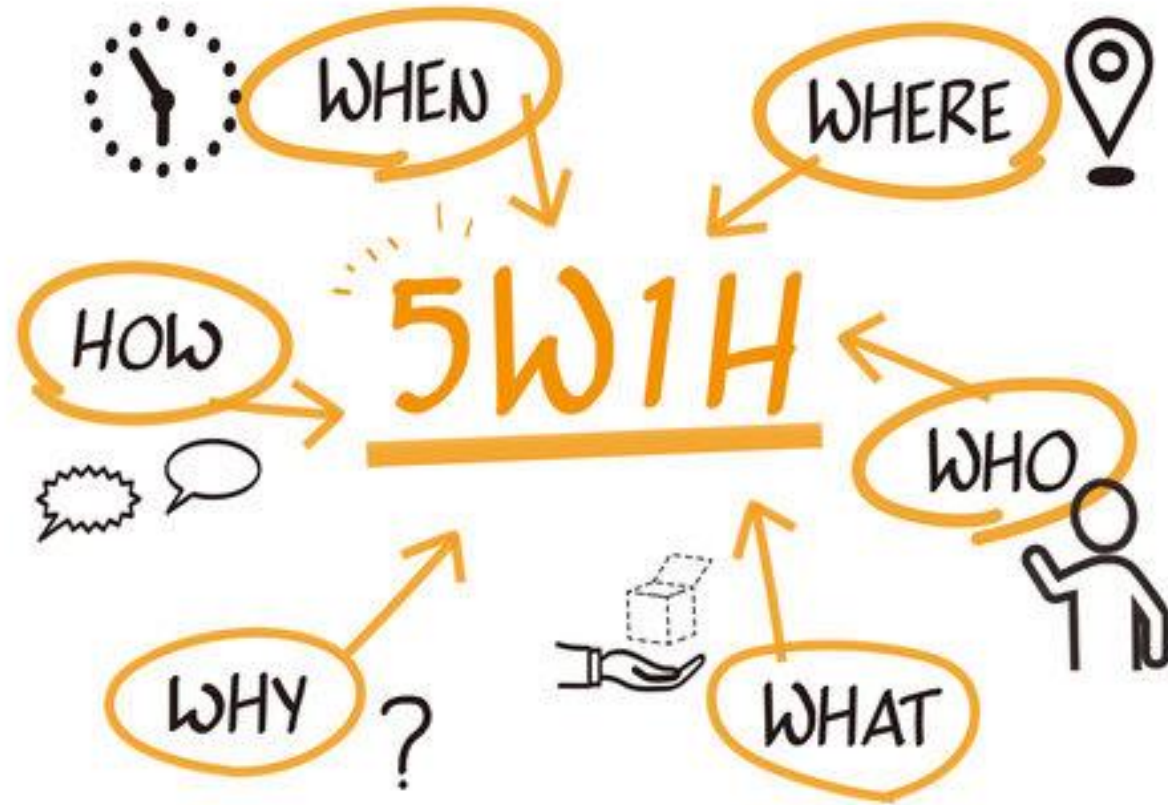


in/sivaraj

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Agenda



What is Uno Platform?

- ★ **UI platform** to build apps for Windows, MacOS, Linux, iOS, Android and Web using C# and XAML (**Cross-platform** application framework)
- ★ **Single-source codebase** solution
- ★ **Free & open-source**
- ★ Extends WinUI 3 & UWP capabilities to other platforms

Who is behind Uno Platform?

- ★ Originally developed by **nventive** (<https://nventive.com/en>)
- ★ Now open sourced
 - ★ More than 250 contributors
 - ★ <https://github.com/unoplatform/uno>

Why choose Uno Platform?

- ★ Efficiency
- ★ Consistency
- ★ Community
- ★ Open Source
- ★ Future-proof

Other alternatives

- ★ Flutter
- ★ React Native
- ★ NativeScript
- ★ Xamarin
- ★ .NET MAUI
- ★ Avalonia UI

Where can you develop & use?

★ Development:

- ★ Windows, Mac or Linux

★ Use:

- ★ Windows 10/11
- ★ MacOS
- ★ Android
- ★ iOS
- ★ Tizen
- ★ Linux
- ★ Web (WASM) : all modern browsers support WASM

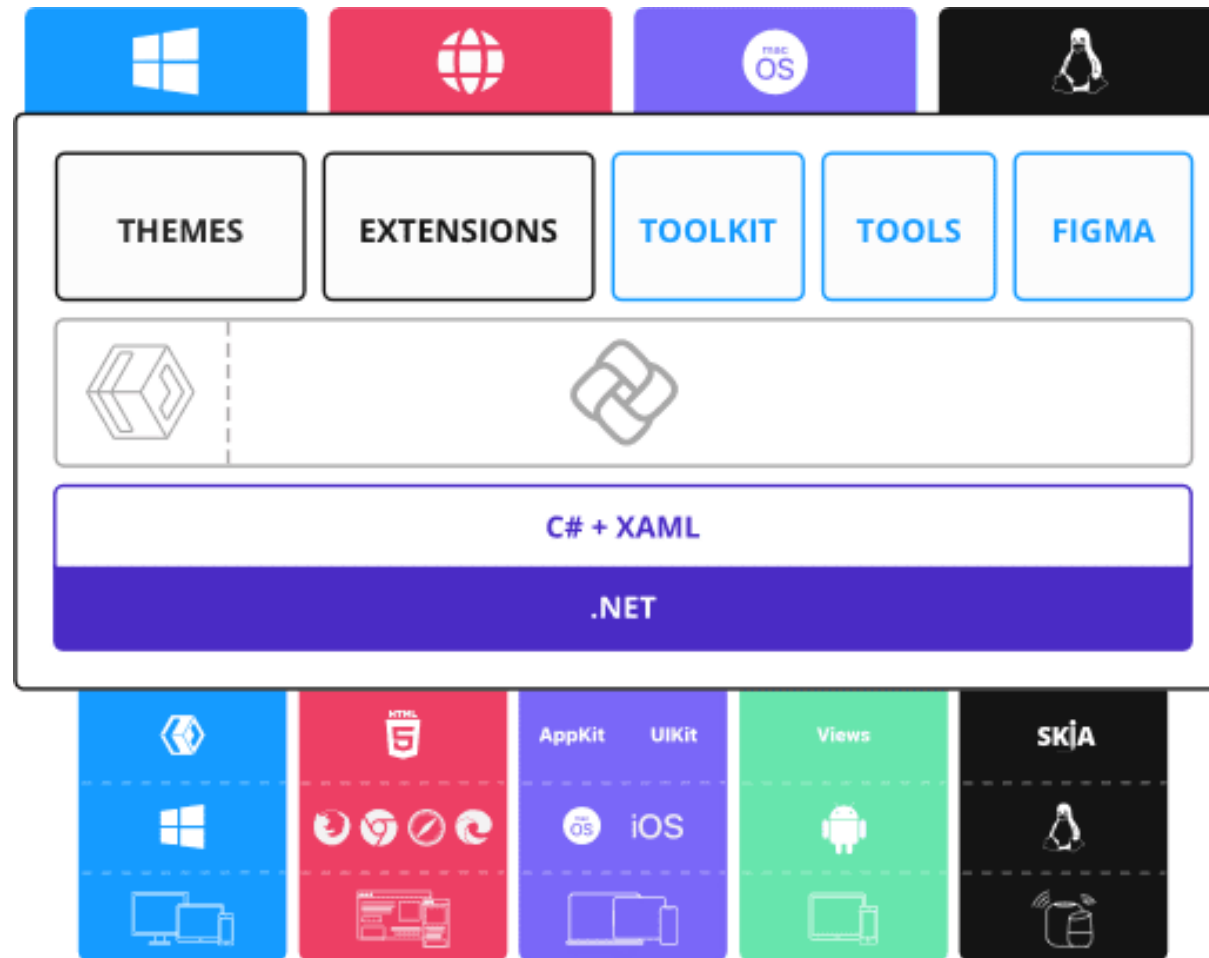
Advantages of WASM

- ★ Low level code
- ★ AOT compilation
- ★ Predictable performance
- ★ Parallel Execution
- ★ Optimized for numerical calculations
- ★ Reduced Overhead

When should you consider Uno Platform?

- ★ When you want to save time and resources by maintaining a single codebase.
- ★ When your goal is to reach a wide audience on different platforms.
- ★ When you want to leverage your C# and XAML skills for cross-platform development.

How Uno Platform works



How Uno Platform works

- ★ Application logic using C#
- ★ User Interface using XAML
- ★ Platform-specific bindings
 - ★ On Windows: Compiled into a WinUI application
 - ★ On non-Windows platforms: Uno.UI library reproduces WinUI API surface
- ★ Compilation (AOT) and code-sharing
- ★ Platform-specific output
- ★ Device Access and APIs
- ★ Testing & debugging

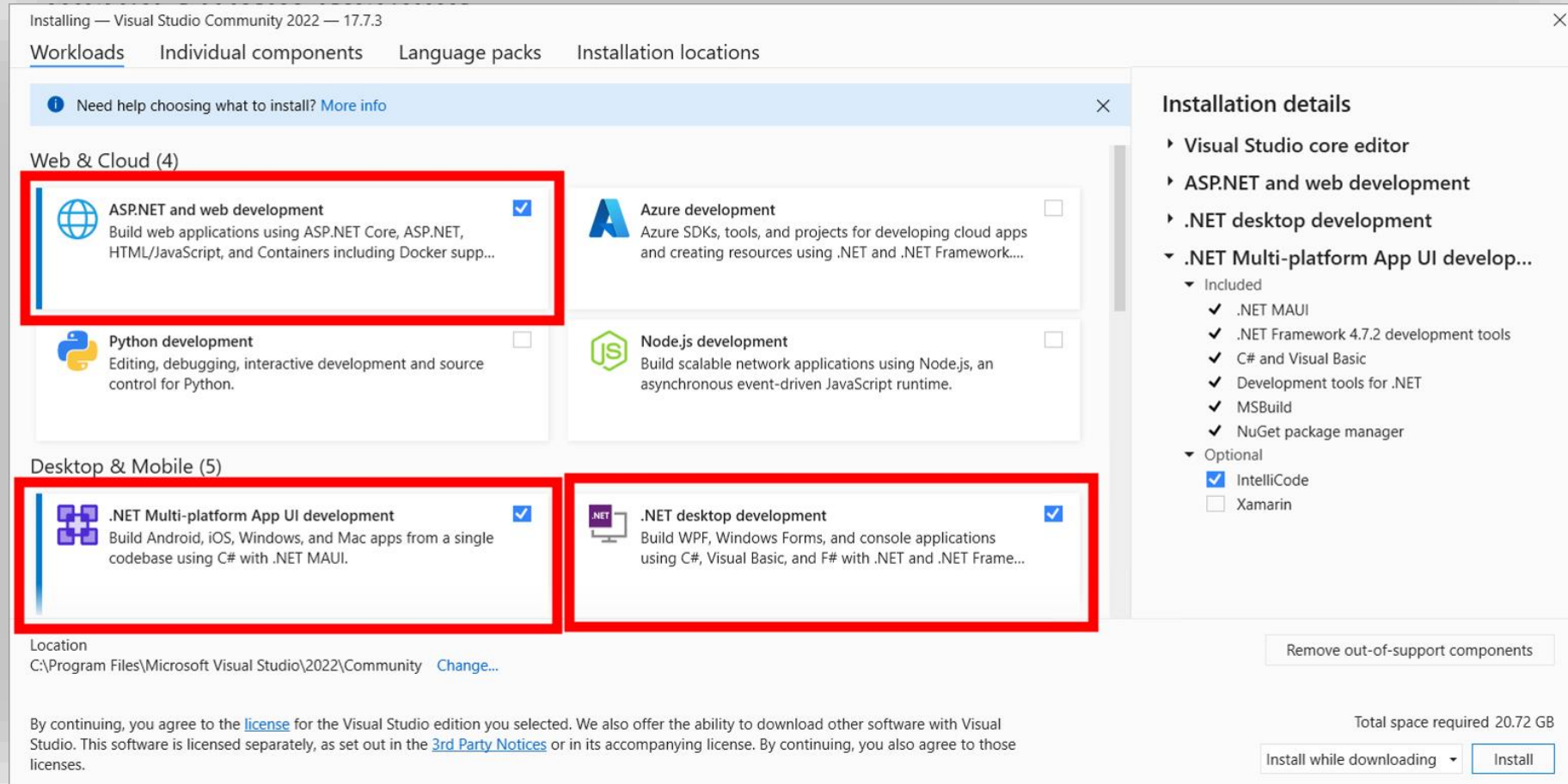
How to use Uno Platform?

★ Dev Environment:

- ★ Visual Studio 2022
- ★ Visual Studio Code
- ★ Visual Studio 2022 for Mac
- ★ JetBrains Rider
- ★ Linux

★ Using Uno Check

Installing in Visual Studio 2022



Finalize your environment

★ To install the tool:

```
dotnet tool install -g uno.check
```

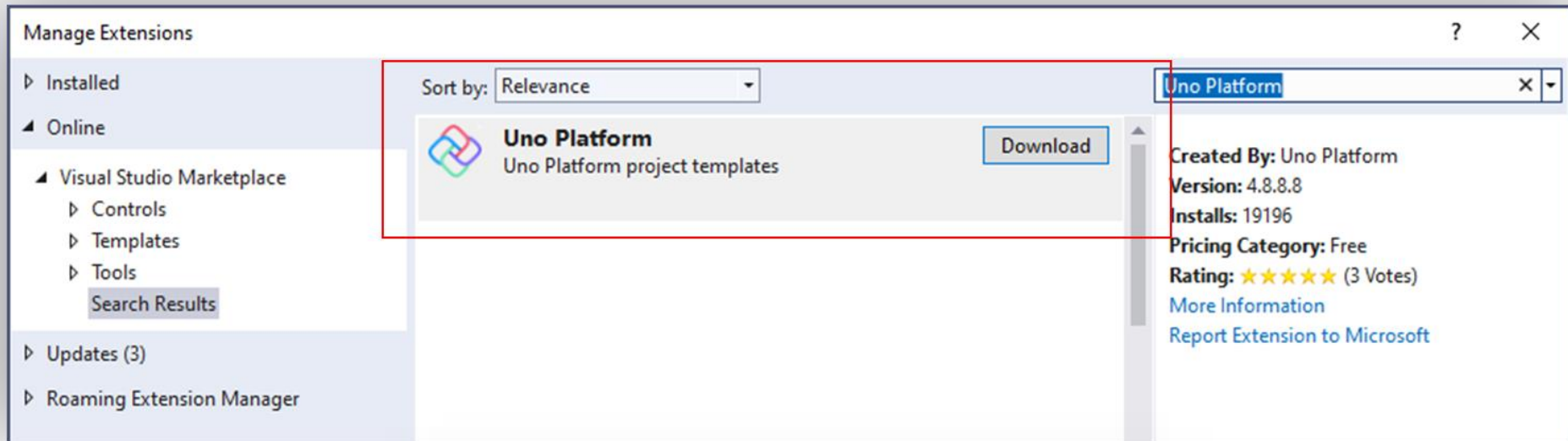
★ To update the tool:

```
dotnet tool update -g uno.check
```

★ Run the tool:

```
uno-check
```

Installing Solution Templates



.NET 7
`dotnet new install Uno.Templates`

.NET 6
`dotnet new -i Uno.Templates`

Uno Platform Application

Blank Template

```
dotnet new unoapp -preset=blank -o test
```

Recommended Template

```
dotnet new unoapp -preset=recommended -o test
```

Create a new project


Recent project templates

A list of your recently accessed templates will be displayed here.

Uno

Clear all


All languagesAll platformsAll project types



Uno Platform App

Template for creating an Uno Platform C# & XAML application that targets Windows App SDK (WinUI), WebAssembly, Android, iOS, Mac Catalyst, macOS and Linux

C#iOSAndroidWindowsmacOSLinuxWebCloudMobileWinUIWebAssemblyUno Platform




Uno Platform Library

Template for creating a multi-platform library with the Uno Platform that targets Windows App SDK (WinUI), Android, iOS, MacCatalyst, WebAssembly and Skia.

C#iOSAndroidWindowsmacOSLinuxWebCloudMobileWinUIWebAssemblyUno Platform

New




Uno Platform Cross-Runtime Library

Template for creating a cross-runtime Uno Platform library that targets Windows App SDK (WinUI), Android, iOS, MacCatalyst, Gtk, Linux Framebuffer, Wpf, and WebAssembly.

C#iOSAndroidWindowsmacOSLinuxWebCloudMobileWinUIWebAssemblyUno Platform

New



Uno Platform UI Tests Library

Project template for creating multi-platform UI Tests with the Uno Platform.

C#iOSAndroidWindowsmacOSLinuxWeb

New

Next



Select startup type

Choose the template to use to start your project, or click Customize to make changes.



Blank

Smallest set of options, with no extra dependencies, to create an app targeting multiple platforms

.NET 7

XAML

Customize



Default

Recommended set of options to create a production-ready app targeting multiple platforms

.NET 7

XAML

MVUX

Material

Configuration

Localization

Testing

Customize

Platforms

Android

iOS

WebAssembly

Windows

macOS (Catalyst)

GTK

Create



UnoTestApp

1. Framework

2. Platforms

3. Presentation

4. Theme

5. Extensions

6. Projects

7. Features

8. Authentication

9. Application



.NET 6.0

Target .NET 6.0 (Long
Term Support)



.NET 7.0

Target .NET 7.0
(Standard Term Support)



.NET 8.0

Target .NET 8.0
(Preview)

Summary

Framework

.NET 7.0

Platforms

Android, iOS, WebAssembly,
macOS (Catalyst), Windows,
GTK

Presentation

None

Theme

Fluent

Extensions

Blank, Console

Features

Central Package Management,
PWA Manifest, Visual Studio
Code Debugging

Cancel

Back

Next

Create

Demo

Q&A

Thank you!



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