



# Windows App SDK



with .NET

## Windows App SDK with .NET

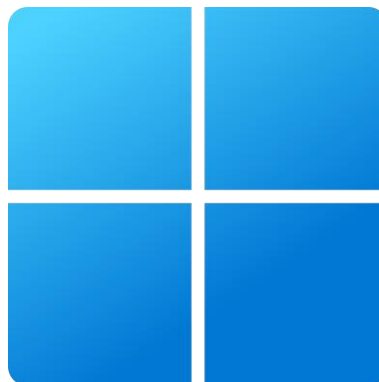
.NET



.NET is the free, open-source, cross-platform framework from Microsoft that enables developers to create powerful cloud services along with building modern applications for mobile, web and desktop which is updated each year with improvements or features with even-numbered long-term releases supported for three years or odd numbered standard-term releases supported for eighteen months.

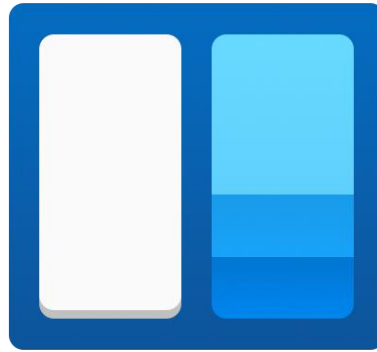
.NET includes C# which is also updated yearly and is a modern, innovative, open-source programming language with type safety, language integrated query, asynchronous programming and more. .NET applications can be developed for any device or platform including iOS, Android, Windows, Linux or MacOS with world-class developer tools including Visual Studio and Visual Studio Code. .NET latest software development kit or SDK which includes the latest version of C# along with documentation and information can be found by visiting [dot.net](https://dot.net).

## Windows



Windows 11 is Microsoft's most powerful and easy-to-use release of the Windows operating system that helps you get things done with thousands of applications. Windows 11 is optimised for productivity with features such a snap assist to organise your applications or play the latest games with reality rivalling graphics. Windows 11 is designed for performance and security with multiple layers of protection to help keep your information and your identity secure. Windows 11 is enhanced with Copilot which is an AI feature that allows you to kickstart your creativity or help you as an intelligent assistant. Windows 11 information, features, functionality, latest hardware and more can be found at [windows.com](https://windows.com).

## Widgets



Widgets are small containers with text and graphics that can be a companion to a Windows application providing frictionless access to most-needed information and help you save time and stay organised by quickly accessing information at a glance without the need to open an application window or website.

Widgets can be customised or personalised depending on the widget such as your location for a weather widget or what size of widgets to display. Widgets can be developed using Adaptive Cards provided from a Progressive Web Application or from a Windows App SDK application. Widget documentation including how developers can implement a widget provider can be found at [aka.ms/widgetdevdocs](https://aka.ms/widgetdevdocs).

## Pomodoro



Pomodoro Technique is a time-management technique developed by Francesco Cirillo in the late 1980s using a timer shaped like a tomato or pomodoro in Italian. The first thing you need to do is decide on a task that you need to get done then you set a timer for a period of time which is usually around twenty-five minutes, once the timer has finished then you take a short five-to-ten-minute break from the task with this work-break cycle known as a pomodoro. Once the short break is over you set the timer for twenty-five minutes to begin a pomodoro and repeat the pomodoro cycle four times and after four pomodoro work-break cycles you take a long twenty-to-thirty-minute break and start again until your task is completed.

## What is Windows App SDK?



### Overview

Windows App SDK provides a unified set of APIs and tools to create native Windows desktop apps targeting from Windows 10 RS5 to the latest version of Windows 11. Windows App SDK is not tied to updates to Windows but instead is delivered via Microsoft.WindowsAppSDK from NuGet which is updated at least every six months.

Windows App SDK supports using both the modern WinRT language independent API delivery system along with the native C-based Windows APIs. Install Windows application development workload for Visual Studio to build WinUI 3 in Desktop applications for Windows using C# and XAML. You can find source code and how to get started with Window App SDK at [github.com/microsoft/WindowsAppSDK](https://github.com/microsoft/WindowsAppSDK).

### XAML

XAML or eXtensible Application Markup Language is an XML-based declarative markup language that can define user-interface controls that can support rotation, animation or other effects. Developers can decouple the implementation of an application including any events, business object and other code in C# from the design and user interface of an application in XAML.

Developers can use data binding from source values to target properties including converting values to present data to users or allow interaction with data from users in XAML. Applications can scale as needed thanks to vector-based controls along with lines, shapes and vector images that can also support variety of brushes in XAML. Developers can completely customise the look-and-feel of an application without impacting the implementation of an application with XAML.

## WinUI

WinUI is the modern user experience framework for building intuitive and accessible native Windows applications using the latest user interface patterns. WinUI 3 is shipped as part of Windows App SDK and decoupled from Windows itself enabling new features to work on older versions of Windows. WinUI 3 also provides the native user interface platform on Windows for cross-platform frameworks such as .NET MAUI and Uno Platform. WinUI 3 implements modern controls that feature the latest Fluent Design System from Microsoft used in Windows itself. You can find more including source code for the latest release of WinUI 3 at [github.com/microsoft/microsoft-ui-xaml](https://github.com/microsoft/microsoft-ui-xaml).

## Fluent

Fluent Design System with Fluent 2 are a set of guidelines from Microsoft for design and interaction that are used by modern native Windows applications on Windows 11. Fluent 2 includes design principles for intuitive and expected experiences in Windows applications including colour, iconography, motion, typography and more. Developers can build great experiences with WinUI 3 using components such as Button, CheckBox, ComboBox and TextBox incorporating Fluent design. Developers building apps with WinUI 3 using components helps ensure an accessible foundation for diverse and delightful experiences for everyone. You can find out more about Fluent 2 which is the latest version of Microsoft's Fluent Design System at [fluent2.microsoft.design](https://fluent2.microsoft.design).

## Summary

.NET is the free, open-source, cross-platform framework from Microsoft that enables developers to build modern applications for any device or for any platform such as desktop. Windows 11 is Microsoft's most powerful easy-to-use version of Windows supporting Widgets with information at a glance that can help you save time and stay organised. Windows App SDK to create WinUI 3 in Desktop applications in C# and XAML with Windows application development workload supporting Windows 10 RS5 to Windows 11. Windows App SDK applications leverage WinUI 3 which is the modern user experience framework decoupled from Windows using the latest user interface patterns. Developers can create accessible apps using WinUI 3 components such as Button, CheckBox, ComboBox and TextBox that incorporate the Fluent Design System.

## About

[dot.net](https://dot.net)

[windows.com](https://windows.com)

[aka.ms/widgetdevdocs](https://aka.ms/widgetdevdocs)

[github.com/microsoft/WindowsAppSDK](https://github.com/microsoft/WindowsAppSDK)

[github.com/microsoft/microsoft-ui-xaml](https://github.com/microsoft/microsoft-ui-xaml)

[fluent2.microsoft.design](https://fluent2.microsoft.design)

[tutorialr.com/talks/windows-app-sdk-with-dot-net](https://tutorialr.com/talks/windows-app-sdk-with-dot-net)

[github.com/tutorialr/windows-app-sdk-with-dot-net-talk](https://github.com/tutorialr/windows-app-sdk-with-dot-net-talk)