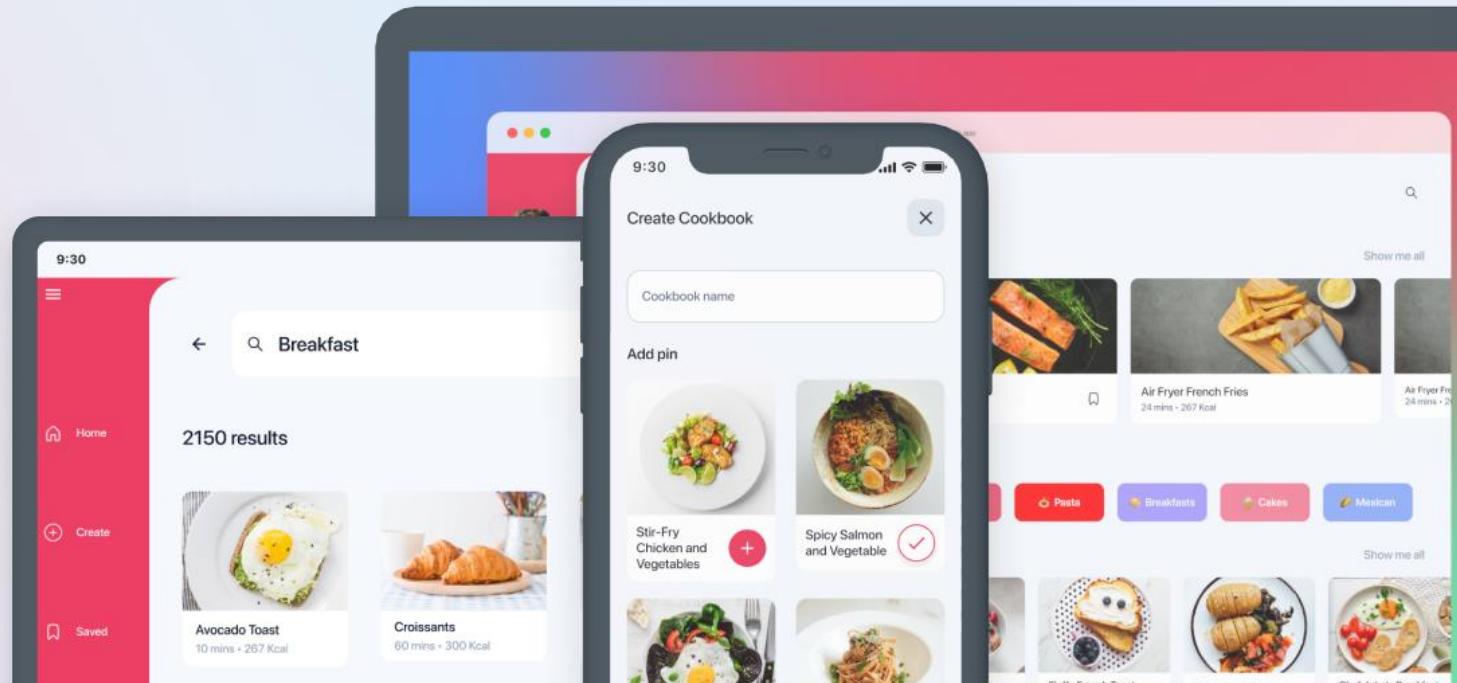
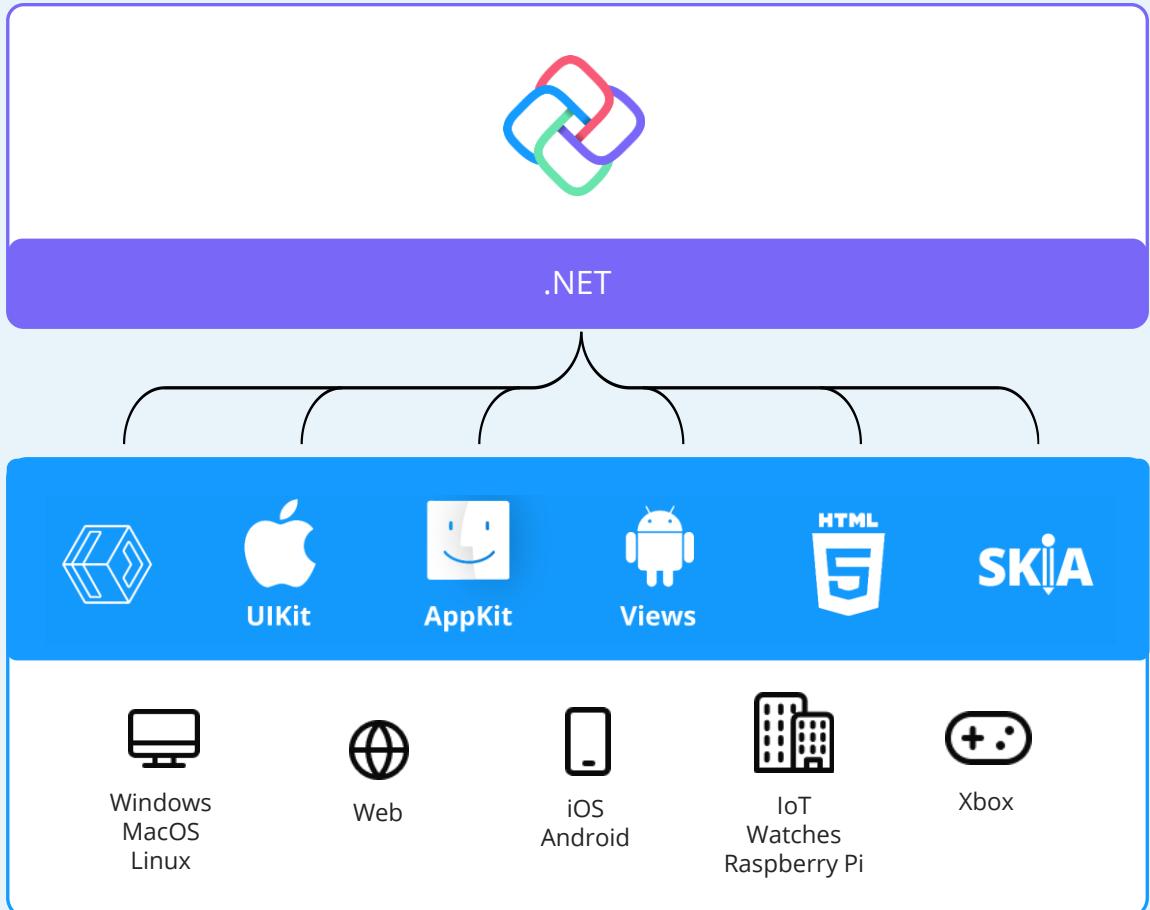




# .NET Apps Everywhere, at 5x the speed!

## Steve Bilogan





# Ultimate Reach & Productivity

**Free and Open-Source** since 2018

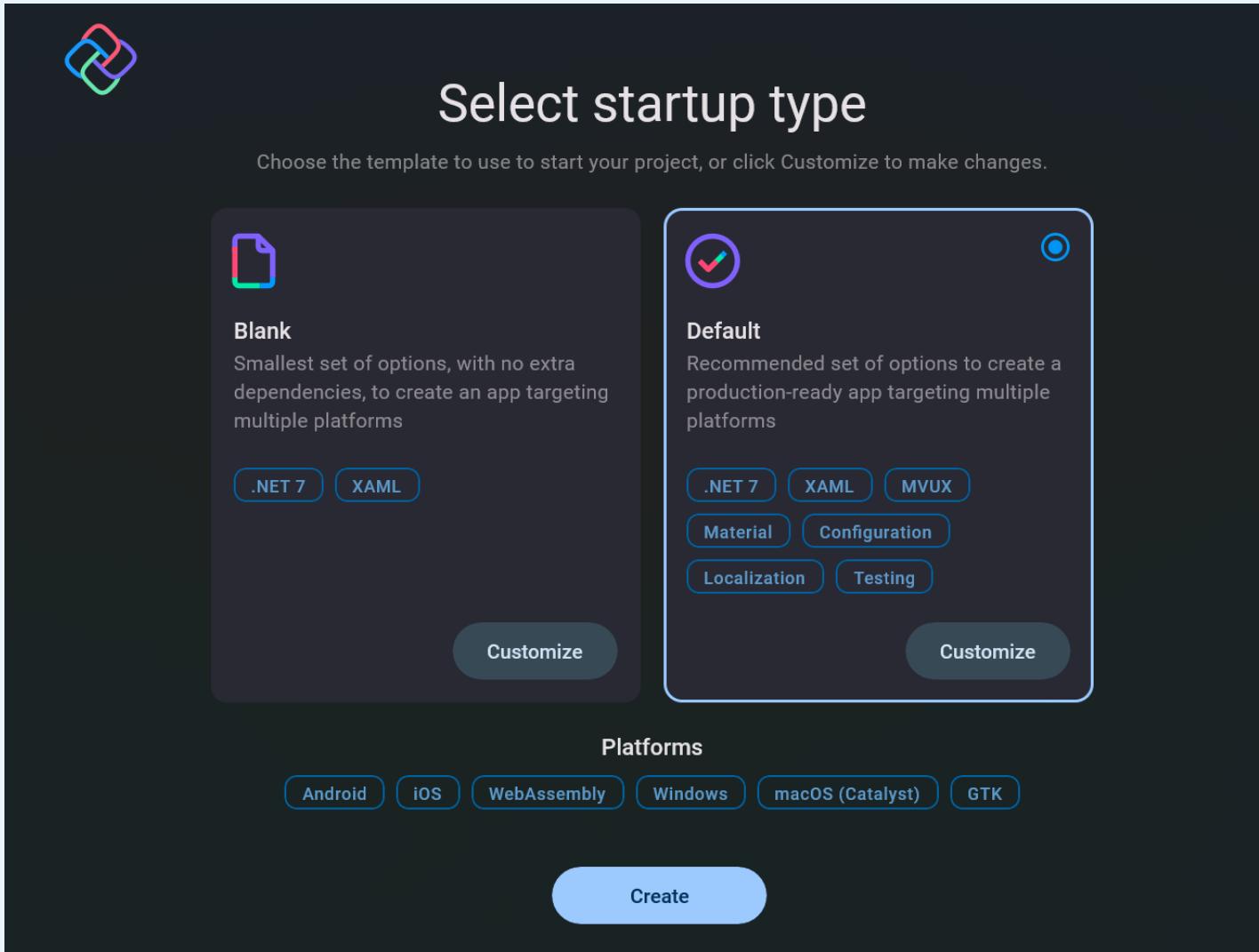
Everywhere .NET runs with **single** codebase

UI Platform + rich ecosystem

Global team

**Productivity** multipliers via **Figma** plugin & Extensions

# We have a wizard !

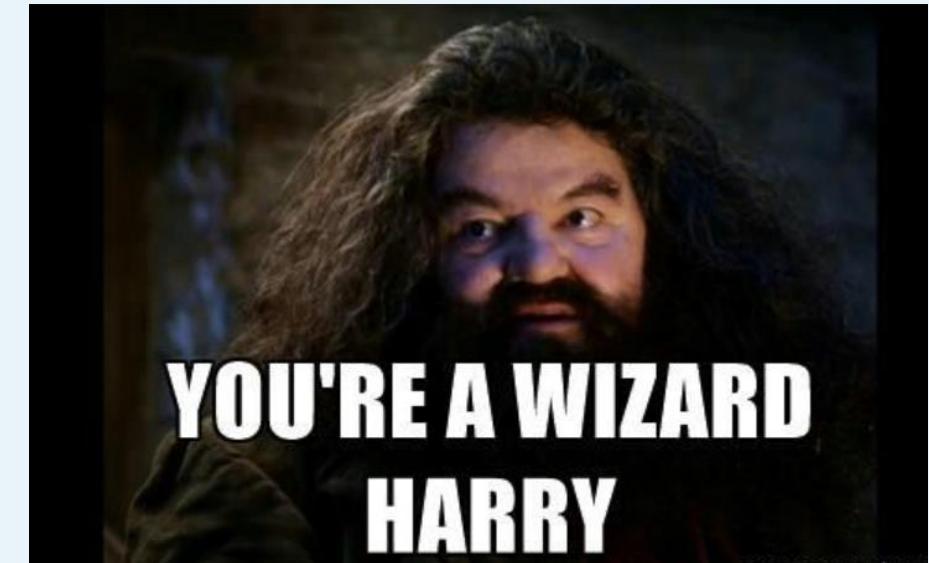


The screenshot shows the 'Select startup type' screen of the Fody project setup wizard. At the top, there's a small Fody logo icon. Below it, the title 'Select startup type' is displayed in large white font. A sub-instruction 'Choose the template to use to start your project, or click Customize to make changes.' is shown in smaller gray text.

Two startup type options are presented:

- Blank**: Described as a "Smallest set of options, with no extra dependencies, to create an app targeting multiple platforms". It includes buttons for ".NET 7" and "XAML".
- Default**: Described as a "Recommended set of options to create a production-ready app targeting multiple platforms". It includes buttons for ".NET 7", "XAML", "MVUX", "Material", "Configuration", "Localization", and "Testing".

Both options have a "Customize" button at the bottom right. Below the startup type sections, there's a "Platforms" section with buttons for "Android", "iOS", "WebAssembly", "Windows", "macOS (Catalyst)", and "GTK". At the very bottom is a large blue "Create" button.



# Find the differences



**WinUI**



**uno**<sup>®</sup>  
PLATFORM

`Microsoft.UI.Xaml.Controls.Button`  
`Microsoft.UI.Xaml.Controls.Border`

`Microsoft.UI.Xaml.Controls.Button`  
`Microsoft.UI.Xaml.Controls.Border`



# Total reuse!

## DatePicker

**39** Files

**600+ XAML** LoC

**11K+ C++** LoC

**30+** Unit Tests

November	13	2017
December	14	2018
January	15	2019
February	16	2020
March	17	2021
April	18	2022
May	19	2023
June	20	2024
July	21	2025
	✓	✗

# Beautiful, pixel-perfect UI

Consumer-grade UI

Hundreds of UI Components

Built in Themes, Light/Dark Mode

Customizable: Platform-specific look or  
same UI everywhere



# Hundreds of components



# Theming



## Fluent

### Buttons

#### Examples



#### Main variants



### CheckBox

#### Example



#### Variants



### Switches

#### Examples



### TextBox

#### Example



#### Variants



### Radio Button

#### Examples



### Buttons

#### Examples



#### Main variants



### TextBox

#### Example Filled

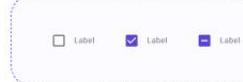


#### Example Outlined

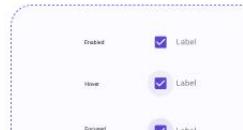


### CheckBox

#### Example



#### Variants

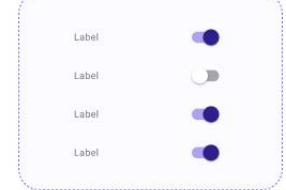


## Material



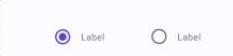
### Switches

#### Examples



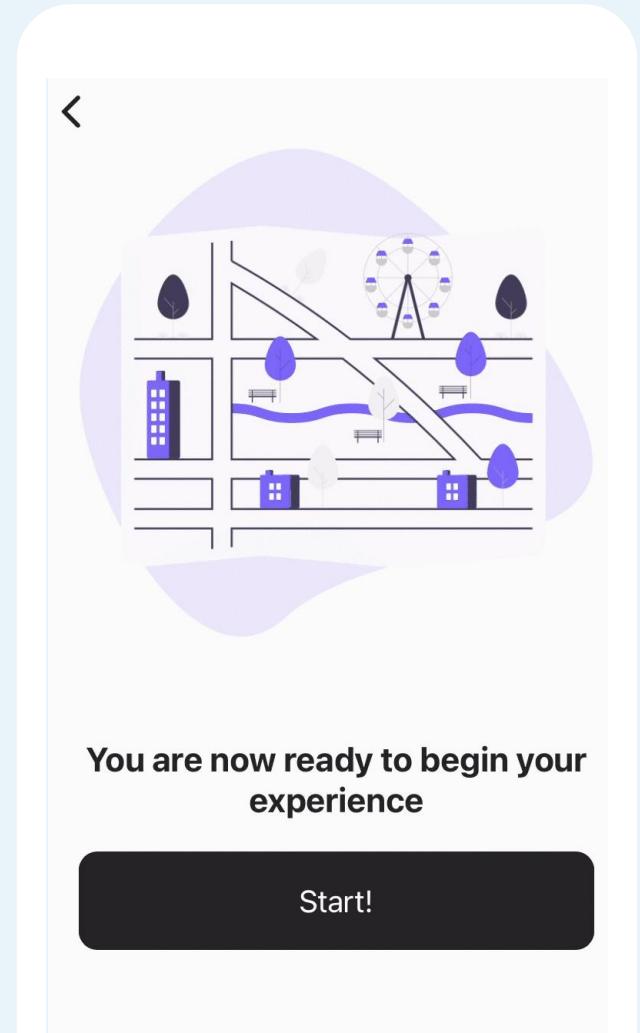
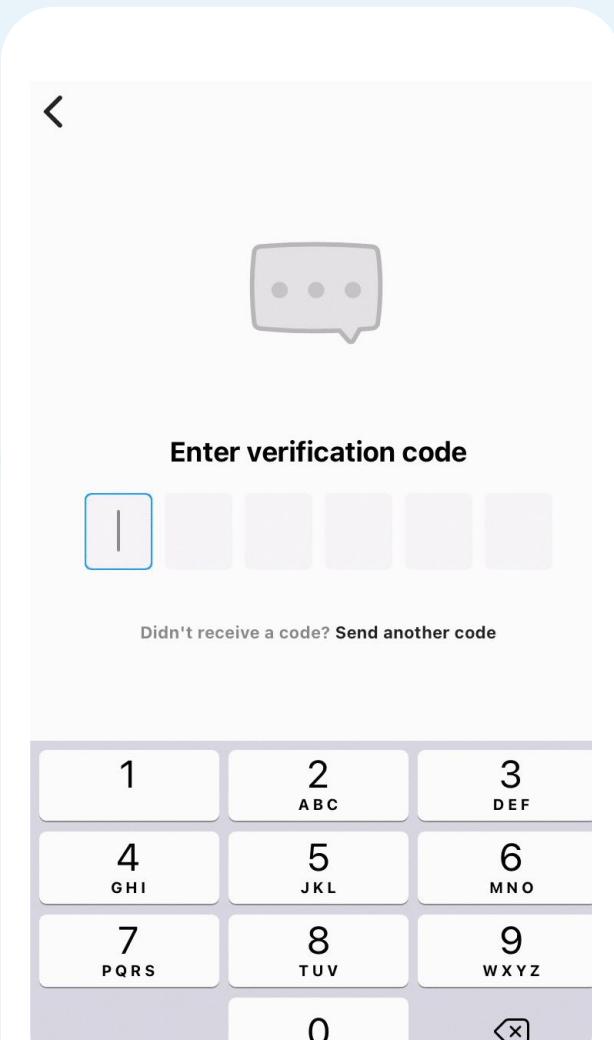
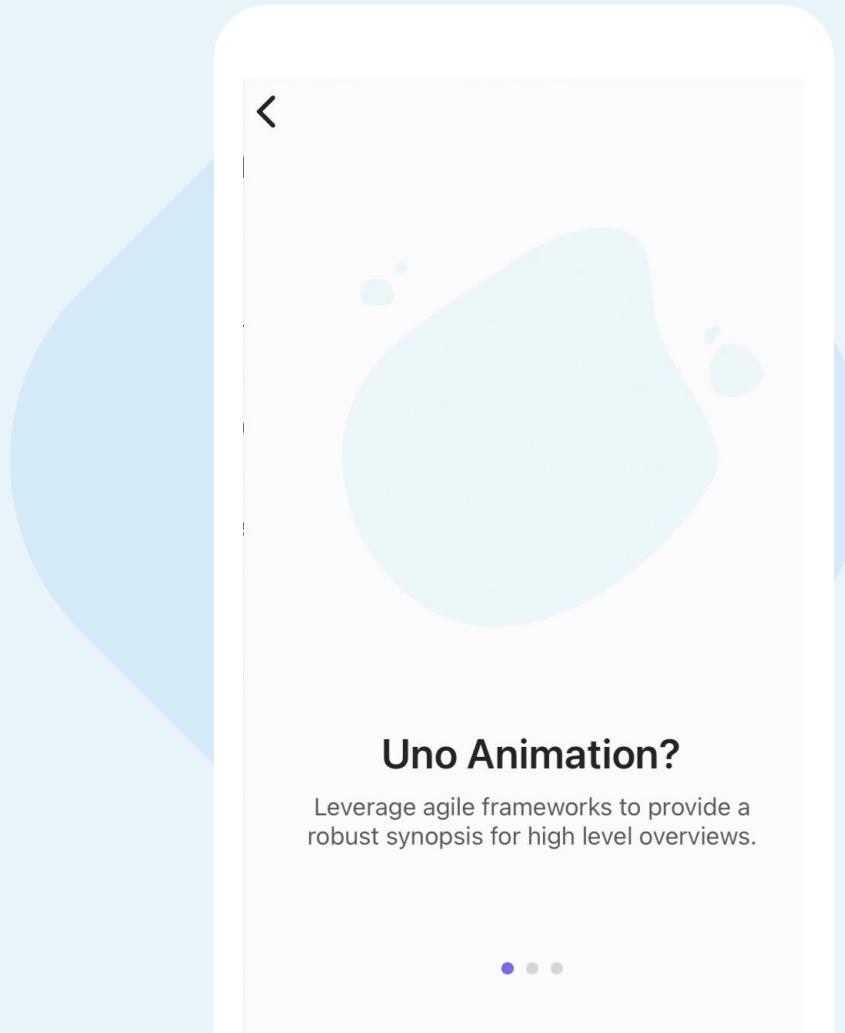
### Radio Button

#### Examples



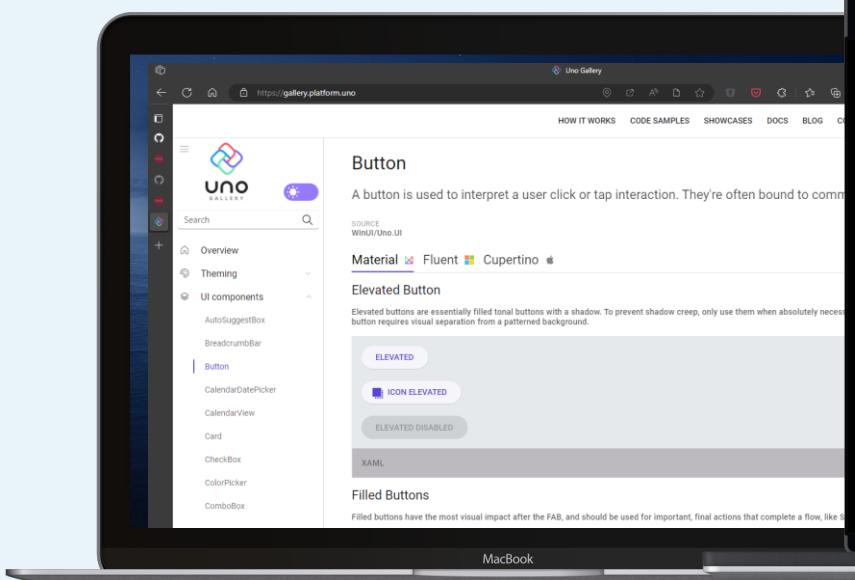
# Animations

Lottie and Rive supported

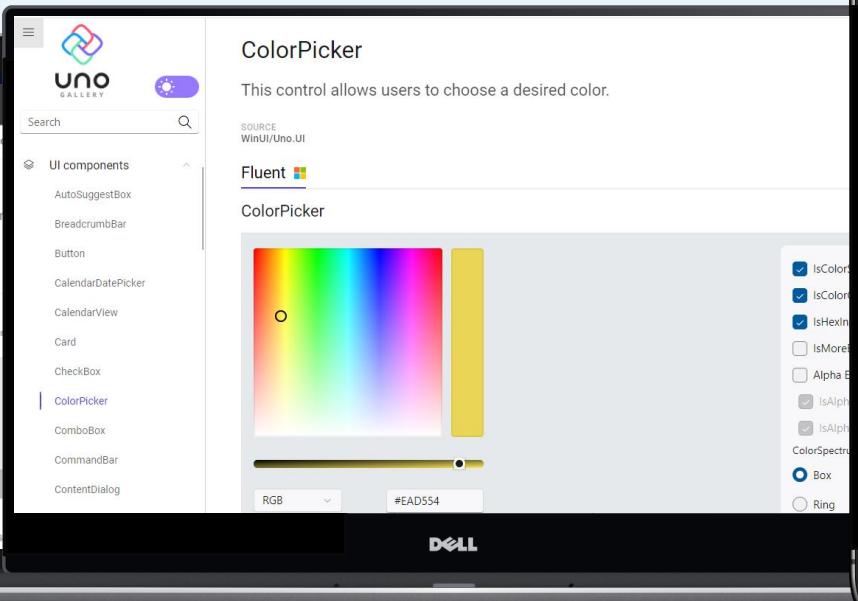


# Other UI features

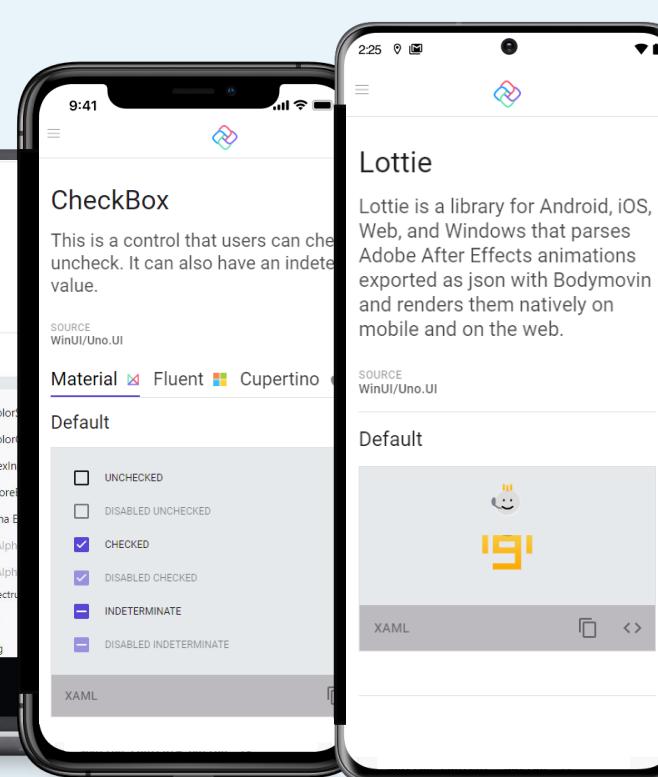
## Accessibility



## Localization



## Conditional XAML



## Adaptive triggers



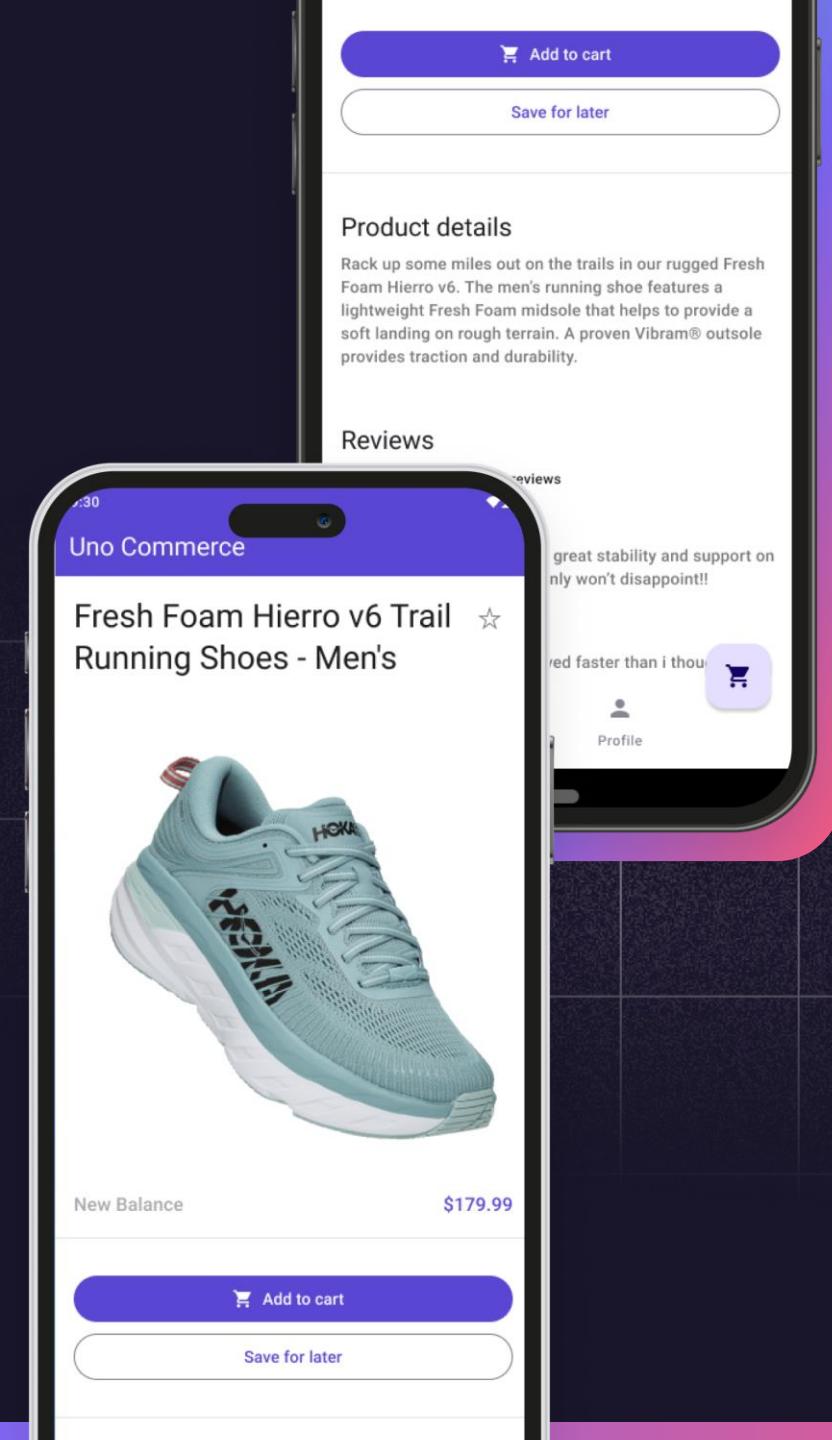
# Demo

## UI Controls

playground.platform.uno

gallery.platform.uno

toolkitlabs.dev



**Uno = UI?**  
**Not only!**

BrightnessOverride  
SimpleOrientationSensor  
**Launcher** Magnetometer  
ChatMessageManager  
MediaPlayer Accelerometer  
SpeechRecognizer  
**Dark Theme** VibrationDevice  
MapLocationFinder **Geolocator** PasswordVault  
Clipboard  
**ApplicationData**  
MapLocationFinder **JumpList** Gyroscope  
Barometer  
**PowerManager**  
DisplayInformation



Demo

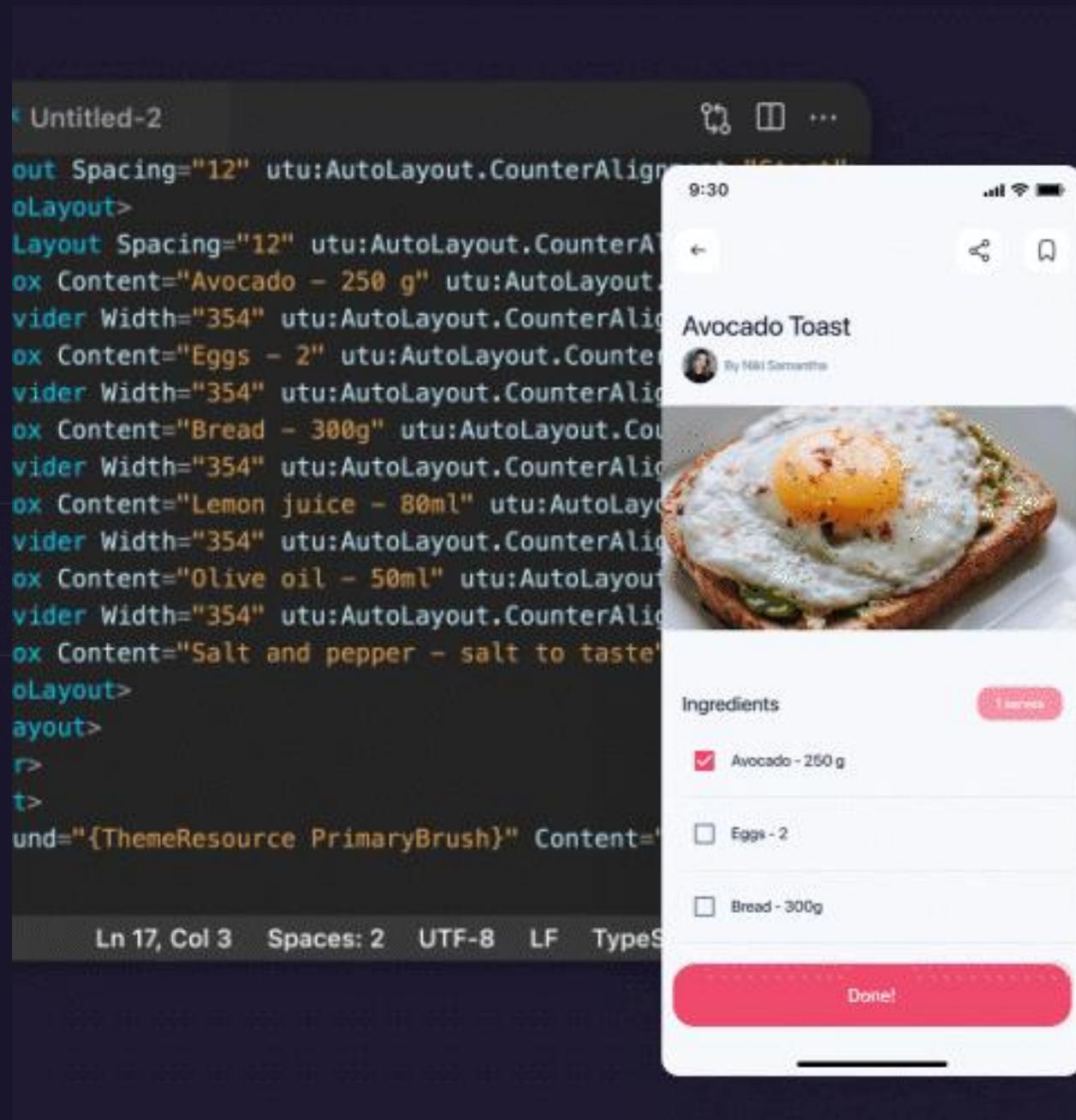
Non UI APIs  
[cutt.ly/apis](https://cutt.ly/apis)





**uno**<sup>®</sup>  
PLATFORM

# The most productive DevLoop Hot Reload



# UI with C# or XAML Markup

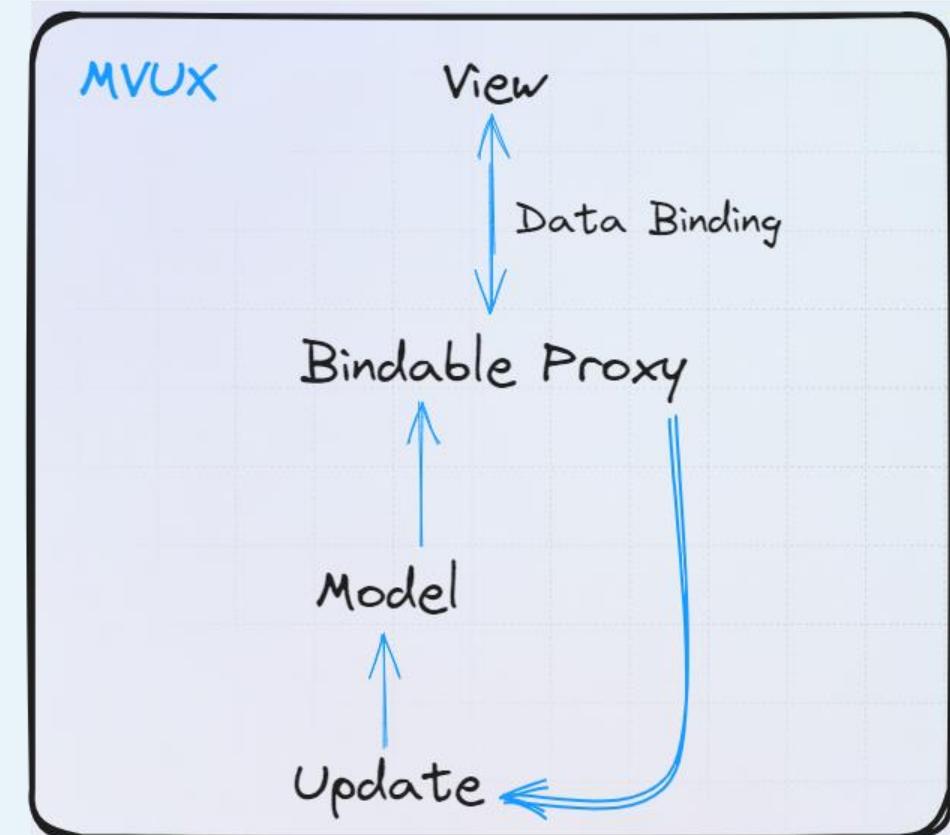
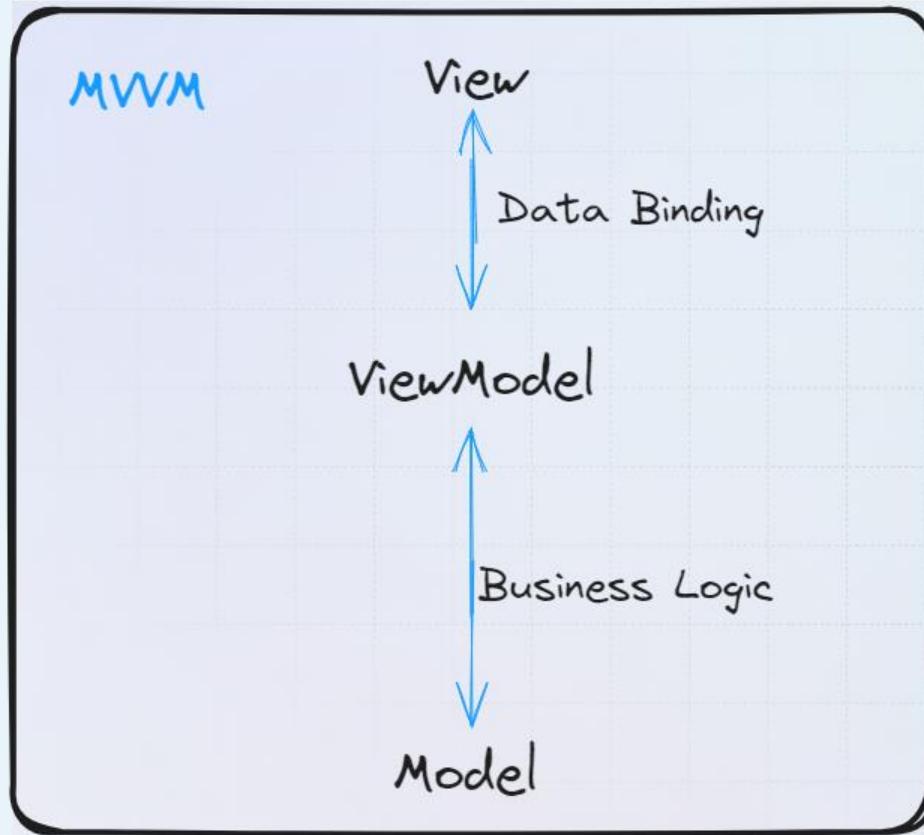


A screenshot of a Visual Studio IDE showing a .NET MAUI project named "SimpleCalculator". The project structure includes files like App.cs, AppResources.cs, GlobalUsings.cs, and MainPage.cs. The MainPage.cs file is open in the code editor, displaying XAML-like C# code for defining a UI. The code uses Uno.Extensions.Markup and Uno.Material libraries to define a header and output stack panel.

```
private ToggleButton Header(BindableBase vm) => new ToggleButton()
{
    .Grid(row: 0)
    .Margin(8, 24, 8, 0)
    .CornerRadius(20)
    .VerticalAlignment(VerticalAlignment.Center)
    .HorizontalAlignment(HorizontalAlignment.Center)
    .Background(Theme.Brushes.Background)
    .Style(Theme.Styles.ToggleButton)
    .IsChecked(x => x.Bind())
    .Content(
        new PathIcon()
        .Data(AppIcons.Light)
        .Foreground(Theme.Brushes.Foreground)
    )
    .ControlExtensions(
        alternateContent: new PathIcon()
        .Data(AppIcons.Dark)
        .Foreground(Theme.Brushes.Foreground)
    );
}

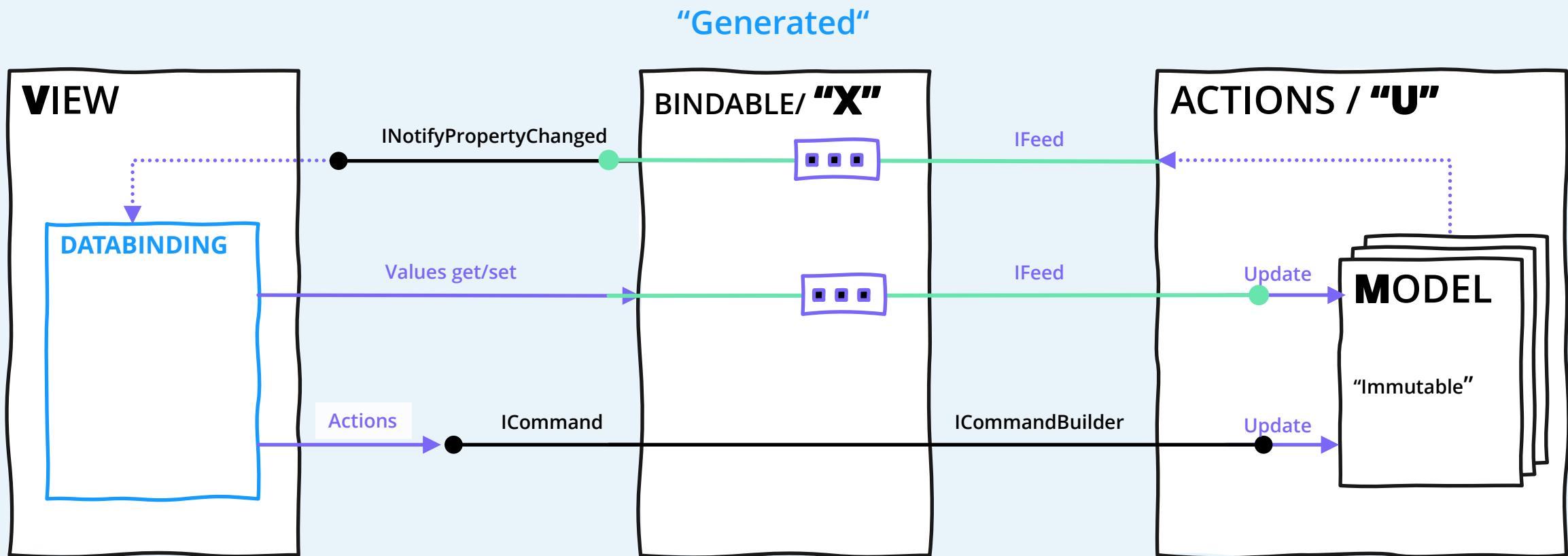
private StackPanel Output(BindableBase vm) => new StackPanel()
{
    .Grid(row: 2)
    .Spacing(16)
    .Padding(16, 8)
    .HorizontalAlignment(HorizontalAlignment.Center)
    .Children(
        new Grid()
        .RowDefinitions<Grid>("Auto, *, Auto, Auto")
        .MaxWidth(700)
        .Background(Theme.Brushes.Background)
        .VerticalAlignment(VerticalAlignment.Stretch)
        .SafeArea(SafeAreaInsetMask.VisibleBounds)
        .Children(
            Header(vm),
            Output(vm)
        )
    );
}
```

# MVVM or MVUX



# MVU-X (MVU eXtended)

MVU + MVVM



# Uno Extensions

## Hit the ground running

Quickly bootstrap new applications with commonly used, battle tested blocks – **Uno Extensions**

Right architecture from the start

Optional, modularity built in!



Dependency  
Injection



Configuration



Serialization



Hosting



HTTP



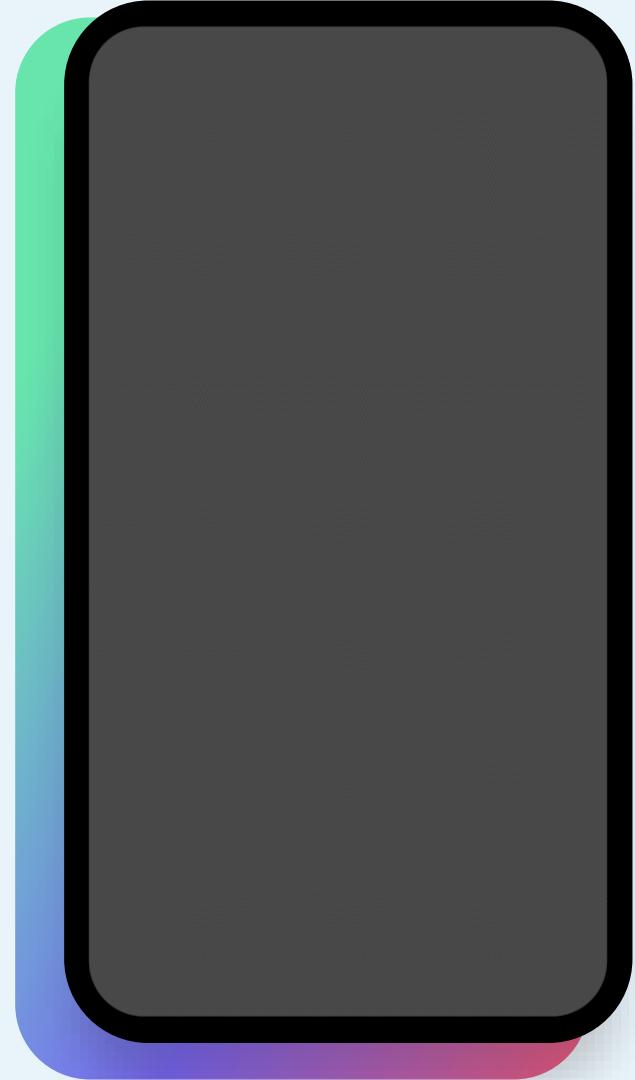
Logging



Environments



Localization



## Extensions: Navigation

**Abstraction** away from UI Layer

Easily **move between pages, open dialogs**  
etc.

Full UnoConf session on Navigation

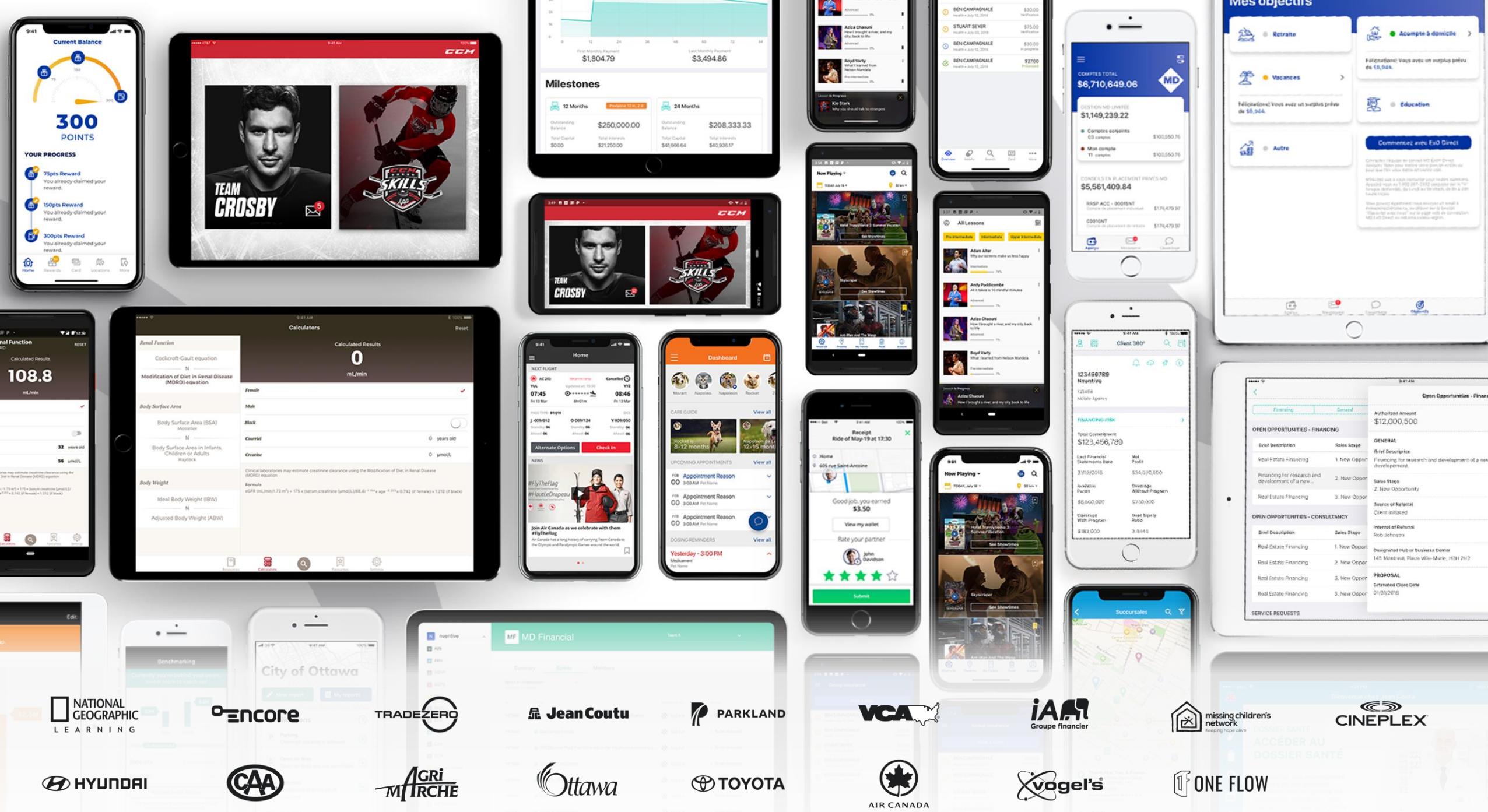
[See more on YouTube](#)



# For Figma



<https://aka.platform.uno/uno-figma-material-toolkit>





## Windows WPF to Web

Deployment, Performance & Security

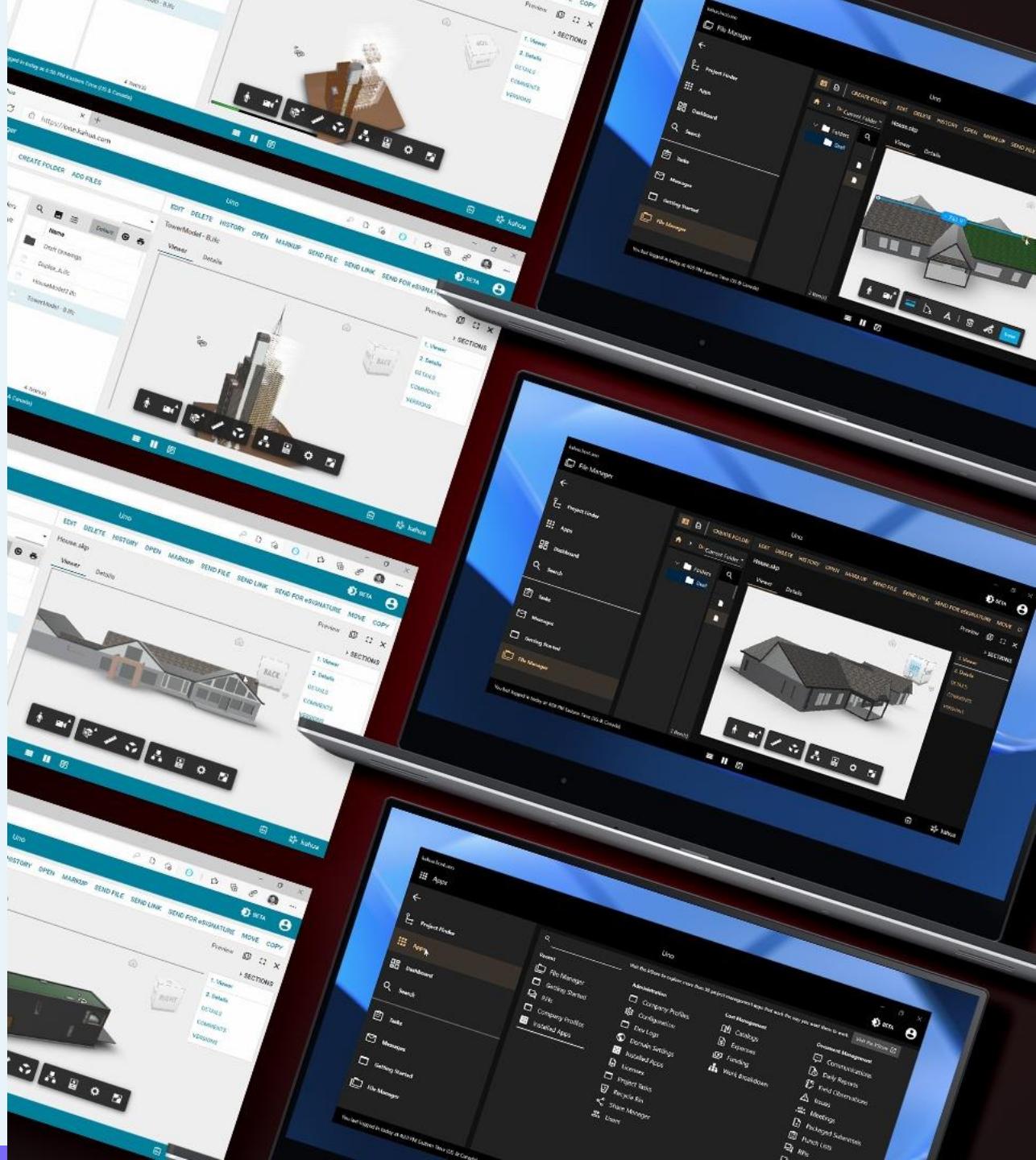
Accessibility & Localization

Code, Skill and Tools Reuse

kBuilder Low-code IDE next!

*"Uno was the only option for us to move 1m+ lines of WPF code to Web in record time. Our end-clients are extremely happy as our Web host now runs as fast as WPF, with all the same features, and doesn't require an install."*

*- Colin Whitlatch, CTO*





# Case study

NuGet Package Explorer

## Great Modernization Strategy

WinUI on the Web

30,000 Monthly Active Users

22% on non-Windows Machines

96% Web users post-deployment

[NuGet.info](https://nuget.info)

The screenshot shows the NuGet Package Explorer interface with the search bar set to "Uno platform". The results list several packages:

- Uno.UI.RemoteControl** by inventive, 364.4k downloads, v3.9.0-dev.58
- Uno.UIMaps** by inventive, 122.3k downloads, v3.9.0-dev.58
- Uno.Foundation.Runtime.WebAssembly** by inventive, 144.8k downloads, v3.9.0-dev.58 (selected)
- Uno.WinUI.Maps** by inventive, 96.8k downloads, v3.9.0-dev.58
- Uno.UI.DualScreen** by inventive, 122.4k downloads, v3.9.0-dev.58
- Uno.UITest** by Uno.UITest, 52.1k downloads, v1.1.0-dev.24
- Uno.UITest.Xamarin** by Uno.UITest.Xamarin, 61.5k downloads, v1.1.0-dev.24

The right pane displays detailed information for the selected package, **Uno.Foundation.Runtime.WebAssembly**:

- Description:** This package provides the .NET interoperability support for WebAssembly in Uno Platform projects.
- Version:** 3.9.0-dev.58
- Author(s):** inventive
- License:**
- Readme:**
- Project URL:** <https://github.com/unoplatform/uno>
- Report Abuse:**
- Tags:**

Below the package list, there's a browser window showing the NuGet.info website for the Uno platform packages:

- Uno.UI.RemoteControl** by inventive 364.4K downloads, v3.8.6
- Uno.Foundation.Runtime.WebAssembly** by inventive 144.8K downloads, v3.8.6 (selected)
- Uno.UIMaps** by inventive 122.3K downloads, v3.8.6
- Uno.UI.DualScreen** by inventive 122.4K downloads, v3.8.6
- Uno.UITest** by Uno.UITest, 52.1K downloads, v1.0.0

At the bottom right of the browser window, it says "Powered by NuGet.info".

# Easy to Start With

# docs.platform.uno



## *Sample apps*



UNO  
PLATFORM

DEVELOPERS BLOG DOCS SUPPORT [Get Started](#)

Overview

Search Docs...

Overview

> Get Started

> Fundamentals

> Extensions

> Themes

> Toolkit

> Figma

# Uno Platform documentation

**Get Started**  
Set up with your OS and IDE of choice.

**How-tos and Tutorials**  
See real-world examples with working code.

**Developing with Uno Platform**  
Learn the principles of cross-platform development with Uno.

**API Reference**  
Browse the set of available controls and their properties.

In This Article

[Get Started](#)

[How-tos and Tutorials](#)

[Developing with Uno Platform](#)

[API Reference](#)

[Top questions about Uno Platform](#)

[Improve this Doc](#)

Uno Platform lets you write an application once in XAML and C#, and deploy it to any target platform.

## Top questions about Uno Platform

**What platforms can I target with Uno Platform?**  
Uno Platform applications run on Web (via WebAssembly), Windows, Linux, macOS, iOS, Android and Tizen.  
[Check supported platform versions.](#)

## Tutorials

## *Tutorials*

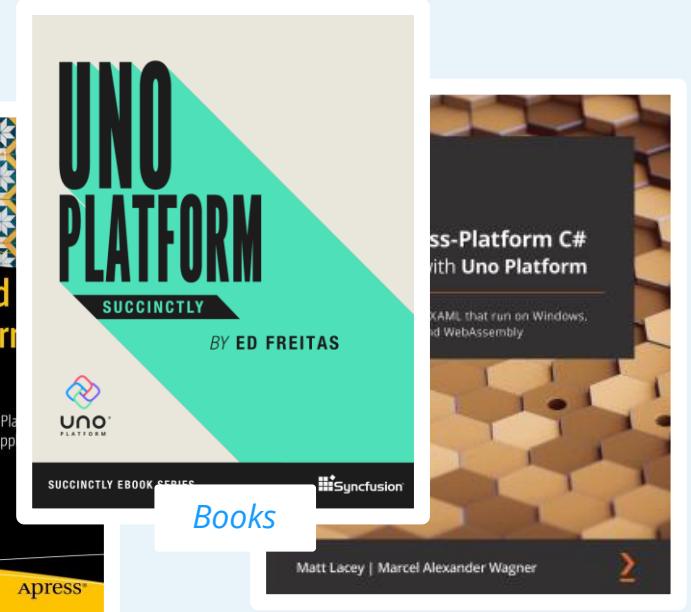
```
Xaml
```

```
1 <Page xmlns:u恩="using:Uno.Extensions.Navigation.UI" xm
2 <Page.Resources>
3   <x:String x:Key="Icon_MoonIcon">F1 M 10.34000015258
4   <x:String x:Key="Icon_SunIcon">F1 M 5.760000228818
5 </Page.Resources>
6 <utu:AutoLayout Background="{ThemeResource Background
7   <ToggleButton Background="{ThemeResource SecondaryC
8     <ToggleButton.Content>
9       <PathIcon Data="{StaticResource Icon_SunIcon}"
10      </ToggleButton.Content>
11      <um:ControlExtensions.AlternateContent>
12        <PathIcon Data="{StaticResource Icon_MoonIcon}"
13        </um:ControlExtensions.AlternateContent>
14      </ToggleButton>
15      <utu:AutoLayout Spacing="16" Padding="16,8" Primary
16        <textBlock Text="{Binding Calculator.Equation}" u
17        <textBlock Text="{Binding Calculator.Output}" utu
18      </utu:AutoLayout>
19      <utu:AutoLayout Spacing="16" Padding="16,0">
20        <utu:AutoLayout Spacing="16" Orientation="Horizon
21          <Button BackGround="{ThemeResource PrimaryConta
```

*Every XAML example is Uno  
Platform example!*

The screenshot shows a course page from Pluralsight. At the top left is the Udemy logo, and at the top right is the Pluralsight logo. Below the logos, the course title "Uno 3 Platform Fundamentals" is displayed in large white text. Underneath the title is a blue button labeled "EXPANDED LIBRARY". Below the title, there is a star rating icon followed by the text "by Thomas Claudius Huber". A brief course description follows: "Uno Platform allows you to run your WinUI code not only on Windows, but also on Android, iOS, macOS, Linux, and the web. This course will teach you how to use Uno Platform, WinUI, and .NET to build a multi-platform app with XAML and C#." At the bottom left is a circular button with a play icon and the text "▶ Preview this course".

## *Free and Paid Courses*



## *Books*

# Extensive Documentation

## WPF, Xamarin.Forms, MAUI, Silverlight migration

**Migrating WPF Apps to Web**

This article covers architecture and implementation considerations for migrating [WPF](#) applications to the Web using Uno UI.

**Introduction**

**Silverlight to Uno Migration**

**Introduction**

Despite the last version of Silverlight 5 being released back in 2011, the platform continued to be popular and there are a number of applications that have been developed and remain in use. Unfortunately, Silverlight will reach the end of support on October 12, 2021 and there continues to be significant limitations for Silverlight development and deployment:

- Silverlight SDK available in Visual Studio 2012
  - Can be opened in Visual Studio 2017 and 2019 with the unofficial extension [Silverlight for Visual Studio](#)
- Silverlight plugin runs in Internet Explorer 10 and 11 only
- No macOS browser support

If you maintain one of these Silverlight applications, it is time to consider migrating to a supported platform. For those that wish to continue with XAML and C#, the Uno Platform is a natural choice for continuing the delivery of such applications on Windows, iOS, Android, and WebAssembly.

**TIP**  
You can learn more about the Uno Platform [here](#).

**Silverlight app review**

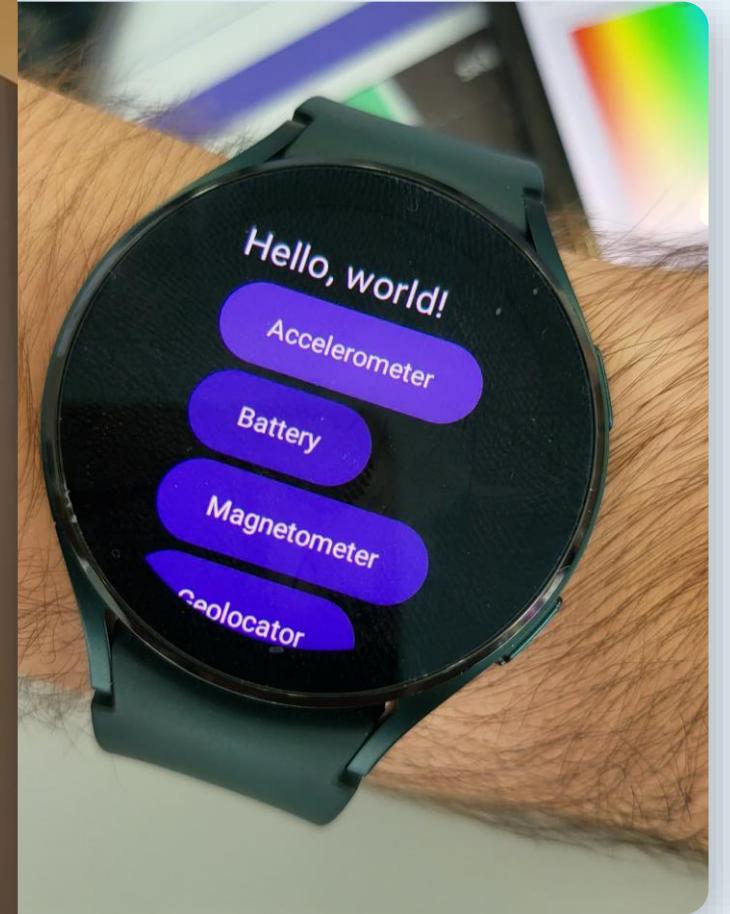
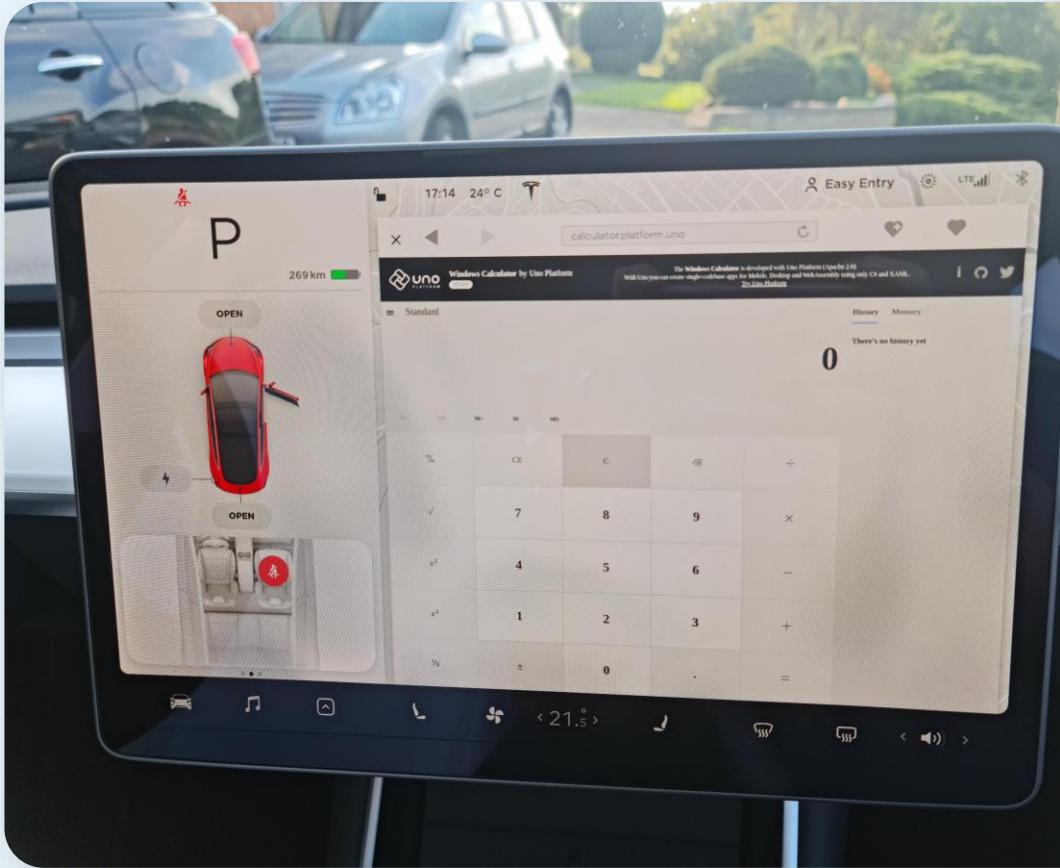
The following video demonstrates the Silverlight TimeEntryRIA application

**In This Article**

- Introduction
- Silverlight app review
- First steps - scoping the migration
- Why choose Uno?
- Starting migration
- Next unit: Create Uno solution

docs.platform.uno

# It really runs **everywhere**



# THANKS!

1

Try Uno Platform  
[platform.uno](https://platform.uno)

2

Chat with us on Discord  
[platform.uno/discord](https://platform.uno/discord)  
#uno-platform

3

Report issues or contribute  
[github.com/unoplatform](https://github.com/unoplatform)



<https://kazoo.dev>



@BiloganSteve



@kaz0