

# .NET MAUI:

One ( Codebase ) for All ( Apps )

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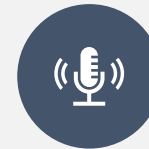
**Charles Lakes II**



# About Me:



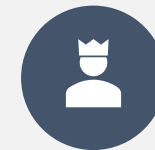
Software  
Engineer.



Community  
Speaker.



M365  
Blogger.



Middle-child.

# Objectives:

## What

Cross-platform

Origin + Timeline

Blazor Hybrid

## Why

Leadership

Marketing

Developers

## How

Layouts

Visual Elements

Shared Resources



# The What

- ❑ Cross-platform
- ❑ Origin + Timeline
- ❑ Blazor Hybrid

# The Why

- ☐ Leadership
- ☐ Marketing
- ☐ Developers

# The How

## ☐ Layouts

- Absolute
- Stack
- Grid

## ☐ Visual Elements

- Image
- Button
- Label

## ☐ Shared Resources

- Fonts
- Colors
- Styles

Modifying — Visual Studio Community 2022 — 17.10.3

Workloads Individual components Language packs Installation locations

## Web & Cloud (4)



### ASP.NET and web development

Build web applications using ASP.NET Core, ASP.NET, HTML/JavaScript, and Containers including Docker supp...



### Azure development

Azure SDKs, tools, and projects for developing cloud apps and creating resources using .NET and .NET Framework....



### Python development

Editing, debugging, interactive development and source control for Python.



### Node.js development

Build scalable network applications using Node.js, an asynchronous event-driven JavaScript runtime.



## Desktop & Mobile (5)



### .NET Multi-platform App UI development

Build Android, iOS, Windows, and Mac apps from a single codebase using C# with .NET MAUI.



### .NET desktop development

Build WPF, Windows Forms, and console applications using C#, Visual Basic, and F# with .NET and .NET Frame...



### Desktop development with C++

Build modern C++ apps for Windows using tools of your...



### Windows application development

Build applications for the Windows Platform using WinUI...



## Installation details

- ▶ Visual Studio core editor
- ▶ ASP.NET and web development
- ▶ Python development
- ▶ Node.js development
- ▶ .NET Multi-platform App UI develop...
- ▶ Game development with Unity
- ▼ Office/SharePoint development
  - ▼ Included
    - ✓ Office Developer Tools for Visual Studio
    - ✓ .NET Framework 4.7.2 development tools
    - ✓ Developer Analytics tools
  - ▼ Optional
    - ☒ Visual Studio Tools for Office (VSTO)
    - ☒ Web Deploy
    - ☒ IntelliCode
    - ☒ .NET Framework 4.8 development tools
    - ☐ ...

### Location

C:\Program Files\Microsoft Visual Studio\2022\Community

Remove out-of-support components

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Total space required 0 B

Install while downloading ▼

Close

# Visual Studio 2022

## Open recent

Search recent (Alt+S)



### ▲ This month

 <b>testProject1.sln</b> C:\Users\user\Documents\testProject1	1/10/2022 11:30 AM
 <b>testProject2.sln</b> C:\Users\user\Documents\testProject2	1/10/2022 11:30 AM
 <b>testProject3.sln</b> C:\Users\user\Documents\testProject3	1/10/2022 11:30 AM
 <b>testProject4.sln</b> C:\Users\user\Documents\testProject4	1/10/2022 11:30 AM
 <b>testProject5.sln</b> C:\Users\user\Documents\testProject5	1/10/2022 11:30 AM
 <b>testProject6.sln</b> C:\Users\user\Documents\testProject6	1/10/2022 11:30 AM

## Get started



### Clone a repository

Get code from an online repository like GitHub or Azure DevOps



### Open a project or solution

Open a local Visual Studio project or .sln file



### Open a local folder

Navigate and edit code within any folder



### Create a new project


Choose a project template with code scaffolding to get started



[Continue without code →](#)





 New to .NET MAUI? [Click here to learn more!](#) | [Don't show again](#)

C# SampleMauiAppDemo (net8.0-android)

ContentPage

ContentPage

```
1 <?xml version="1.0" encoding="utf-8" ?>
2 <ContentPage xmlns="http://schemas.microsoft.com/dotnet/2021/maui"
3   xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
4   x:Class="SampleMauiAppDemo.MainPage">
```

6    ↓    <ScrollView>

Sort by: Default

- a. ☐
- b. ☐
- c. ☐

Search (Ctrl+E)



## ▲ C# Items

Code

## Data

## General

▶ Web

## SQL Server

## Workflow

## Xamarin.Forms

## .NET MAUI

## Android



## .NET MAUI ContentPage (C#)

## C# Items



## .NET MAUI ContentPage (XAML)

## C# Items



## .NET MAUI ContentView (C#)

## C# Items



## .NET MAUI ContentView (XAML)

## C# Items



## .NET MAUI ResourceDictionary (XAML)


## C# Items

**Type:** C# Items

A page for displaying content using XAML.

```
19 FontSize="96"
20 SemanticProperties.HeadingLevel="Level1" />
```

```
22 <Label
23     Text="Welcome to &#10;.NET Multi-platform App UI"
24     Style="{StaticResource SubHeadline}"
25     SemanticProperties.HeadingLevel="Level2"
26     SemanticProperties.Description="Welcome to dot ne
```

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C# SampleMauiAppDemo (net8.0-android)

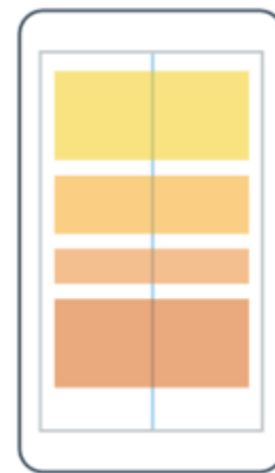
ContentPage

ContentPage

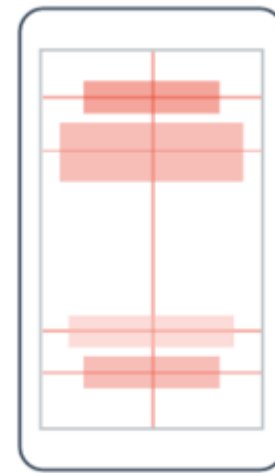
```

1      <?xml version="1.0" encoding="utf-8" ?>
2      <ContentPage xmlns="http://schemas.microsoft.com/xaml"
3                  xmlns:x="http://schemas.microsoft.com/xaml"
4                  x:Class="SampleMauiAppDe
5
6      <ScrollView>
7          <VerticalStackLayout
8              Padding="30,0"
9              Spacing="25">
10             <Image
11                 Source="dotnet_bot.png"
12                 HeightRequest="185"
13                 Aspect="AspectFit"
14                 SemanticProperties.Des
15
16             <Label
17                 Text="Hello, World!"
18                 Style="{StaticResource
19                 FontSize="96"
20                 SemanticProperties.Head
21
22             <Label
23                 Text="Welcome to &#10;.
24                 Style="{StaticResource
25                 SemanticProperties.Head
26                 SemanticProperties.Desc

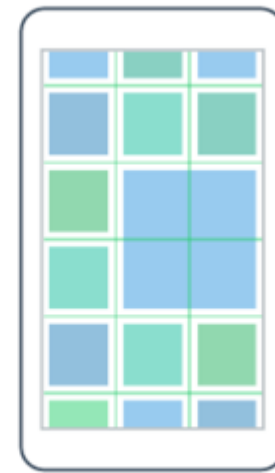
```



## StackLayout



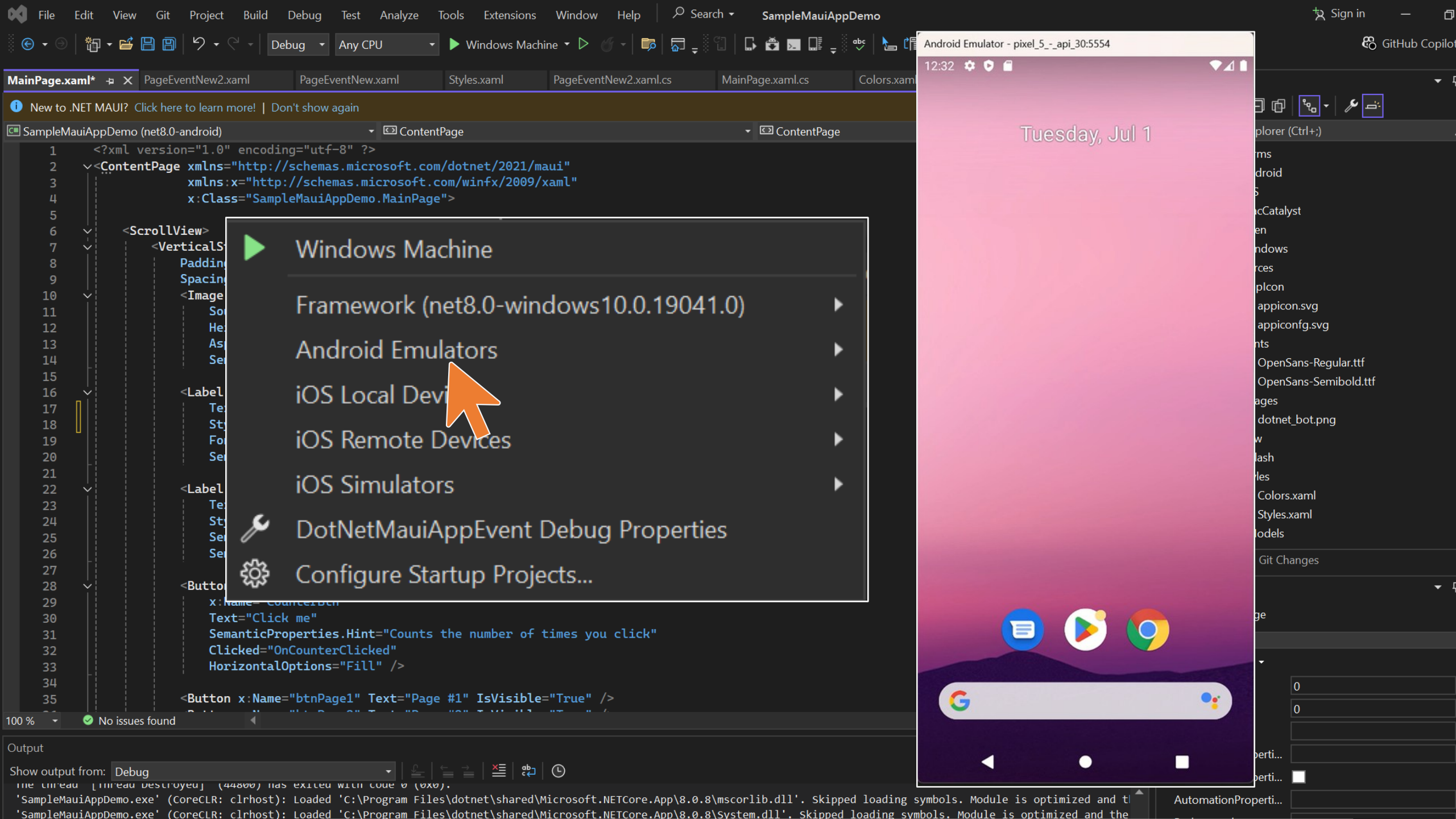
## AbsoluteLayout



Grid



## FlexLayout



# The How

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# Recap:

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# Contact:



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@The2Lakes



/losodamus



Charles is a technical speaker and low-code advocate with a pro-code background, specializing in transforming business data architecture. With a passion for innovation, he shares his expertise to solve complex business problems and guide organizations in reimagining their legacy processes, advancing automation initiatives, streamlining operations, and reducing infrastructure costs.