



Dev Days



#XamarinDevDays

Native iOS & Android Development with Xamarin

Presenter Name
Presenter Twitter
Presenter Title

Xamarin – Your Complete Mobile Solution



Develop



Test



Build



Distribute



Monitor

 **Xamarin** test cloud >  MonkeyChat > master > May 24, 2016 7:37 PM

 New Test Run

[Support](#)

[Docs](#)


 James ▾

 Overview

RECORDER TEST
ScrollToEvent[AppView: Class=Xamarin.TestRec...



 Filter devices

ALL RESULTS 

Recorder Test

New Test 8 ⚡

- Tapped on view with class: AppCompatActivity 6 ⚡
- Tapped on view with class: EditText
- Tapped on view with class: AppCompatActivity
- Tapped on view with class: 1 ⚡



HTC One A9
Android 6.0.1



Huawei Nexus 6P
Android 6.0.1



LG Nexus 5X
Android 6.0.1



Samsung Galaxy S6
Android 5.1.1



HTC One M9
Android 5.0.2



Samsung Galaxy S6 Ed...
Android 5.0.2



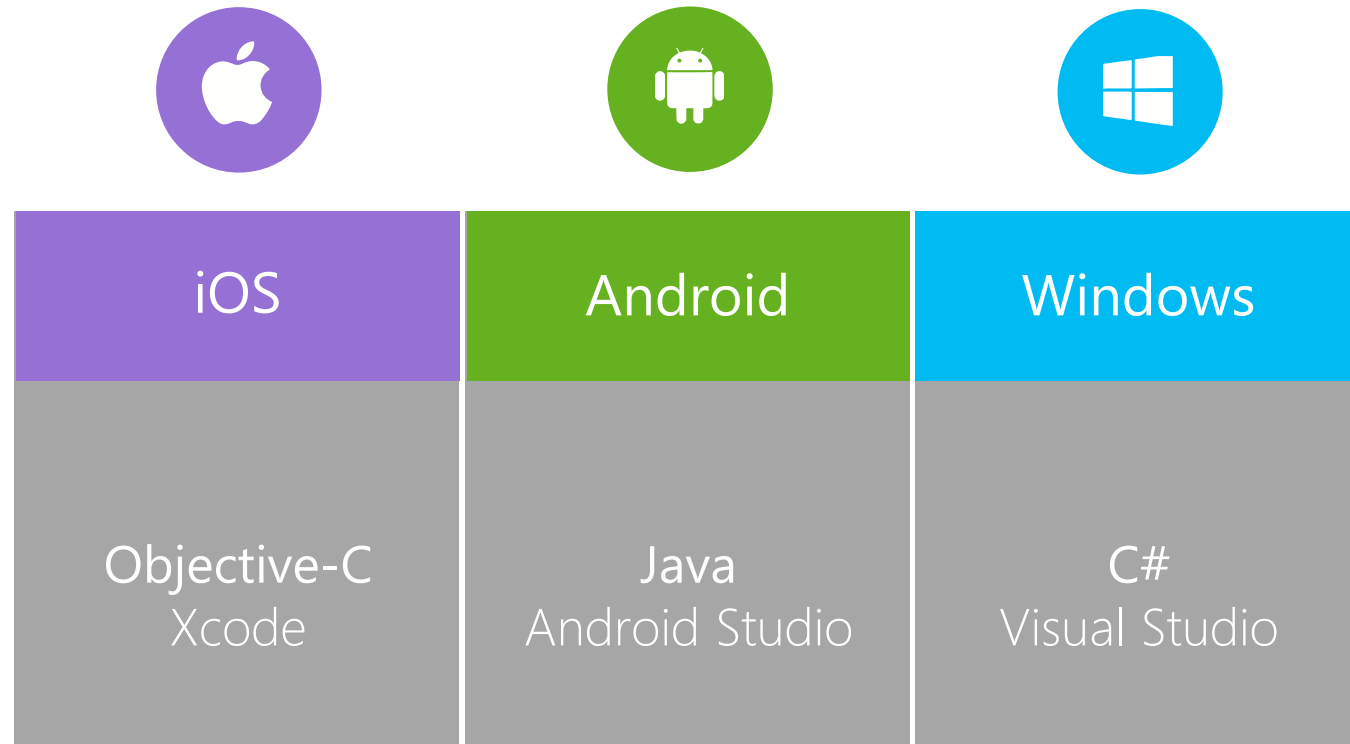
Samsung Galaxy S5
Android 5.0



Samsung Galaxy Note ...
Android 4.3

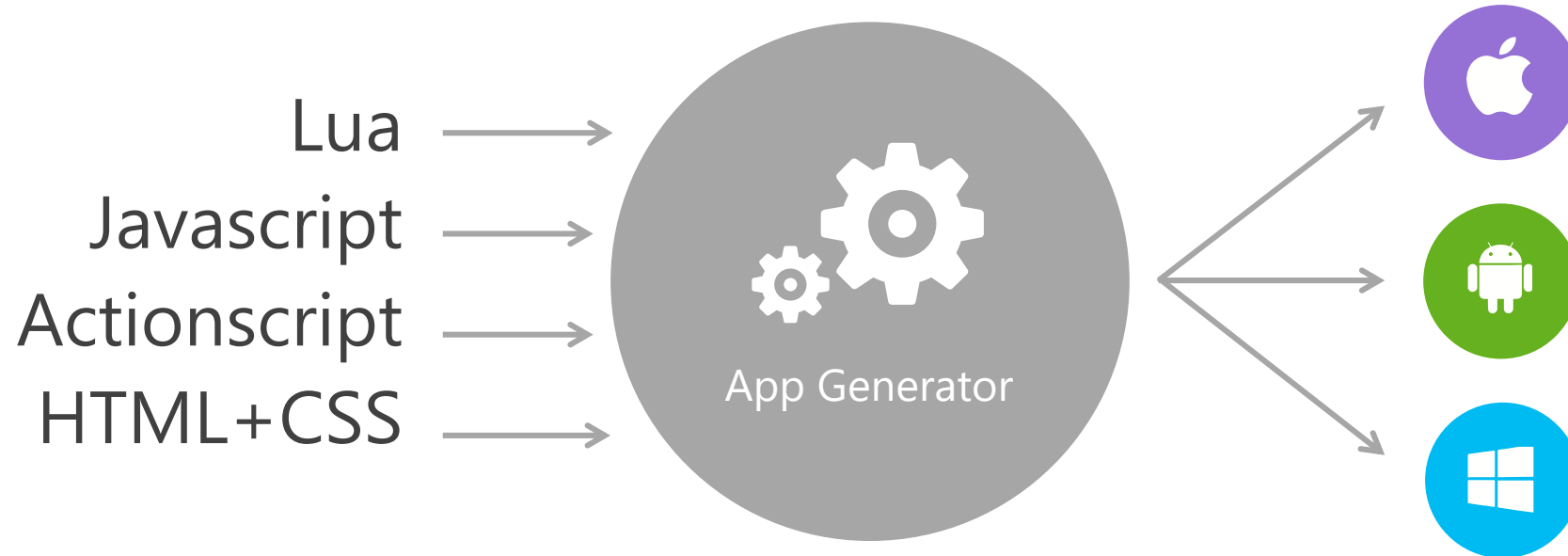
Architecting Mobile Apps

Silo Approach



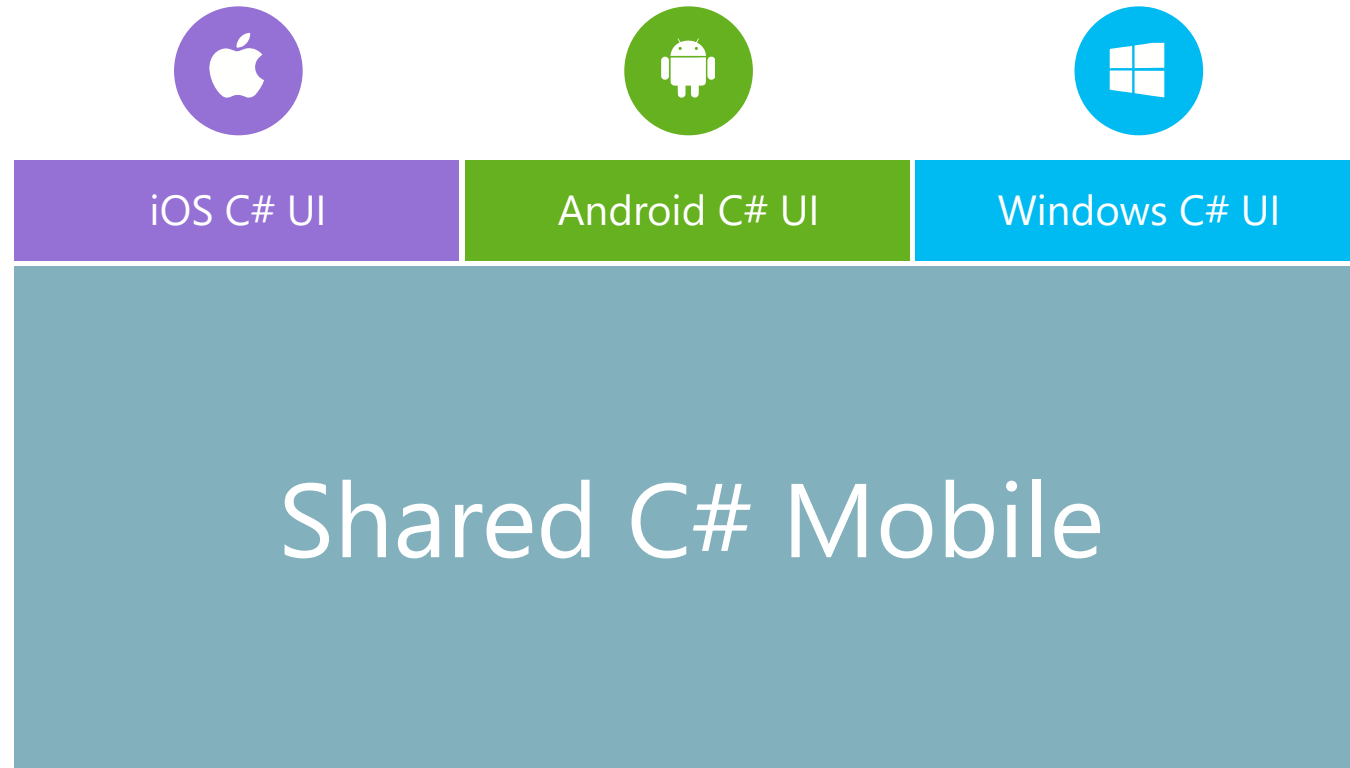
No shared code • Many languages & development environments • Multiple teams

Write Once, Run Anywhere



Limited native API access • Slow performance • Poor user experience


Xamarin's Unique Approach



Shared C# codebase • 100% native API access • High performance

Windows APIs

Microsoft.Phone	Microsoft.Networking	Windows.Storage	Windows.Foundation	Microsoft.Devices
System.Net	System	System.IO	System.Linq	System.Xml
System.Data	System.Windows	System.Numerics	System.Core	System.ServiceModel



C#


iOS – 100% API Coverage

UIKit	UIKit	iBeacon	CoreGraphics	CoreMotion
System.Net	System	System.IO	System.Linq	System.Xml
System.Data	System.Windows	System.Numerics	System.Core	System.ServiceModel

C#

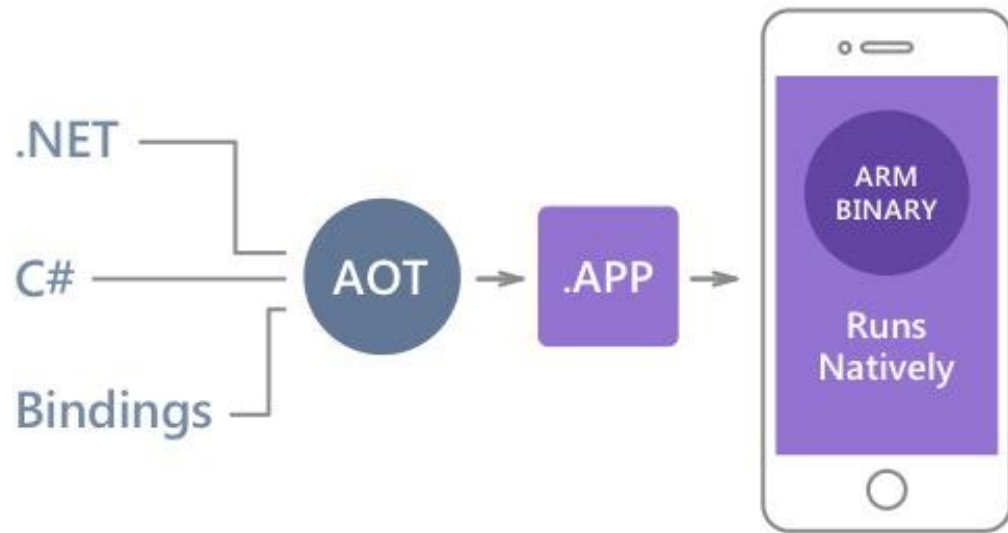
Android – 100% API Coverage

Text-to-speech	ActionBar	Printing Framework	RenderScript	NFC
System.Net	System	System.IO	System.Linq	System.Xml
System.Data	System.Windows	System.Numerics	System.Core	System.ServiceModel

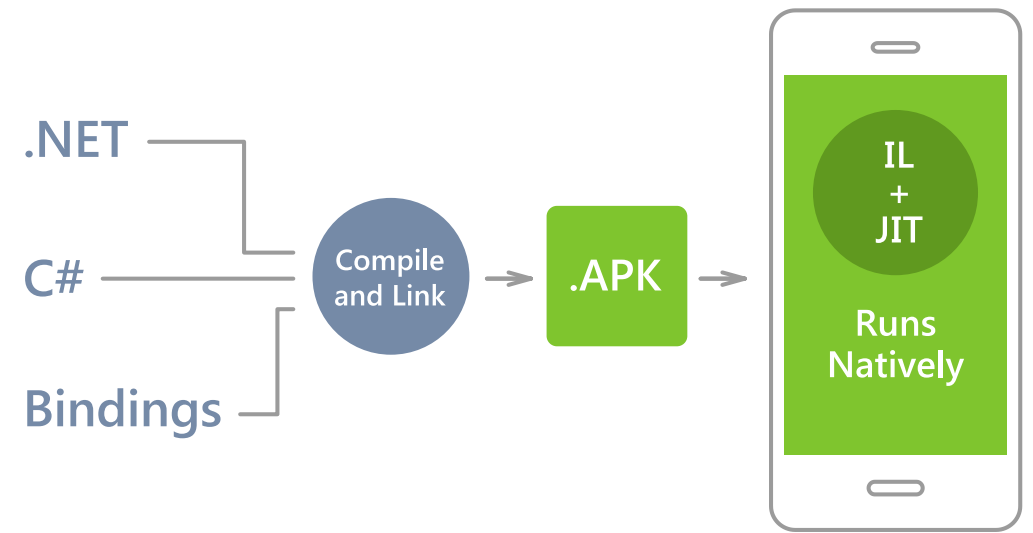


C#

Native Performance

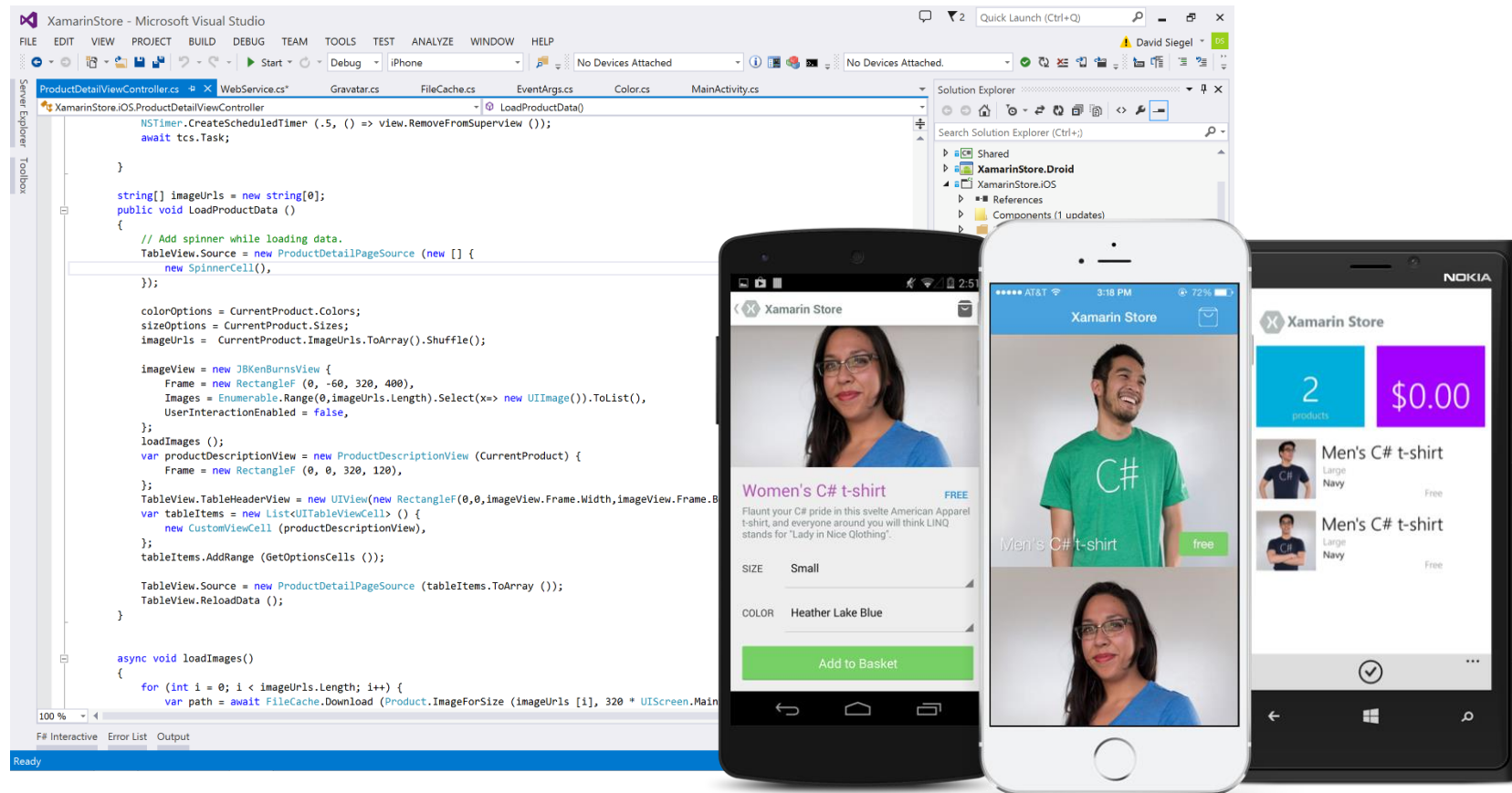


Xamarin.iOS does full Ahead Of Time (AOT) compilation to produce an ARM binary for Apple's App Store.



Xamarin.Android takes advantage of Just In Time (JIT) compilation on the Android device.

Anything you can do in Objective-C, Swift, or Java can be done in **C#** and Visual Studio with Xamarin.



✓ Always Up-to-Date

Same-day support:

- iOS 5
- iOS 6
- iOS 7
- iOS 8
- iOS 9
- iOS 10

Full support for:

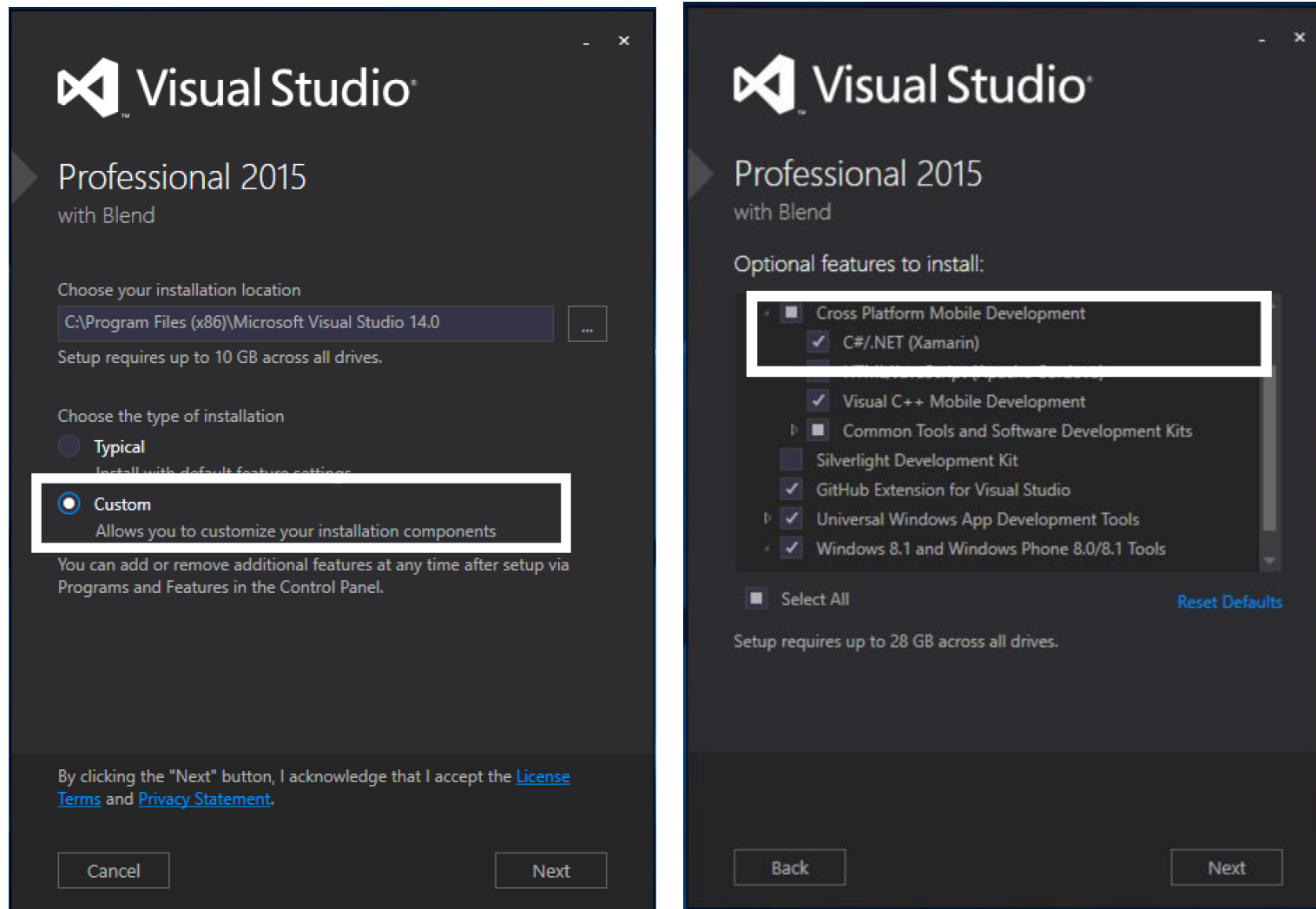
- Apple Watch
- Android Wear
- Amazon Fire TV
- Google Glass
- and much more

Development Experience

Xamarin is included in Visual Studio

Including Community Edition!

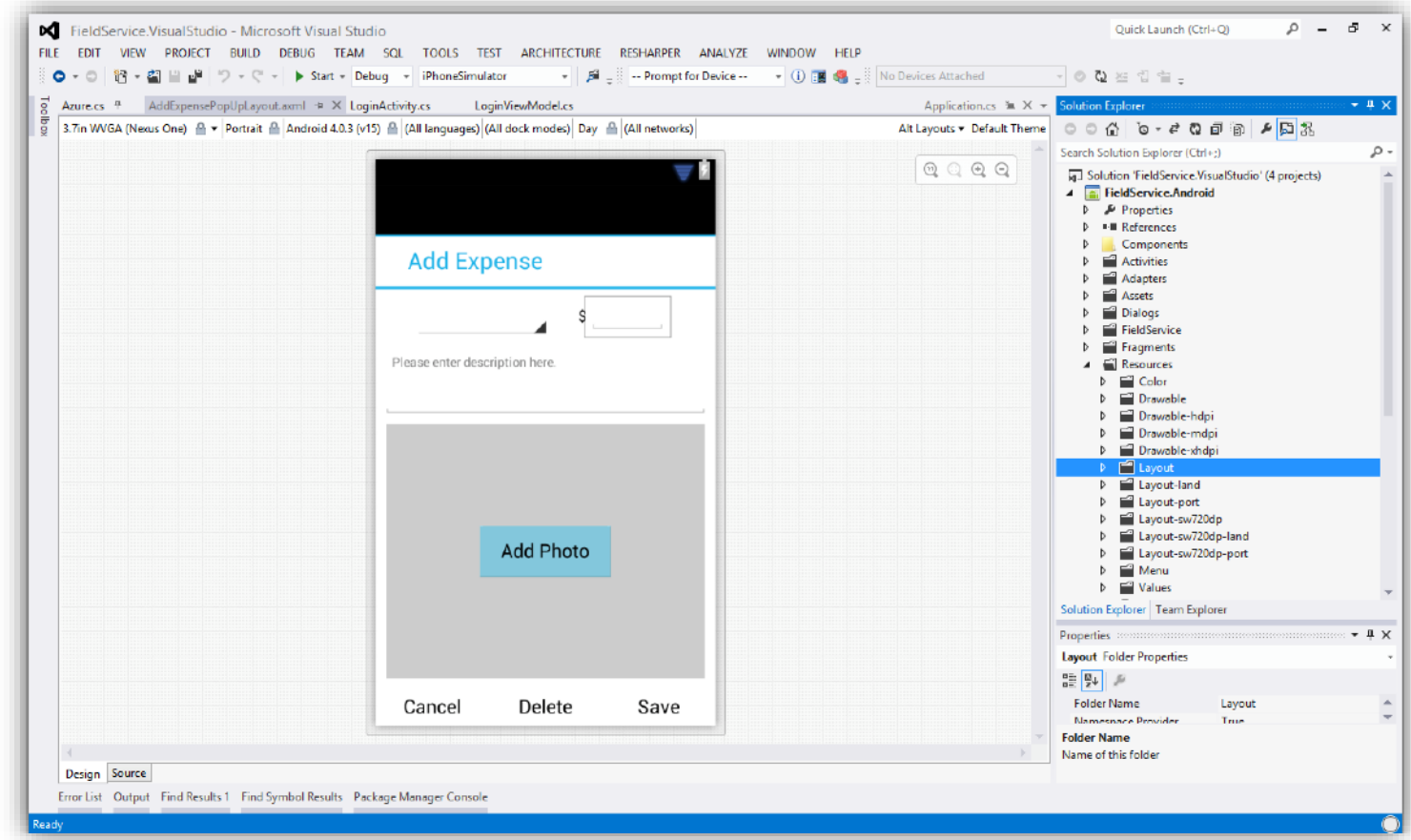
Visual Studio Integration



Xamarin.com/Download

Android Designer

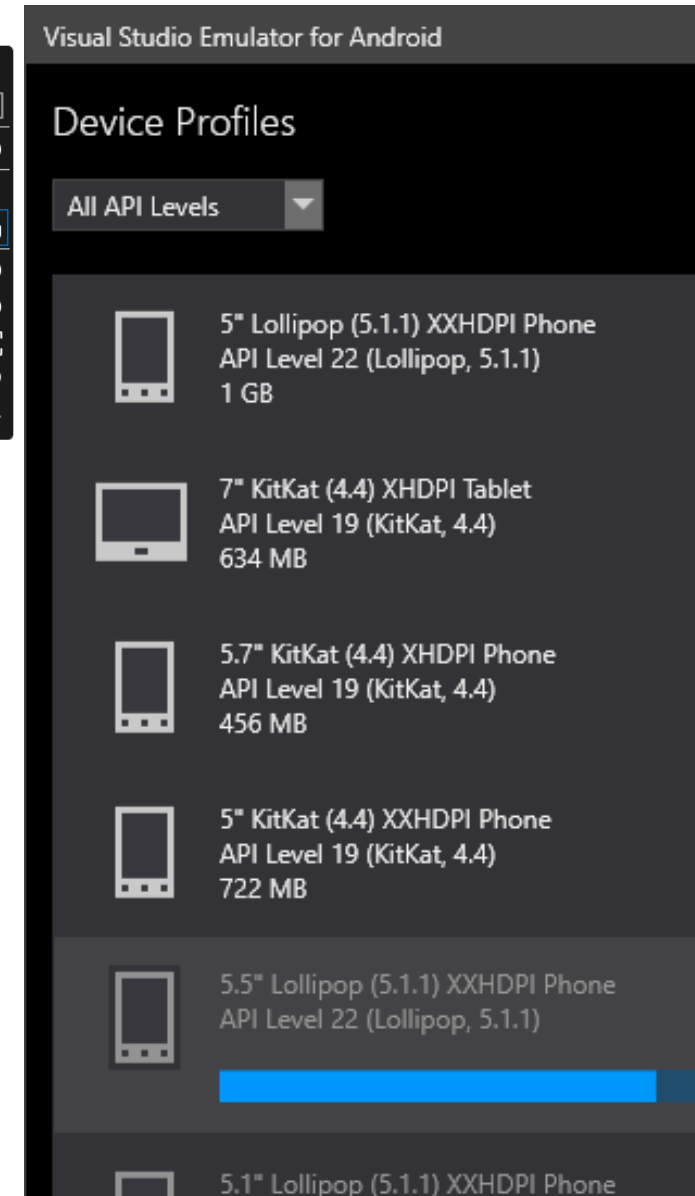
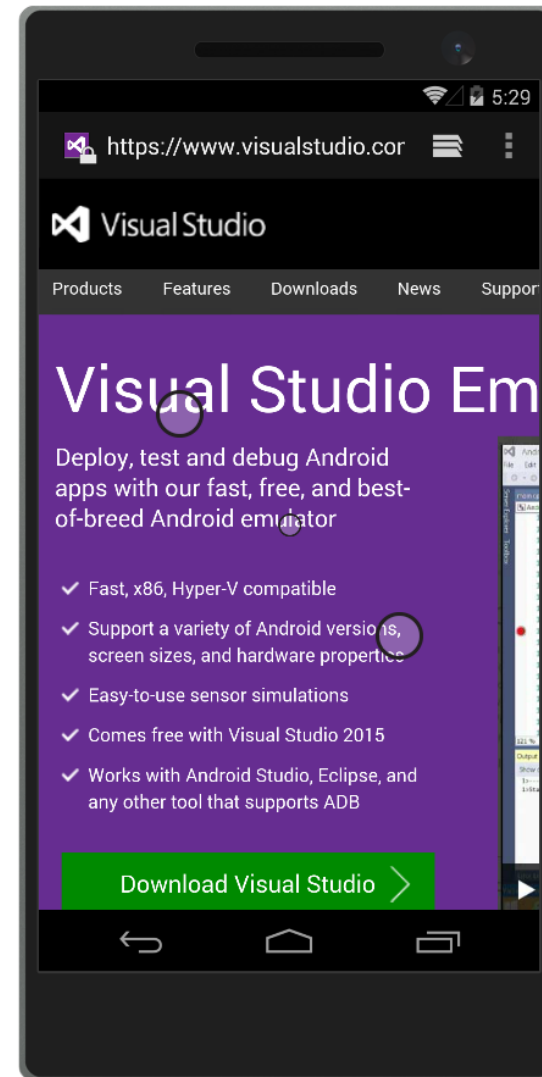
- Create UI with drag & drop simplicity
- Target multiple screen sizes, resolutions and Android versions
- Layouts saved in standard Android XML files



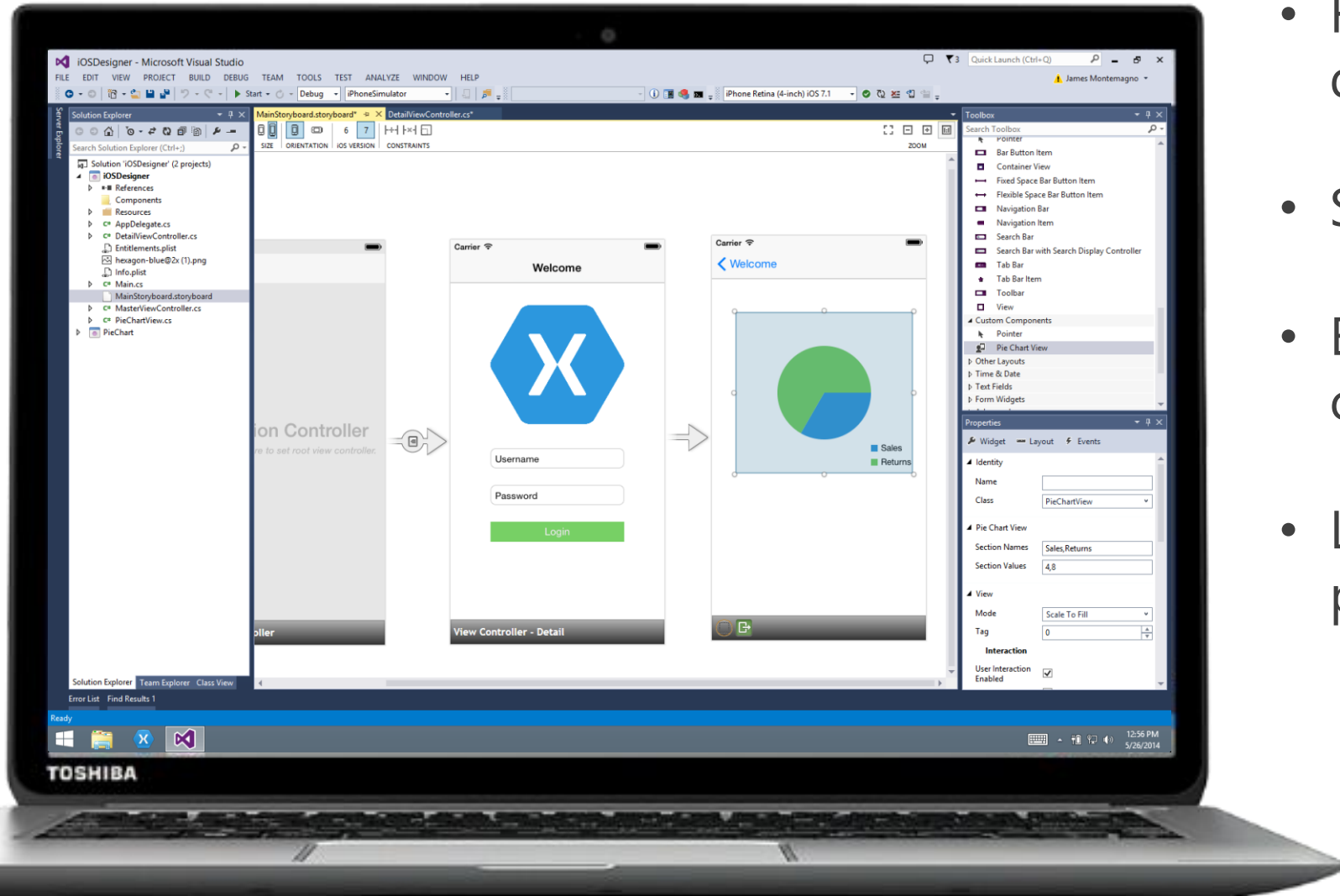
Android Hyper-V Emulators for PC

- Multi-Touch Enabled
- Super Fast
- Rotate, screenshots, location changes, and more!

<http://bit.ly/hyperv-android>



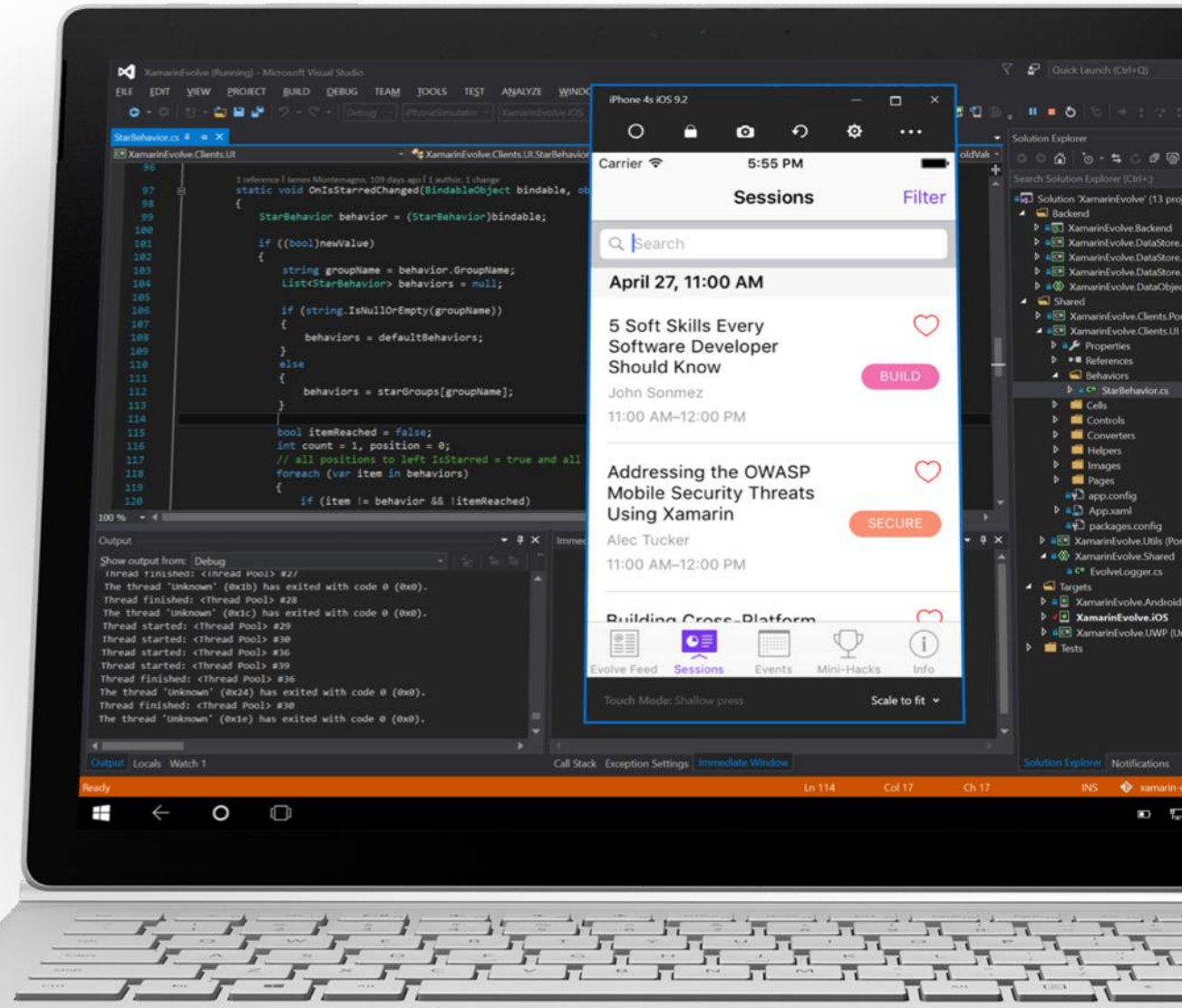
Xamarin Designer for iOS



- Follows familiar Visual Studio designer idioms
- Supports all UIKit elements
- Edit custom and 3rd party components
- Live preview of changes to properties

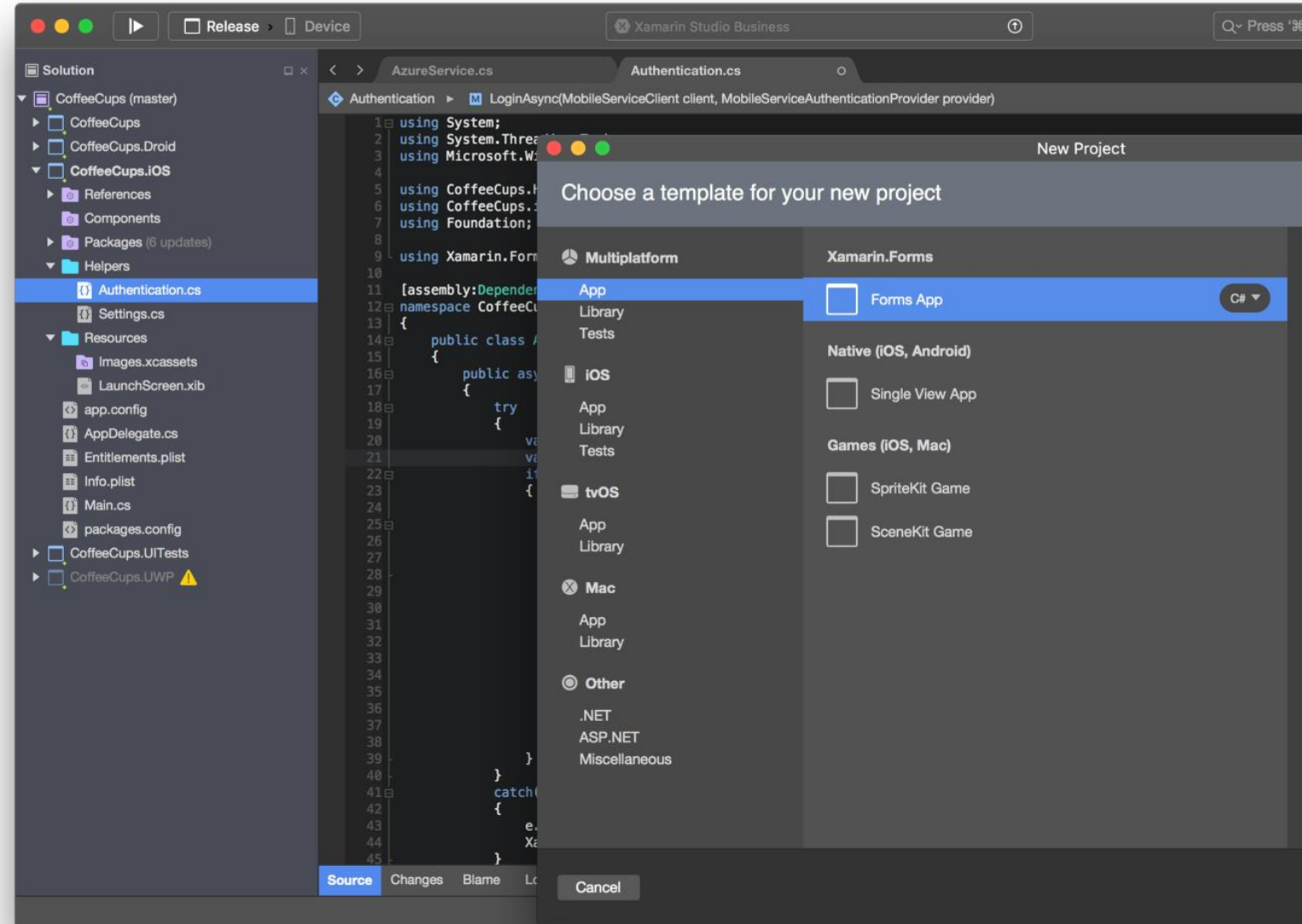
Visual Studio iOS Simulator Remoting

- Multi-Touch Enabled
- Pressure Sensitive
- Super Fast
- Rotate, screenshots, location changes
- Never leave VS



*available as a preview

Xamarin Studio – Mac



Open Source – open.xamarin.com



Xamarin
OPEN SOURCE

[Xamarin SDK](#)

[Documentation](#)

[Community](#)

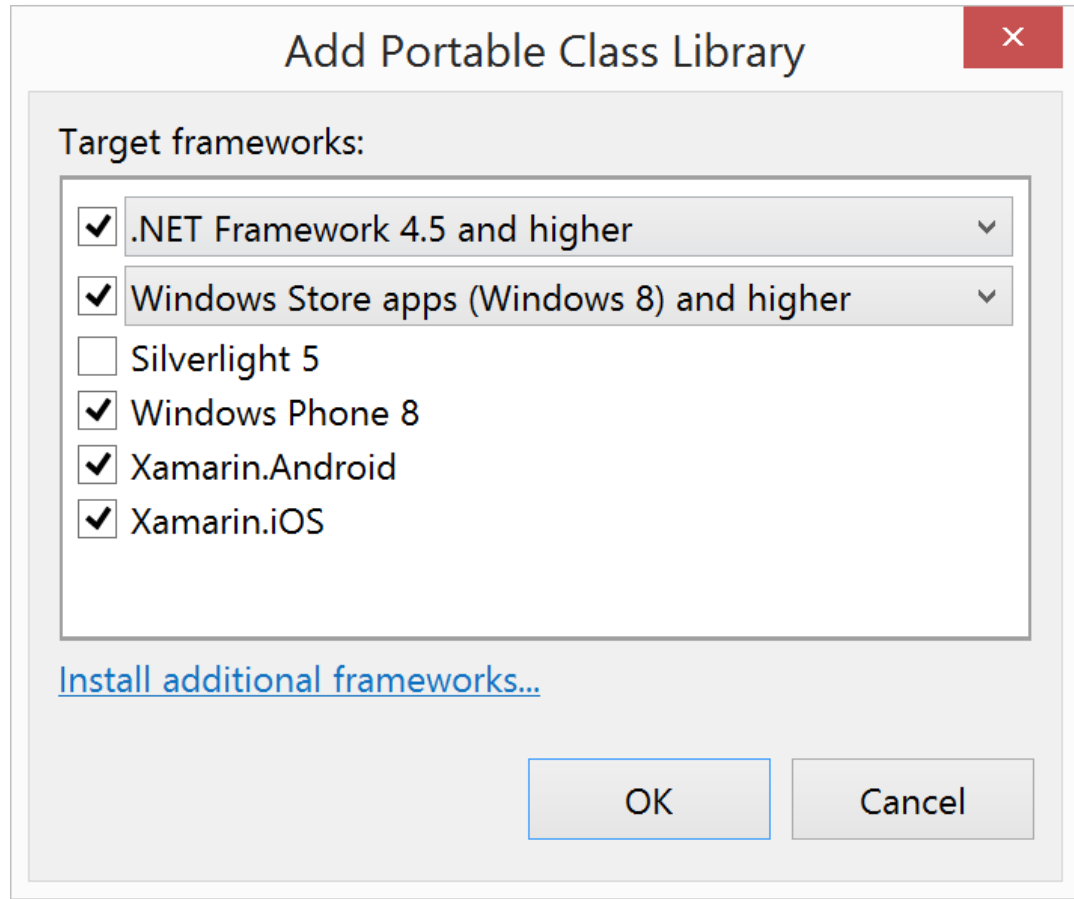
[Contribute](#)

Build the future of apps
with Xamarin.

Xamarin SDK is now fully available under the MIT license.

Sharing Code

Portable Class Libraries



1 Assembly
Multiple Platforms

Including:

Xamarin.iOS and Xamarin.Android

NuGet

The image shows two overlapping windows from the NuGet package manager. The background window, titled "Add Packages", has a search bar with "nuget.org" and a list of packages including Xamarin.Social, Xamarin.Auth, Xamarin.Mobile, Xamarin.InAppBilling, Xamarin.FacebookBinding, and BugSense plugin for Xamarin Android application. The foreground window, titled "PlanetXamarin.WinStore - Manage NuGet Packages", shows a search for "xamarin". It features a list of installed and available packages, with "Json.NET" highlighted. A detailed view of the "xamarin" package is shown on the right, including its metadata and license information.

Add Packages

nuget.org

Xamarin.Social
Share statuses, links, and images on Facebook, Flickr, Twitter, and more.

Xamarin.Auth
A cross-platform API for authenticating users and storing their information.

Xamarin.Mobile
Xamarin.Mobile is a library that exposes a single set of APIs for common mobile device functionality across iOS, Android and Windows Phone.

Xamarin.InAppBilling
Component to assist in adding In-App Billing to a Xamarin application via Google Play Services.

Xamarin.FacebookBinding
Xamarin Android Binding library for Facebook Android SDK.

BugSense plugin for Xamarin Android application
BugSense is the leading crash reporting and quality metric service. This is the official plugin for Xamarin Android applications.

☐ Show pre-release packages

PlanetXamarin.WinStore - Manage NuGet Packages

Stable Only Sort by: Most Downloads

xamarin

EntityFramework
Entity Framework is Microsoft's recommended data access technology for new applications.

Json.NET
Json.NET is a popular high-performance JSON framework for .NET **Install**

jQuery
jQuery is a new kind of JavaScript Library. jQuery is a fast and concise JavaScript Library that simplifies HTML document traversal and DOM manipulation, event handling, animation, and many other tasks that are common at the moment of writing this page.

WebGrease
Web Grease is a suite of tools for optimizing javascript, css files and images.

Microsoft ASP.NET MVC
This package contains the runtime assemblies for ASP.NET MVC.

Microsoft HTTP Client Libraries
This package provides a programming interface for modern HTTP/REST based applications.

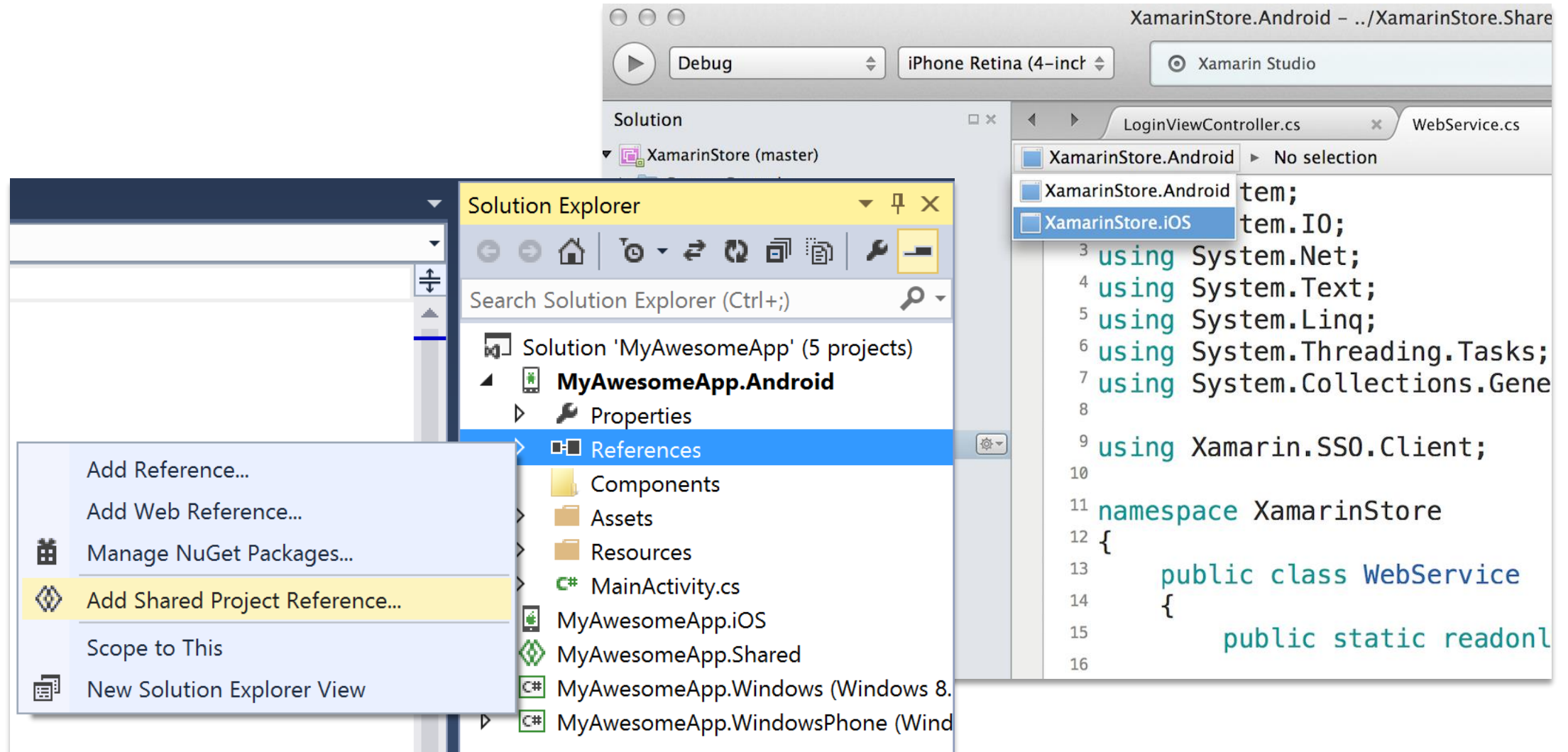
Microsoft ASP.NET Web API 2.2
This package contains everything you need to host ASP.NET Web API on IIS.

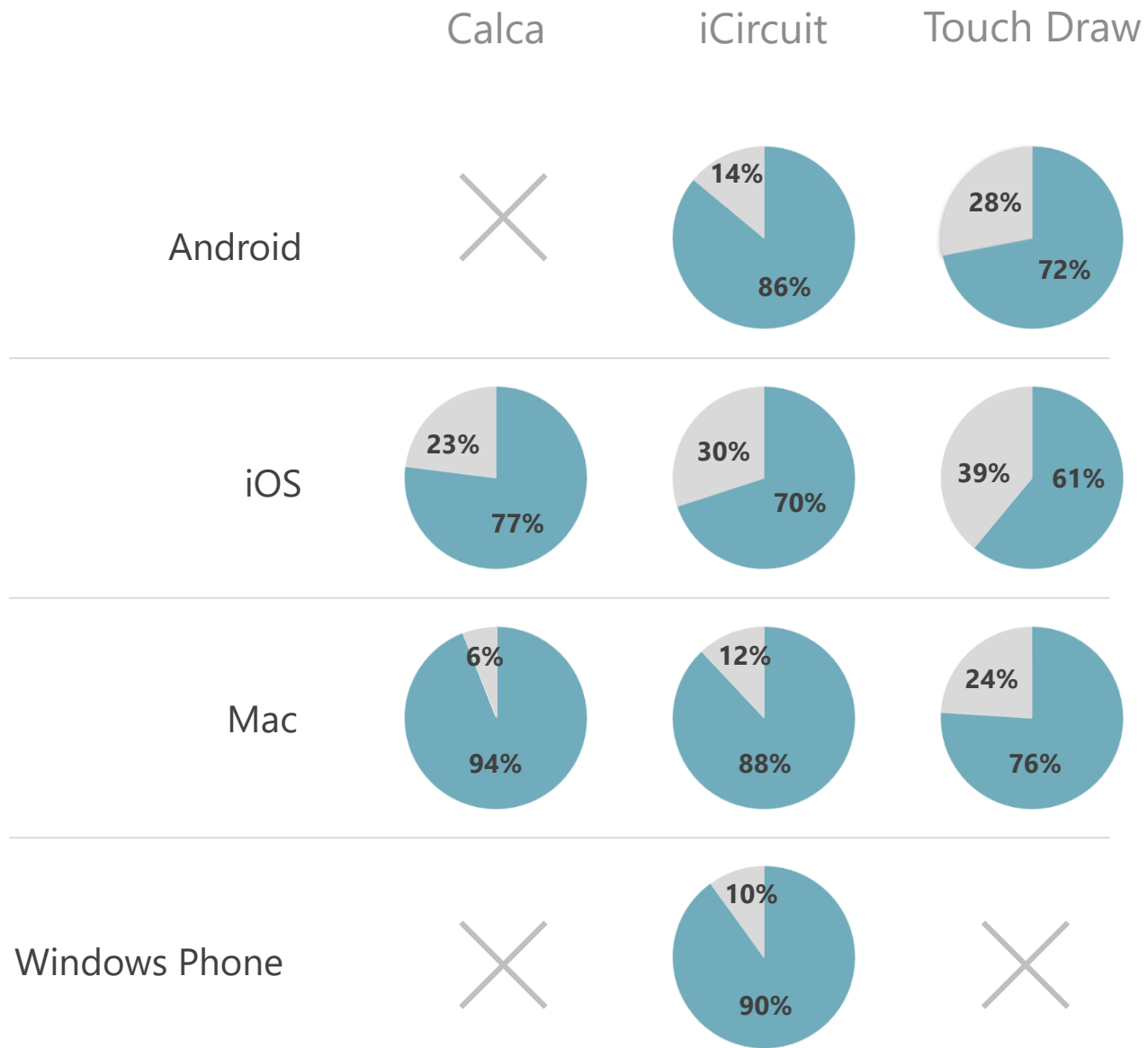
Created by: James Newton-King
Id: [Newtonsoft.Json](#)
Version: 6.0.3
Last Published: 4/27/2014
Downloads: 6189092
License: [View License](#), [Project Information](#), [Report Abuse](#)
Description: Json.NET is a popular high-performance JSON framework for .NET
Tags: json
Dependencies: No Dependencies

Each package is licensed to you by its owner. Microsoft is not responsible for, nor does it grant any licenses to, third-party packages.

Settings Close

Shared Projects

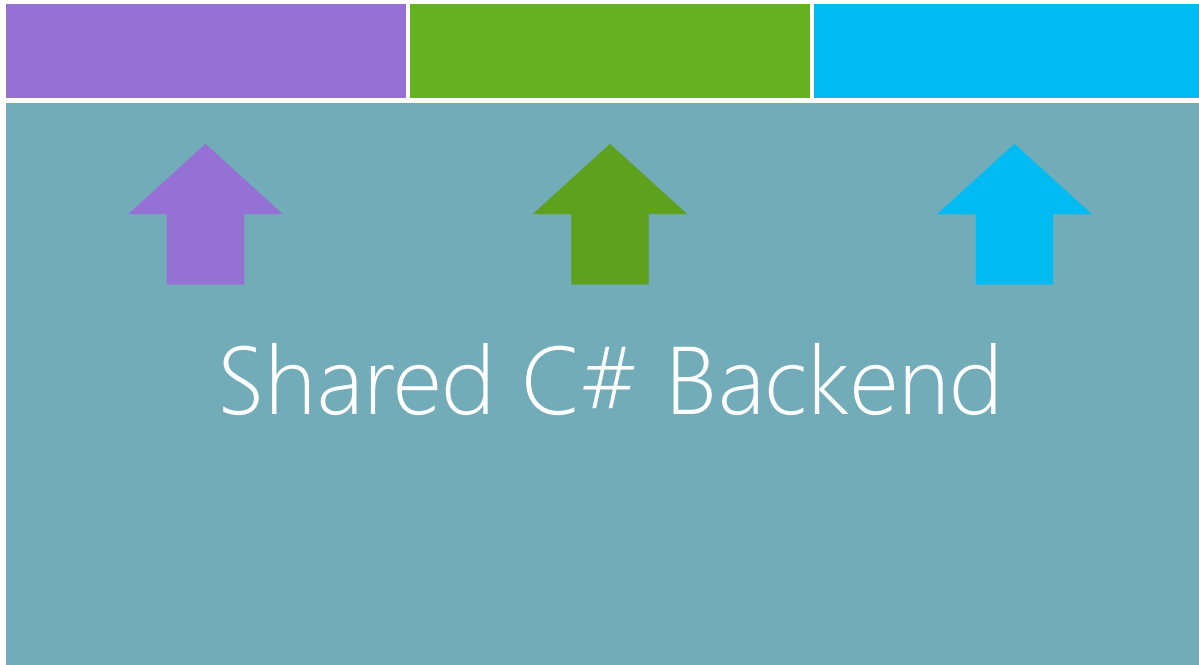




Code Sharing Stats

Let's Build an App

Simplifying Development





UI+APIs

Battery
GPS
Lights
Notifications
Settings
Text To Speech



UI + APIs

Battery
GPS
Lights
Notifications
Settings
Text To Speech



UI + APIs

Battery
GPS
Lights
Notifications
Settings
Text To Speech

Platform Specific Code

What if we didn't have to
write this code?

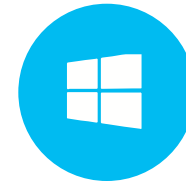
What if we could access
it from shared code?

Speak("Hello World");

AVSpeechSynthesizer

TextToSpeech

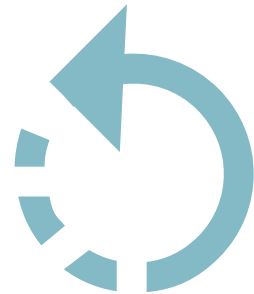
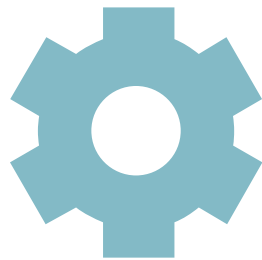
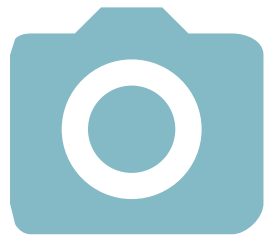
SpeechSynthesizer



Plugins for Xamarin

github.com/xamarin/plugins

Common API



10 Minute Break

Presenter First Name

Presenter Last Name

Presenter Title

Presenter e-mail

blogs

Twitter