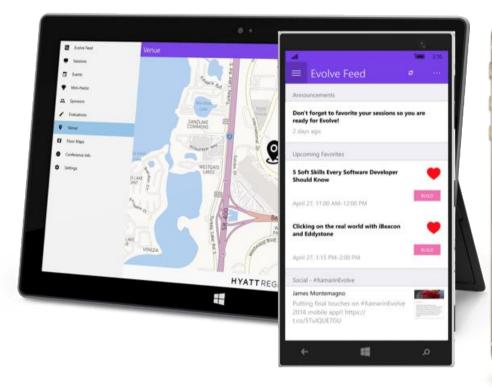


Cross-Platform Native User Interfaces with Xamarin.Forms

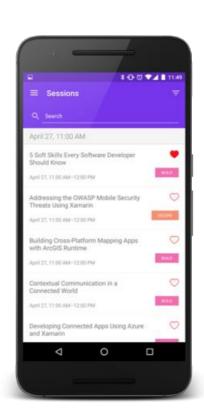
Naweed Akram

@xgeno / naweed@xgeno.com
Developer/Evangelist @ XGENO Software

Meet Xamarin.Forms

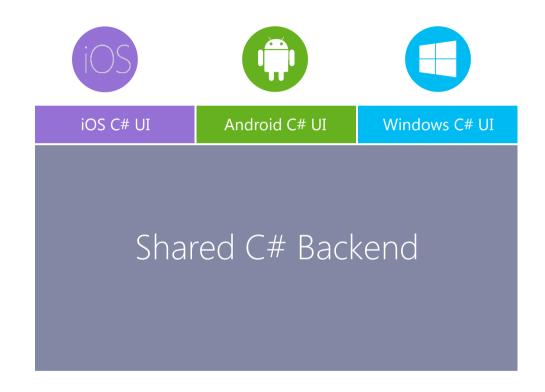




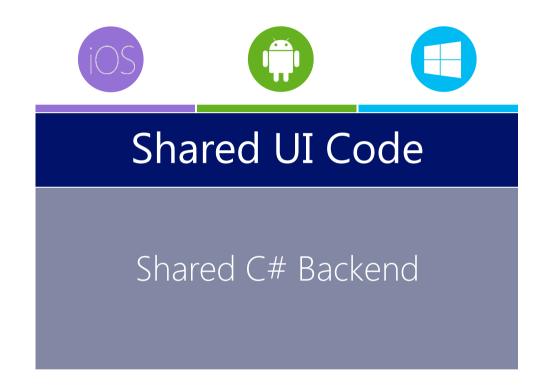


Build native UIs for iOS, Android, and Windows from a single, shared C# codebase.

Xamarin + Xamarin.Forms

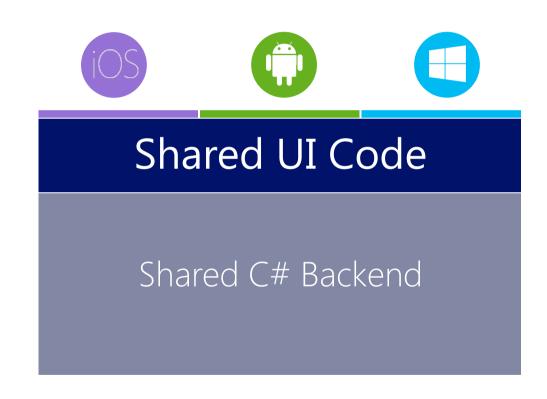


Traditional Xamarin
Approach



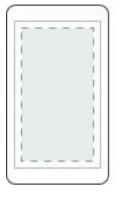
With Xamarin.Forms:
More code-sharing, all native

What's included

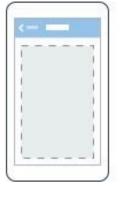


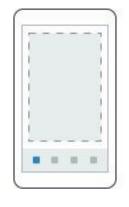
- ✓ 40+ Pages, layouts, and controls (Build from code behind or XAML)
- √ Two-way data binding
- ✓ Navigation
- ✓ Animation API
- ✓ Dependency Service
- ✓ Messaging Center

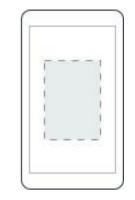












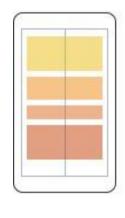
Content

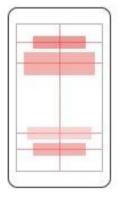
MasterDetail

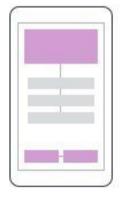
Navigation

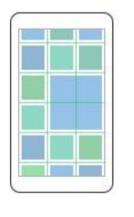
Tabbed

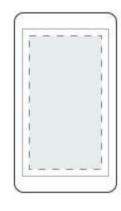
Carousel

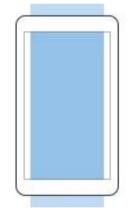


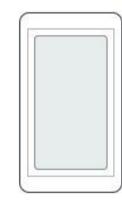












Stack

Absolute

Relative

Grid

ContentView

ScrollView

Frame

Controls

ActivityIndicator	BoxView	Button	DatePicker	Editor
Entry	Image	Label	ListView	Мар
OpenGLView	Picker	ProgressBar	SearchBar	Slider
Stepper	TableView	TimePicker	WebView	EntryCell
ImageCell	SwitchCell	TextCell	ViewCell	

Xamarin.Forms Ecosystem













Windows	Xamarin.Forms	
StackPanel	StackLayout	
TextBox	Entry	
ListBox	ListView	
CheckBox	Switch	
ProgressBar	ActivityIndicator	
Grid	Grid	
Label	Label	
Button	Button	
Image	Image	
Date/TimePicker	Date/TimePicker	

Control Comparison

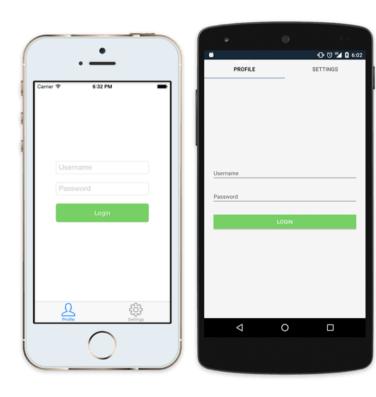
Windows	Xamarin.Forms
DataContext	BindingContext
{Binding Property}	(Binding Property)
ItemsSource	ItemsSource
ItemTemplate	ItemTemplate
DataTemplate	DataTemplate

Binding Comparison

```
<ContentPage.Padding>
 <OnPlatform x:TypeArguments="Thickness">
    <OnPlatform.iOS>
      0, 20, 0, 0
    </OnPlatform.iOS>
    <OnPlatform.Android>
     0, 0, 0, 0
    </OnPlatform.Android>
    <OnPlatform.WinPhone>
     0, 0, 0, 0
    </OnPlatform.WinPhone>
 </OnPlatform>
</ContentPage.Padding>
```

Platform Customization

Native UI from shared code





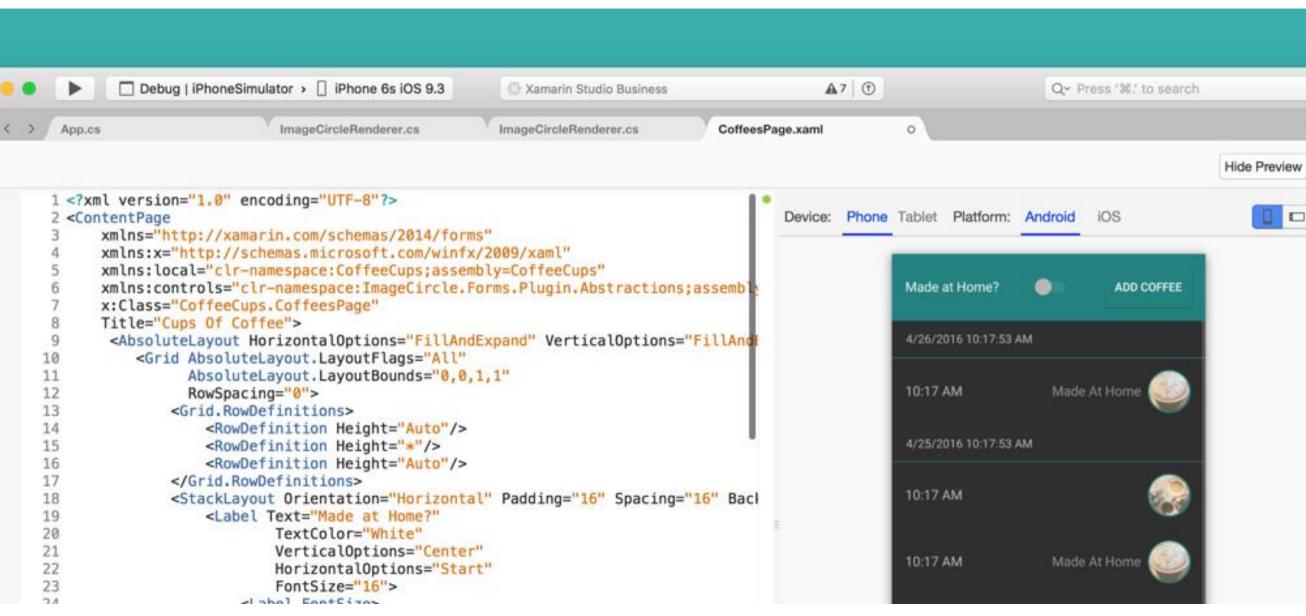
```
<?xml version="1.0" encoding="UTF-8"?>
<TabbedPage xmlns="http://xamarin.com/schemas/2014/forms"
            xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
            x:Class="MyApp.MainPage">
<TabbedPage.Children>
<ContentPage Title="Profile" Icon="Profile.png">
    <StackLayout Spacing="20" Padding="20"</pre>
                 VerticalOptions="Center">
        <Entry Placeholder="Username"</pre>
               Text="{Binding Username}"/>
        <Entry Placeholder="Password"</pre>
               Text="{Binding Password}"
               IsPassword="true"/>
        <Button Text="Login" TextColor="White"</pre>
                BackgroundColor="#77D065"
                Command="{Binding LoginCommand}"/>
    </StackLayout>
</ContentPage>
<ContentPage Title="Settings" Icon="Settings.png">
    <!-- Settings -->
</ContentPage>
</TabbedPage.Children>
</TabbedPage>
```

DEMO

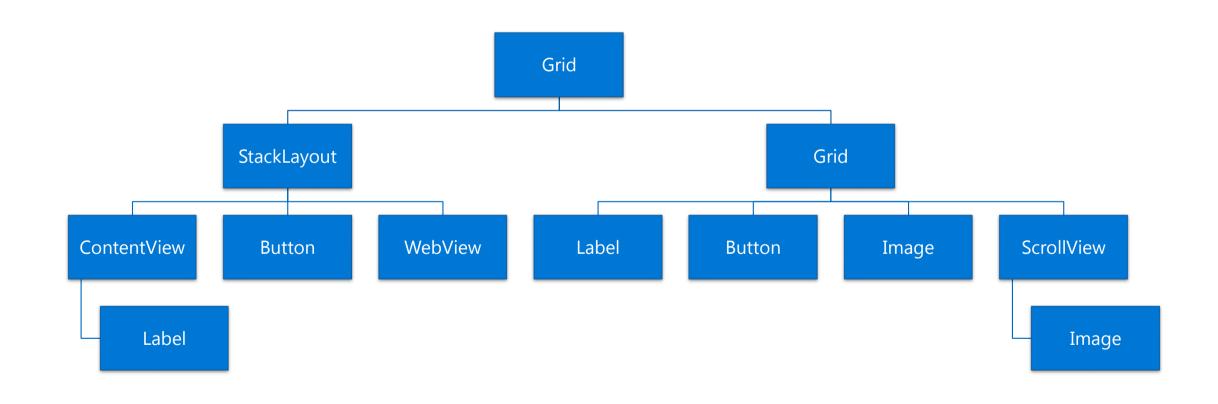
Xamarin.Forms is Open Source!

open.xamarin.com

XAML Previewer

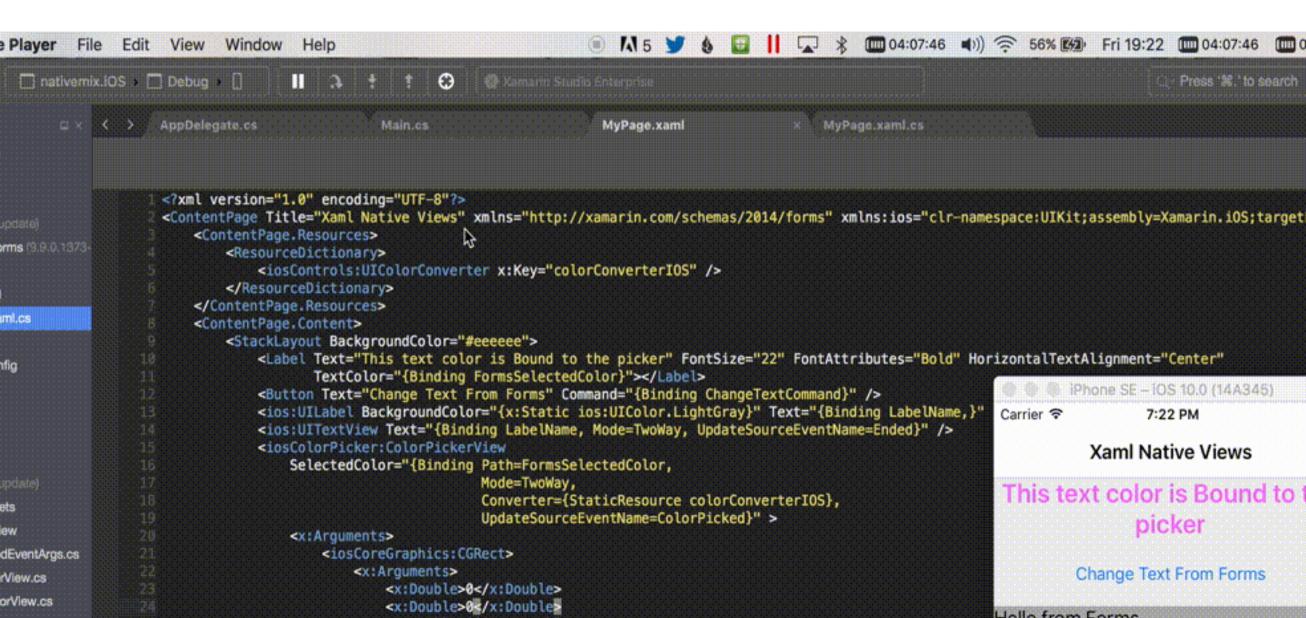


Fast Renderers



FORMS STRUCTURE

Native View Declarations



More Performance Enhancements

- Android Startup
- Reduce Android GPU Overdraw
- Single DLL

Q & A