XAMARIN.FORMS

Writing one app to rule all your platforms

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XAMARIN.FORMS

Native UIs for iOS, Android, and Windows from a shared .NET codebase

THE APP LANDSCAPE

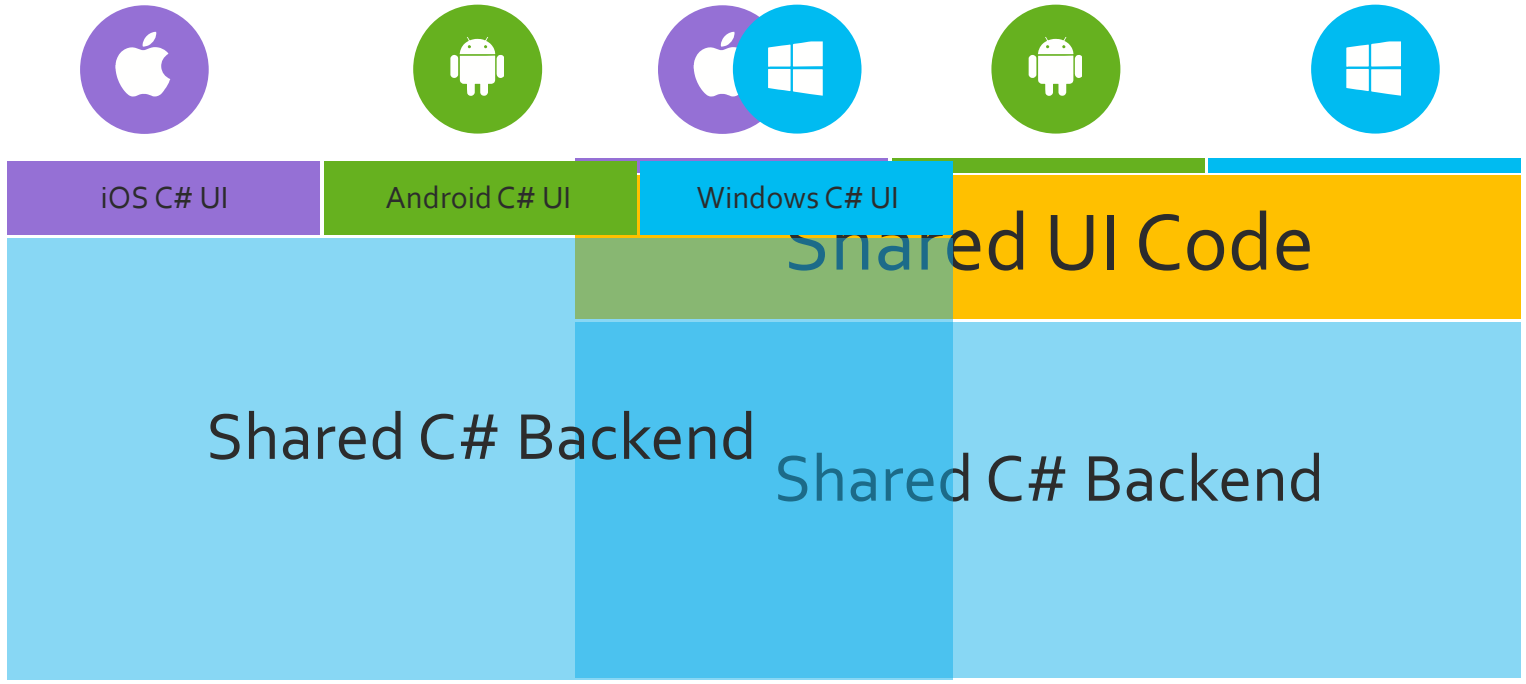
- Android (Phone & Tablet)
  - Leading the market
  - 2x the user base of iOS
- iOS (Phone & Tablet)
  - First to market
  - Brought us the first wildly successful app store
  - Users spend $4 on apps to every $1 Android users spend (Fortune '14)
- UWP (Windows Desktop/Tablet & Phone)
  - Phone is not dead yet (new third party devices)
  - Strong support in enterprise
  - Lots of business PCs & phone is free

TRADITIONAL APP DEVELOPMENT

HYBRID APPS

Quick development with common codebase,
but some limitations.

NATIVE APPS, WRITTEN IN .NET & C#



Traditional Xamarin Approach

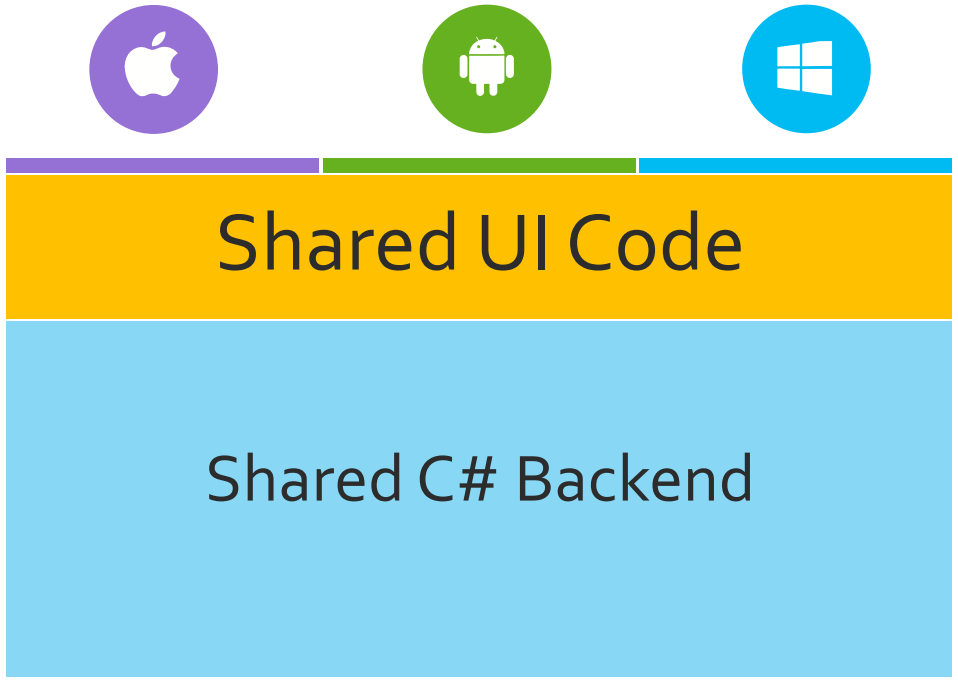
With Xamarin.Forms:
More code-sharing, all native

XAMARIN FORMS

So you can concentrate [on] doing the 60-70% but you always have to spend some time writing the UI for that platform and Xamarin.Forms will help you [do] the extra 30% in a breeze

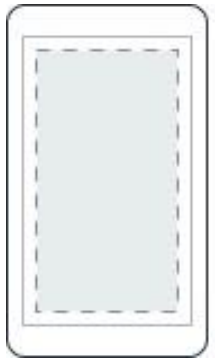
-Lino Tadros, .NET Rocks #1042

BAKED-IN FEATURES



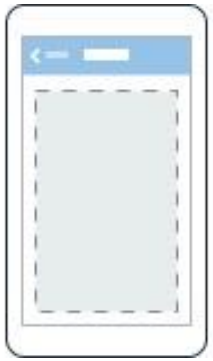
- ✓ 40+ Pages, layouts, and controls
  (Build from code behind or XAML)
- ✓ Two-way data binding
- ✓ Navigation
- ✓ Animation API
- ✓ Dependency Service
- ✓ Messaging Center

PAGES & LAYOUTS

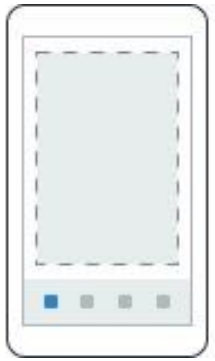


Content

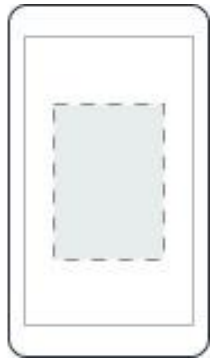
MasterDetail



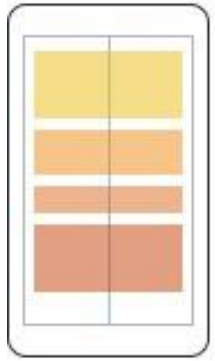
Navigation



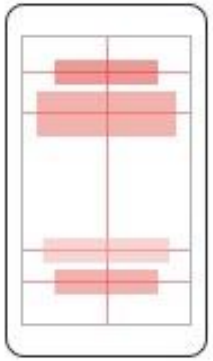
Tabbed



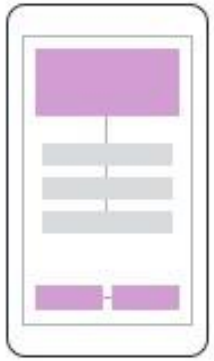
Carousel



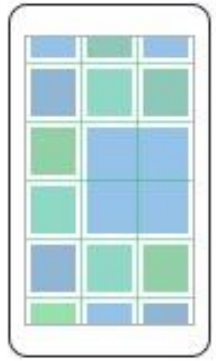
Stack



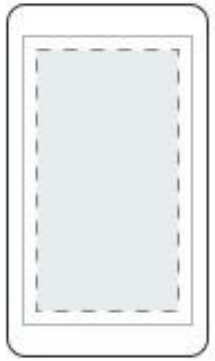
Absolute



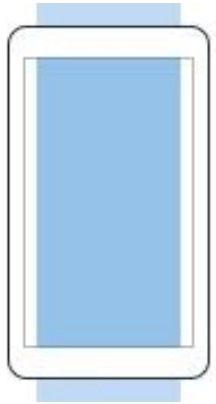
Relative



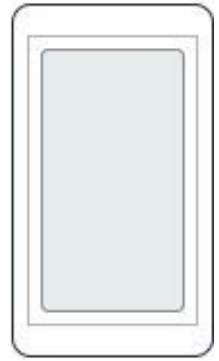
Grid



ContentView



ScrollView



Frame

CONTROLS

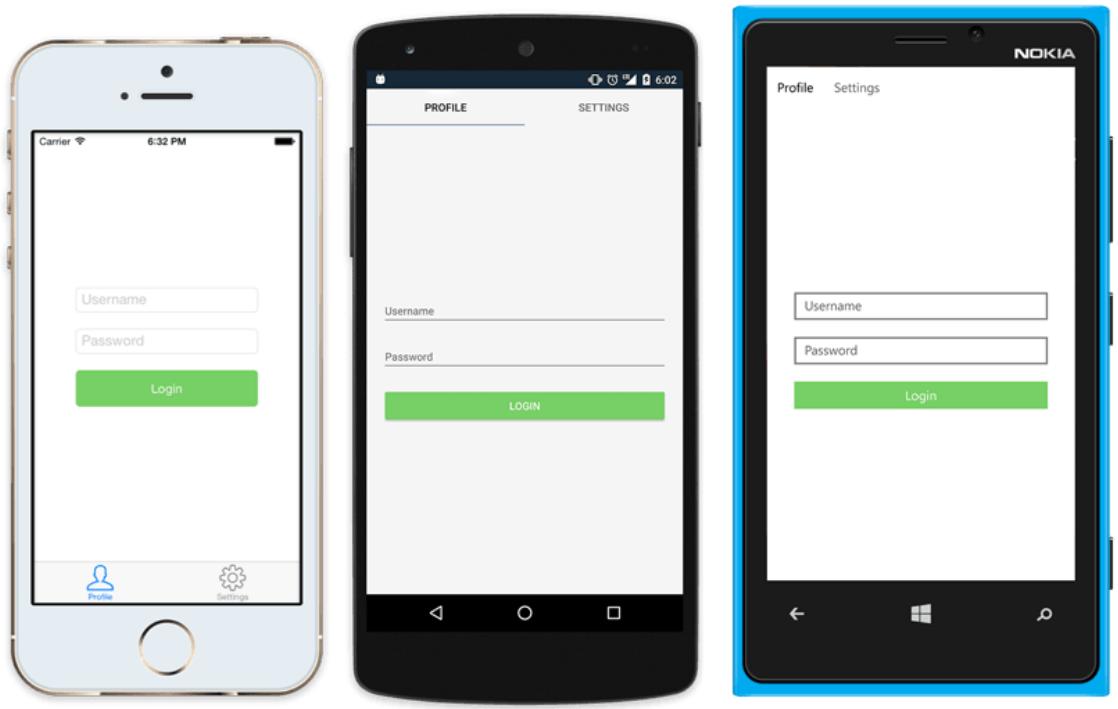
ActivityIndicator	BoxView	Button	DatePicker	Editor
Entry	Image	Label	ListView	Map
OpenGLView	Picker	ProgressBar	SearchBar	Slider
Stepper	TableView	TimePicker	WebView	EntryCell
ImageCell	SwitchCell	TextCell	ViewCell	

XAMARIN.FORMS XAML

So that's the big thing is that your expressing what your intent is with the XAML but its rendered with the native UI of the tool.

-Carl Franklin, .NET Rocks #1042

COMMON XAML – NATIVE UI




```
<?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"
          VerticalOptions "Center">
    <Entry Placeholder "Username"
        Text "{Binding Username}"/>
    <Entry Placeholder "Password"
        Text "{Binding Password}"
        IsPassword "true"/>
    <Button Text "Login" TextColor "White"
        BackgroundColor "#77D065"
        Command "{Binding LoginCommand}"/>
  </StackLayout>
</ContentPage>
<ContentPage Title "Settings" Icon "Settings.png">
  <!-- Settings -->
</ContentPage >
</TabbedPage.Children>
</TabbedPage>
```

GETTING STARTED

DEMO TIME

XAMARIN FORMS IMPROVEMENTS

- Styles! (Plus platform specific styles)
- Dynamic resources
- Behaviors
- Triggers
- Improved binding support
- Sleep/Resume/Start events
- Application level resource dictionary
- Better font properties
- Compiled XAML
  - Performance, faster loading
  - Smaller App Size
  - See XAML Errors at build vs runtime
- Better Layout inspection
- Enhancements to ListView
  - Caching (smoother scrolling)
  - Better Feedback on scroll position
  - Header & Footer
  - Pull to Refresh
- Application
  - Modal Navigation Events (Pushing/Pushed, Popping/Popped)
- Data Templates
- URL Navigation
- Margins

FUTURE OF XAMARIN FORMS

- Platform Effects
- Control Templates
- UWP Maps
- Themes
- Native Embedding (requires shared project)
- XAML Previewer (Design Time Preview)
  - In Xamarin Studio Preview and coming to Visual Studio

RESOURCES

Github.com/duanenewman/talks

- Video
  - Xamarin Evolve – evolve.xamarin.com
- Audio
  - .NET Rocks
- Code
  - James Montemagno - github.com/JamesMontemagno
  - Xamarin Samples - github.com/xamarin/xamarin-forms-samples

THANK YOU!

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