



Xamarin





What i will talk today ?

- 1) **Mobile OS market**
- 2) **Web Apps/Native Apps**
- 3) **What is Xamarin**
- 4) **Architecture**
- 5) **Advantages**
- 6) **Xamarin Products**
- 7) **Xamarin.Forms**



Mobile OS market



74%



23%





What is Xamarin

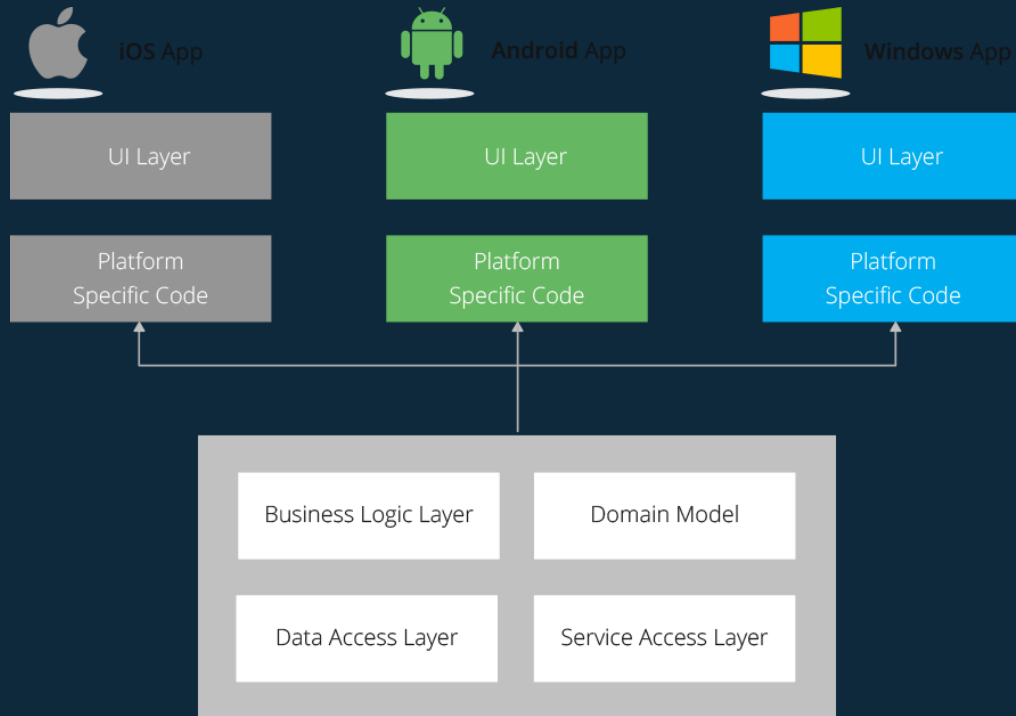
- **Microsoft Company**
- **Cross-Platform Development Tool**
- **C#-shared codebase**

Xamarin apps look and feel native because they have,

1. **Native User Interfaces**
2. **Native API Access**
3. **Native Performance**



Architecture Xamarin





Advantages

- **Native User Interface**
- **Native Performance**
- **Native Look and Feel**
- **Shared Code Across Platforms**
- **C# & .NET Framework**



Advantages - Shared Code



Android

iOS

Java

Objective-C

Eclipse

XCode

Advantages - Shared Code



Android

Java

Eclipse



iOS

Objective-C

XCode



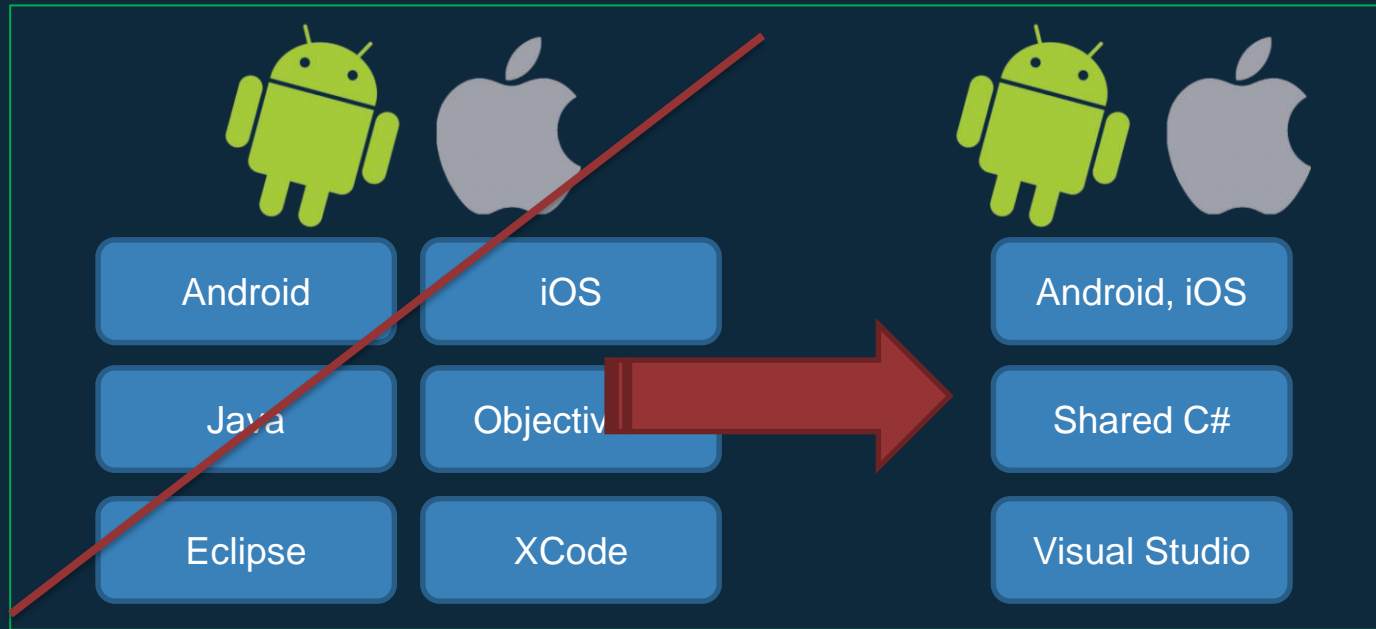
Android, iOS

Shared C#

Visual Studio



Advantages - Shared Code





Xamarin – The Bad

- **License cost**
- **Incompatibility with latest version of various platforms**
- **Limited Access to Open Source Libraries**
- **Component documentation**
- **Xamarin Community Support**





Framework Libraries



C#

Windows APIs

- Windows.Storage
- Windows.Foundation
- Microsoft.Devices
- System.Xml
- System.Linq
- System.IO
- System
- System.Net
- Microsoft.Phone
- Windows.Networking



C#


iOS APIs

- iBeacon
- CoreGraphics
- CoreMotion
- System.Xml
- System.Linq
- System.IO
- System
- System.Net
- MapKit
- UIKit
- iBeacon



C#

Android APIs

- Printing Framework
 - Renderscript
 - NFC
 - System.Xml
 - System.Linq
 - System.IO
 - System
 - System.Net
 - Text-to-speech
 - ActionBar
- 



Xamarin Products

- **Xamarin.iOS since 2011**
- **Xamarin.Android since 2011**
- **Xamarin.Mac since 2012**
- **Xamarin.Forms since 2014**
- **Xamarin Test Cloud**
- **Xamarin for Visual Studio**





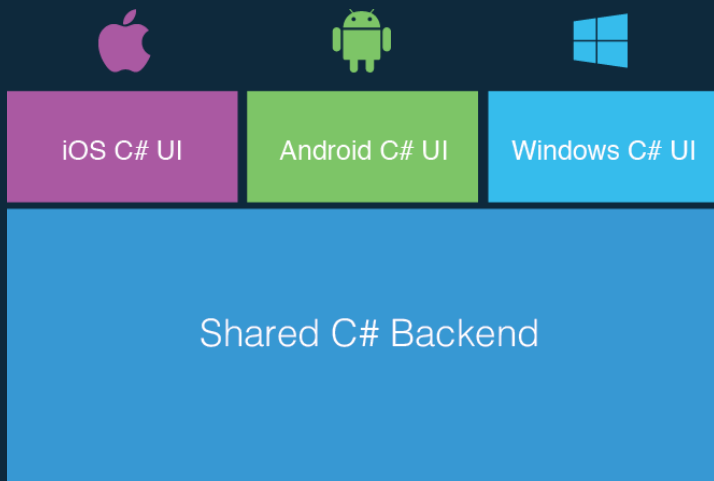
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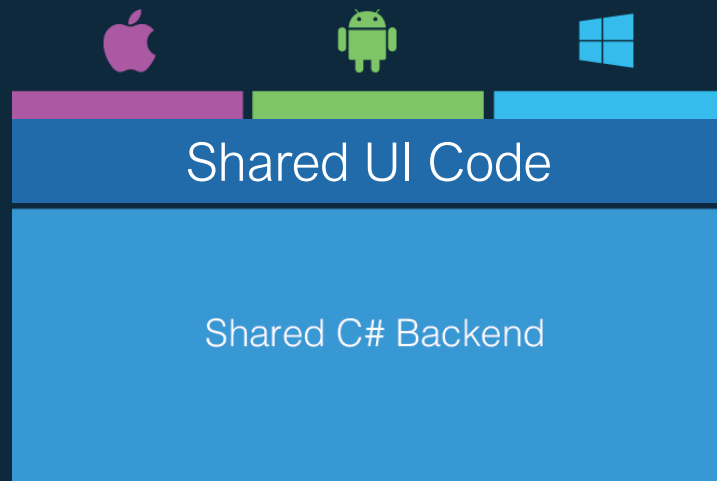


What is Xamarin.Forms

Traditional



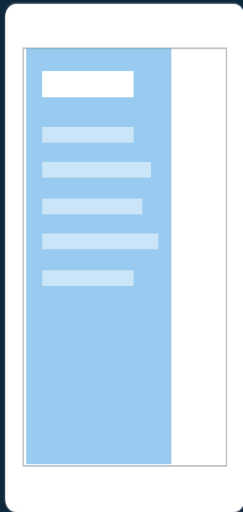
Xamarin.Forms



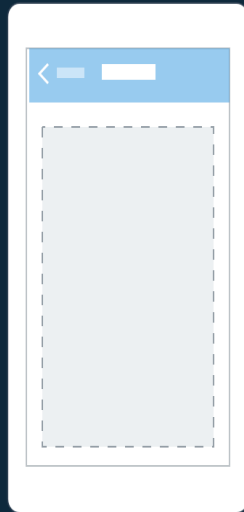
Pages



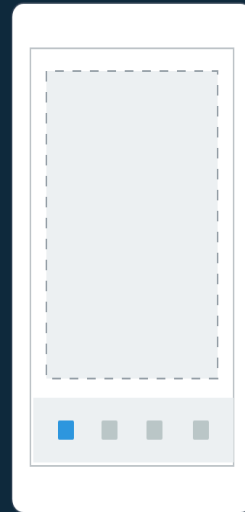
Content



MasterDetail



Navigation

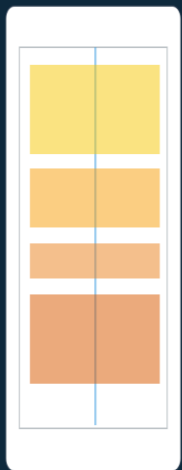


Tabbed

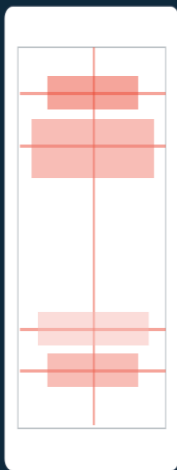


Carousel

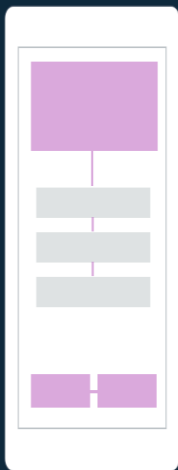
Layouts



Stack



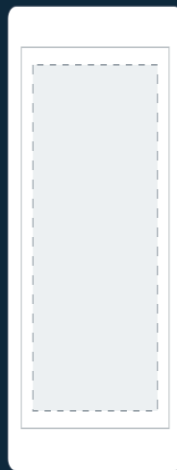
Absolute



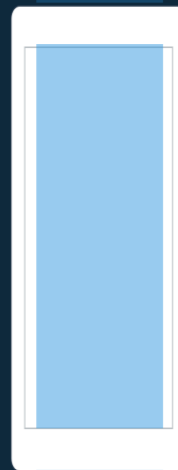
Relative



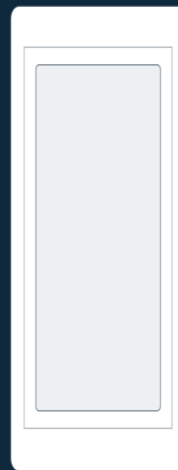
Grid



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

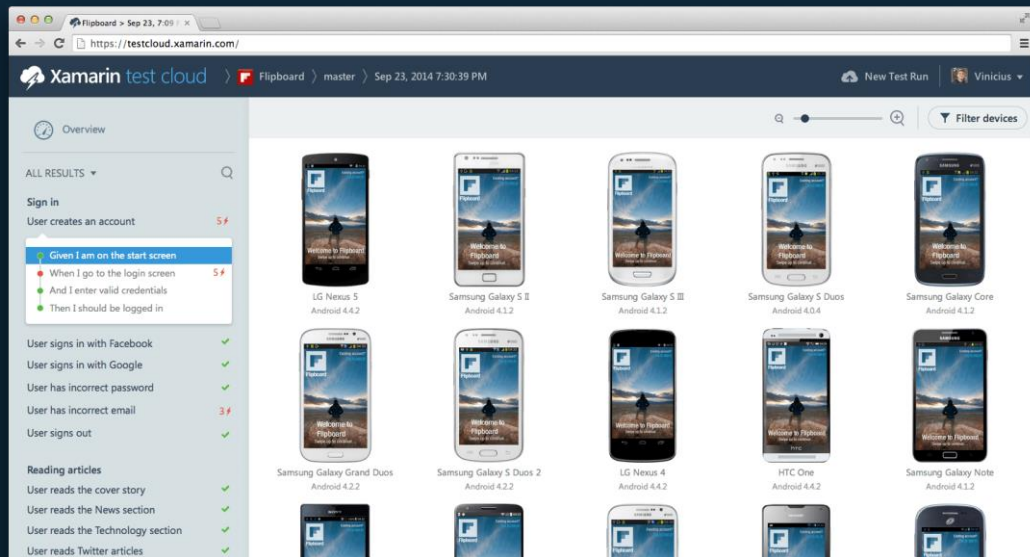
TextCell

ViewCell



Xamarin – Test Cloud

- Nunit
- Cucumber
- 1000
\$/Month
- 200h



“We built Xamarin Test Cloud to address a major pain point in the delivery of mission-critical apps for enterprises and top mobile app companies”
Nat Friedman (CEO of Xamarin)

Pricing

	STARTER FREE	INDIE \$299 <small>Per platform, per year</small>	BUSINESS \$999 <small>Per platform, per year</small> <small>MOST POPULAR</small>	ENTERPRISE \$1899 <small>Per platform, per year</small>
Permitted Use	Individual	Individual	Organization	Organization
Deploy to Device	✓	✓	✓	✓
Xamarin Studio	✓	✓	✓	✓
Unlimited App Size		✓	✓	✓
Visual Studio Support			✓	✓
Business Features			✓	✓
Premium Components				✓
Email Support			✓	✓
One Business Day SLA				✓
Hotfixes				✓
Technical Kick-off Session				✓
Code Troubleshooting			At Extra Cost	At Extra Cost



Tutorial

