Introducción a Xamarin y Xamarin.Forms



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X Xamarin Platform

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Quick Launch (Ctrl+Q)
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Rdio.Xamarin - Microsoft Visual Studio
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM SQL TOOLS TEST ARCHITECTURE ANALYZE WINDOW HELP
                                                                                                                         - O D x 1 4 + + "
 G - O R - M W P - C - ▶ Start - AppSton - iPhone
 ConfirmationFragment.cs AssignmentControl.xaml AssignmentDetailsController.cs 4 X
 👣 FieldService.iOS.AssignmentDetailsController

→ F StatusChanged

                                                                                                         Search Solution Explorer (Ctrl++
               public override void ViewDidLoad ()
                                                                                                          Solution 'Rdio.Xamarin'(4 projects)
                   base.ViewDidLoad ();
                                                                                                         ▶ c# Rdio
                                                                                                         P Rdio.Android
                   //UI that is required to be setup from code
                   assignmentBackground.Image = Theme.AssignmentActive;

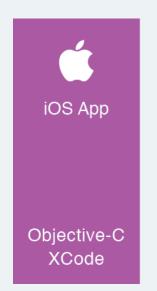
▲ C# Rdio.Windows

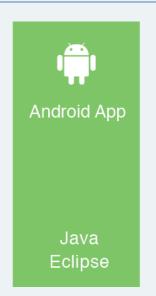
                   contact.IconImage = Theme.IconPhone;
                                                                                                           b & Properties
                   address.IconImage = Theme.Map;
                   priority.TextColor = UIColor.White;
                                                                                                            ▶ ■■ References
                   priorityBackground.Image = Theme.NumberBox;
                                                                                                                          .....
                   accept.SetBackgroundImage (Theme.Accept, UIControlState.Normal);
                   decline.SetBackgroundImage (Theme.Decline, UIControlState.Normal);
                   numberAndDate.TextColor =
                      titleLabel.TextColor =
                       startAndEnd.TextColor = Theme.LabelColor;
                   status.StatusChanged += (sender, e) => SaveAssignment ();
                   status.Completed += (sender, e) =>
                       menuViewModel.MenuIndex = SectionIndex.Confirmations;
                      assignmentViewModel.SelectedAssignment = status.Assignment;
                       var method = Completed;
                           Completed(this, EventArgs.Empty);
                   //Child controller
                       summaryController = ChildViewControllers[0] as SummaryController;
               public override void ViewWillAppear (bool animated)
                   base.ViewWillAppear (animated);
  Error List Output Find Symbol Results F# Interactive Package Manager Console
```

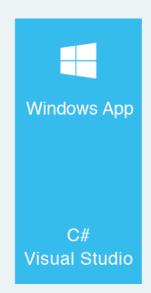
Crea aplicaciones de iOS, Android, Mac y Windows nativas en Visual Studio con C#

Estrategias de desarrollo de apps móviles

Estrategia Silo





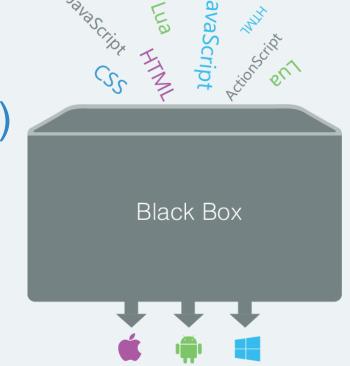


Desarrolla apps múltiples veces

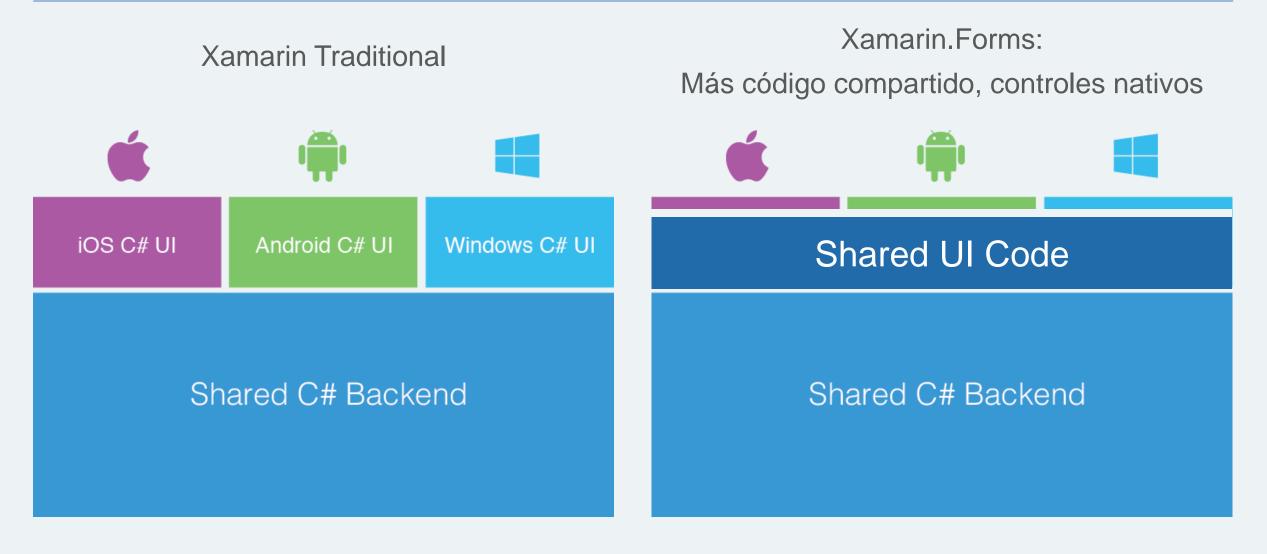
- Múltiples equipos
- Múltiples bases de código
- Diferentes herramientas

Estrategia WORA (Write Once, Run Anywhere)

- Un común denominador mínimo
- Fragmentación de navegador
- El desarrollo y diseño para una plataforma sirve para el resto de plataformas

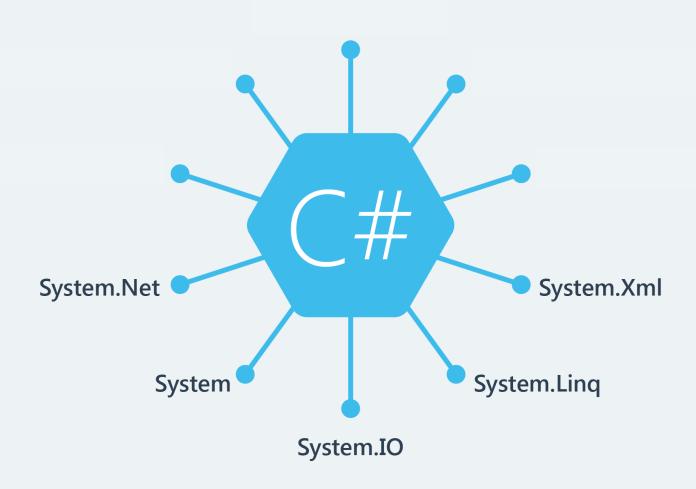


La estrategia única de Xamarin

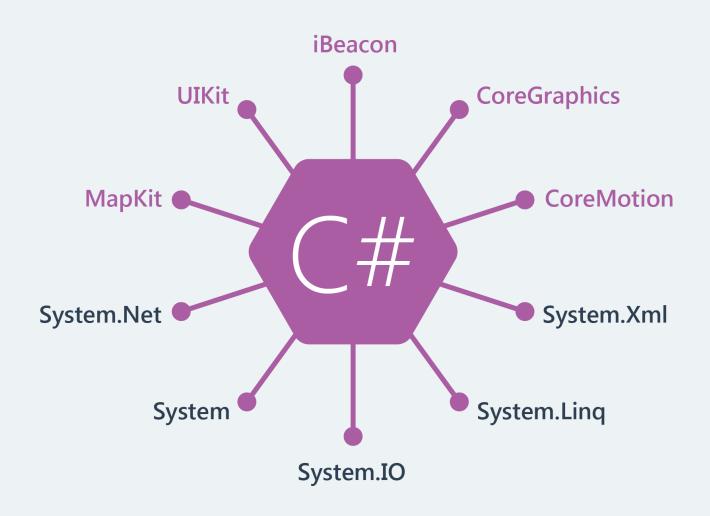


¿Cómo funciona Xamarin?

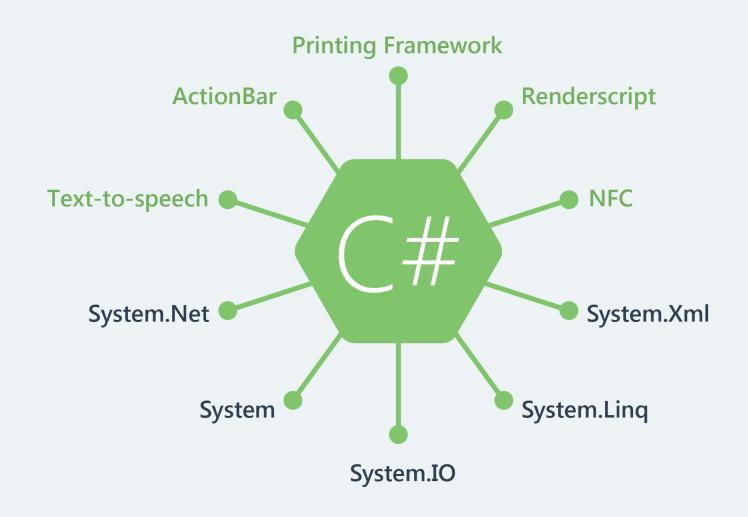
Windows APIs



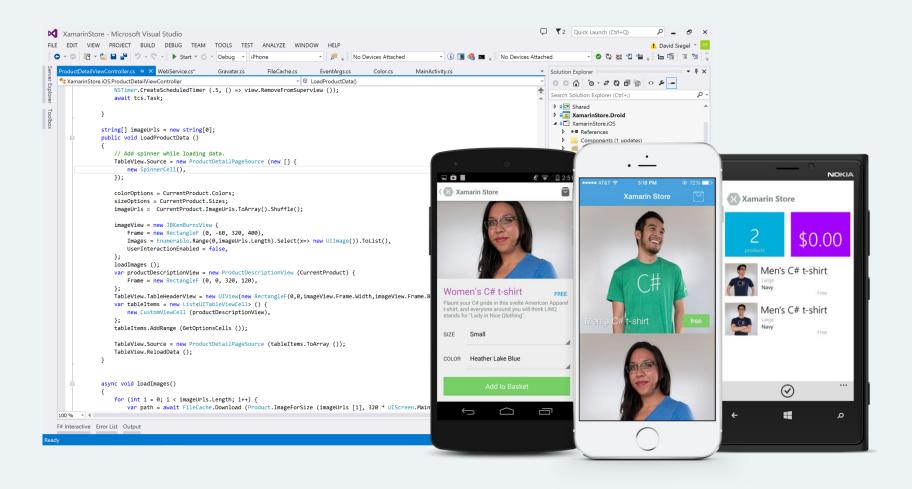
iOS APIs | 100% Coverage



Android APIs | 100% Coverage



Todo lo que puedes hacer en Objective-C, Swift, o Java lo puedes realizar en C# con Xamarin y Visual Studio

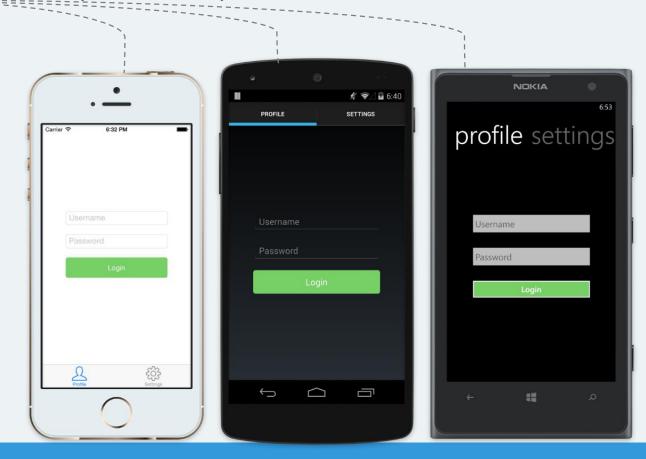


Ejemplo de Xamarin.Forms

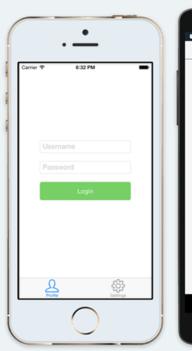
```
using Xamarin.Forms;
var profilePage = new ContentPage {
    Title = "Profile",
    Icon = "Profile.png",
    Content = new StackLayout {
        Spacing = 20, Padding = 50,
        VerticalOptions = LayoutOptions.Center,
        Children = {
            new Entry { Placeholder = "Username" },
            new Entry { Placeholder = "Password", IsPassword = true },
            new Button {
                Text = "Login",
                TextColor = Color.White,
                BackgroundColor = Color.FromHex("77D065") }}}
var settingsPage = new ContentPage {
    Title = "Settings",
    Icon = "Settings.png",
    (\ldots)
};
var mainPage = new TabbedPage { Children = { profilePage, settingsPage } };
```

Utiliza una sola API para construir interfaces de usuario nativas y específicas de plataforma.

En tiempo de ejecución, cada página de Xamarin.Forms y sus controles son mapeados a elementos de interfaz de usuario nativos y específicos de plataforma.



Interfaces de usuario nativas desde un código compartido

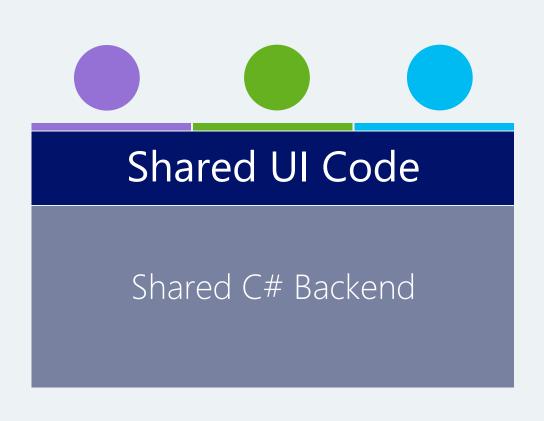






```
<?xml version="1.0" encoding="UTF-8"?>
<TabbedPage xmlns="http://xamarin.com/schemas/2014/forms"
            xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
            x:Class="MyApp.MainPage">
<TabbedPage.Children>
<ContentPage Title="Profile" Icon="Profile.png">
    <StackLayout Spacing="20" 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>
```

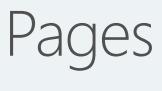
What's Included



✓ Más de 40 páginas, layouts y controles

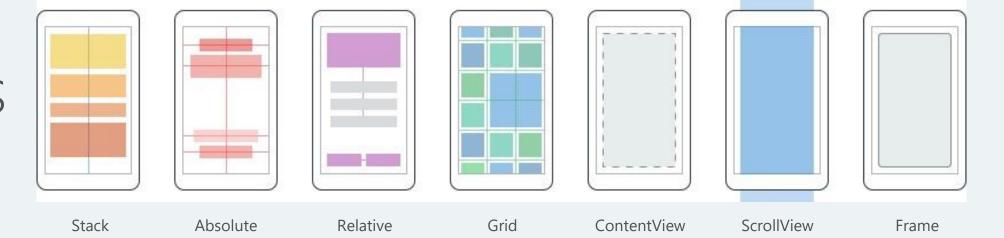
(Desarrolla desde code-behind en C# o XAML)

- ✓ Enlace de datos two-way
- ✓ Navegación
- ✓ API de Animación
- ✓ Servicio de dependencias
- ✓ Messaging Center





Layouts



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	

Distribuye en todas partes

Una app de Xamarin puede ser distribuida en distintas tiendas de aplicaciones













Entorno de desarrollo

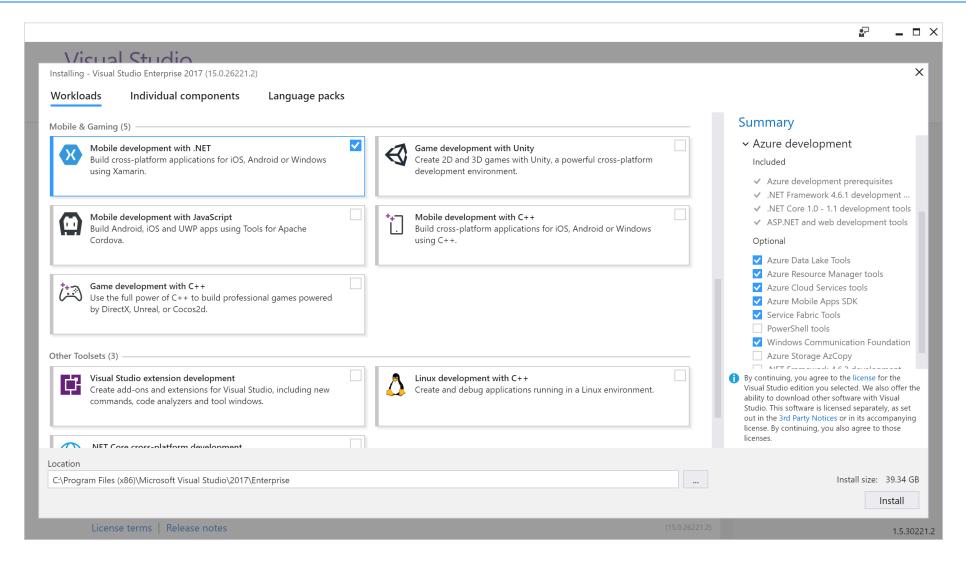




Xamarin está incluido en Visual Studio

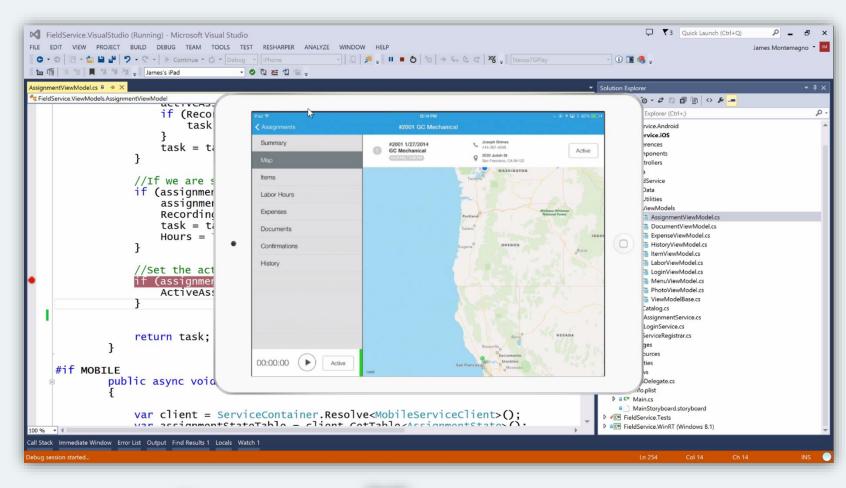
¡Incluyendo la Community Edition! (gratuita)

Integración con Visual Studio



xamarin.com/download

Integración con Visual Studio









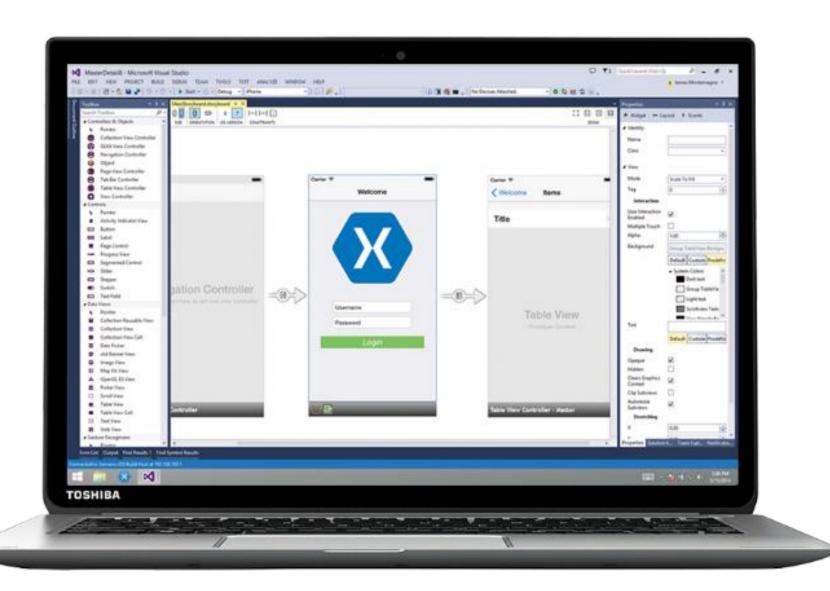
Una única solución con varios proyectos:

- iOS
- Android
- Windows Phone
- Windows Store
- UWP

Aprovecha la integración con el ecosistema de Microsoft

- ReSharper
- Team Foundation Server
- Y más

Xamarin para Visual Studio



Visual Studio para Mac

iOS, Android, & macOS

Desarrollo de .NET

.NET Core & ASP.NET Core

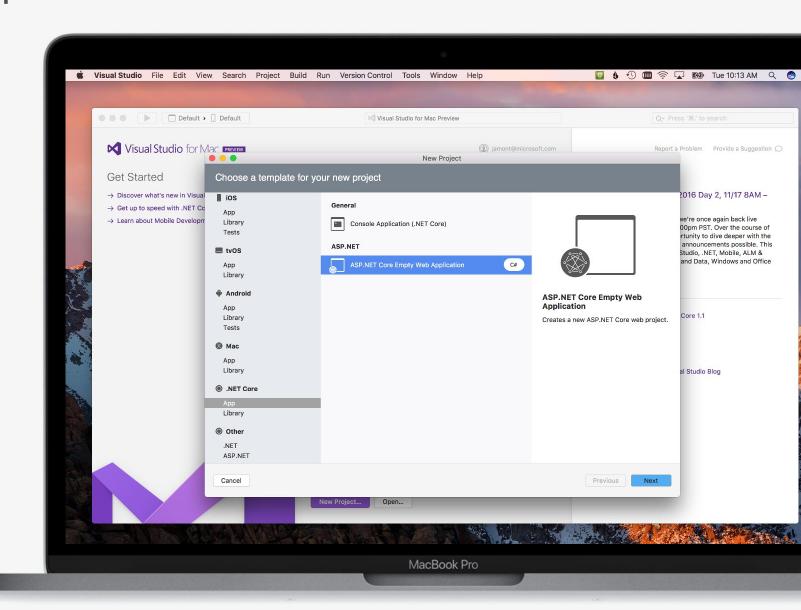
Herramientas para Azure

Desarrollo de juegos para Unity

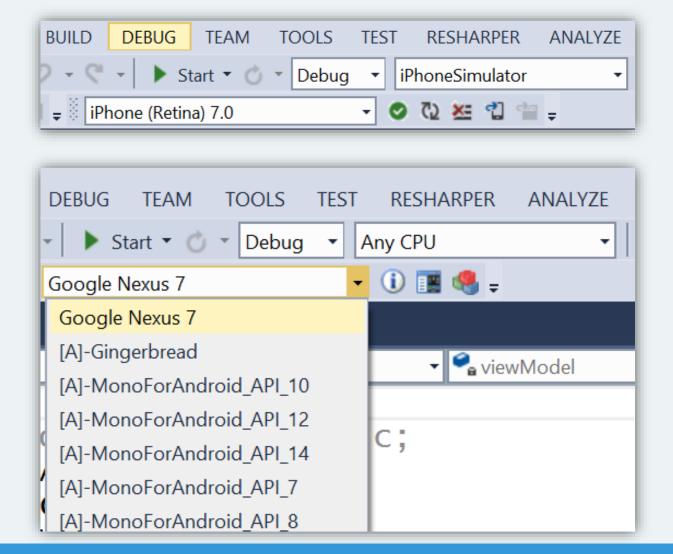
Azure Functions

IoT

Docker



Integración con Visual Studio



Realiza tus pruebas en

- Emuladores
- Dispositivos

Demo

https://github.com/icebeam7/AppClima



Q&A

Recursos para aprender Xamarin:



http://aka.ms/xamarindiplomado30



https://developer.xamarin.com/guides/xamarin-forms/creating-mobile-apps-xamarin-forms/



https://www.facebook.com/groups/xamarindiplomadoitc/

¡Gracias por tu atención!



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