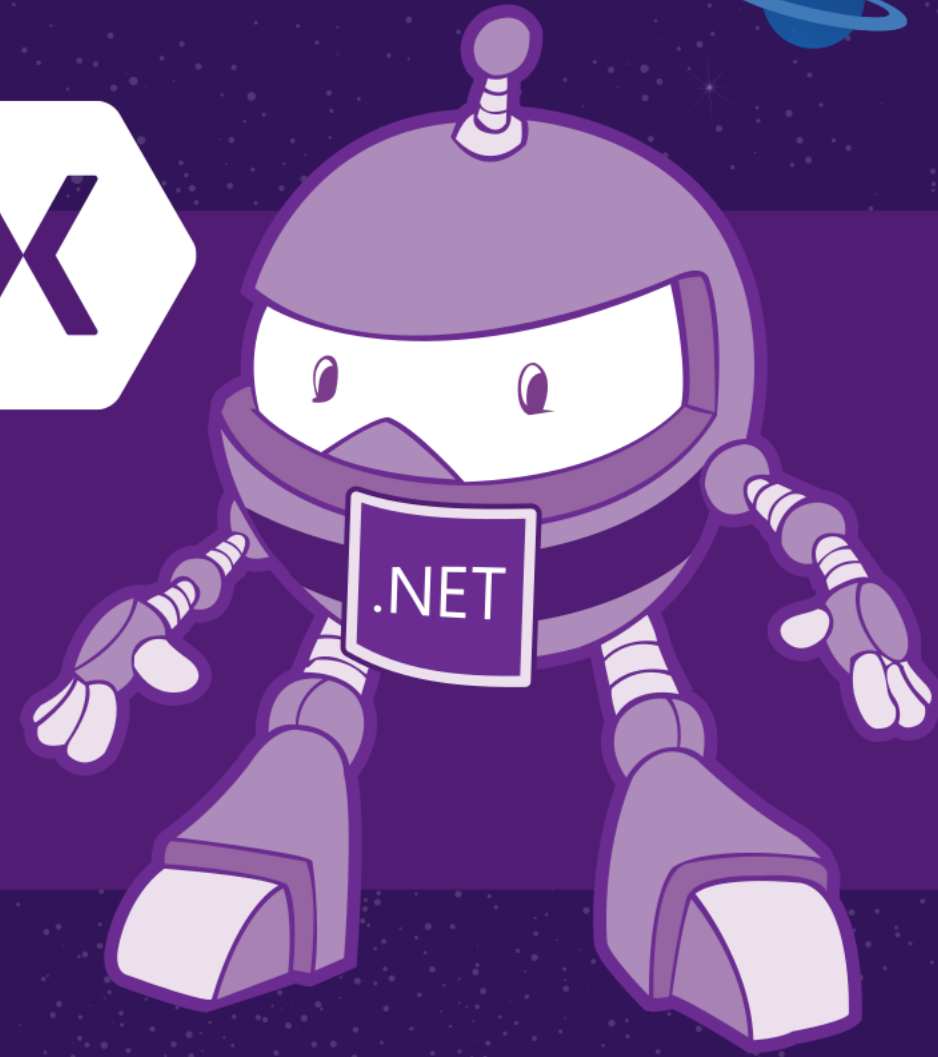


.NET Conf

"Focus on Xamarin"

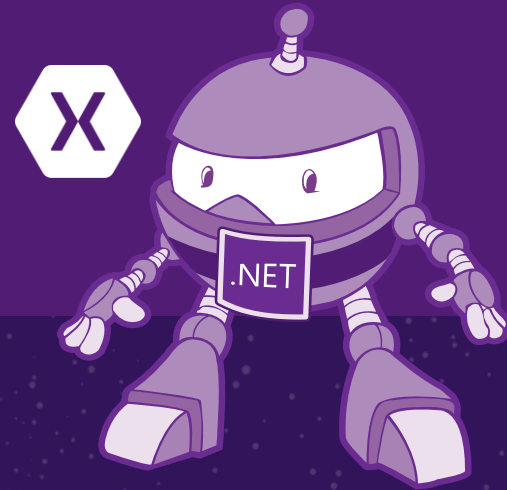


focus.dotnetconf.net

Boosting Your Xamarin Development Productivity



Maddy Leger
Program Manager, Xamarin
@maddyleger1



Ways to boost your productivity



Code



Build



Deploy



Iterate

Code faster

80%

20%

20%

20%

20%

20%

20%

20%

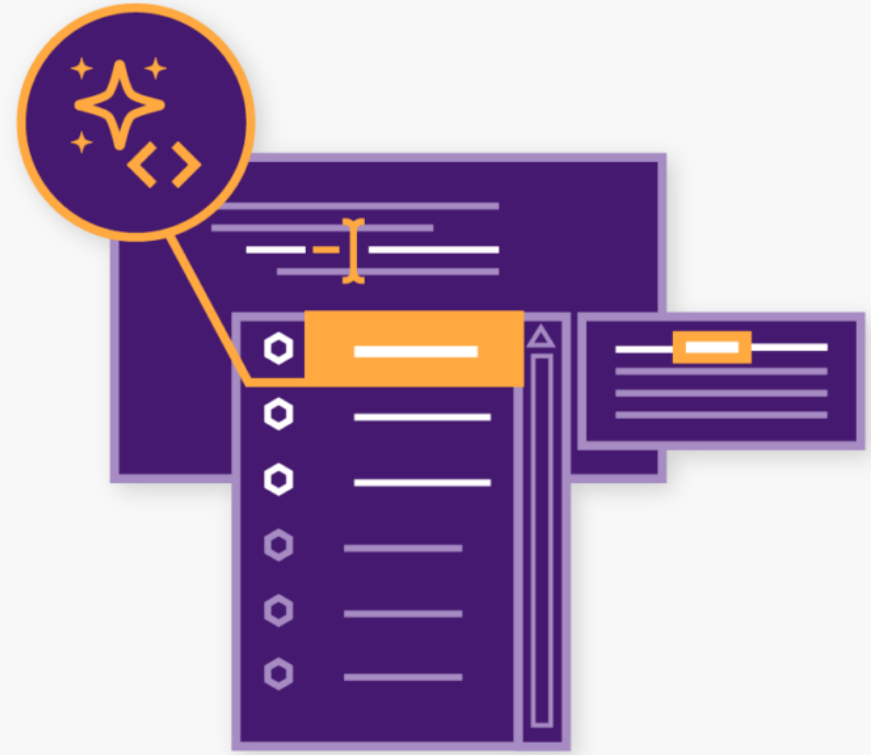
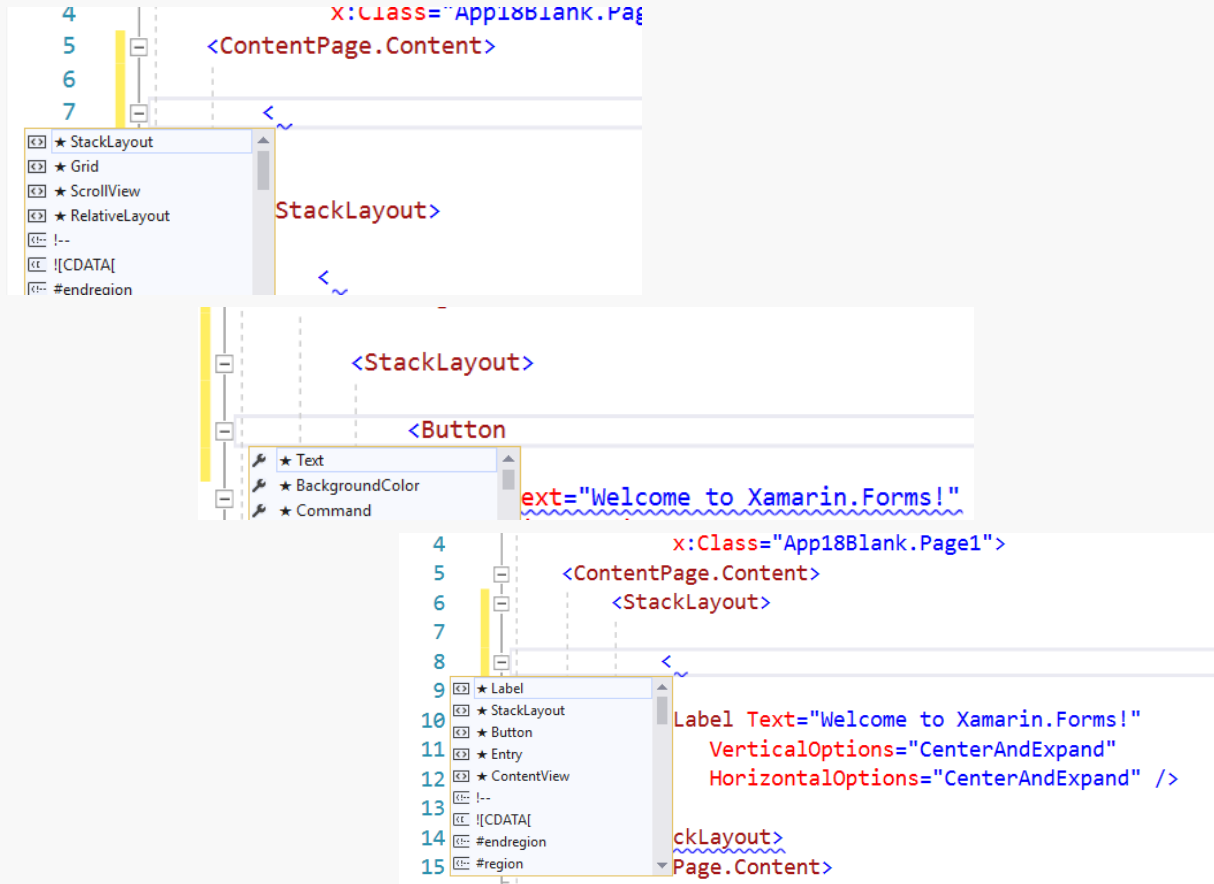
20%

20%

.NET



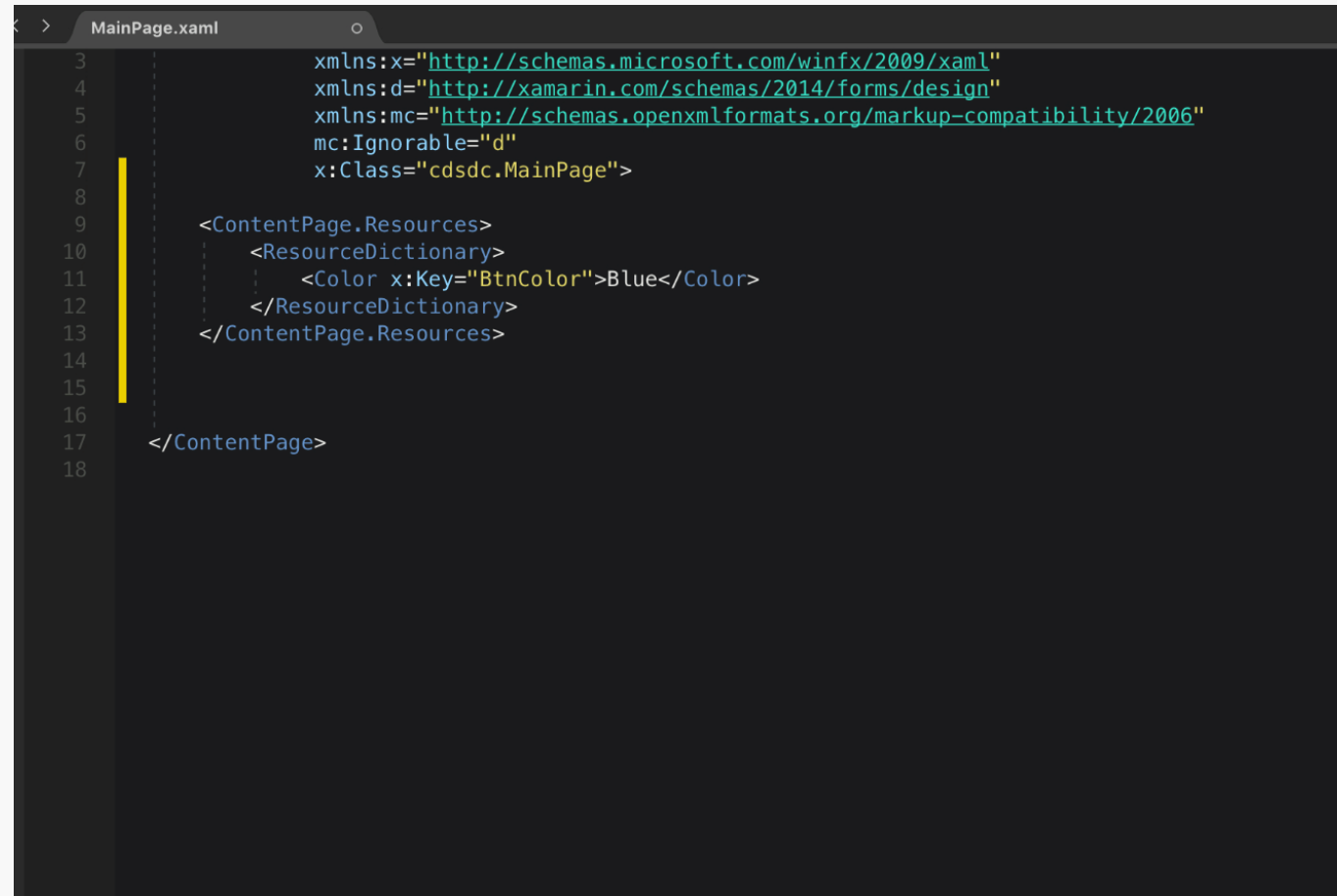
IntelliCode



Optimized code editor - Mac

```
23     SetSupportActionBar(toolbar);
24
25     FloatingActionButton fab = findViewById<FloatingActionButton>(Resource.Id.fab);
26     fab.Click += FabOnClick;
27
28     Button Accept = findViewById<Button>(Resource.Id.buttonAccept);
29     Button Reject = findViewById<Button>(Resource.Id.buttonDecline);
30     Button Submit = findViewById<Button>(Resource.Id.buttonSubmit);
31     Button Cancel = findViewById<Button>(Resource.Id.buttonCancel);
32     Button Reset = findViewById<Button>(Resource.Id.buttonReset);
33 }
34
35 public override bool OnCreateOptionsMenu(IMenu menu)
36 {
37     MenuInflater.Inflate(Resource.Menu.menu_main, menu);
38     return true;
39 }
40
41 public override bool OnOptionsItemSelected(IMenuItem item)
42 {
43     int id = item.ItemId;
44     if (id == Resource.Id.action_settings)
45     {
46         return true;
47     }
48
49     return base.OnOptionsItemSelected(item);
50 }
51
52 private void FabOnClick(object sender, EventArgs eventArgs)
53 {
54     View view = (View)sender;
55     Snackbar.Make(view, "Replace with your own action", Snackbar.LengthLong)
```

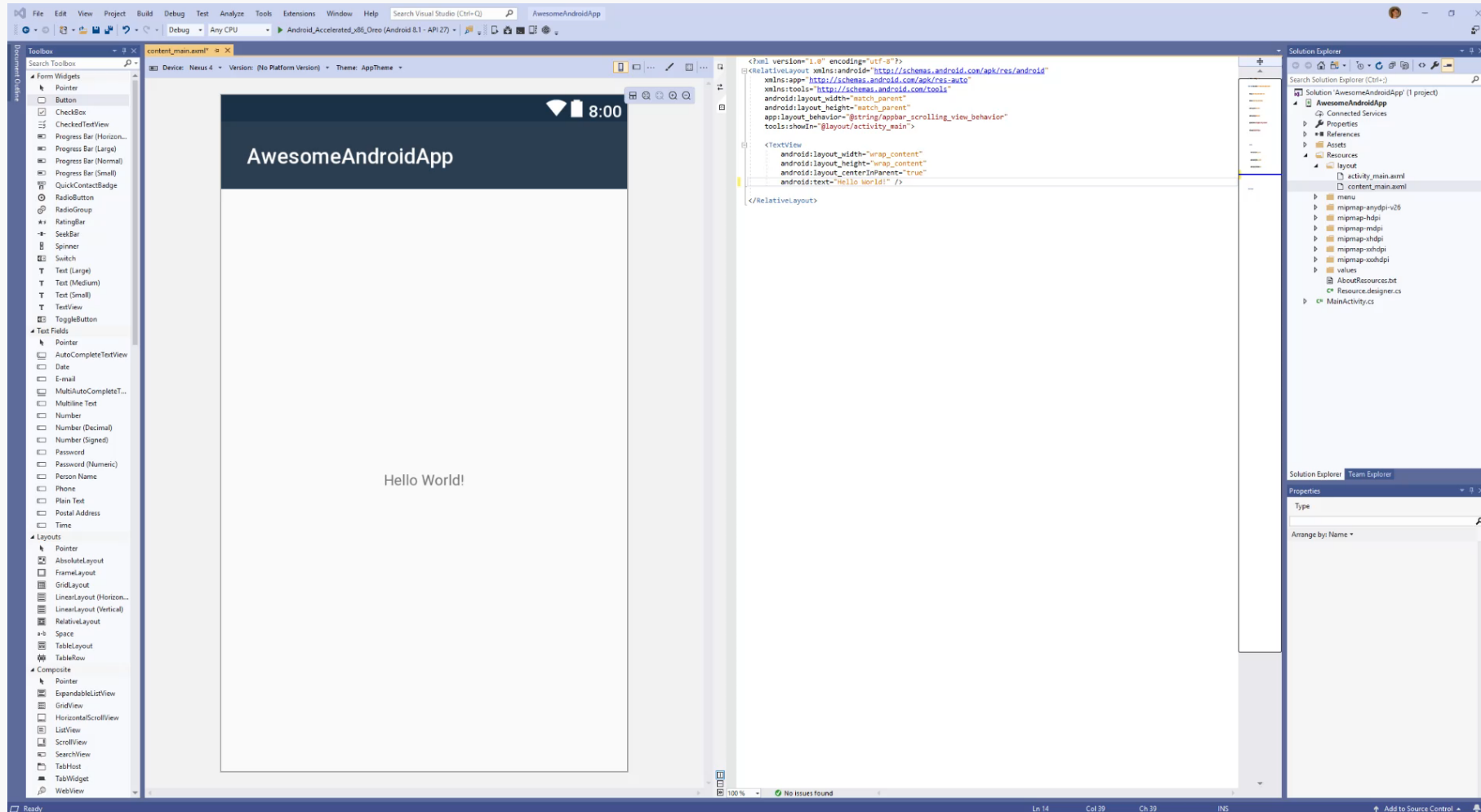
XAML IntelliSense - Mac



The screenshot shows a code editor window titled 'MainPage.xaml'. The code is written in XAML and includes XML namespace declarations and a resource dictionary. A yellow vertical bar is positioned at line 15, column 1. The code is as follows:

```
3      xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
4      xmlns:d="http://xamarin.com/schemas/2014/forms/design"
5      xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
6      mc:Ignorable="d"
7      x:Class="cdsdc.MainPage">
8
9      <ContentPage.Resources>
10         <ResourceDictionary>
11             <Color x:Key="BtnColor">Blue</Color>
12         </ResourceDictionary>
13     </ContentPage.Resources>
14
15
16
17 </ContentPage>
18
```

Android XML + Designer



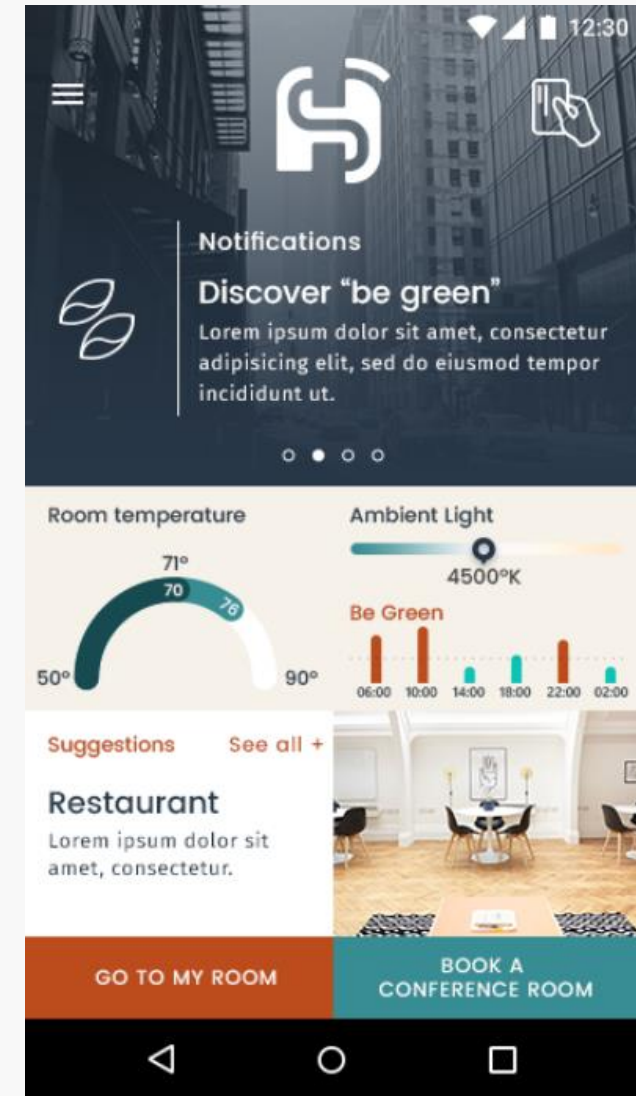
Build faster

.NET



SmartHotel360 Reference App

Step	VS 2017 (15.8)	VS 2019 (16.0)	Delta
First Build	01:04.20	00:50.13	-21.95%
Incremental Build (XAML Change)	00:10.62	00:07.47	-29.66%
Deploy (XAML Change)	00:09.03	00:04.44	-50.83%



Deploy faster

or

or .NET



Android Startup Tracing

Type

Startup Speed

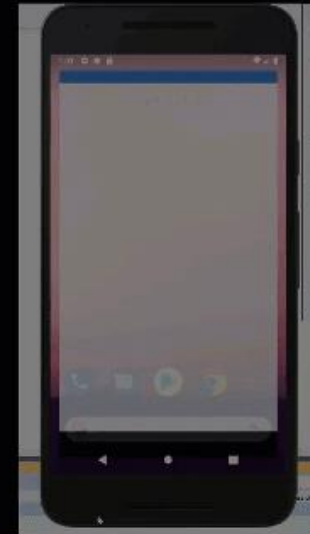
APK Size

Code Generation and Runtime

- ☒ AOT Compilation
- ☐ Use LLVM Optimizing Compiler
- ☒ Enable Startup Tracing



Startup Tracing



Normal

Android App Bundles

Specific Languages

Proper Resource Screen
Densities

Best Match ABIs



arm64

fr

en

xxxhdpi

Base

Optimized APK
(20-50% size reduction)

Iterate faster

80%

20%

20%

20%

20%

20%

20%

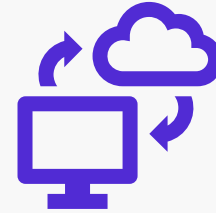
.NET



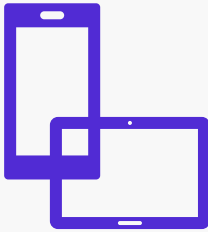
XAML Hot Reload for Xamarin.Forms



No setup or code changes



Interact with your real data



Android or iOS



Emulator, Simulator, or Device



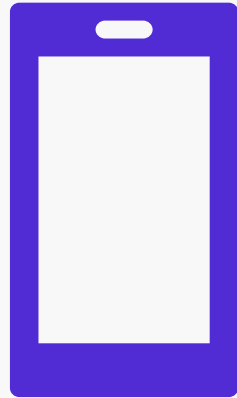
Intelligent and resilient



Works with custom controls, third party libraries and frameworks, Shell, resources, and more!

Xamarin Hot Restart

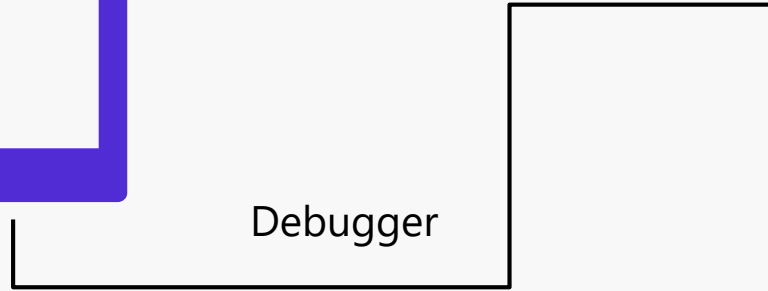
iOS Device



Visual Studio 2019



Debugger



Demo: Iterate Faster.NET



Resources

- Hot Reload Docs: aka.ms/XAMLHotReloadDocs
- Hot Restart Docs: aka.ms/HotRestartDocs
- Monkey App: github.com/maddyleger1/MonkeysRefresh

Boosting Your Xamarin Development Productivity



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