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Creating Universal App for Microsoft Windows, Windows 10 & Windows Phone

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Surface Pro 3

SPECIFICATIONS



Screen size: 12 inches



Resolution: 2160 x 1440



Dimensions: 11.5" x 7.93" x 0.36"

Battery Life: Up to 9 hours of web browsing⁴



Processor: 4th generation Intel[®] Core[™] i3, i5 or i7



A full Docking Station



Intel i **&** GB Ram 528 GB SSD Chf 2989 Chf 14^g (type cover) Project wireless (Miracast) Run on battery

The Challange

ONE WINDOWS

Phone Ph

Phablet

Small Tablet Large

Tablet

2-in-1s (Tablet or Laptop)

Classic Laptop Desktops & All-in-Ones





ONE WINDOWS





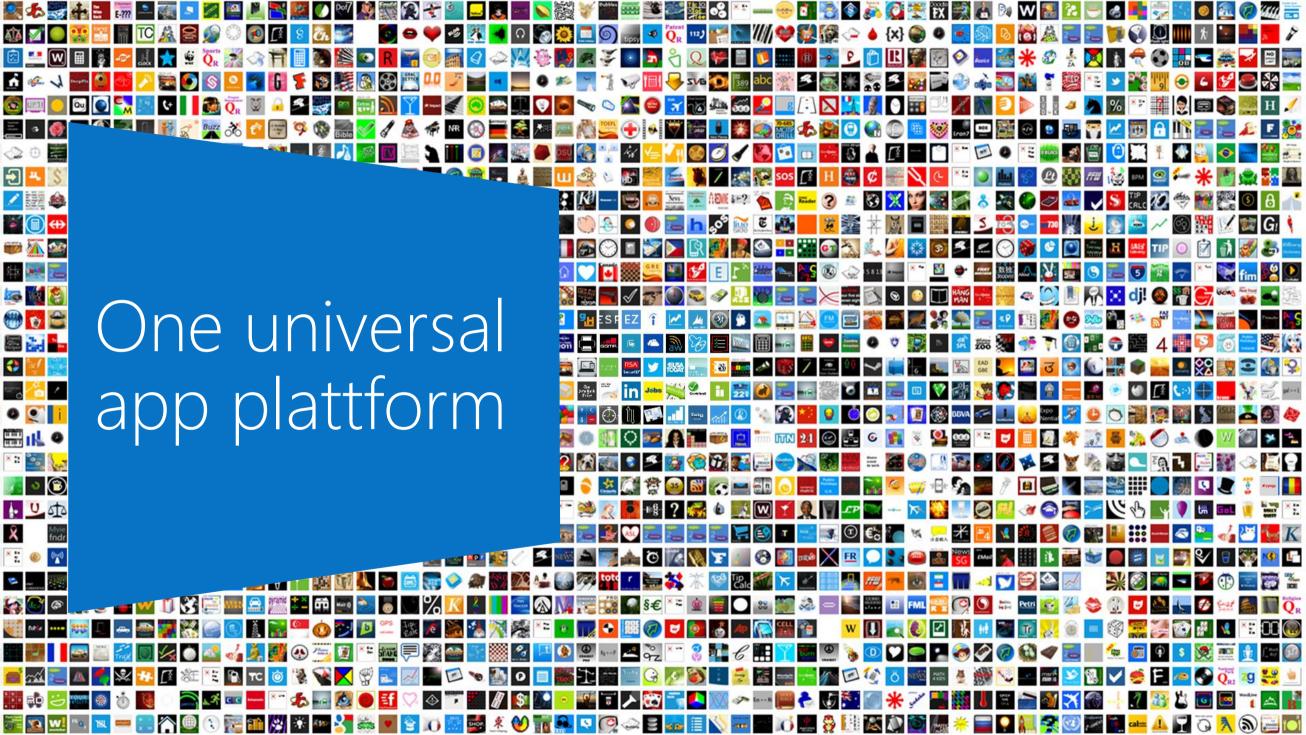




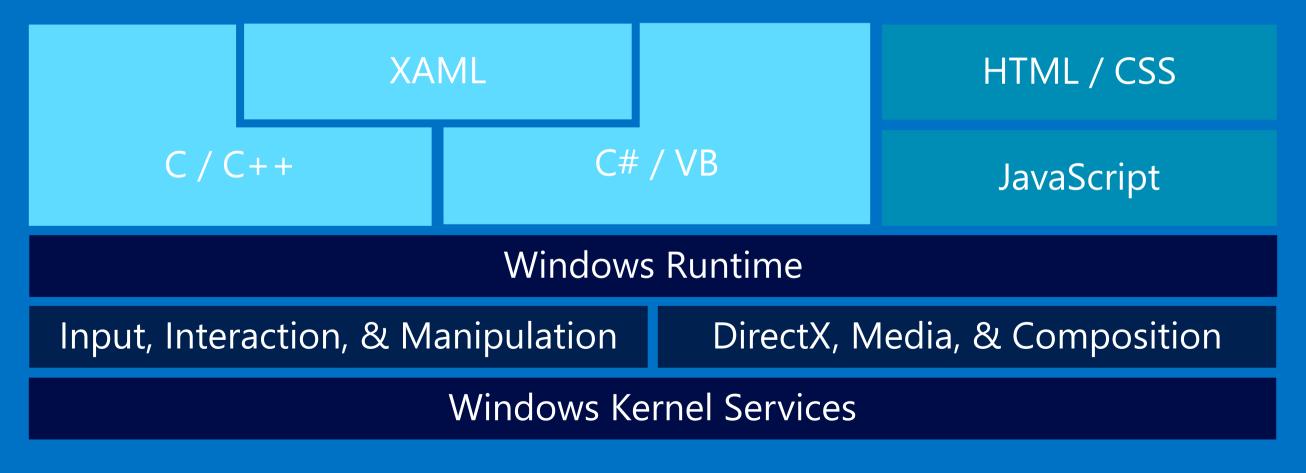
Internet of Things

Xbox

PPI



A common, familiar programming model for universal Windows apps



Demo: Shared Projects

'Primitives' - same

- Layout: Panel, StackPanel, Grid, Border
- Buttons, Slider, ToggleSwitch, CheckBox, RadioButton, ProgressBar
- TextBox/TextBlock
- Shapes/Path



'Primitives' – same API, tailored behavior

Hub

- AppBar/CommandBar
- Date/Time Pickers and List Pickers
- ListView
 - Multi-select; containers, swipe selection
- Flyouts
- Media
- Ads SDK*



You can *tailor* the design to each device



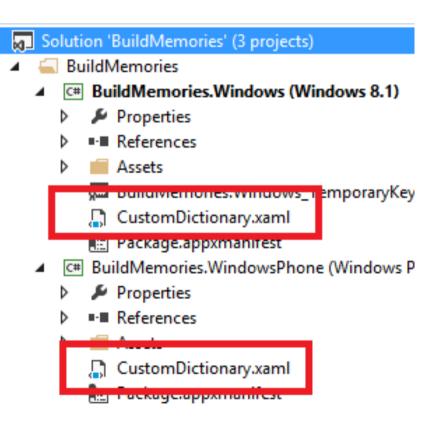






Tailor the design trough Styles

A resource dictionary per project





Demó: Talored resources

Code reuse options for universal apps

call WinRT APIs include code and .xaml files



New

Sharing **source code** between projects

I can easily include platform-specific code under #if or partial classes Portable Class Libraries

Sharing one **binary** between projects

Improved!

I compile just once and know it works on all platforms



Demó: Shared source code

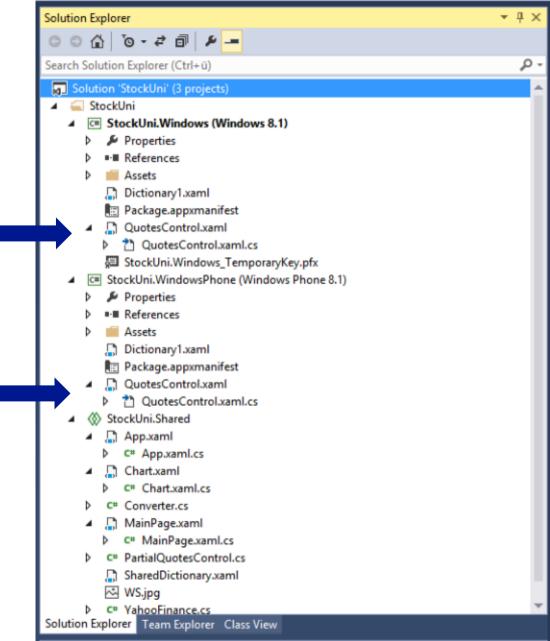
Device-specific APIs

- Windows
 - SearchBox
 - SettingsFlyout
- Windows Phone
 - Pivot
 - AutoSuggestBox
 - ContentDialog
 - Maps
 - System Chrome
 - Progress area, in-call UI

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Use User Controls

- Can be in the shared project
 - Same code and behavior for both platforms
- One on each project
 - Different code and behavior





Global Resources

- Share DataTemplate
- Share Converters
- Share Style



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Demo: Share resources

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Use conditional constants



C#: WINDOWS_APP and WINDOWS_PHONE_APP

#if WINDOWS_PHONE_APP

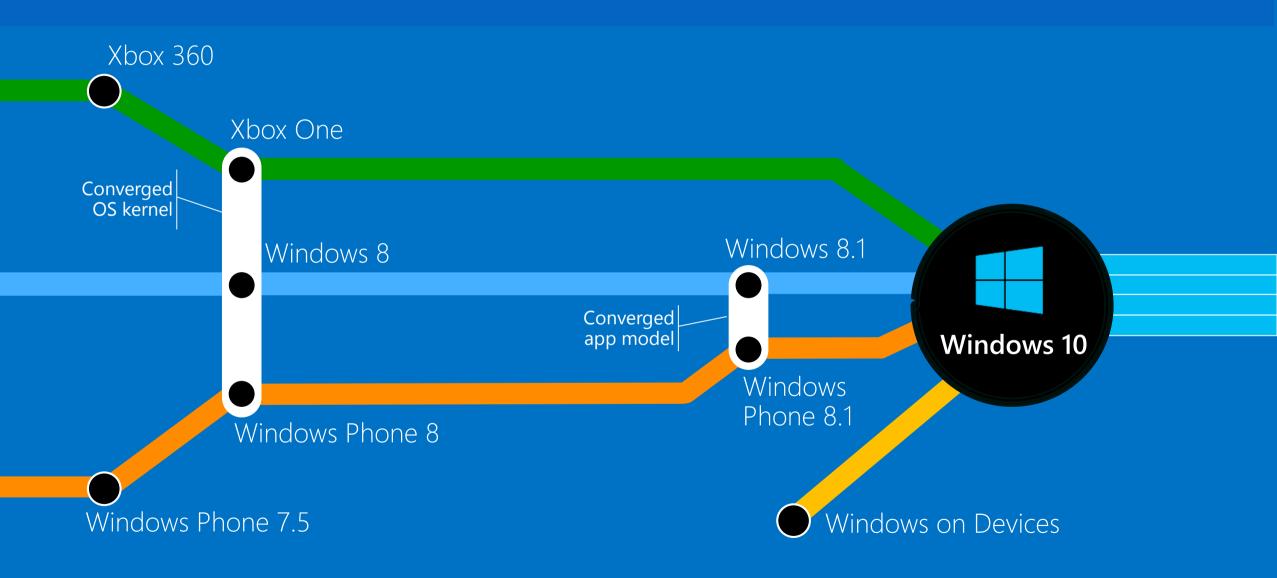
Windows.Phone.UI.Input.HardwareButtons.BackPressed +=
this.HardwareButtons_BackPressed;

#endif

Demo: Final solution

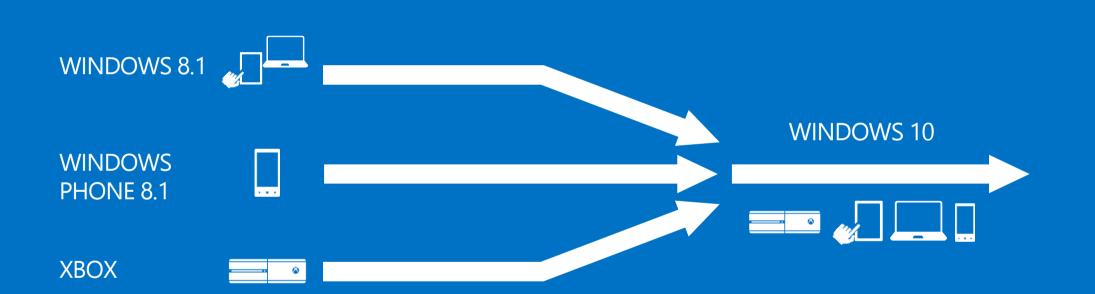
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Platform Convergence Journey





One Windows Store



- Converged developer portal for Windows and Windows Phone
- Separate user and developer capabilities

- Fully converged experience
- Best features from each
- New capabilities





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