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Shaping the Future with You

Windows Phone 8: XAML Application Development

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Agenda

Overview

Building Windows Phone 8 applications

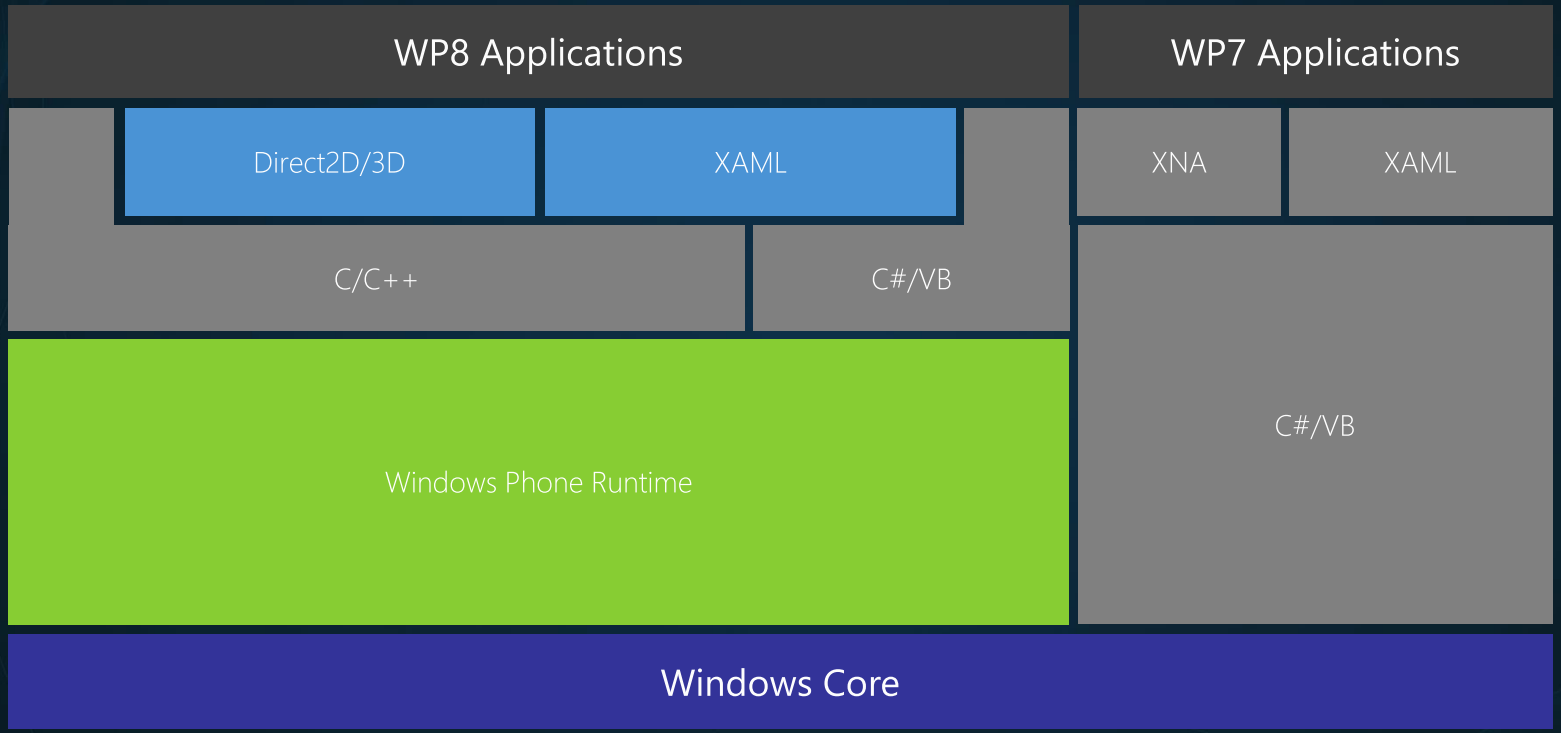
What about Windows Phone 7 application

OVERVIEW

What is XAML?

- A declarative, markup-based language to define your user experience
- **The** way to write apps for Windows Phone
- Aligns with Windows 8

Windows Phone



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BUILDING WINDOWS PHONE 8 APPLICATIONS

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New XAML application features

Project infrastructure and design

Building Blocks

.NET

Project infrastructure and design

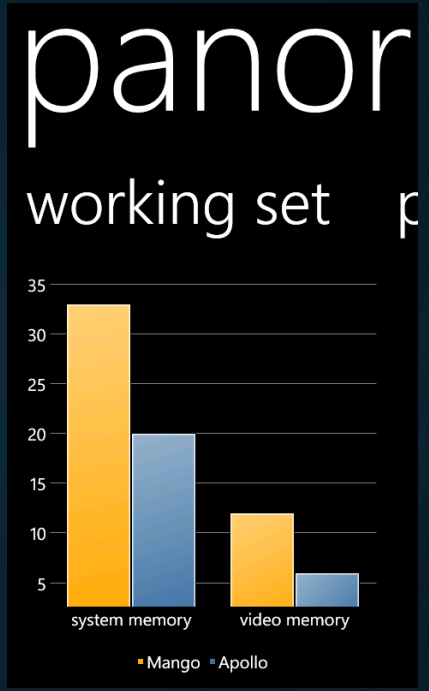
- New and Updated Project Templates
  - HTML5 & Alignment Grid
- Localization
  - Use resource strings from the start, both code-behind and XAML
  - Full support for RTL & BiDi
- Multiple resolutions
  - WVGA (480 x 800)
  - 720p (720 x 1280) – 1.5 scaled
  - WXGA (768 x 1280) – 1.6 scaled
  - Layout is in logical vs. physical pixels

Project infrastructure and design

DEMO

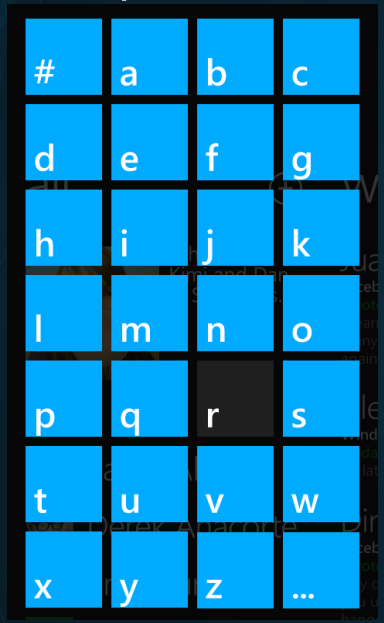
Building blocks

- Control improvements
  - ProgressBar animates off-thread
  - Panorama, Pivot & LongListSelector all in ROM
  - Reduced Panorama memory usage
  - Improved “first touch” experience for signature controls

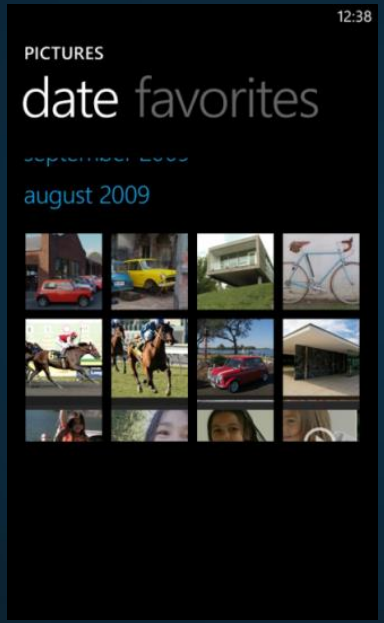


LongListSelector (part 1)

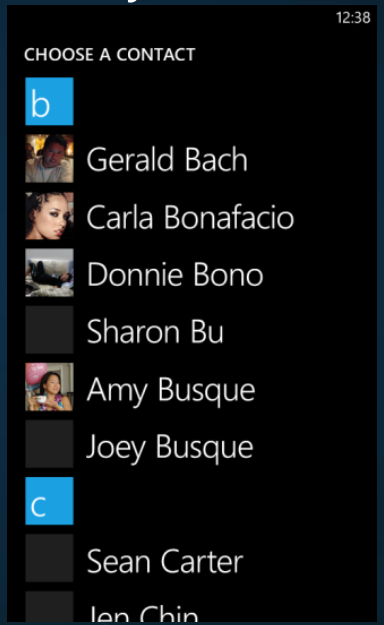
JumpList



Grid View



Sticky Headers



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Building blocks

DEMO

LongListSelector (part 2)

- Grouping requires an IList of IList
- Does UI virtualization
- ItemRealized is the key to infinite scrolling
- Remember to set IsGroupingEnabled

Maps

- Interactivity
  - Off-thread input, panning, fluid pinch+stretch
- Overlay layers
  - UIElement position and scale transforms no longer updated on UI thread
- Vector-based
  - Render from vector data, readable labels, perspective view
- Offline maps
  - Common cache across all applications

WebBrowser

- IE10-based
- Supports HTML5 features
  - Local storage, CSS3
- Supports gestures

- Mango apps run in IE9 compatibility mode

Pinch + Stretch

- Extends the ManipulationDeltaEventArgs class
- **PinchManipulation** property
- Provides center point for the original and current gesture

ViewportControl

- More “primitive” than ScrollViewer
- Able to update bounds dynamically
- Designed specifically for touch-specific scenarios
- Base-control for LongListSelector
- Input is off-thread

.NET

- CoreCLR
- async/await
- HttpClient
- CallerMemberName
- Portable Class Libraries (PCL)

WHAT ABOUT WINDOWS PHONE 7 APPLICATIONS

Application compatibility

- Massive effort on making sure the top apps and API are compatible
- Tools can target both 7.1 and 8.0
- Light Up
- Code sharing using PCL

Application compatibility

DEMO

Summary

- XAML is THE way to develop for Windows Phone 8
- LOADS of bug fixes and performance improvements made to controls
- High compatibility between Windows Phone 7.5 and 8.0
- PCL, HttpClient, async, etc also now available

thank you for attending my session at **#TechEdZA** /cc **@rudigrobler**

Related sessions

Windows Phone 8 Critical Developer Practices for Delivering Outstanding Applications	WED 13:15
Designing awesome XAML applications in Visual Studio and Blend for Windows 8 and Windows Phone 8	WED 17:15
How to leverage code across Windows Phone 8 and Windows 8	THUR 17:15
Windows Phone 8 XAML Application Development	FRI 8:30

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