

WPF 4 Miscellany

Features added in WPF 4



Topics

- Graphics Performance
- Layout Rounding
- Animation Easing
- Multitouch
- Custom Dictionaries
- Xaml Parsing

Graphics Performance

- General performance
- VisualScrollableAreaClip
- Default RenderOptions.BitmapScalingMode

Cached Composition

```
<Grid CacheMode="BitmapCache">  
  ...  
</Grid>
```

```
<Grid>  
  <Grid.CacheMode>  
    <BitmapCache RenderAtScale="2"  
      SnapsToDevicePixels="False"  
      EnableClearType="False" />  
  </Grid.CacheMode>  
  ...  
</Grid>
```

Bitmap Effects

- Pixel Shader 3.0

BitmapEffect	Translated To
BlurBitmapEffect	BlurEffect
DropShadowBitmapEffect	DropShadowEffect

Glow

Testing

Shadow

Testing

Disabled

BevelBitmapEffect

EmbossBitmapEffect

OuterGlowBitmapEffect

<http://wpffx.codeplex.com/>

Layout Rounding

Animation Easing

BackEase

BounceEase

CircleEase

CubicEase

ElasticEase

ExponentialEase

PowerEase

QuadraticEase

QuarticEase

QuinticEase

SineEase

Multitouch

Low-level events

TouchDown

TouchMove

TouchUp

Manipulation Events

ManipulationStarting

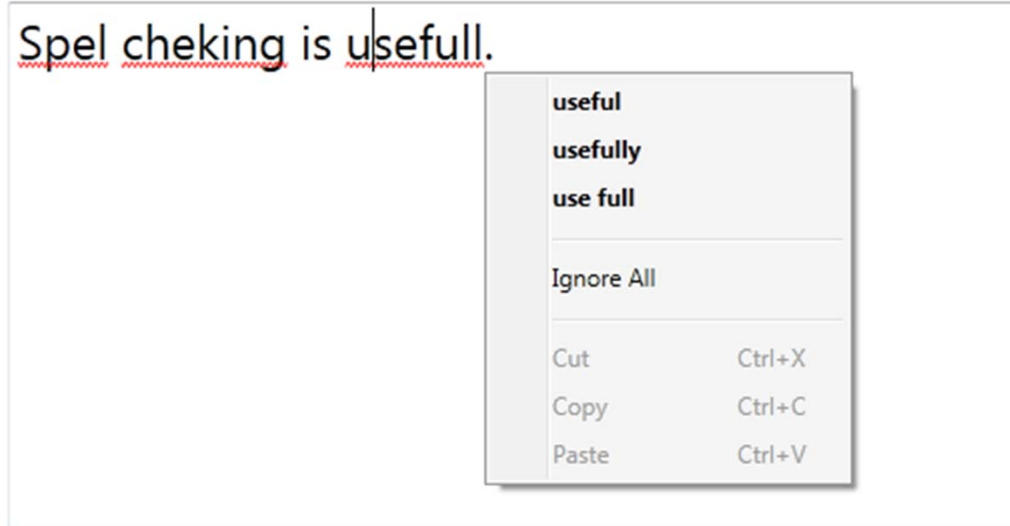
ManipulationStarted

ManipulationDelta

ManipulationBoundaryFeedback

ManipulationCompleted

Custom Dictionaries



Microsoft, but not Pluralsight?

System.Xaml

- Separate component
- APIs for Xaml's structure
- Some new Xaml features
 - Not usually available

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