Multi-resolution apps for Windows Phone 8

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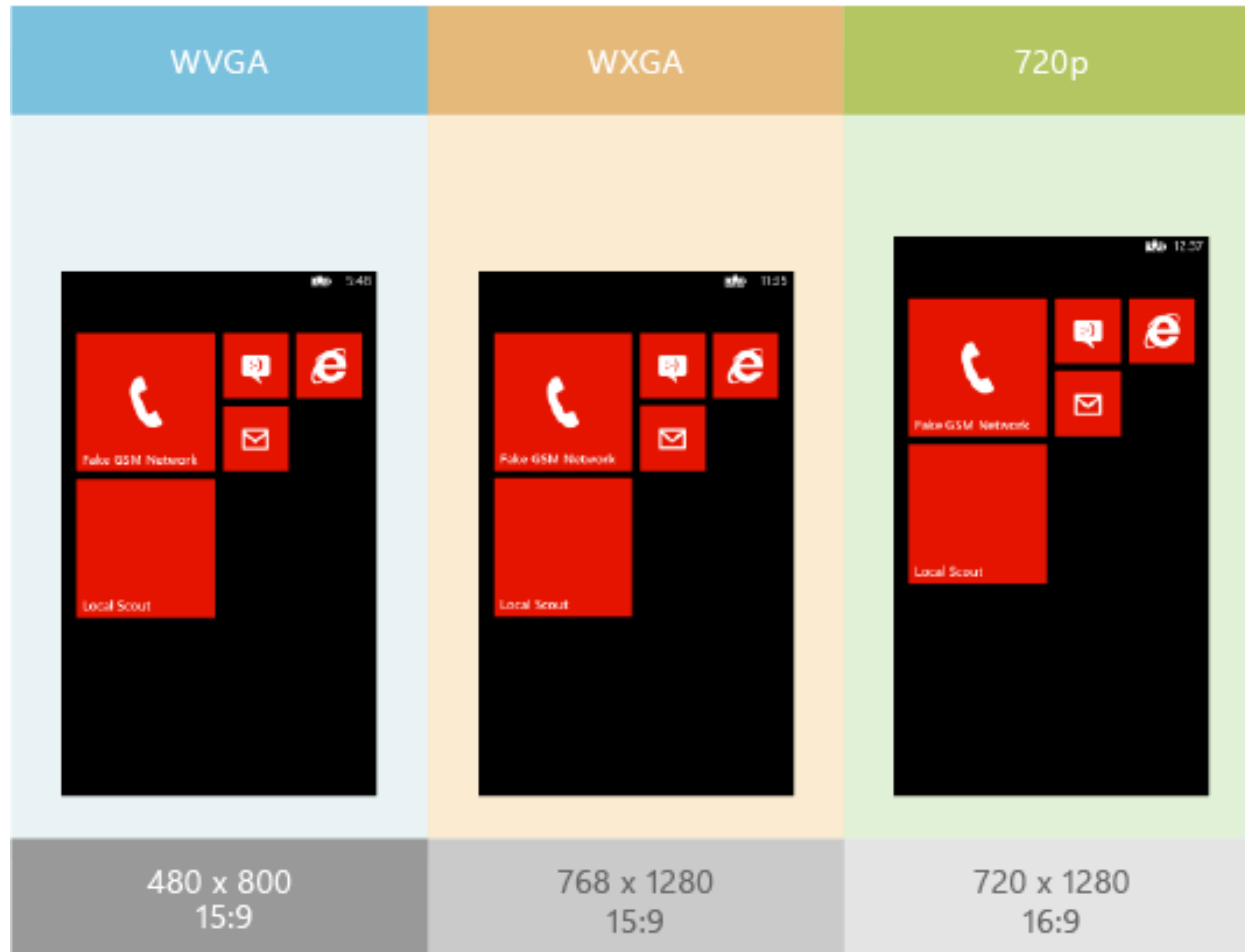http://wp7rocks.com

devrain
solutions

Supported resolutions

Supported resolutions

Resolution	Resolution	Aspect ratio	Delta from Windows Phone OS 7.1	Scaled resolution
WVGA	480 × 800	15:9	None. This is the only supported resolution for Windows Phone OS 7.1.	480 × 800
WXGA	768 × 1280	15:9	1.6*x* scale	480 × 800
720p	720 × 1280	16:9	1.5*x* scale, 80 pixels taller (53 pixels, after scaling)	480 × 853

Supported resolutions

WVGA	WXGA	720p
480 x 800 15:9	768 x 1280 15:9	720 x 1280 16:9

- do not hard-code the height and width or the margins of the controls;
- use * and the **Auto** value to set the height and width of its rows and columns.

Resolution-dependent backgrounds and assets

Detecting actual resolution

```csharp
public enum Resolutions { WVGA, WXGA, HD720p };

public static class ResolutionHelper
{
    private static bool IsWvga   { get { return App.Current.Host.Content.ScaleFactor == 100;  } }
    private static bool IsWxga   { get { return App.Current.Host.Content.ScaleFactor == 160;  } }
    private static bool Is720p    { get { return App.Current.Host.Content.ScaleFactor == 150; } }

    public static Resolutions CurrentResolution {
        get
        {
            if (IsWvga) return Resolutions.WVGA;
            else if (IsWxga) return Resolutions.WXGA;
            else if (Is720p) return Resolutions.HD720p;
            else throw new InvalidOperationException("Unknown resolution");
        }
    }
}
```

MultiResImageChooser.cs

```csharp
using System.Windows.Media.Imaging;

public class MultiResImageChooserUri {
    public Uri BestResolutionImage {
        get {
            switch (ResolutionHelper.CurrentResolution) {
                case Resolutions.HD720p:
                    return new Uri("Assets/MyImage.screen-720p.jpg", UriKind.Relative);
                case Resolutions.WXGA:
                    return new Uri("Assets/MyImage.screen-wxga.jpg", UriKind.Relative);
                case Resolutions.WVGA:
                    return new Uri("Assets/MyImage.screen-wvga.jpg", UriKind.Relative);
                default:
                    throw new InvalidOperationException("Unknown resolution type");
            }
        }
    }
}
```

Splash screens

Splash screens

Add images with the following file names:

- SplashScreenImage.Screen-WVGA.jpg
- SplashScreenImage.Screen-WXGA.jpg
- SplashScreenImage.Screen-720p.jpg

All splash screen images must be in the root folder of your app project.

Tile and app icons

Tile and app icons

For Tile and app icons, you have to include images only for WXGA resolution. The phone automatically scales the images to the correct size for WVGA and 720p screens.

Flip Template

Iconic Template

Cycle Template

WXGA resolution Tile sizes

	Flip and Cycle	Iconic
Small	159 × 159 pixels	110 × 110 pixels
Medium	336 × 336 pixels	202 × 202 pixels
Wide	691 × 336 pixels	N/A

Resources

Windows Phone 7 Rocks!
http://wp7rocks.com

Q&A

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