Me, Myself and I

LORI LALONDE
Consultant

Windows Phone 8 Recipes
A Problem-Solution Approach

Pro XAML with C#
From Design to Deployment on WPF, WinRT and Windows Phone

Apress®

CTTDNUG

MVP
Microsoft® Most Valuable Professional

Xamarin Certified Mobile Developer

Twitter: @loriblalonde
Email: loriblalonde@gmail.com
Blog: geekswithblogs.net/lorilalonde
LinkedIn: http://ca.linkedin.com/in/lorilalonde

ObjectSharp

Xamarin vs Xamarin.Forms

ObjectSharp

Xamarin's Default App Architecture

iOS C# UI

Android C# UI

Windows C# UI

Shared App Logic

~75% - 90% code reuse

ObjectSharp
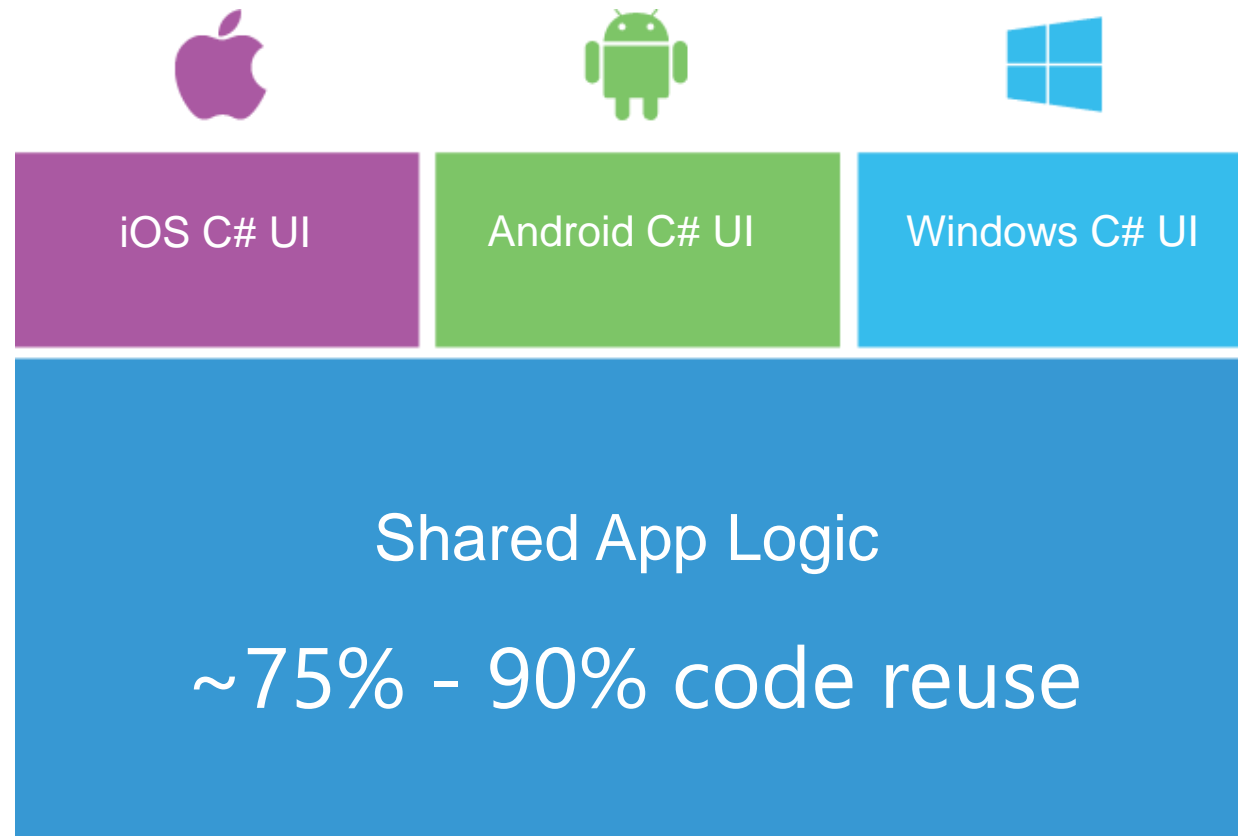
Xamarin.Forms App Architecture

Xamarin.Forms

Shared App Logic

~90 - 99% code reuse
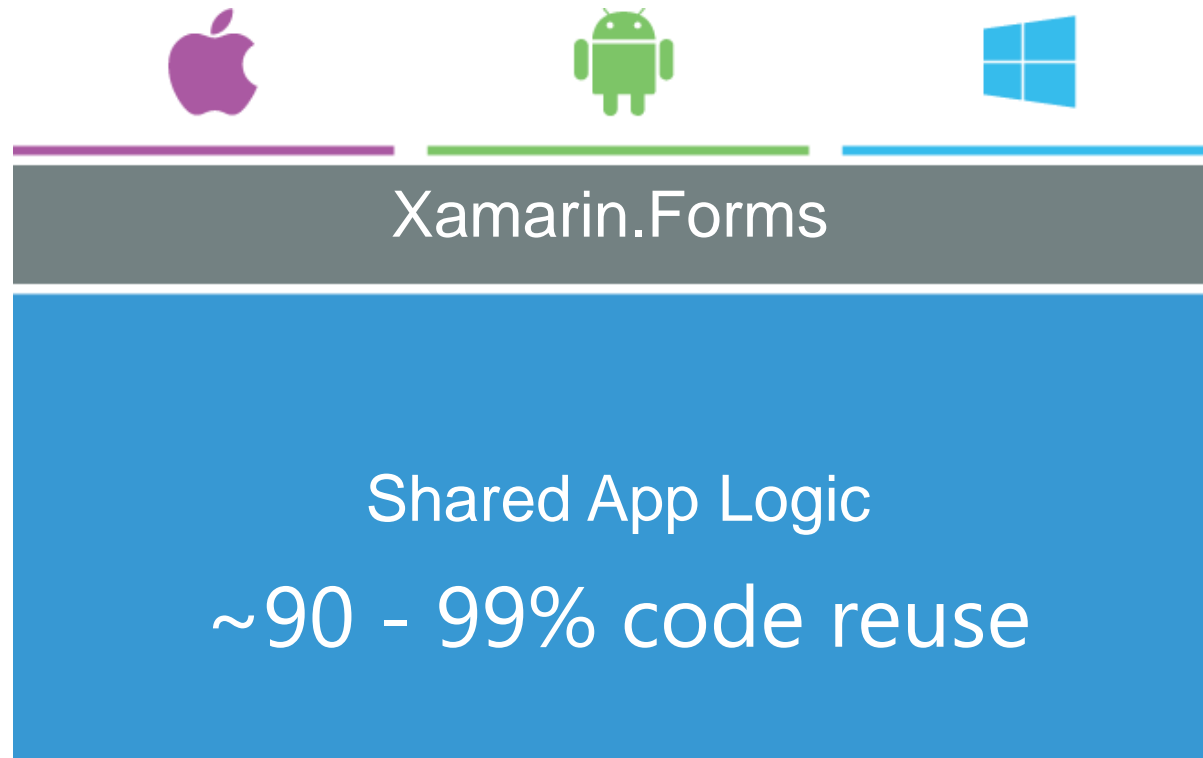
Xamarin.Forms v1.3 - no support for Windows 8.1 or Windows Phone 8.1

ObjectSharp

Xamarin.Forms 1.4

- Added support for Windows 8.1 and Windows Phone 8.1

- Xamarin.Forms templates do not add 8.1 projects automatically

- Some limitations
  - no support for: maps, gridview, loading embedded resources from another assembly

Object Sharp

Xamarin.Forms: Build Native User Interfaces using Shared Code
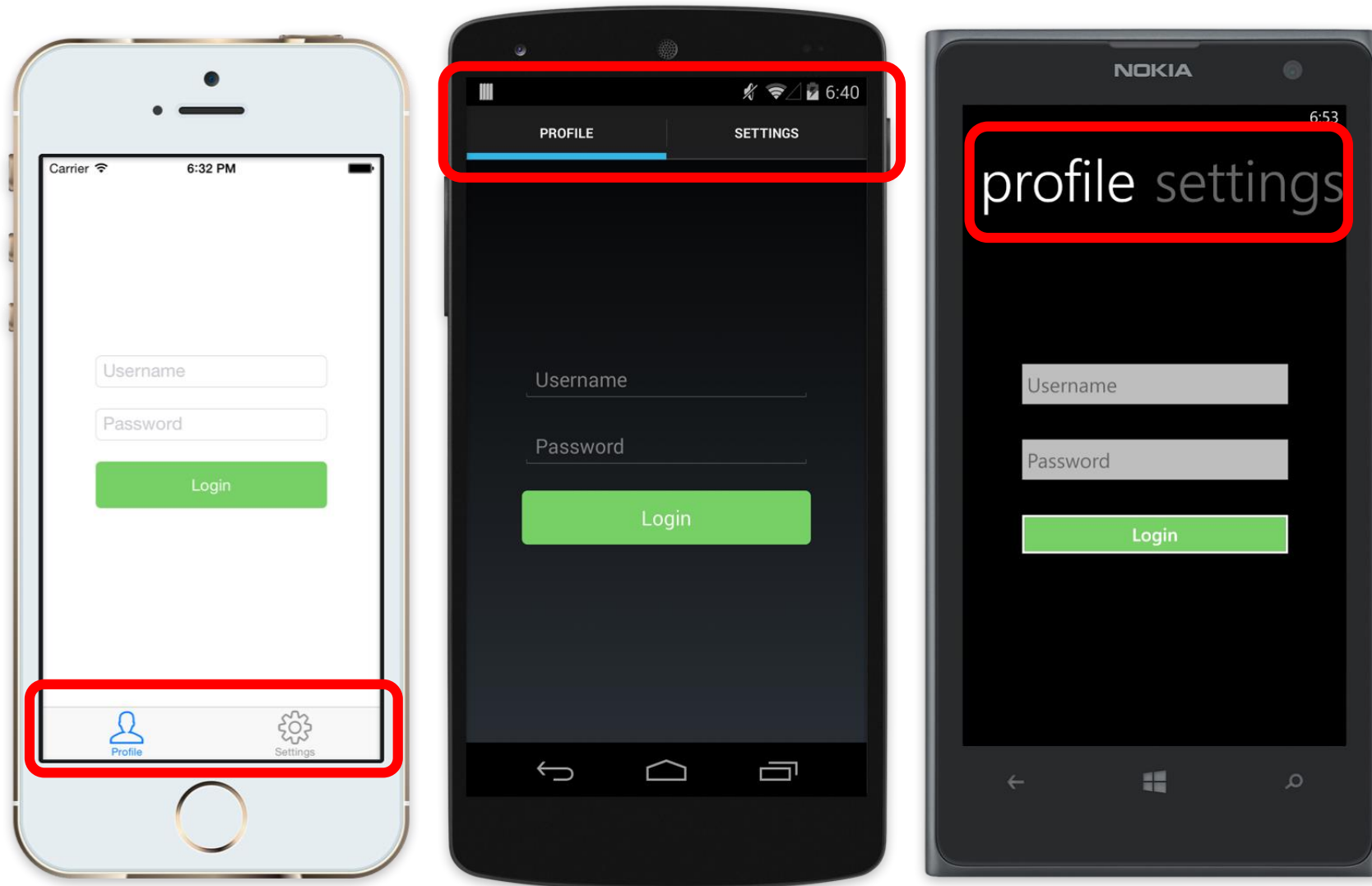
The Tools
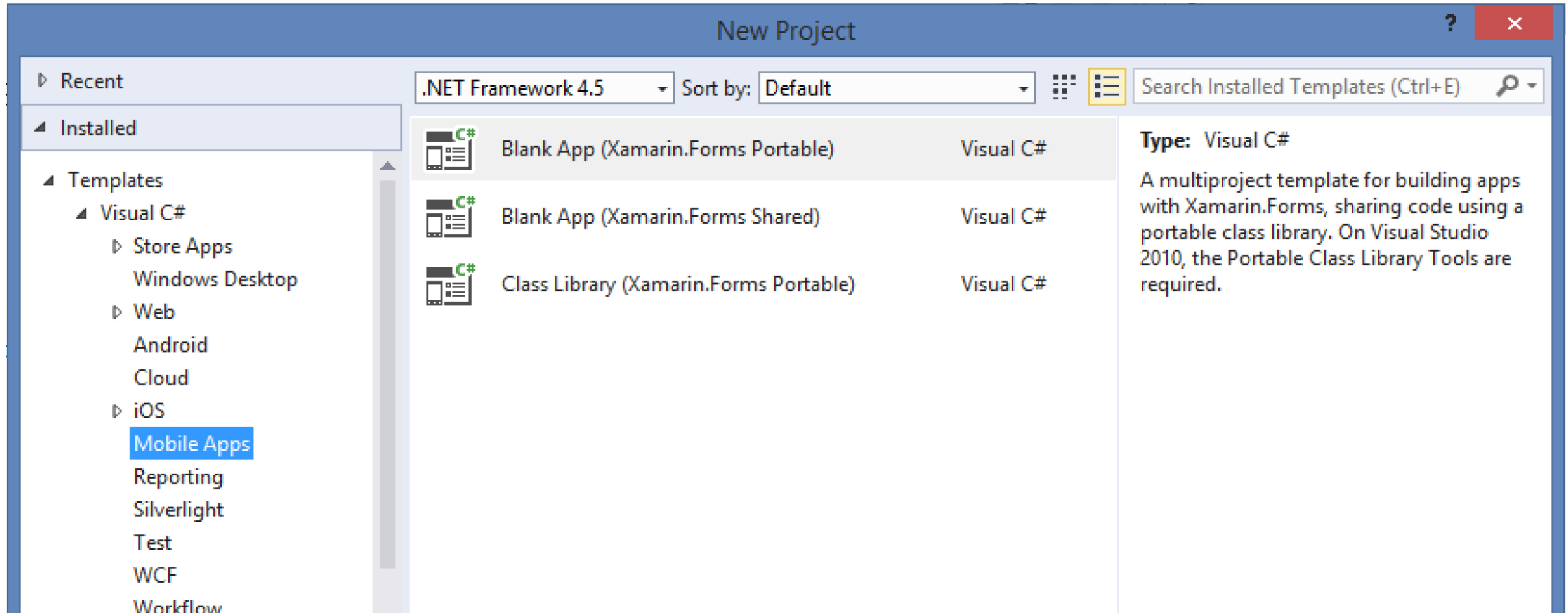

Xamarin Studio

OR

Visual Studio®

+ Xamarin Plug-Ins

ObjectSharp

Xamarin.Forms Templates

Supports Data Binding

```xml
<Button Text="search"
        Grid.Row="3"
        Command="{Binding SearchCommand}"
        Grid.ColumnSpan="2" />
<ListView ItemsSource="{Binding Places}"
          Grid.Row="4"
          Grid.ColumnSpan="2">
    <ListView.ItemTemplate>
        <DataTemplate>
            <ViewCell>
                <Grid RowSpacing="5">
                    <Grid.RowDefinitions>
                        <RowDefinition Height="Auto" />
                        <RowDefinition Height="Auto" />
                        <RowDefinition Height="Auto" />
                    </Grid.RowDefinitions>
                    <Label Text="{Binding PostalCode}" Font="Medium,Bold" />
                    <Label Text="{Binding PlaceName}" Font="Small" Grid.Row="1" />
                    <BoxView WidthRequest="200" HeightRequest="2" Grid.Row="2">
                        <BoxView.Color>
```

Layouts and Controls

Pages

Content

Carousel

Master Detail

Navigation

Tabbed

Layouts

StackLayout

AbsoluteLayout

RelativeLayout

ScrollView

ContentView

Grid

User Interface Controls

Entry / Picker	View / Cell	Misc
Editor	BoxView	Label
Entry	ListView	Image
DatePicker	OpenGLView	Map
TimePicker	TableView	ActivityIndicator
Picker	WebView	ProgressBar
Stepper	ImageCell	SearchBar
Slider	EntryCell	
Switch	TextCell	

....and more

ObjectSharp

Let's see what this looks like…

Platform-Specific Tweaks

ObjectSharp

Device Class

Static class which enables customization to layout and functionality by platform

Properties	Methods
Device.OS	Device.GetNamedSize
Device.Idiom	Device.OnPlatform
Device.Styles	Device.StartTimer
	Device.BeginInvokeOnMainThread

ObjectSharp

Device.OnPlatform Example

XAML

```xml
<ContentPage.Padding>
    <OnPlatform x:TypeArguments="Thickness">
        <OnPlatform.iOS>
            5,20,5,0
        </OnPlatform.iOS>
        <OnPlatform.Android>
            5,5,5,5
        </OnPlatform.Android>
        <OnPlatform.WinPhone>
            5,5,5,5
        </OnPlatform.WinPhone>
    </OnPlatform>
</ContentPage.Padding>
```

Code Behind

```csharp
this.Padding = new Thickness(5, Device.OnPlatform(20, 0, 0), 5, 0);

Device.OnPlatform(
    iOS: () =>
    {
        Padding = new Thickness(5,20,5,5);
        FormTitle.Text = "Postal Codes on iOS";
    },
    Android: () =>
    {
        Padding = new Thickness(5);
        FormTitle.Text = "Postal Codes on Android";
    },
    WinPhone: () =>
    {
        Padding = new Thickness(5);
        FormTitle.Text = "postal codes on wp";
    });
```

ObjectSharp

Let's apply some platform tweaks...

Questions?

ObjectSharp

Additional Resources

Xamarin Developer Documentation – http://developer.xamarin.com

Book: Xamarin.Forms by Charles Petzold - http://developer.xamarin.com/guides/cross-platform/xamarin-forms/creating-mobile-apps-xamarin-forms/
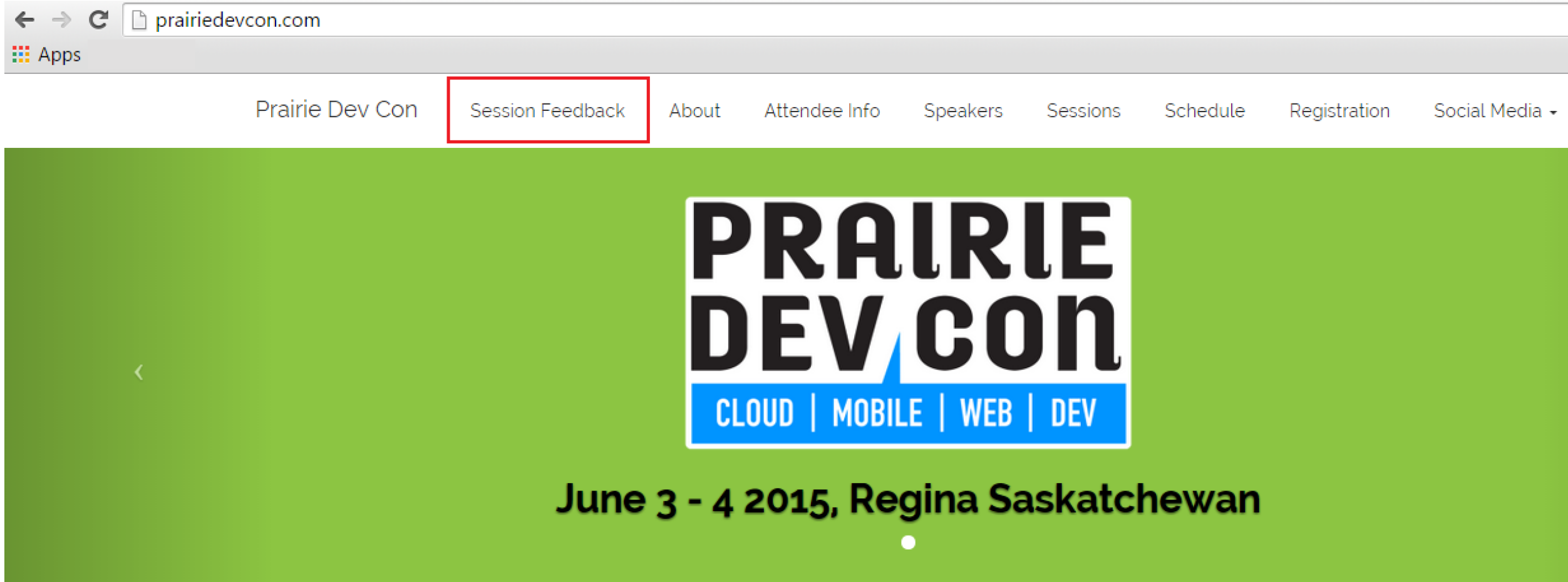
Xamarin.Forms Samples - http://developer.xamarin.com/samples/xamarin-forms/all/

ObjectSharp

Additional Resources (continued)

Xamarin Forms Labs - https://github.com/XLabs/Xamarin-Forms-Labs

James Montemagno – https://github.com/jamesmontemagno

Craig Dunn - https://github.com/conceptdev

Please fill out the session survey…

Your feedback matters!

Thanks!

Twitter: @loriblalonde
Email: loriblalonde@gmail.com
Blog: geekswithblogs.net/lorilalonde
LinkedIn: http://ca.linkedin.com/in/lorilalonde

ObjectSharp