Lab 5 — Tool Box

Mr. Yousif Garabet Arshak
Computer Science Department
University of Zakho
yousif.arshak@uoz.edu.krd

Outlines

- Xamarin.Forms Tool Box (Controls)
 - 1. Image
 - 2. Stepper
 - 3. ProgressBar
 - 4. CarouselView



Images in Xamarin.Forms

Xamarin.Forms uses the <u>Image</u> view to display images on a page. It has several important properties:

- •<u>Source</u> An <u>ImageSource</u> instance, either File, Uri or Resource, which sets the image to display.
- •<u>Aspect</u> How to size the image within the bounds it is being displayed within (whether to stretch, crop or letterbox).

```
XAML → <Image Source="waterfront.jpg" /> C# → var image = new Image { Source = "waterfront.jpg" };
```

More details: Images in Xamarin.Forms - Xamarin | Microsoft Docs



Xamarin.Forms Stepper

- Use a Stepper for selecting a numeric value from a range of values.
- The Xamarin.Forms Stepper consists of two buttons labeled with minus and plus signs. These buttons can be manipulated by the user to incrementally select a double value from a range of values.

The <u>Stepper</u> defines four properties of type double:

- •Increment is the amount to change the selected value by, with a default value of 1.
- •Minimum is the minimum of the range, with a default value of 0.
- •Maximum is the maximum of the range, with a default value of 100.
- •Value is the stepper's value, which can range between Minimum and Maximum and has a default value of 0.

XAML -> <Stepper Maximum="100" Increment="1"/>



Xamarin.Forms ProgressBar

The Xamarin.Forms <u>ProgressBar</u> control visually represents progress as a horizontal bar that is filled to a percentage represented by a float value. The ProgressBar class inherits from <u>View</u>.

XAML → <ProgressBar Progress="0.5" />

iOS

Android

More Details: Xamarin.Forms ProgressBar - Xamarin | Microsoft Docs



Xamarin.Forms CarouselView

- The <u>CarouselView</u> is a view for presenting data in a scrollable layout, where users can swipe to move through a collection of items.
- A <u>CarouselView</u> is populated with data by setting its <u>ItemsSource</u> property to any collection that implements IEnumerable. The appearance of each item can be defined by setting the <u>ItemTemplate</u> property to a <u>DataTemplate</u>.
- By default, a <u>CarouselView</u> will display its items in a horizontal list. However, it also has access to the same layouts as CollectionView, including a vertical orientation.



```
• XAML \rightarrow
```

```
<CarouselView x:Name="MyCarouselView" HeightRequest="400" IsScrollAnimated="True"</pre>
      <CarouselView.ItemTemplate>
        <DataTemplate>
          <Image Source="{Binding .}"/>
        </DataTemplate>
      </CarouselView.ItemTemplate>
    </CarouselView>
var images = new List<string>
        "image1.jpg",
        "image2.png",
        "image1.jpg"
      MyCarouselView.ItemsSource = images;
```



Exercises

- 1- Create CarouselView and read 3 images from web.
- 2- Use stepper to increase and decrease the value of ProgressBar.



Any Questions?



