

## Read this first

The following two exercises are slightly more challenging than the previous ones. Don't get disappointed if you can't replicate the exact same UI.

Creating a beautiful and balanced UI requires a lot of try and error. You have to make small changes and preview the result. Sometimes this may take an hour or so, even for experienced Xamarin developers.

Here are some tips that help you along the way:

1- **Use BackgroundColor for troubleshooting:** If elements are not positioned the way you expect, set their BackgroundColor to see exactly how Xamarin Forms renders them. Not only will this help you troubleshoot rendering issues quickly, it's a great learning tool for understanding how layouts work.

2- **Focus on one element at a time.** Don't try to get the entire page look perfect right from the beginning. Implement one element a time.

3- **There are various ways to solve a problem.** Your solution may be different from mine and that's perfectly fine. There is no right or wrong. As long as the UI renders correctly on devices with different sizes, your solution is right. Experiment with different simulators.

4- **Do your best to solve each exercise on your own.** Don't quickly refer to my solutions. You won't learn this way.

5- **Be prepared for a challenge.** Building complex UIs can be challenging at the beginning, but the more you exercise, the better you'll get at it. Don't rely only on the exercises in this course. Next time you use an app, try to re-create the same UI or a simplified version of that in Xamarin Forms.

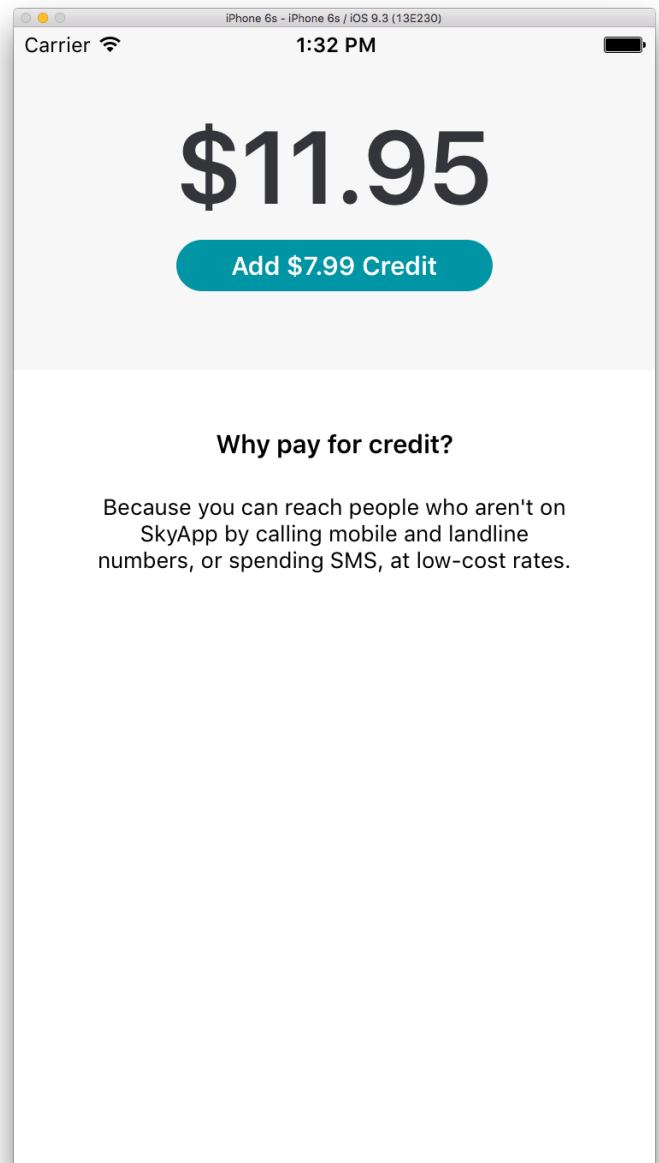
# Absolute Layout

By: Mosh Hamedani

## Exercise 1

Here we have two StackLayouts. One on the top with two items: \$11.95 label and the button. And the other on the bottom. We need to put the first StackLayout on top of a BoxView (banner). That's why we need to use AbsoluteLayout to overlay elements.

- **Banner**
  - BackgroundColor = "#f7f7f7"
  - Should take 1/3 of the page height.
- **\$11.95 label**
  - TextColor = "#33353a"
  - FontSize = "60"
  - FontAttributes = "Bold"
- **Button**
  - BackgroundColor = "#1695A3"
  - BorderRadius = "15"
  - HeightRequest = "30"
  - FontSize = "15"
  - FontAttributes = "Bold"
- **"Why pay for credit" label**
  - FontSize = "15"
  - FontAttributes = "Bold"
- **Description label**
  - FontSize = "13"



# Absolute Layout

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For the description, instead of setting the Text attribute, put the text between Label element's tags:

```
<Label>  
Because you can reach people who aren't on  
SkyApp by calling mobile and landline  
numbers, or spending SMS, at low-cost rates.  
</Label>
```

This way, text will be rendered exactly as is (eg three lines here). Make sure each line starts at column 0 and there is no indentation.

Set HorizontalTextAlignment property of the Label to "Center" and observe the result.

# Absolute Layout

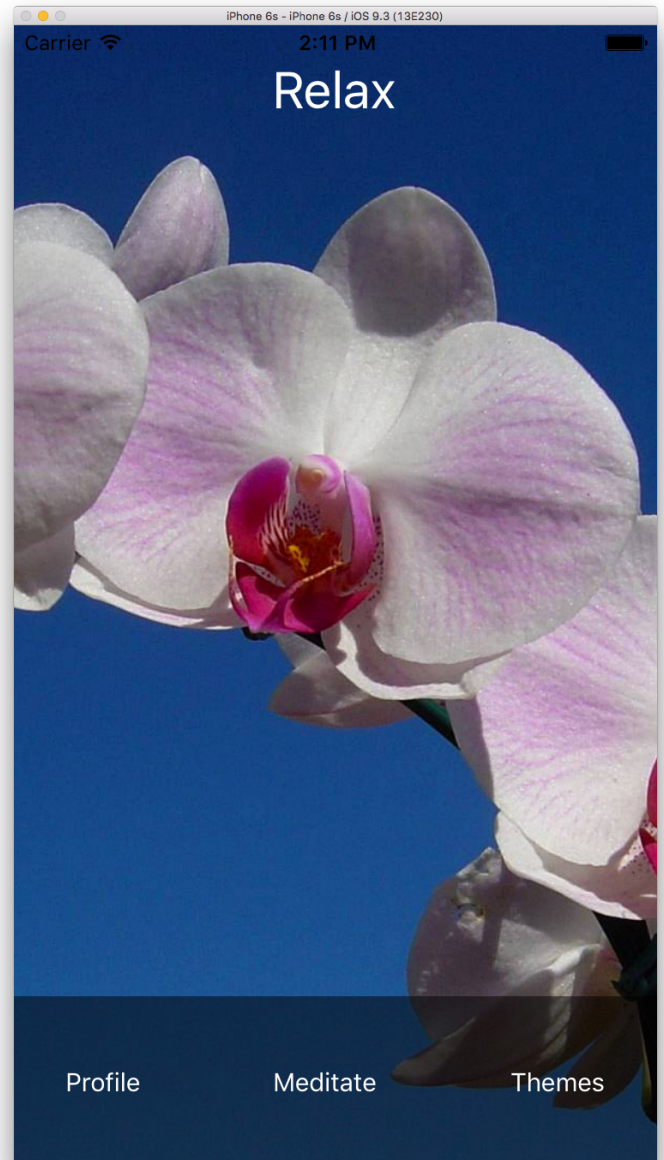
By: Mosh Hamedani

## Exercise 2

Here we are overlaying a few labels on top of an image. So, that's why we need to use `AbsoluteLayout`.

Also, we want to make sure that the 3 labels (Profile, Meditate and Theme) are always near the bottom of the page. That's another reason why we should use `AbsoluteLayout`. I've put these labels in a horizontal `StackLayout`, which is on top of a black `BoxView` with Opacity of 50%. This is how we get the "bar" effect.

- **Background image**
  - Source = "<http://lorempixel.com/1920/1080/nature/7>"
  - Aspect = "AspectFill" (dimensions of the image are different from the device. AspectFill makes the image fill the page irrespective of the size of the device.)
- **Relax label**
  - FontSize = "30"
  - Should be 20 units from top of the page.
- **BoxView**
  - Should be anchored to the bottom of the page.
  - Its height should be 100 units.
  - Opacity = "50"



# Absolute Layout

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- **StackLayout on the bottom**
  - Padding = “30, 0”.
  - Should be anchored to the bottom of the page.
  - Its height should be 100 units.
- **Labels in the StackLayout**
  - FontSize = “15”
  - HorizontalOptions = “Center”
  - For the second label set HorizontalOptions to “CenterAndExpand”. This allocates any available space to this label. To better understand this, set a different background color on each label.