# ICE Motivator

## Part 1

Let’s build our first Xamarin forms app using the XAML page for the controls.

1. Launch visual Studio 2019.
2. Choose **Create a New Project** on the right hand side of the dialog.
3. In the Search window, type in Xam and you will see a list of possible Xamarin applications that can be created. Select Xamarin Forms. Make sure to choose the version that using C# and not F#.
4. For the **Project name** type: *Motivator*Then click the **Create** button
5. In the **New Cross Platform App** Dialog, select **Blank**. At this point you could also turn on the Windows UWP option to create a Windows application. This is not needed for this class, but it is an option.   
     
   Then click the **OK** button
6. You will now be able to go into the Motivate project and select the **MainPage.xaml** file to start editing.

Remove the **<StackLayout>** and all of the nodes inside of it.

1. We are going to change to use a **<Grid>** object here instead of the **<StackLayout>** that we have used last week.  
   * Set the **BackgroundColor** to some color (I used Black)
   * Set the **RowDefinitions** to “\*, 75”

This will create Grid with 3 rows with the following heights

* + Row 0 - \* => this means that it takes up as much space as possible
  + Row 1 - 75 => this mean that the height will be 75 pixels

If you run the program right now you will not see anything. We need to add the controls to the grid.

To use this **RowDefinitions** and adding it as a string in the properties, you need to update your Nuget packages for Xamarin.Forms to **4.8** or higher. By default, **4.6** is used and you will need to update to get this to work.

1. We will be adding 2 controls to the Grid

<Label x:Name="sayingLabel" Text="Tap a button to get motivated!"  
 TextColor="White" FontSize="36" />

<Button Text="Eat Vegetables!" FontSize="35" />

Run the program and you will notice that all of the controls are on top of each other at the top of the page. This is because we create the controls in the Grid but did not assign which row each one should be in.

1. Add Grid.Row properties to each of the controls so that they end up with 1 in each row. Just like most programming, the row numbers start with 0.
2. Add a Clicked property to the Button and create a callback for it. In the callback add the following code to change the text on the second label

sayingLabel.Text = "Eat Veggies and you will lose weight!";

Run the program and you should be able to click on the button to change the text.

## Part 2

Add the following to the Motivator:

* A Label that reads “Motivator!” near the top of the screen in a large font
* An additional advice button. Add a new method for the clicked event and set the sayingText to something appropriate.
* Make sure that the new controls are positioned in the Grid correctly. To do this, you may need to add new rows. You can use Auto to make the row the size of the controls in the row.
* A picture containing flower, bird

  Description automatically generatedHave fun changing the colors on the controls to something that looks good.

**Submission: ZIP and Post to the dropbox before the due date**