## Exercise 1 - Layout Basics

* Goal - add a couple controls to a layout container
* Stuff to Know
  + TextBlock element has Text property
  + Button element has Content property for button label
  + StackPanel has Orientation property that can be Horizontal or Vertical
  + The default orientation for a StackPanel is vertical
  + Background property -- can set background color for any element
  + HorizontalAlignment -- Left, Right, Center, Stretch
  + VerticalAlignment -- Top, Bottom, Center, Stretch
  + Margin property adds space outside the control -- Left,Top,Right,Bottom
  + Padding property adds space inside the control -- Left,Top,Right,Bottom
* Best Practices
  + Use the text editor when editing .xaml, not the drag/drop designer
  + Set editor as "Source Code (Text) Editor" to get Intellisense
  + Avoid setting explicit size and position for child elements

### The Exercise

* Create a new WPF project
  + Open Visual Studio, create a new project
  + For Project template, pick "WPF App (.NET Framework)"
  + Give the project a name and find a location to save it
  + Framework should be: .NET Framework 4.8.1
  + Run your application => you should see an empty window
* Set up XAML editor (one-time thing)
  + In Solution Explorer, rt-click MainWindow.xaml, select Open With…
  + Select: Source Code (Text) Editor
  + Click "Set as Default"
  + Click OK
  + (This sets up Intellisense for XAML editing)
* Part 1 - Button and Text
  + Add a Button and a TextBlock to the main window, putting the text below the button
  + Change the Button so it doesn't stretch across the window
  + Position both button and text in the center of the window, left to right
  + Use margins to add space above and between the controls
  + Use Padding to give the text in the button some elbow room
* Part 2 - One more button
  + Add a second button on the right side of the first, with different text
  + There should be some space between the buttons and they should be centered, left to right
  + Move everything down by 1 inch
* Extra Credit
  + Experiment with Background color on each element--what does this tell you?
  + How do things change when you set Background on a container vs on each control?
  + What happens when you change the size of the parent Window? Why?
  + What happens when text for 2nd button is much longer than 1st? Why?
  + What would happen if you put a StackPanel element inside a Button element and then added several TextBlock elements to the StackPanel?