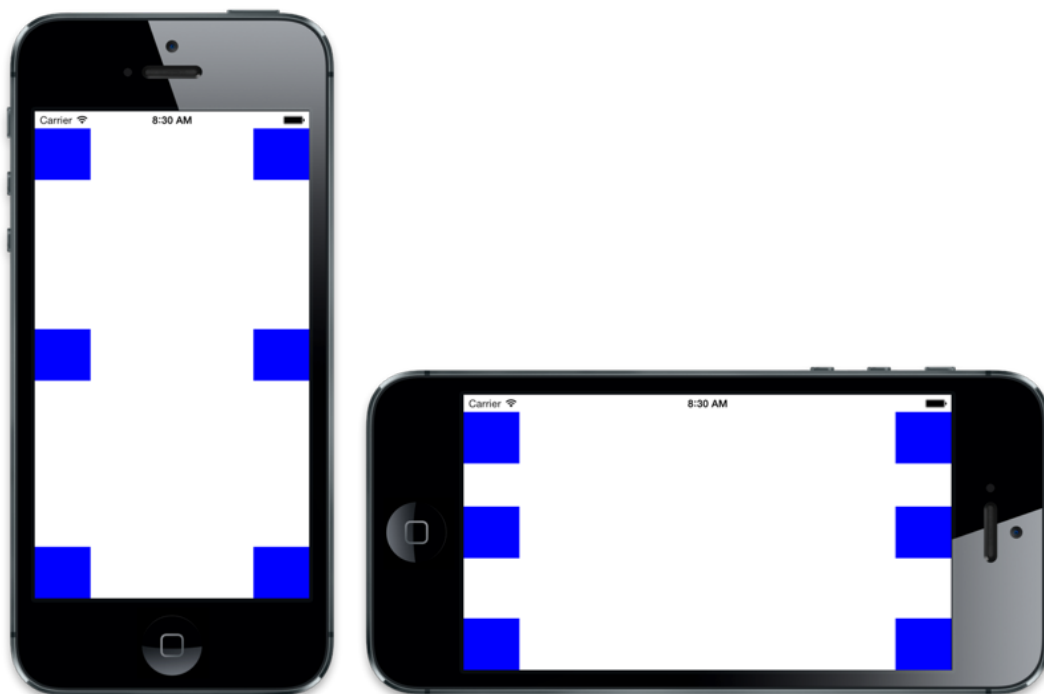# Challenge 9.6 - Auto Layout Practice

In order to understand Auto Layout you need to create iPhone interfaces with it. Your goal is to understand how to describe the relation of visual objects to each other and the edges of the iPhone screen.

Create separate Xcode projects for each challenge and test your interface in both the portrait and landscape orientations. You can check to see if the layout displays correctly on the iPhone 3.5" or iPhone 4" screen sizes. The iPhone screen should match the images below.

Tip: Use the hotkey Command + Right/Left Arrow to rotate the iPhone Simulator or Menu > Hardware > Rotate Left/Right
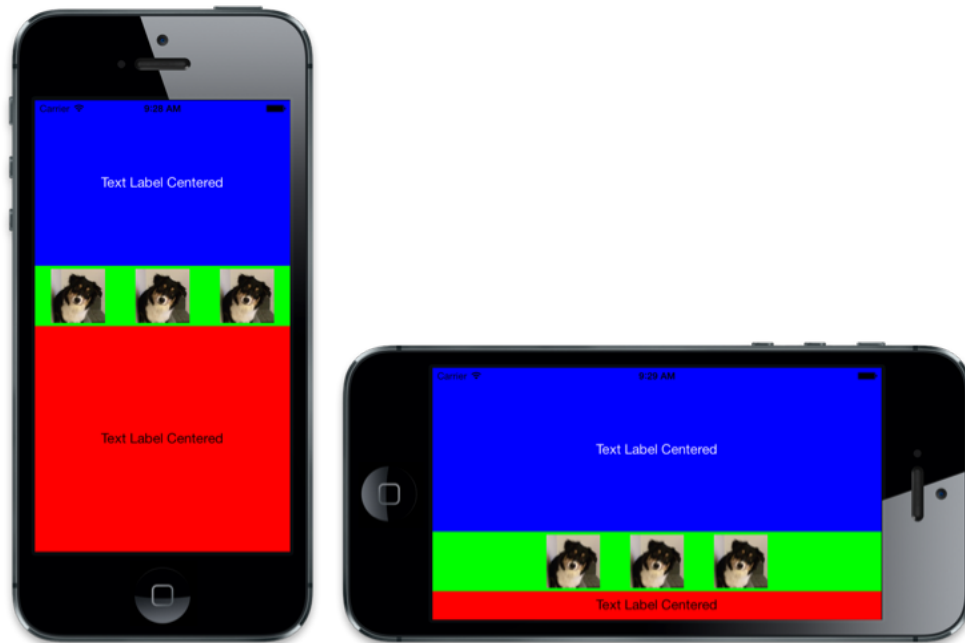
Screen Boundaries

Create six UIView (or UIImageView) objects and place them in the corners (below the status bar) and aligned to the vertical center of the iPhone. When you rotate the views should stick to the edges. I colored my views blue, but you can use any color to make them stand out from the white background.

Note: You'll have to manually add the constraints, when I used "Reset to Suggested Constraints in View Controller" my views disappeared when I pressed the *Play* button.

Complex Layout

Create three vertical sections with different colors. For this layout you will need to use relational layout constraints. You will need to be careful with the layout of the images, so that they stay centered and don't hug the edge of the iPhone in landscape.

Layout Hints

1. The top and middle sections will have a fixed height, the bottom section will resize.
2. Center the middle *UIImageView* vertically and horizontally to the green *UIView*.
3. Make the left and right images centered with the Y axis of the middle image.
4. Make the left and right images use horizontal spacing in relation to the center *UIImageView*.
5. Center a text label vertically and horizontally inside the red and blue UIView objects.

Bonus 1: Make the red and blue UIView objects have equal widths.
Bonus 2: Create an iPhone app layout that matches your Facebook or Twitter profile page.