General Assembly
MOB Assignment Brief

WEEK 5 ASSIGNMENT

VIEWS

Working solo, complete all view exercises in the given iOS app. The assigned app contains a series of screens, each prompting for a series of views to be created using several different techniques. These exercises will familiarize you with various layout methods, rotation, scrolling and give you more hands-on experience with table views.

GOALS OF PROJECT

‣ Gain familiarity with various iOS layout methods (Springs & Struts, Autolayout)

‣ Write code to create and modify views outside of Interface Builder

‣ Understand how to make a view controller rotation-friendly

‣ Gain ability to create content in scrollable, pannable views

‣ Create view hierarchies in one of the basic building blocks of iOS apps: the reuseable table view cell

PROJECT REQUIREMENTS

Your app must:

‣ Meet all requirements laid out in the sample app

‣ Format: Sample app has all canvas views filled out correctly, views implemented with code (not Interface Builder)

‣ Specifically, screen one will contain a red box with a black border on the top of the screen, and a black box with a red border on the bottom of the screen. Use Springs & Struts to lay out these views.

‣ Screen two will contain four blue boxes, one in each corner of the screen. They must stay in their respective corners on device rotation. Use Autolayout.

‣ Screen three will contain four blue boxes, one in each corner of the screen. They must stay in their respective corners on device rotation. Use Autolayout.

‣ Screen four will contain a scroll view. In the scroll view, place a blue box at the top, a very tall (1000+px) label containing text in the middle, and a red box at the bottom. The scroll view should scroll. Use Autolayout.

‣ Screen five will contain a green button with a border that says 'Tap me!'. Once tapped, the button rises 20 pixels (without changing size) and turns red, then back down 20 pixels and turns back to green. Use Autolayout.

‣ Screen six will contain a table view with blank cells. Make the label of each cell green and centered, and have its text say "Row {X}" (X is the row number of the cell). The tableview should rotate correctly. Use Autolayout.

DELIVERABLES

‣ Assignment (code, resources, project file) posted on Github

TIMELINE

DUE DATE	DELIVERABLE
Week 6, Day 1	Assignment (code, resources, project file) posted on Github

SUGGESTED WAYS TO GET STARTED

‣ First understand the Springs & Struts and autoresizing mask model of view layout. Where do you expect there would be difficulties with this type of layout?

‣ Figure out what an Autolayout constraint is, and read through the API documentation.

‣ Start simple: What constraints would you use to make a centered view that is 20x20px?

‣ What are Autolayout constants? What are they used for?

RESOURCES

Links:

‣ Apple's official guide to Autolayout

‣ Big Nerd Ranch's tips and tricks for Autolayout

‣ Yet another Autolayout guide, with lots of code snippets!

‣ Autolayout wrapper with pleasing syntax

EVALUATION

Your assignment will be evaluated regarding the extent to which you meet the above requirements using this rubric:

LINK TO RUBRIC

The rubric outlines how your assignment will be evaluated on assignment readiness, stability & performance, and style & readability.