

UIKit

Part 6 – Auto Constraint Layout

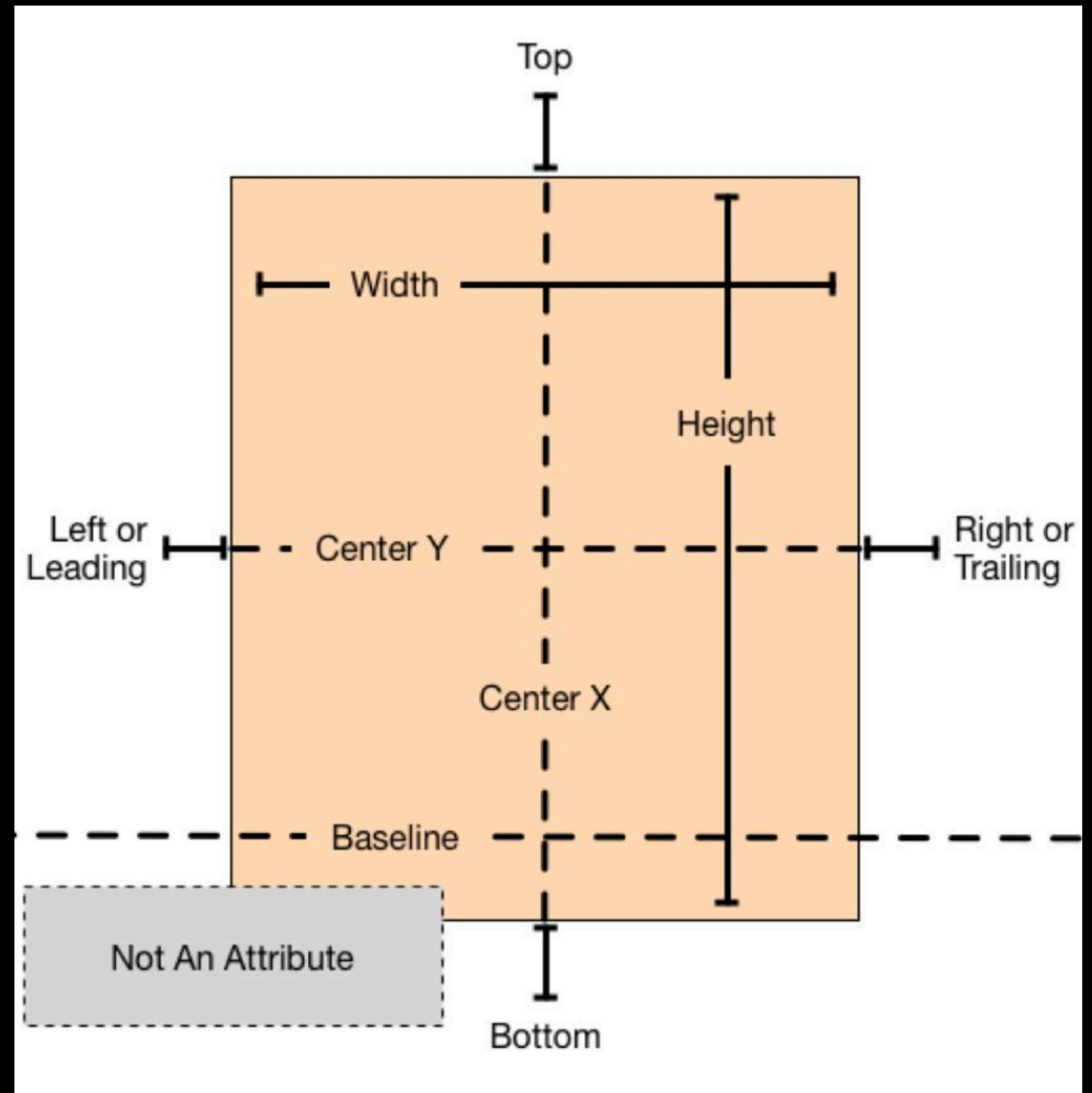
What is Auto Layout?

Auto Layout dynamically calculates the size and position of all the views in your view hierarchy, based on constraints placed on those views.



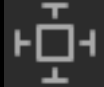
Auto Layout Attributes

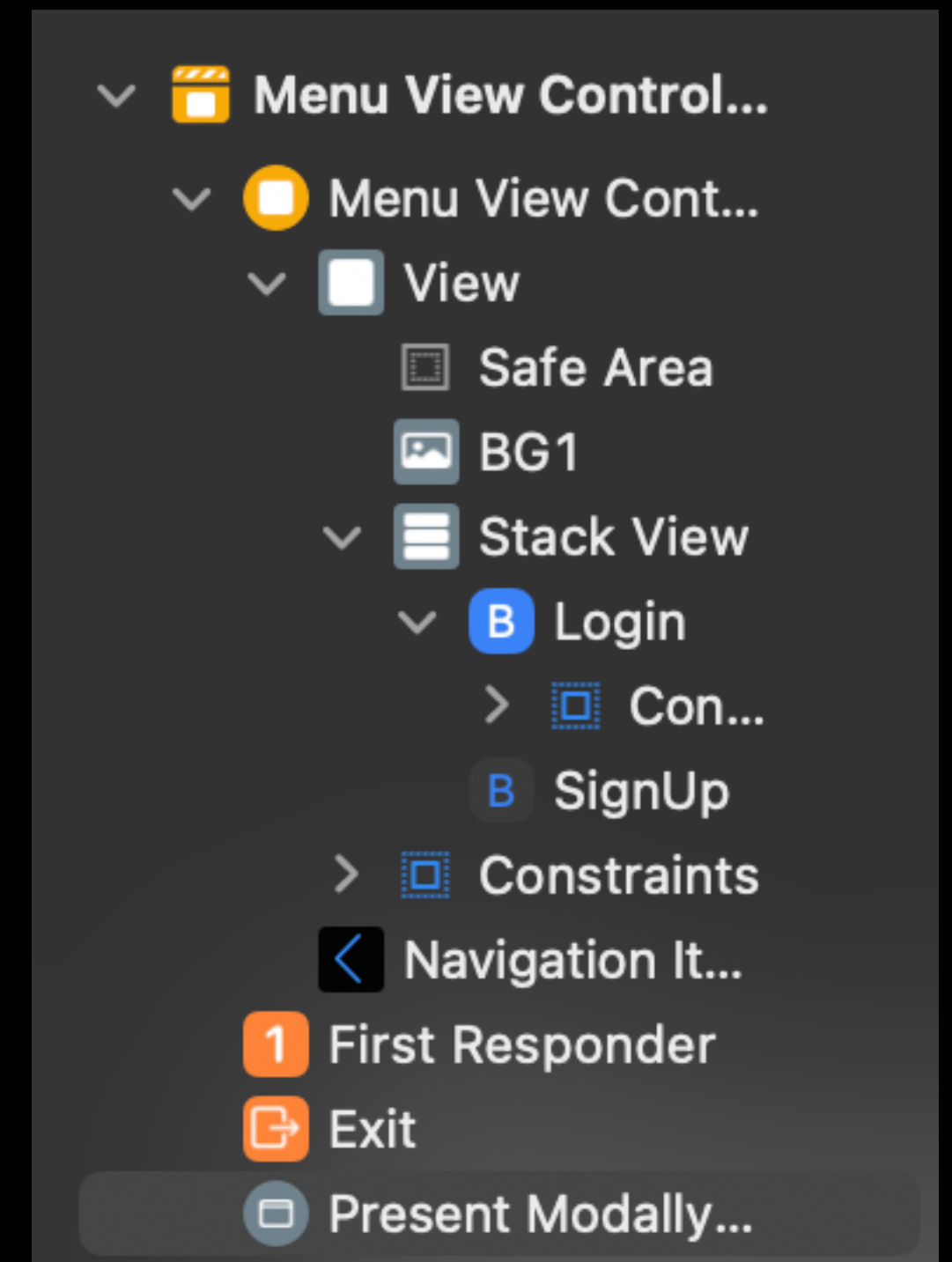
- In general, this includes the four edges (leading, trailing, top, and bottom), as well as the height, width, and vertical and horizontal centers.
- UILabel items also have one or more baseline attributes.



Auto Layout

How to make an auto constraint layout?

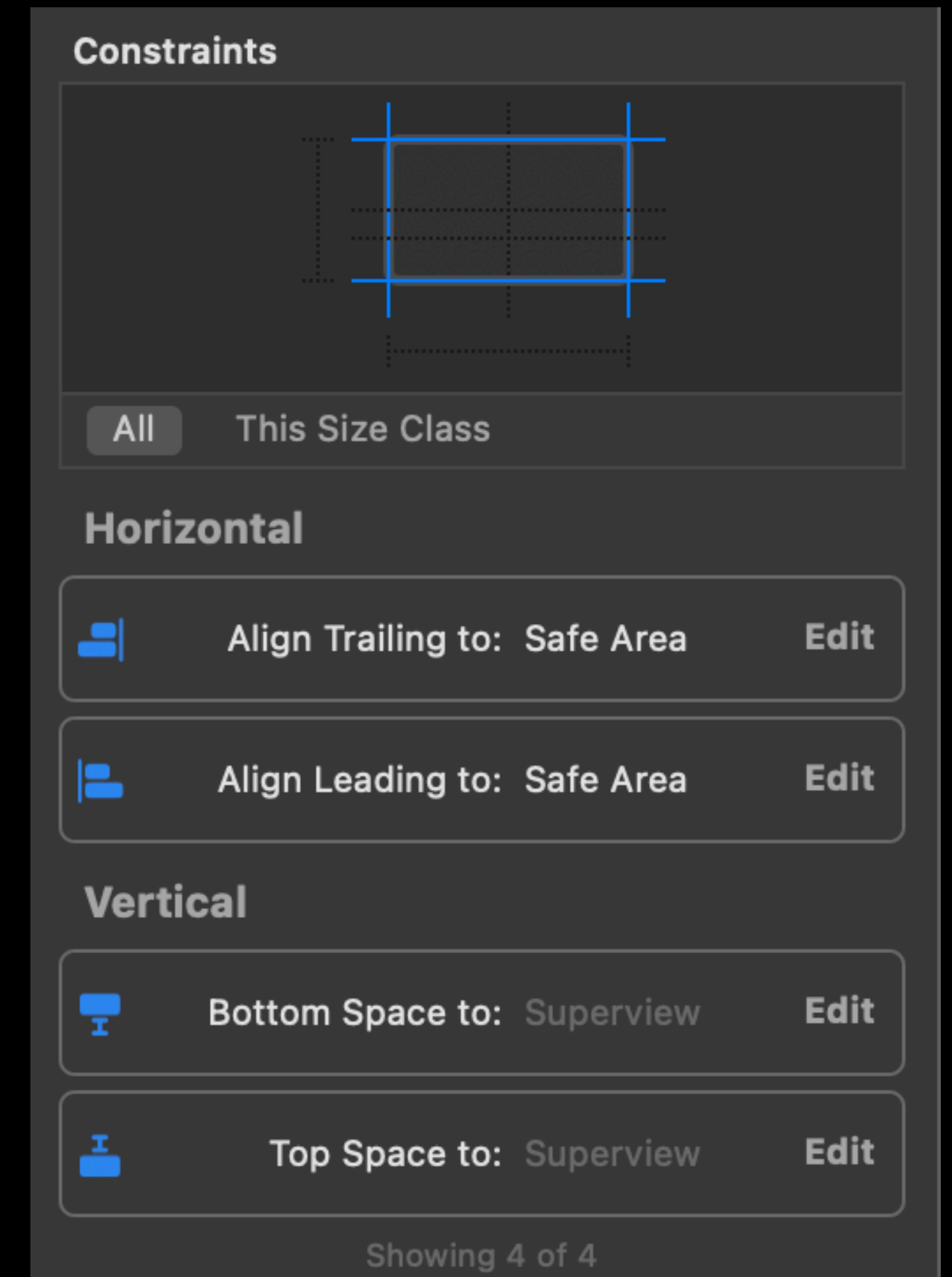
1. Click  when on storyboard/xib file (located at bottom right canvas)
2. Add the top, bottom, leading, and trailing constraints
3. If needed, you can also add height or width
4. Make sure there's no warning (yellow warning still acceptable)



Auto Layout


How to modify an auto constraint layout?

1. Click “Size inspector” panel
2. At “Constraints” section look up and make sure layout in correct corresponding constraints
3. If you stil need modification, just double click one of given constraint to see detail



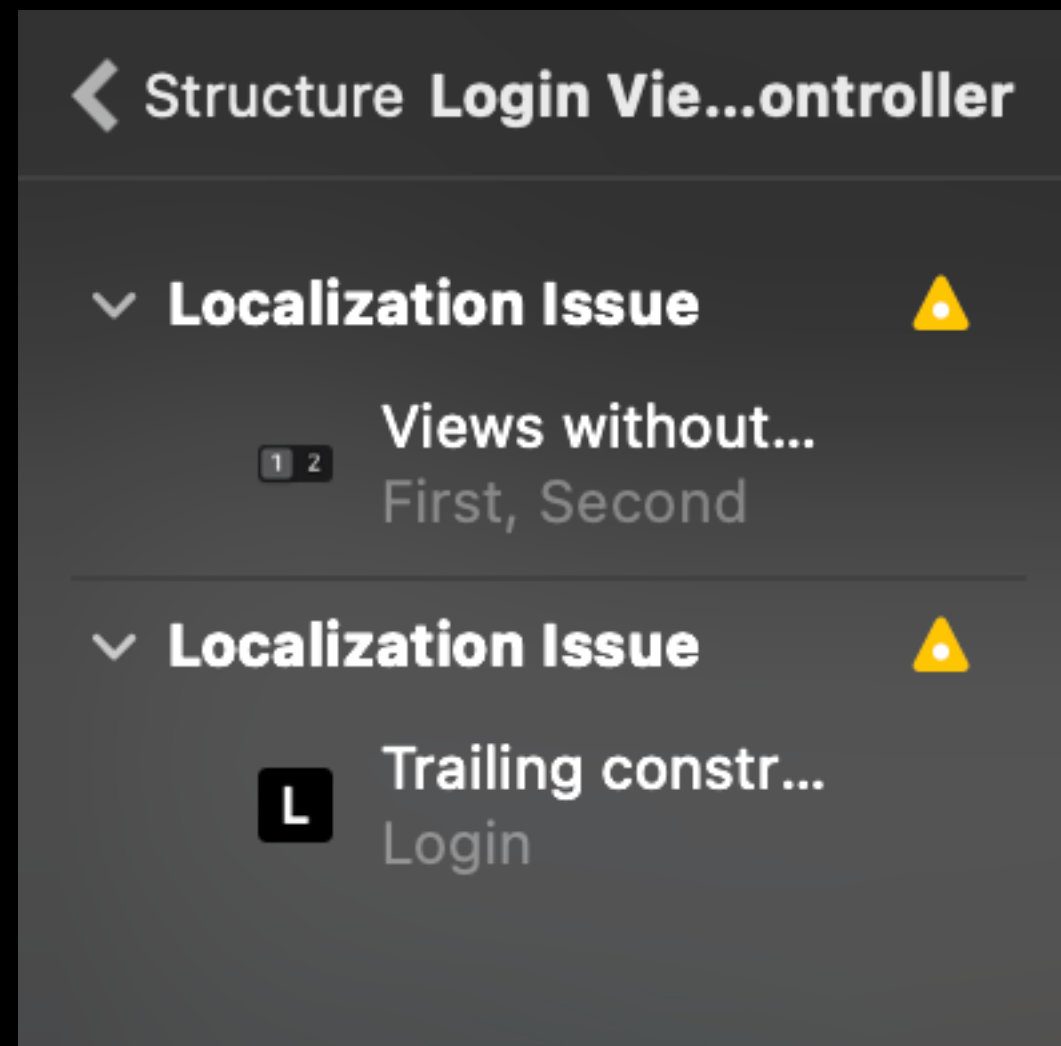
Auto Layout

How to prevent a warning in auto constraint layout?

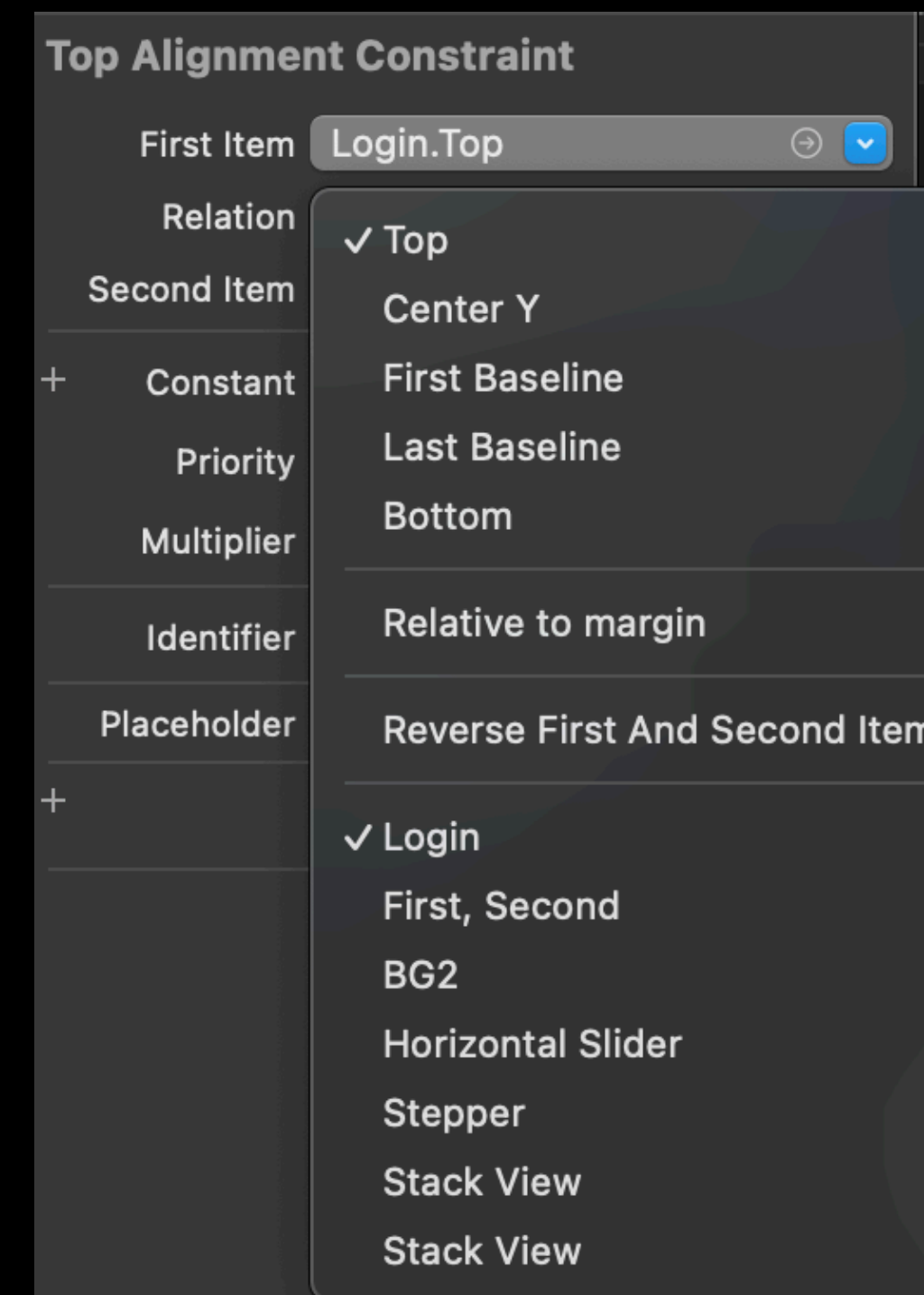
1. Make sure you gave correct constraint
2. Minimum constraint contains of one X position (top or bottom) and one Y position (leading or trailing)
3. To prevent constraint ambiguity, you should add width or height of you Object
4. Make sure “First item” and “Second item” in “size inspector panel” are in correct ways if you missed something when adding using  button

Auto Layout

How to prevent a warning in auto constraint layout?







Always keep an eye on document outline (left position on canvas area)



Also double check constraint given by double clicking on it

Auto Layout

Giving up on modifying constraints? Try this before!

1. *Need to clear all current selected Object constraints?* click  and select “Clear Constraints” on “Selected Views” section
2. *Stuck? needed to complete remaining constraints?* click  and select “Add Missing Constraints” on “Selected Views” section
3. *Ruin a constraints? why not reset to suggested constraints?* click  and select “Reset to Suggested Constraints” on “Selected Views” section
4. *Updating constraints value but not changed?* click  and select “Update Constraint Constants” on “Selected Views” section

Auto Layout

Finished added constraints, but still error or running but not expected?

1. Take a look your Objects connection on “**Connections inspector**” panel
2. Make sure you connect correct ViewController Swift file to current UIViewController in XIB/Storyboard by checking on “**Identity inspector**” panel
3. Make sure you already add your programmatically code of your Objects
4. Keep an eye and repeat check on your **@IBOutlet** and **@IBAction**

Always clear current view constraints **before** removing entire constraint on your view controller

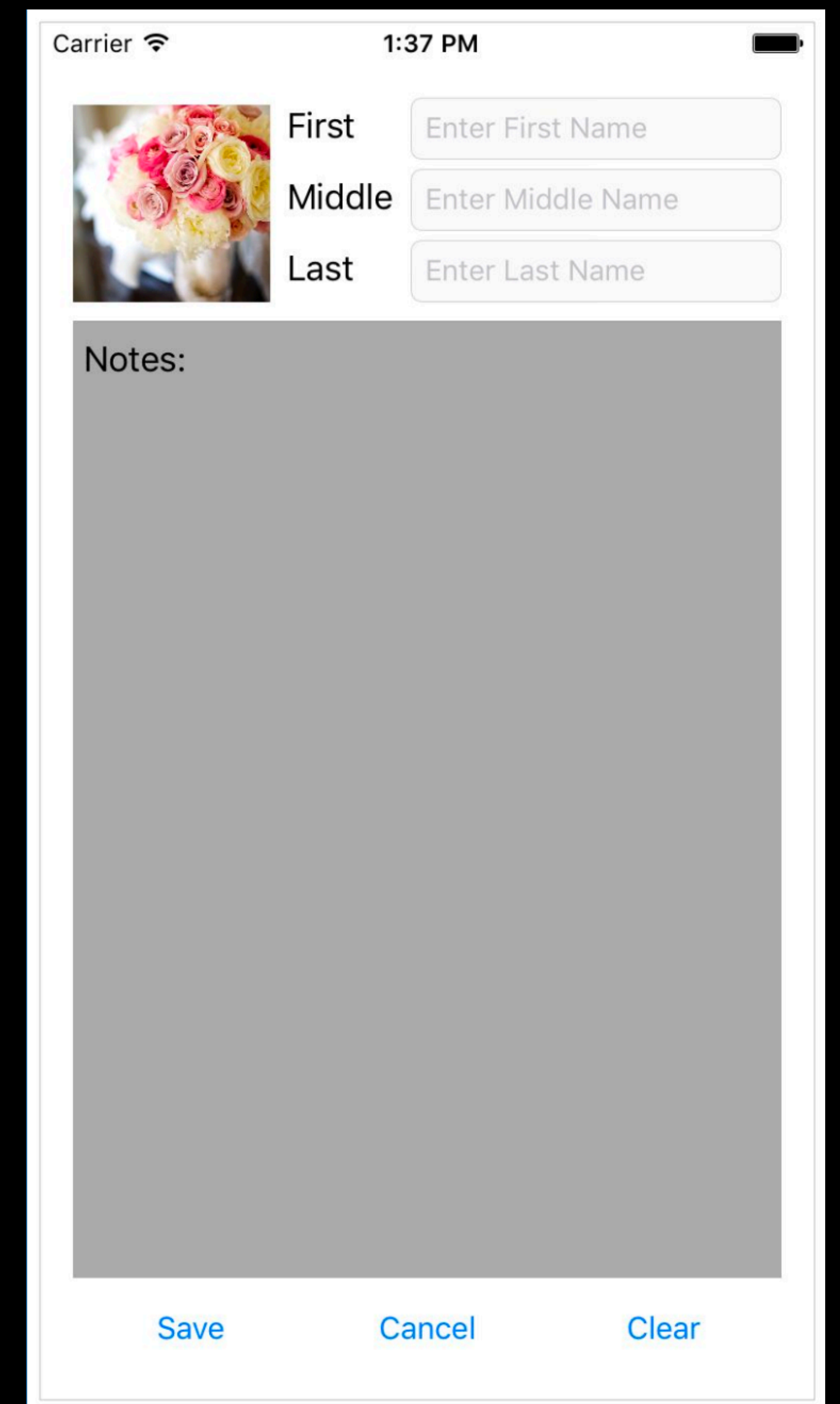
Practice, Practice, and Practice

to improve our auto layouting in UIKit

Practice given screenshot
beside

Auto Layouting with
Nested Stack Views.

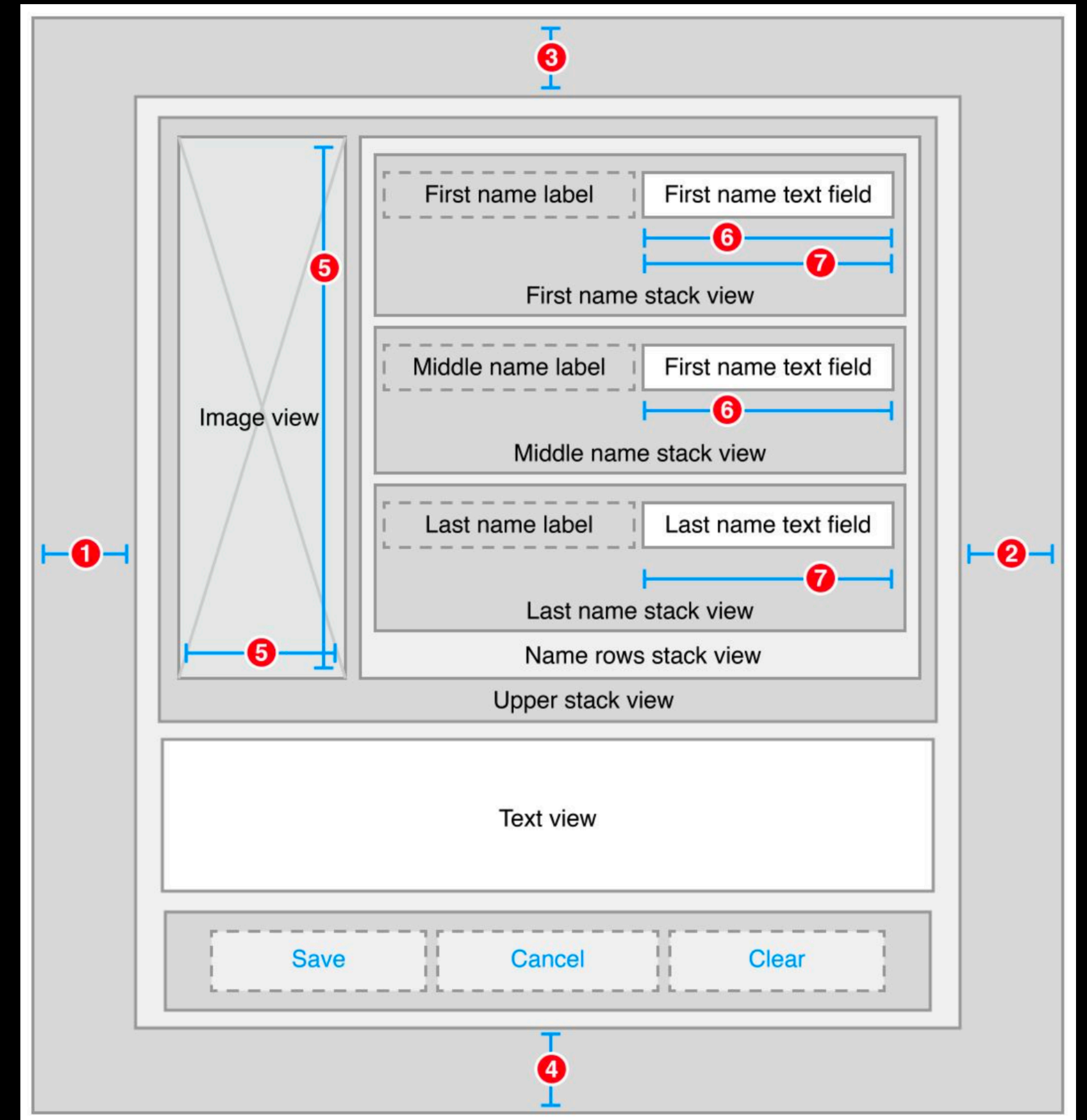
iCodeWave Community



The screenshot shows a mobile app interface for a wedding guest list. At the top, the status bar displays 'Carrier', a Wi-Fi signal icon, the time '1:37 PM', and a battery icon. The form has a white background with rounded corners. On the left, there is a square image placeholder showing a bouquet of pink and yellow roses. To the right of the image are three text labels: 'First', 'Middle', and 'Last', each followed by a text input field. The input fields have a light gray border and placeholder text: 'Enter First Name', 'Enter Middle Name', and 'Enter Last Name'. Below these fields is a large, gray rectangular area labeled 'Notes:'. At the bottom of the form, there are three buttons: 'Save', 'Cancel', and 'Clear', all in blue text.

End slide show and unhide next slide to reveal prototype of this practice

The answer of prototype



Thanks For Your Attendance Today!

iCodeWave Community