

Introducing

# Adaptive Layout

Demo

# Introducing Adaptive Layout Demo

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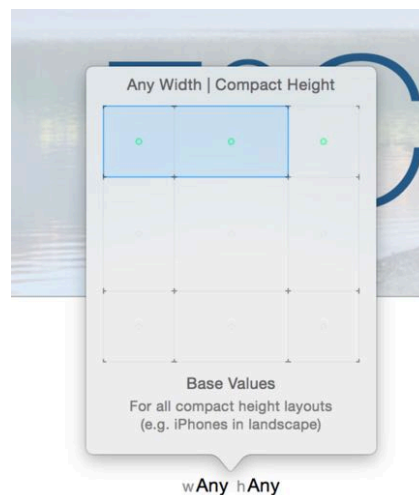


# Adaptive Weather Demo

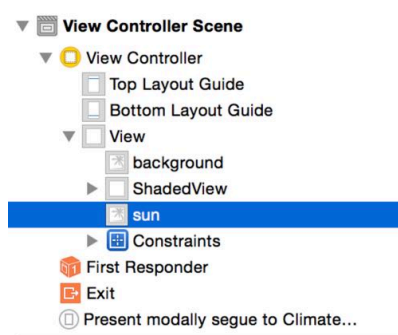
## Installable Constraints

## Uninstalling Constraints

Open **Main.storyboard**, and select the **View Controller Scene**. Use the size class selector to choose **Any Width | Compact Height**:

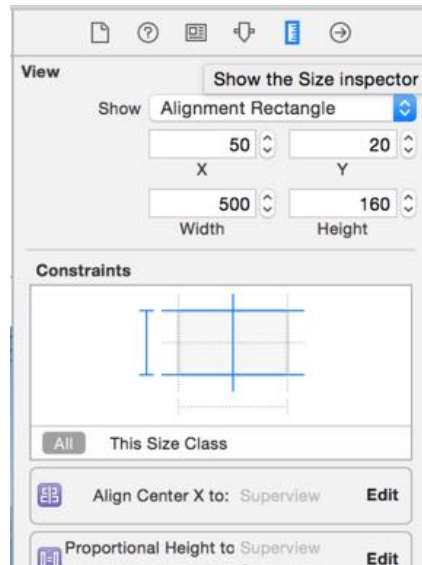


Select the **sun** image view in the document outline:

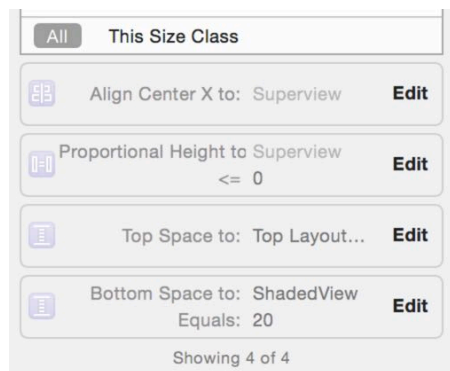


Open the **size inspector**, and ensure that the **All** option is selected in the **Constraints** box (as opposed to **This Size Class**):

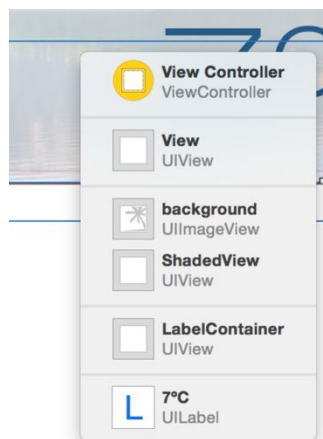




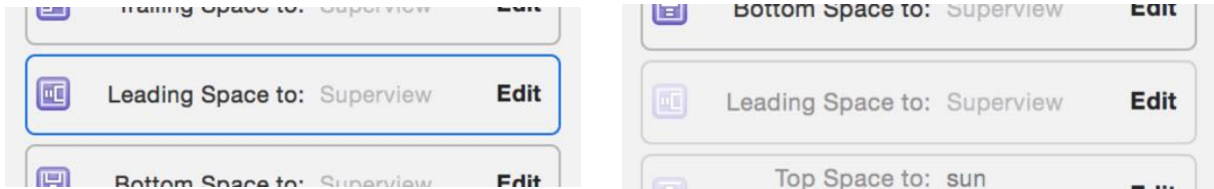
Select each of the constraints in turn and press **delete** to uninstall them. This will grey them out:



**Ctrl-shift click** somewhere on top of the shaded view, and select **ShadedView** in the context menu:



Open the **Size Inspector** again, and find the **Leading Space To: Superview** constraint. **Select** it and press **delete** to uninstall it:



## Creating the New Layout

Back on the canvas, use the grab handle on the corner of the shaded to resize it to be the right hand half of the superview:

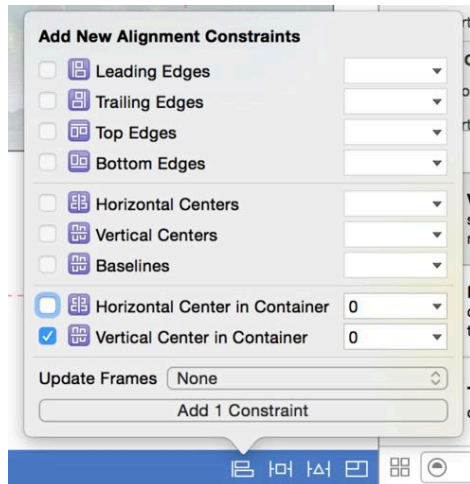


Now select the sun image view, and once again use the grab handles to fill the space on the left hand side of the canvas:

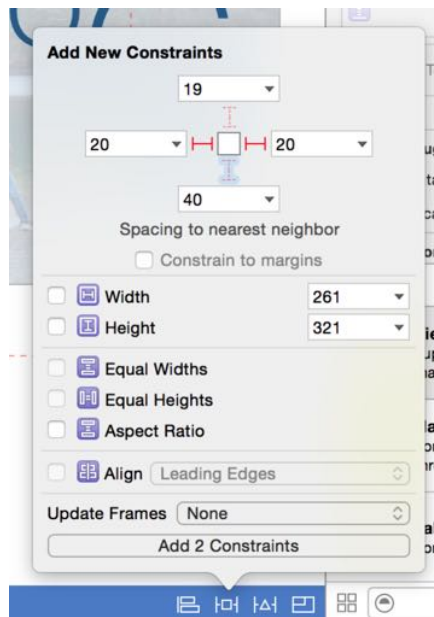


## Adding Constraints

Select the **sun**, and use the **Align** menu on the bottom toolbar to add a **Vertical Center in Container** constraint:



Then use the **Pin** menu to add **Leading** and **Trailing** constraints, each with a value of **20 points**. Ensure **Constrain to Margins** is **not checked**:

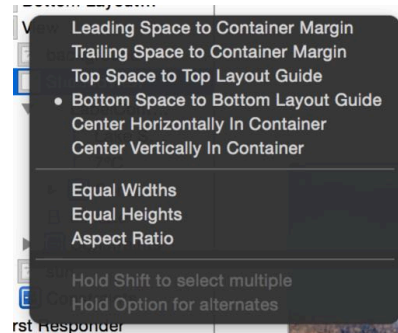


**Ctrl-drag** from the **ShadedView** to its superview in the **Document Outline**:

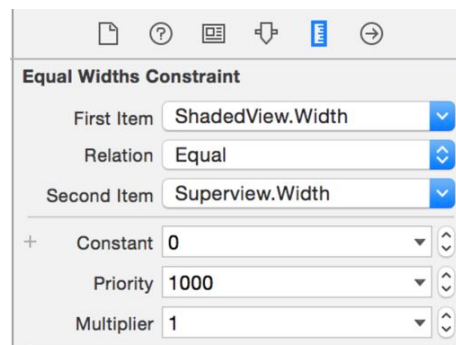




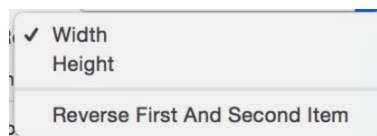
Select **Equal Widths** in the context menu:



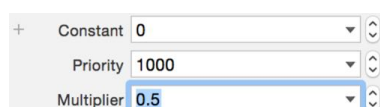
Find the newly created **Equal Width** constraint in the **Size inspector**, and **double-click** it to reveal its properties:



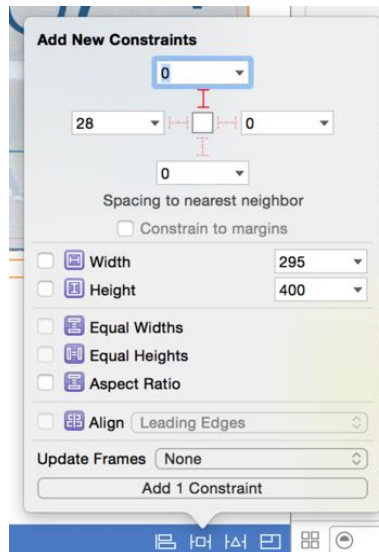
Note that the first item should be **ShadedView**, and the second item **Superview**. If this is not the case then select **Reverse First And Second Item** from the drop-down list next to **First Item**:



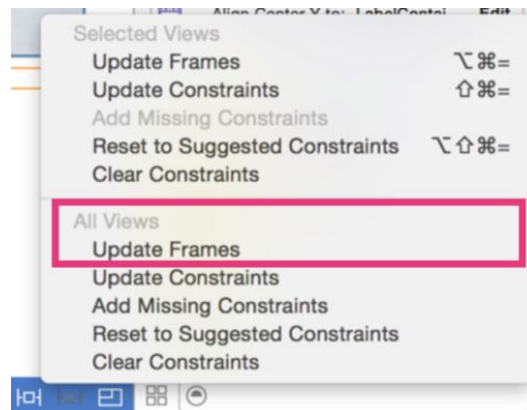
Set the **Multiplier** value to **0.5**:



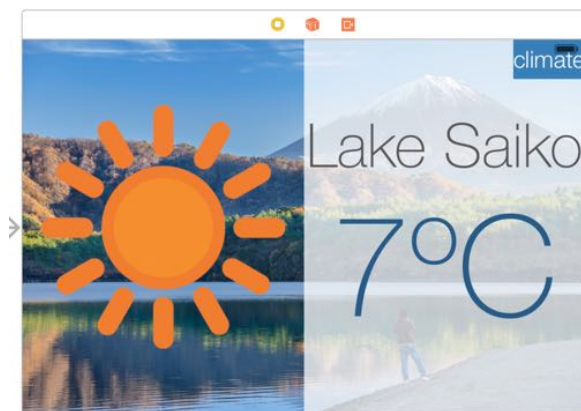
Once again, select **ShadedView** in the **Document Outline**. Then use the **Pin** menu to create a **Top** constraint of size **0**, checking that **Constrain to Margins** is **unchecked**:



Use the **Resolve Auto Layout Issues** menu to **Update Frames of All Views**:



The canvas will now look like this:



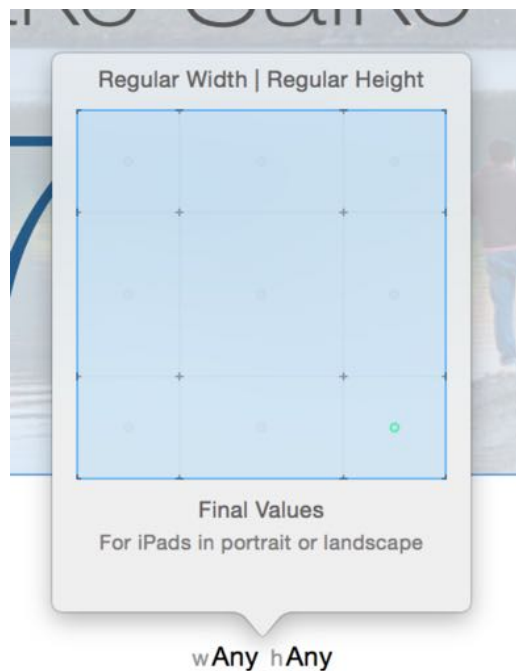


You can check that this is truly an adaptive design in the preview assistant editor:



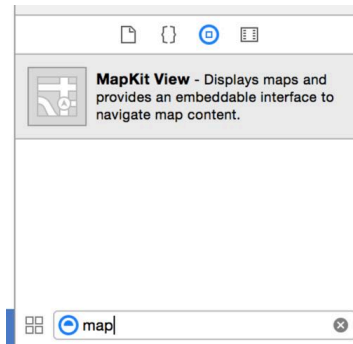
## Installable Views

Open **Main.storyboard** and select the **View Controller** canvas. Use the **size class selector** to choose **Regular Width | Regular Height**:



Find a **Map Kit View** in the **Object Library**:

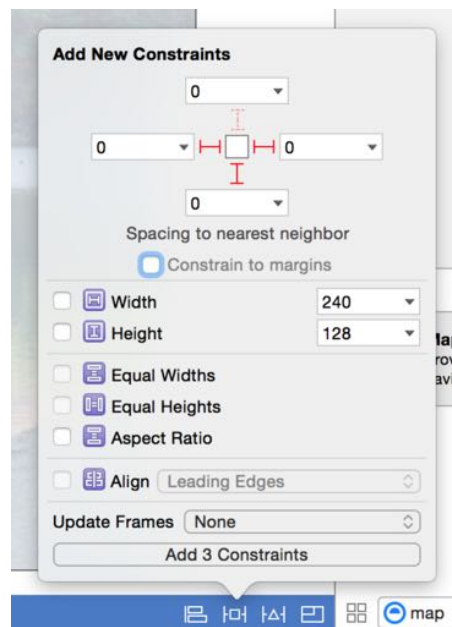




**Drag** one out into the bottom of the shaded view:

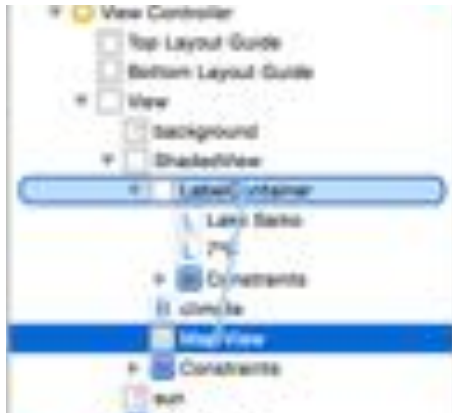


With the map view selected, use the **Pin** menu to add **Bottom**, **Left** and **Right** constraints with **Size 0**. Ensure that **Constrain to Margins** is **not checked**:

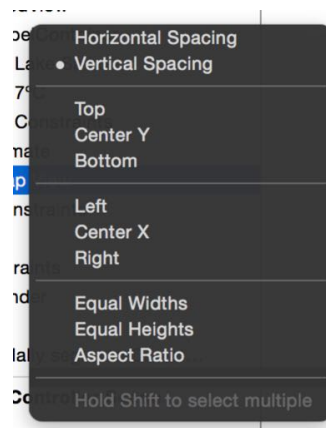


In the **Document Outline**, **ctrl-drag** from the **Map View** to the **Label Container**:

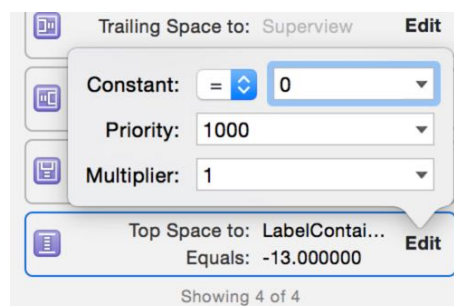




Select **Vertical Spacing** in the context menu that appears:

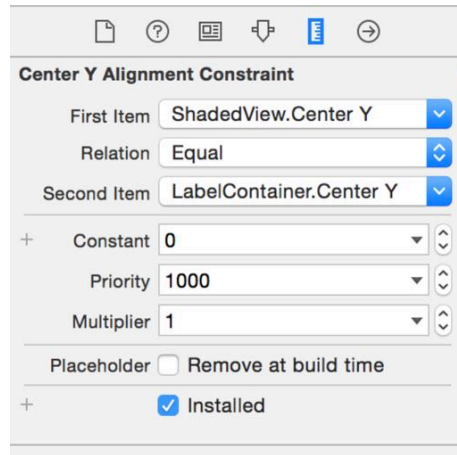


Select the **Map View** in the **Document Outline** again, and then open the **Size Inspector**. Ensure that the **Top Space to Label Container** value is set to **0**, using the **Edit** button:

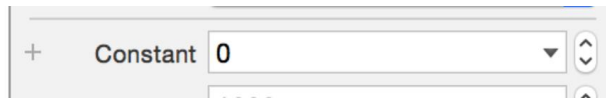


Select the **Label Container** in the **Document Outline**, and then **double click** the **Align Center Y to Superview** constraint in the **Size Inspector**, to reveal the advanced constraint parameters:

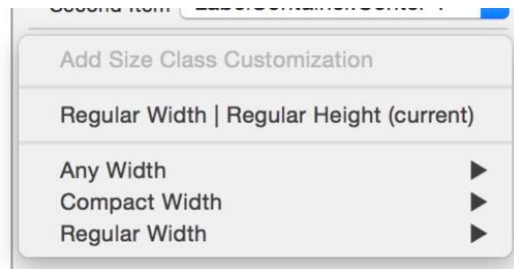




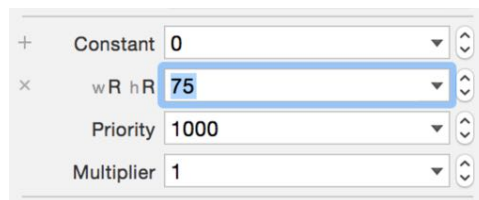
Click the + next to the **Constant** field:



Select **Regular Width | Regular Height (current)** from the **Add Size Class Customization** menu:

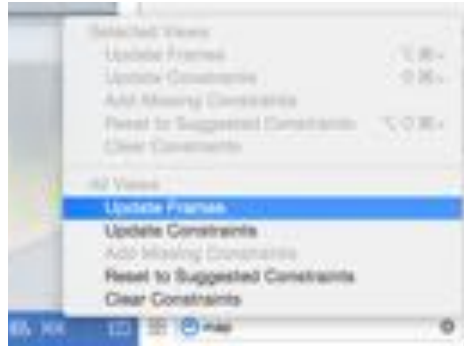


Update the **wR hR** constant value to **75**:

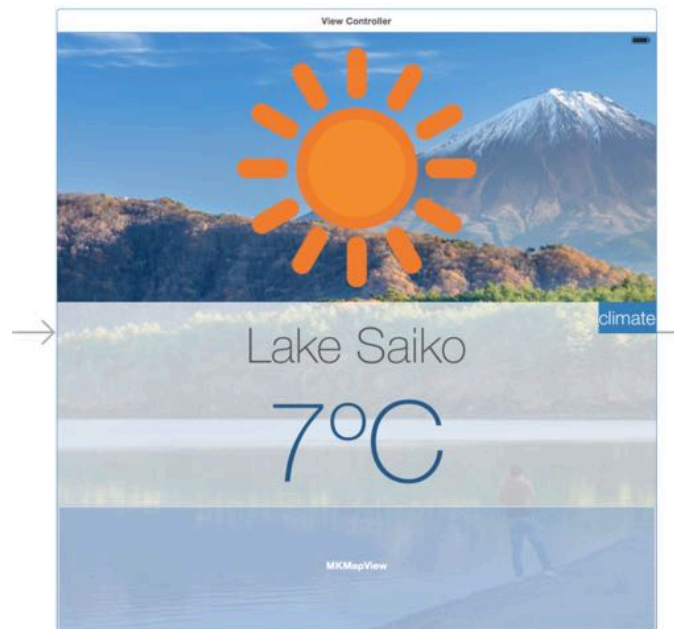


Use the Resolve Auto Layout Issues menu to Update the Frames of All Views:

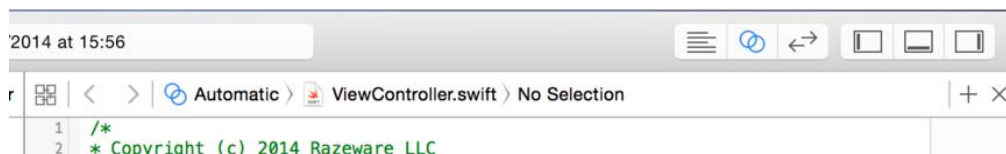




This will update the appearance of the canvas to look like this:



Open the **assistant editor**, and use the jump bar to select **Automatic**, to bring up **ViewController.swift**:



**Drag** from the **circle** next to the **mapView IBOutlet** in **ViewController.swift** to the **Map View** on the storyboard:





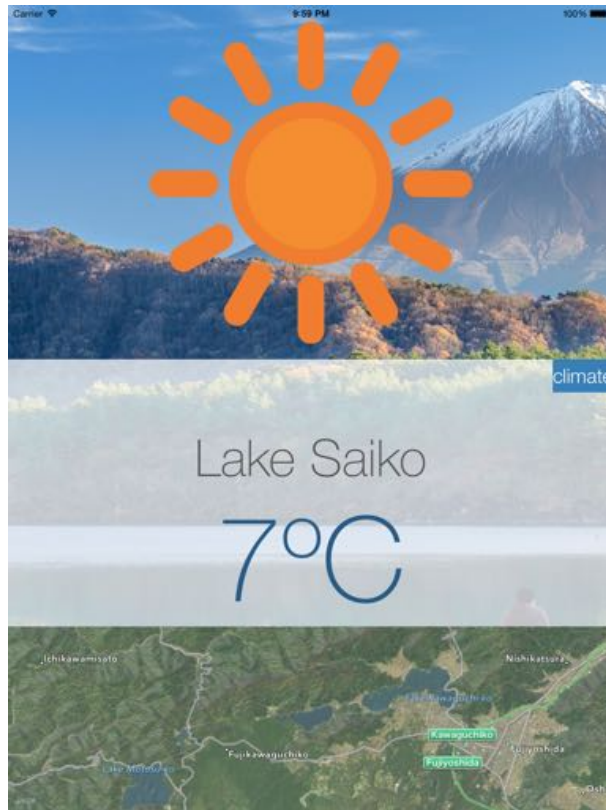
Run the app up in a simulator to check your work. First of all, check that you haven't broken anything for the iPhone 6:



And finally you can check that the map has appeared for the iPad layouts:







Excellent! That brings the demo to a close – you can now continue with the lab section of the session.

