Advanced watchOS

Hands-On Challenges

Beginning watchOS Hands-On Challenges

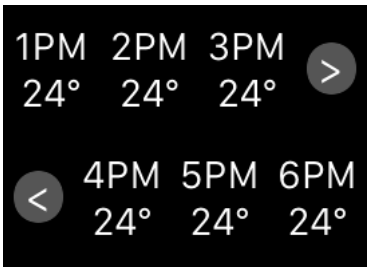
Challenge A: Layout & Animation

Right now, your users can switch back and forth between the two "pages" of short-term forecast data. In this short challenge, you'll tweak the layout and add a little animation to give the interface a final bit of polish.

Let's get started!

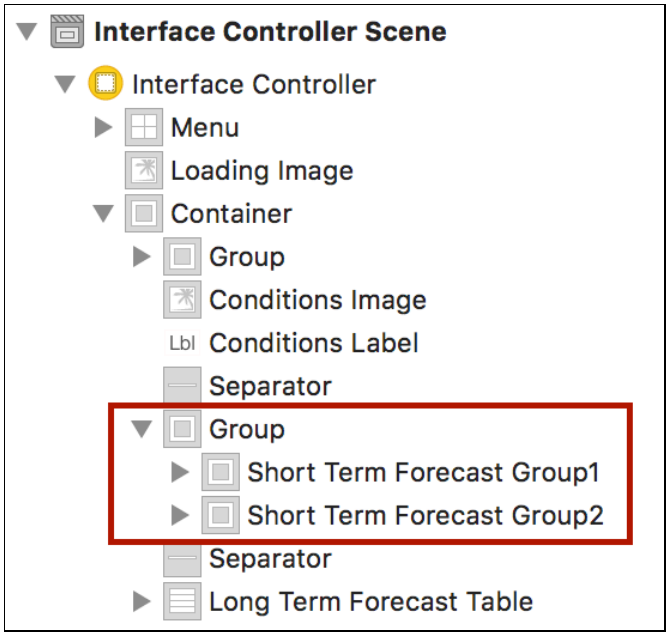
Side-by-side layout

The two short-term forecast groups are currently stacked vertically.



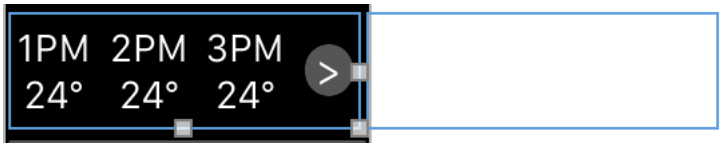
The idea is to stack them *horizontally* instead so they're side by side.

Start by adding a new group to the layout next to the existing short-term forecast groups. Then place the two short-term forecast groups *inside* this group.



By default, groups are already set to stack horizontally which means that's it for the layout!

Things will look a little strange in the storyboard, but rest assured the two forecast groups are now side by side as intended.



Time to head to the code — open **InterfaceController.swift** and find `awakeFromContext(_:)`. The last line of the method hides the second short-term forecast group, which you don't need to do anymore since it's off-screen.

Find that line and **delete** it:

```
shortTermForecastGroup2.setHidden(true)
```

Now it's time to look at the animation!

Animating widths

You already saw some animation in the beginner series, and this is no different. When the user goes from page 1 to page 2, the idea here is to animate out page 1 by setting its width to 0 and fading it out. You don't need to do anything to page 2 — it will slide in from the right as page 1 shrinks down.

Still in **InterfaceController.swift**, find `showSecondPage()` and replace the implementation with the following:

```
animateWithDuration(1.0) {
  self.shortTermForecastGroup1.setRelativeWidth(0,
   withAdjustment: 0)
  self.shortTermForecastGroup1.setAlpha(0)
}
```

It's a very simple animation block: you're setting the first page's relative width to 0 to start. That's 0% relative to its container. Next, you set the alpha to 0 to fade it out. Over the one second of the animation, the group will shrink down and fade out. Easy!

Next, find `showFirstPage()`, which will need to undo the above animation to restore page 1 to its original state. Update the implementation with the following:

```
animateWithDuration(1.0) {
  self.shortTermForecastGroup1.setRelativeWidth(1,
   withAdjustment: 0)
  self.shortTermForecastGroup1.setAlpha(1)
}
```

This time you set the relative width back to 1, or 100% of the container, and the alpha to 1 to make the group fully visible.

Build and run the app, and you'll see the transition between the two groups when you hit the two buttons.