

# iOS: Size Classes

BNRG CHAPTER 17

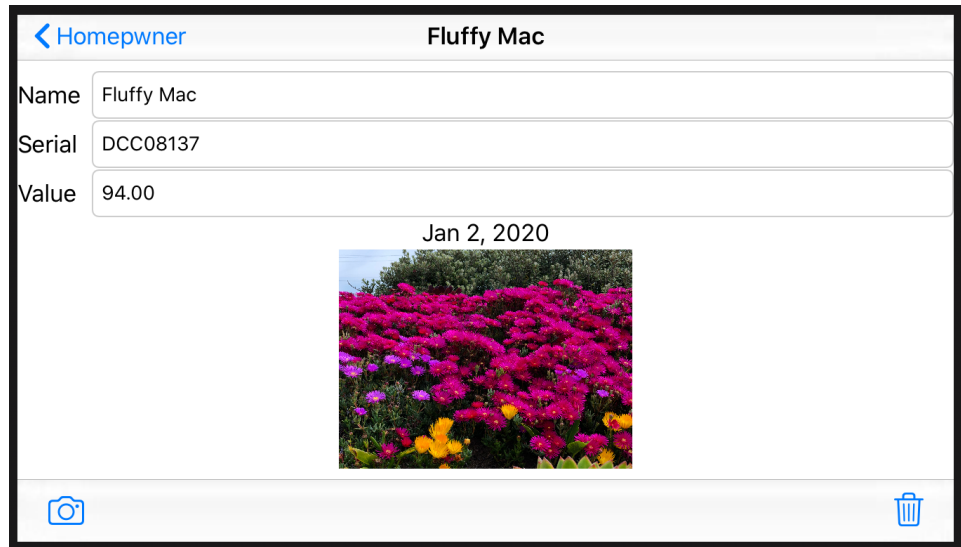
# Topics

- ▶ Screen dimensions and UI layout
- ▶ Size-specific classes

# Screen Dimensions and UI Layout

To work well, an app needs to account for different possible screen dimensions of the device on which it is running

This might require size-specific layouts

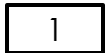


*Example: this is not a good layout for a horizontal screen*

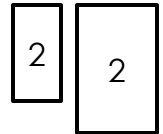
# Size Classes

- ▶ The relative sizes of screens are defined in *size classes*
- ▶ Each dimension (height, width) can be either compact or regular
- ▶ So this gives us four combinations of size classes:

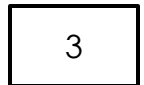
1. compact width and compact height: iPhones with 3.5", 4", or 4.7" screens in landscape orientation



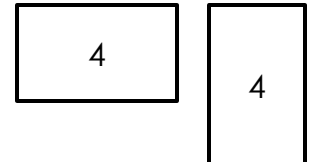
2. compact width and regular height: iPhones of all sizes in portrait orientation



3. regular width and compact height: iPhones with 5.5" screens in landscape orientation



4. regular width and regular height: iPads of all sizes in all orientations



# Modifying Traits for a Specific Size Class

When we are modifying the interface for a specific size-class combination, we can change these characteristics:

- ▶ properties for many views
- ▶ whether a specific subview is installed
- ▶ whether a specific constraint is installed
- ▶ the constant of a constraint
- ▶ the font for subviews that display text

# Creating Size-Class Specific Layouts

Creating size classes for an interface is simple (just a few steps in Interface Builder)

► but it's valuable!

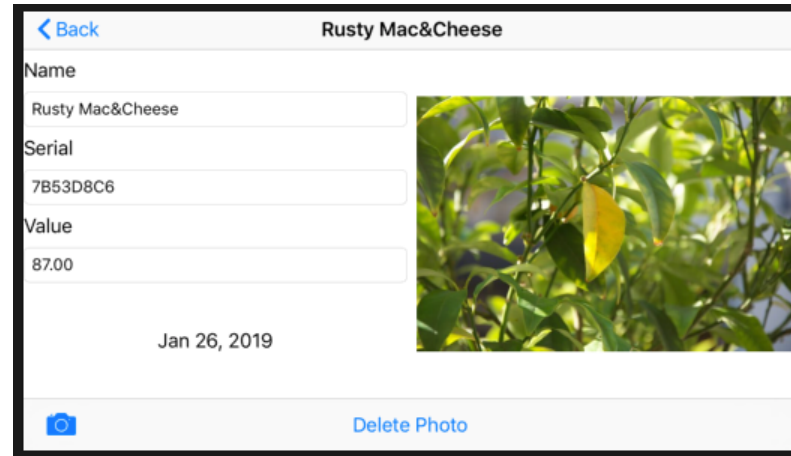
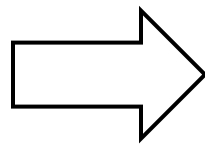
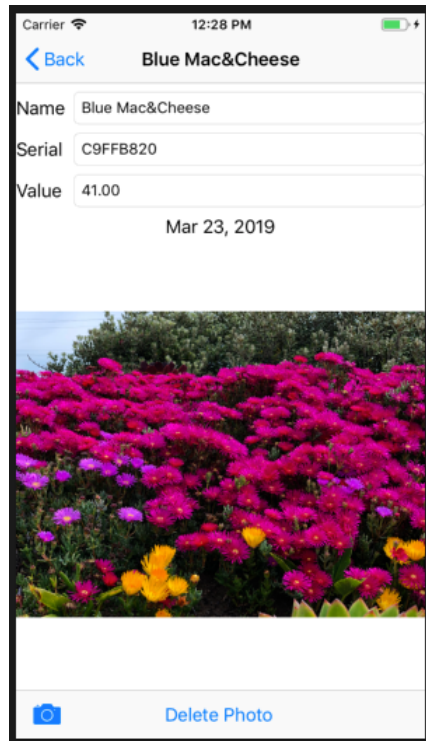
Keep these ideas in mind as you build your own interfaces

Another valuable guideline: **design first for smaller devices!**

# Size-Specific Classes

The work in Ch. 17 is to adjust view properties based on size class

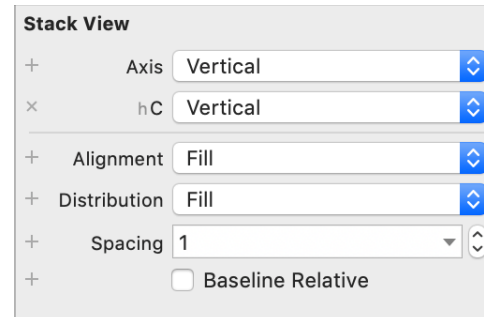
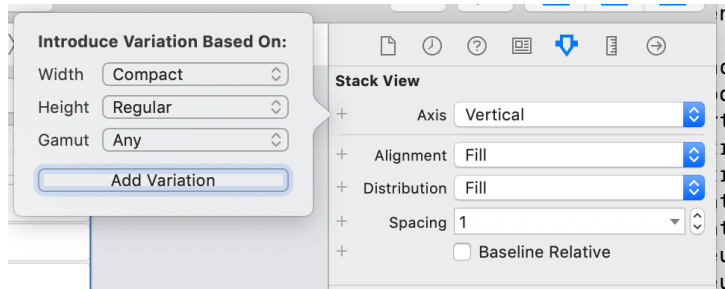
- put the image view on the right-hand side of the labels and text fields



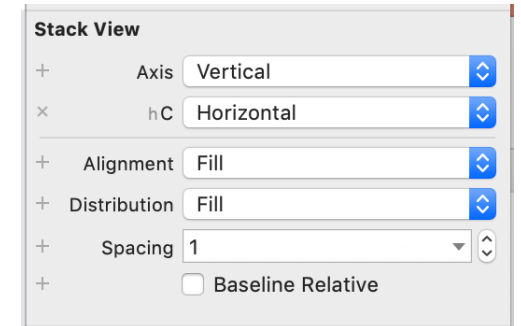
# Size-Class Specific Option

For for stack view

- ▶ add a size-class-specific option
- ▶ by clicking on the + next to property for which we want a new option (here, Axis, for the outer stack view)



after picking "Any" for Width  
and "Compact" for Height

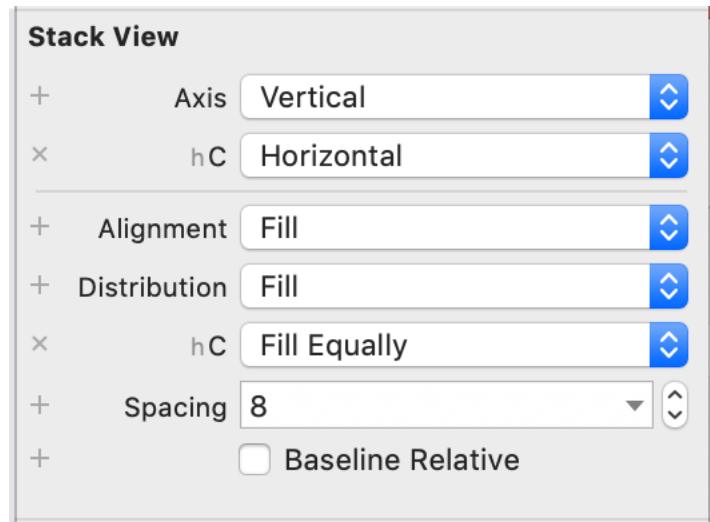


then Horizontal for hC: when the  
interface has a compact height,  
the outer stack view will have a  
horizontal configuration



# Size-Class Specific Option

Final thing to do is to change the hC variation of the outer StackView to "Fill Equally"



# Bronze Challenge

Do the Bronze Challenge on p. 313

► it's easy!

instead of this:

Name	item name
Serial	FT67SK3FYK
Value	56.00

image

this:

Name
item name
Serial
FT67SK3FYK
Value
56.00

image