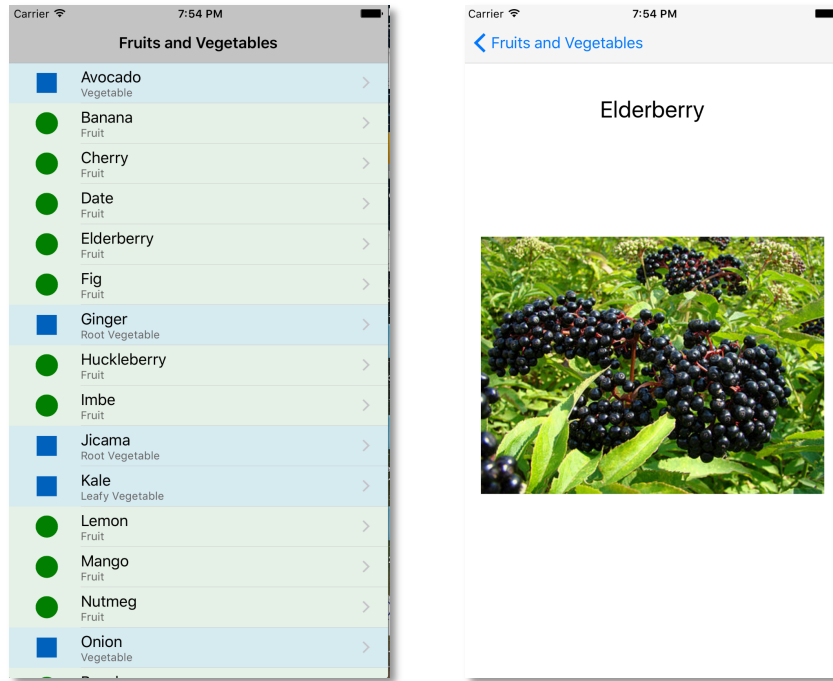


# Fruits and Vegetables

## An easy introduction to Table View and Navigation Controller Part 4: Customizing the Table View



## Introduction

We might want to add one or more of these changes to the table view:

- Add the disclosure indicator (>) or other navigation indicator.
- Add a subtitle that indicates a little more about the item, such as whether it is a fruit or a vegetable.
- Add an image to each cell.
- Change the background colors of the cells.

## Materials

- You should finish Lesson 3 before you start this lesson.

## Instructions

1. Make sure your Fruit Table View Controller has this code near the top. We added these numbers previously. These numbers indicate which of the items in the list are vegetables.

```
var vegetables = [ 0, 6, 9, 10, 14, 18, 19, 23, 24 ];  
var roots = [ 6, 9, 23 ];  
var leafy = [ 10, 18 ];
```

2. To use the information in the Int arrays, we can use the **contains** method, like this:

```
if (vegetables.contains(indexPath.row)) {
```

- a. The **contains** method returns true if the number is in the Int array, and false if the number is not in the array.

3. In storyboard, in the Document Outline, click on the **Fruit Cell** and view its attributes in the Attribute Inspector.
4. Try playing with the style. Add a subtitle, right detail, and left detail. See how they differ.
5. Try adding an image. You may not see the image until you actually run the app. The app will resize the image to fit in the small space.
6. Try changing the disclosure indicator. You can have an arrow (>), information (circle i), checkmark, or both arrow and information. For this kind of app, we usually use the arrow. In another kind of app, you might use different icons for different cells in the table view.
7. You can change the subtitles at run time, just like you changed the titles in the cells to provide a list of fruits. Use code like this to let the subtitle indicate whether the list item is a fruit or a vegetable. We use the **detailTextLabel** attribute of the cell. Add the orange code to **tableView:cellForRowAt:indexPath**.

```
cell.textLabel?.text = fruits[indexPath.row]
if (vegetables.contains(indexPath.row)) {
    cell.detailTextLabel?.text = "Vegetable"
}
else {
    cell.detailTextLabel?.text = "Fruit"
}
```

8. You can also add or change the image at run time. It is a good idea that if any item has an image, every item should have an image. Otherwise, the labels may not line up. You might create a blank or invisible image if you need one as a spacer. Add the orange code to **tableView:cellForRowAt:indexPath**.

```
cell.textLabel?.text = fruits[indexPath.row]
if (vegetables.contains(indexPath.row)) {
    cell.imageView?.image = UIImage(named: "bluesquare")
}
else {
    cell.imageView?.image = UIImage(named: "greencircle")
}
```

*Continue to next page →*

9. Finally, you can change the background color of the cell like this. I colored the vegetables a light shade of blue and the fruits a light shade of green. Use whatever colors you like. Add the orange code to **tableView:cellForRowAt:indexPath**.

```
cell.textLabel?.text = fruits[indexPath.row]
if (vegetables.contains(indexPath.row)) {
    cell.backgroundColor =
        UIColor(red: 0.85, green: 0.92, blue: 0.95, alpha: 1)
}
else {
    cell.backgroundColor =
        UIColor(red: 0.9, green: 0.95, blue: 0.9, alpha: 1)
}
```

10. I will leave it up to you to figure out how to change the subtitle to indicate whether a vegetable is a leafy vegetable or a root vegetable.
11. In the storyboard, you can change the font, size, and color of the title and subtitle text.
12. In the code, you can change the color of the title and subtitle text individually for each cell.