

Chapter 1: Your First Unit Tests

Choose options for your new project:

Product Name:

Team:

Organization Name:

Organization Identifier:

Bundle Identifier:

Language:

☐ Use Core Data

☒ Include Unit Tests

☐ Include UI Tests

```
✓ func test_NumberOfVowels_WhenPassedDominik_ReturnsThree() {  
25     let viewController = ViewController()  
26  
27     let string = "Dominik"  
28  
29     let numberOfVowels = viewController.numberOfVowels(in: string)  
30  
31     XCTAssertEqual(numberOfVowels, 3,  
32         "should find 3 vowels in Dominik")  
33 }
```

```

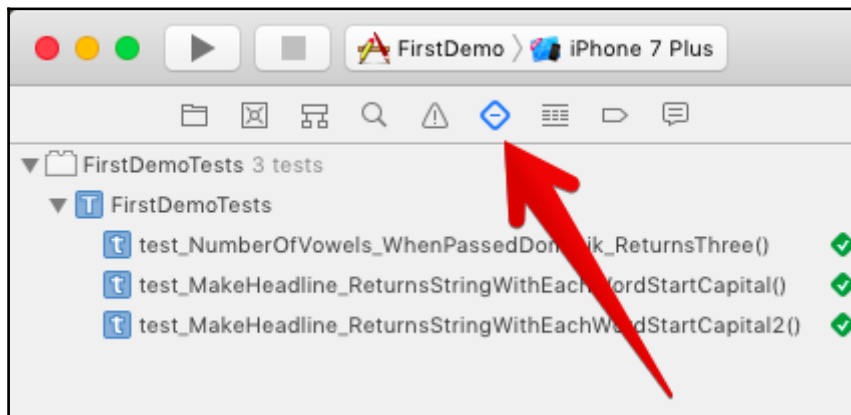
❌ func test_NumberOfVowels_WhenPassedDominik_ReturnsThree() {
25     let viewController = ViewController()
26
27     let string = "Dominik"
28
29     let numberOfVowels = viewController.numberOfVowels(in: string)
30
31     XCTAssertEqual(numberOfVowels, 4, ❌ XCTAssertEqual failed: ("3") is not equal to ("4") - ...
32         "should find 4 vowels in Dominik")
33 }

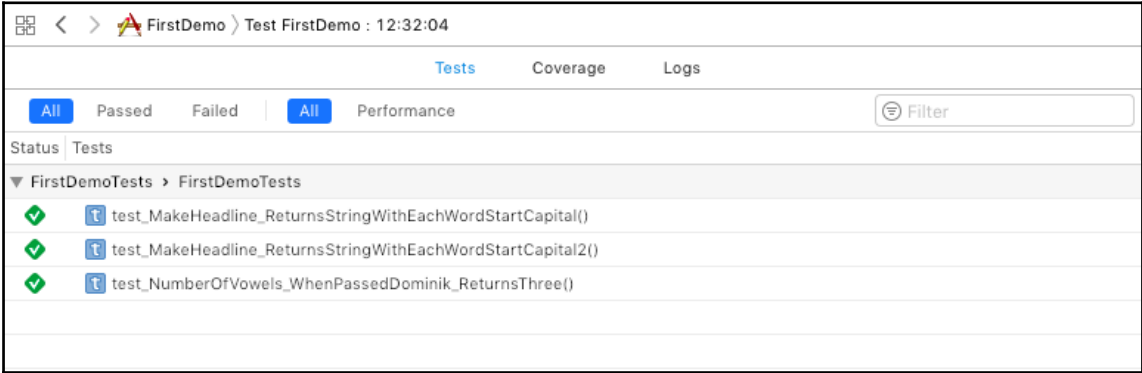
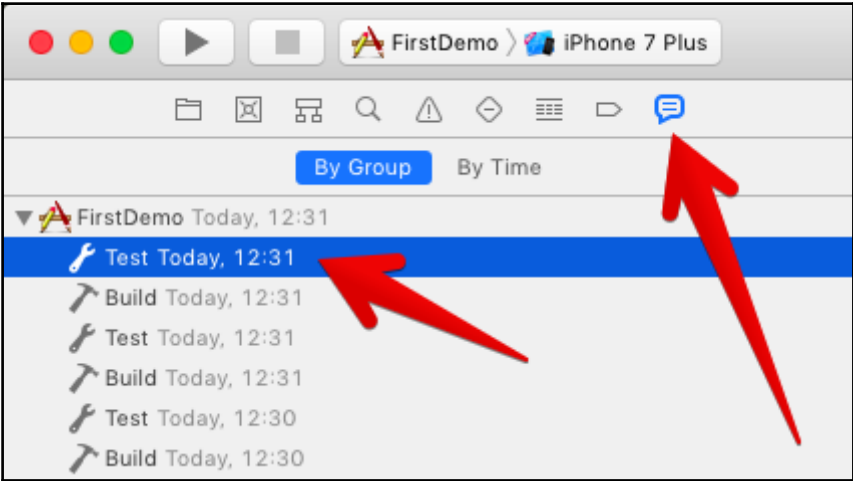
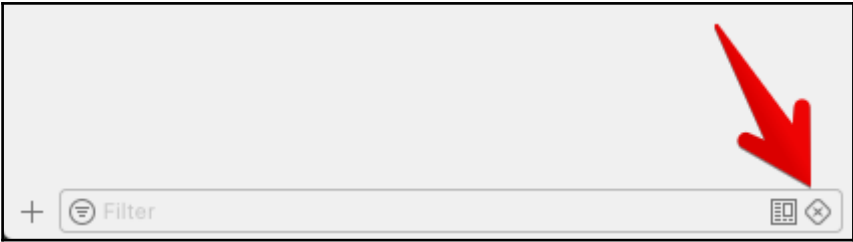
```

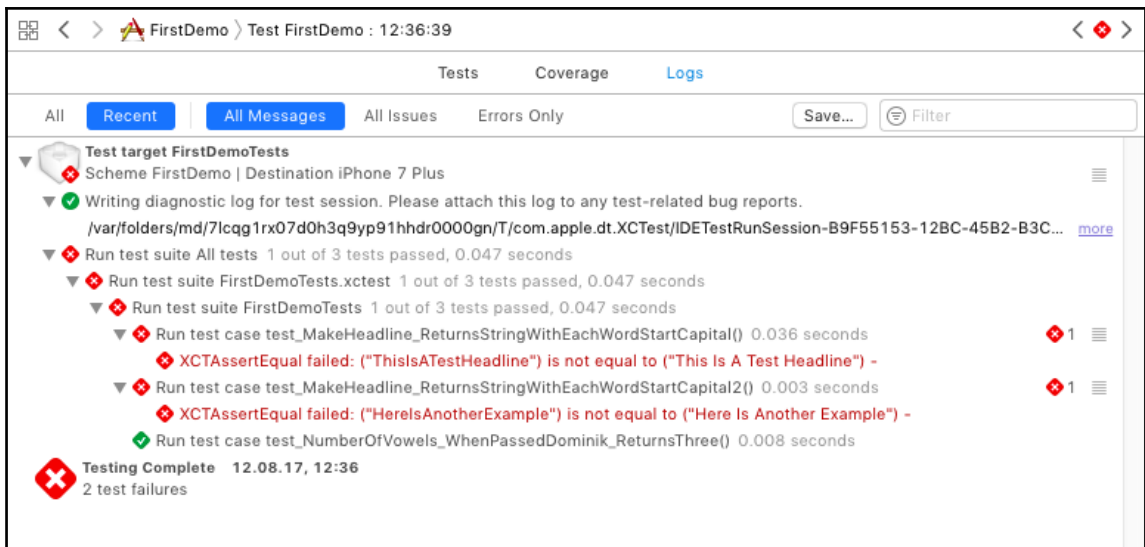
Test Suite 'FirstDemoTests.xctest' started at 2017-08-11 17:10:30.039
 Test Suite 'FirstDemoTests' started at 2017-08-11 17:10:30.040
 Test Case '-[FirstDemoTests.FirstDemoTests test_NumberOfVowels_WhenPassedDominik_ReturnsThree]' started.
 /Users/dom/Documents/TDD_book/edition_03/code/FirstDemo/FirstDemoTests/FirstDemoTests.swift:31: error: -
 [FirstDemoTests.FirstDemoTests test_NumberOfVowels_WhenPassedDominik_ReturnsThree] : XCTAssertEqual
 failed: ("3") is not equal to ("4") - should find 4 vowels in Dominik
 Test Case '-[FirstDemoTests.FirstDemoTests test_NumberOfVowels_WhenPassedDominik_ReturnsThree]' failed
 (0.068 seconds).
 Test Suite 'FirstDemoTests' failed at 2017-08-11 17:10:30.113.
 Executed 1 test, with 1 failure (0 unexpected) in 0.068 (0.073) seconds
 Test Suite 'FirstDemoTests.xctest' failed at 2017-08-11 17:10:30.116.
 Executed 1 test, with 1 failure (0 unexpected) in 0.068 (0.077) seconds
 Test Suite 'All tests' failed at 2017-08-11 17:10:30.117.
 Executed 1 test, with 1 failure (0 unexpected) in 0.068 (0.089) seconds

Test session log:
 /var/folders/md/71cqglrx07d0h3q9yp91hhdr0000gn/T/com.apple.dt.XCTest/IDETestRunSession-FBB-8BD-
 B6F4-44DB-A172-A780881D51E7/FirstDemoTests-17EE33C5-EBB5-435F-86F8-C4FA3E28496E/Session-
 FirstDemoTests-2017-08-11_170959-PICaen.log

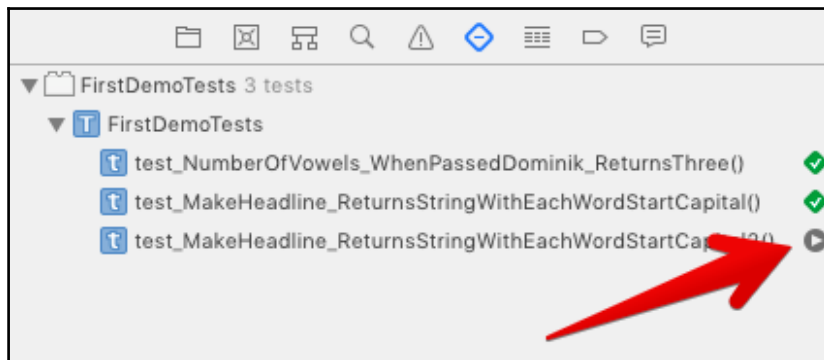
All Output ⌵ Filter

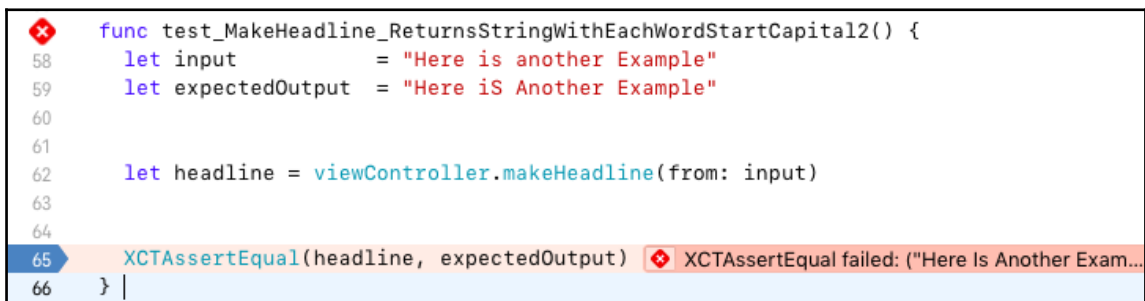
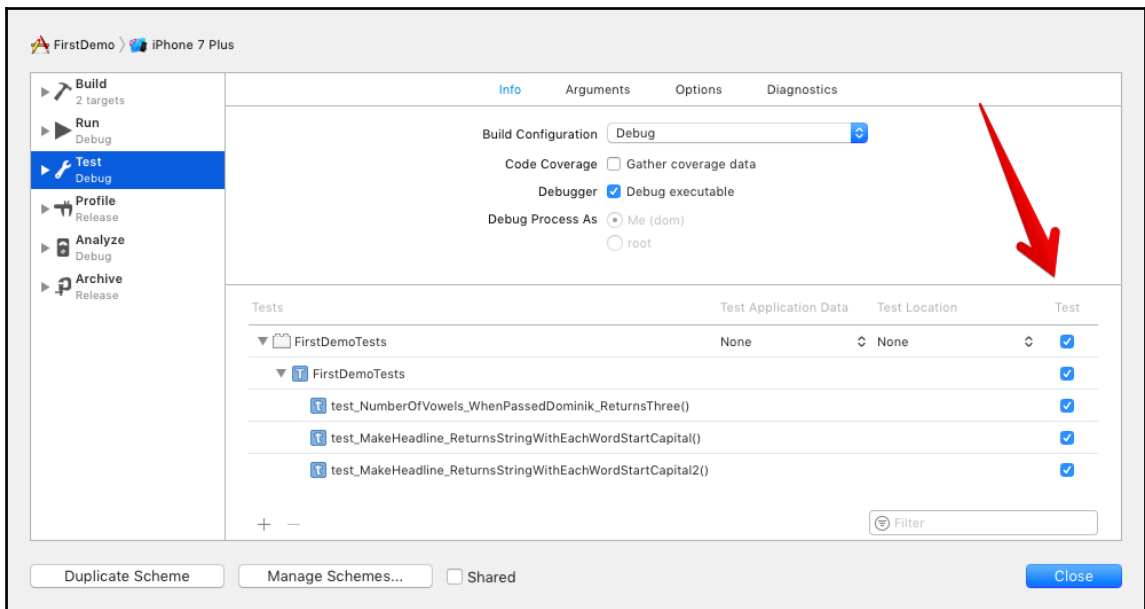
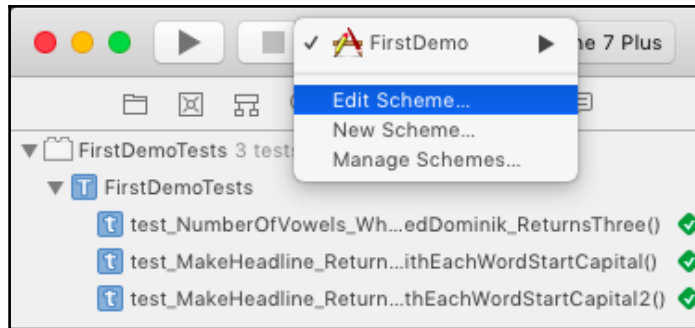


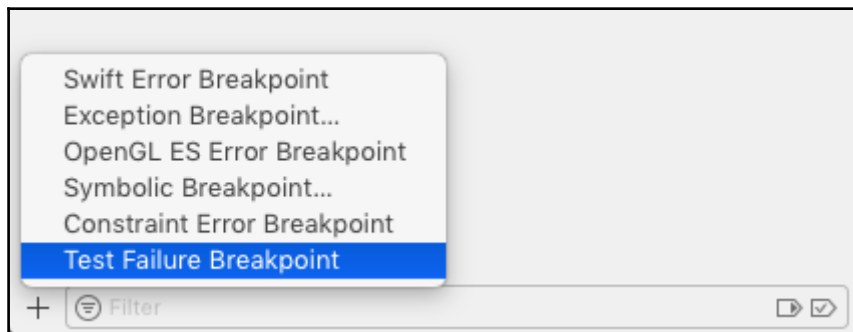
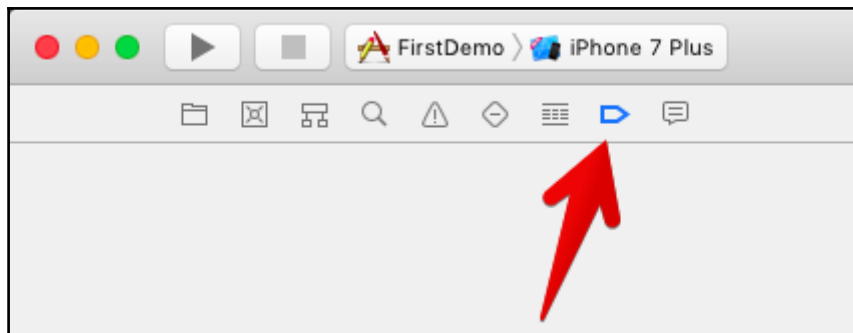




```
func test_MakeHeadline_ReturnsStringWithEachWordStartCapital2() {  
58     let input = "Here is another Example"  
59     let expectedOutput = "Here Is Another Example"  
60  
61  
62     let headline = viewController.makeHeadline(from: input)  
63  
64  
65     XCTAssertEqual(headline, expectedOutput)  
66 }
```

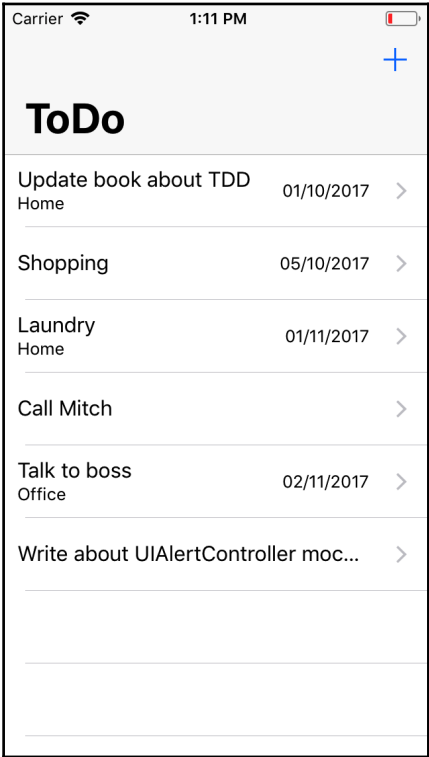


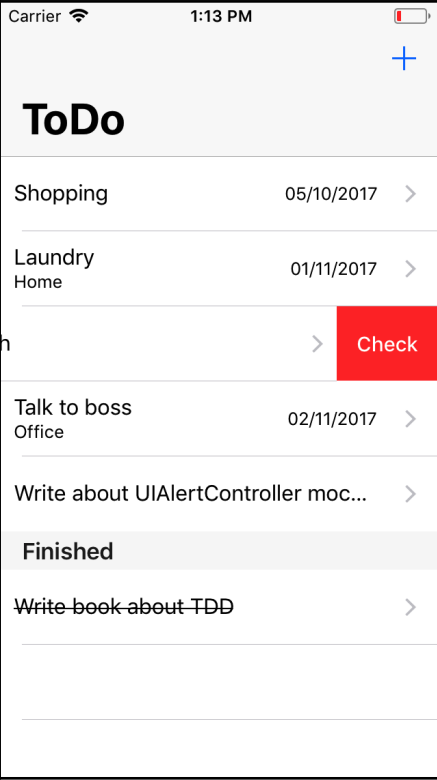


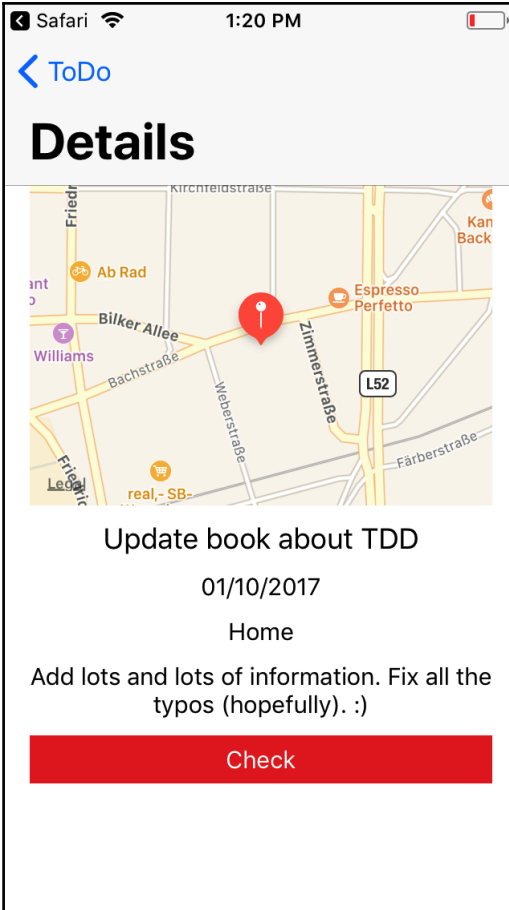


Chapter

2: Planning and Structuring Your Test-Driven iOS App







Carrier

1:14 PM

Title

Call Mom

Date

01/01/2016

Location

Home

Address

Address

Description

Cancel

Save

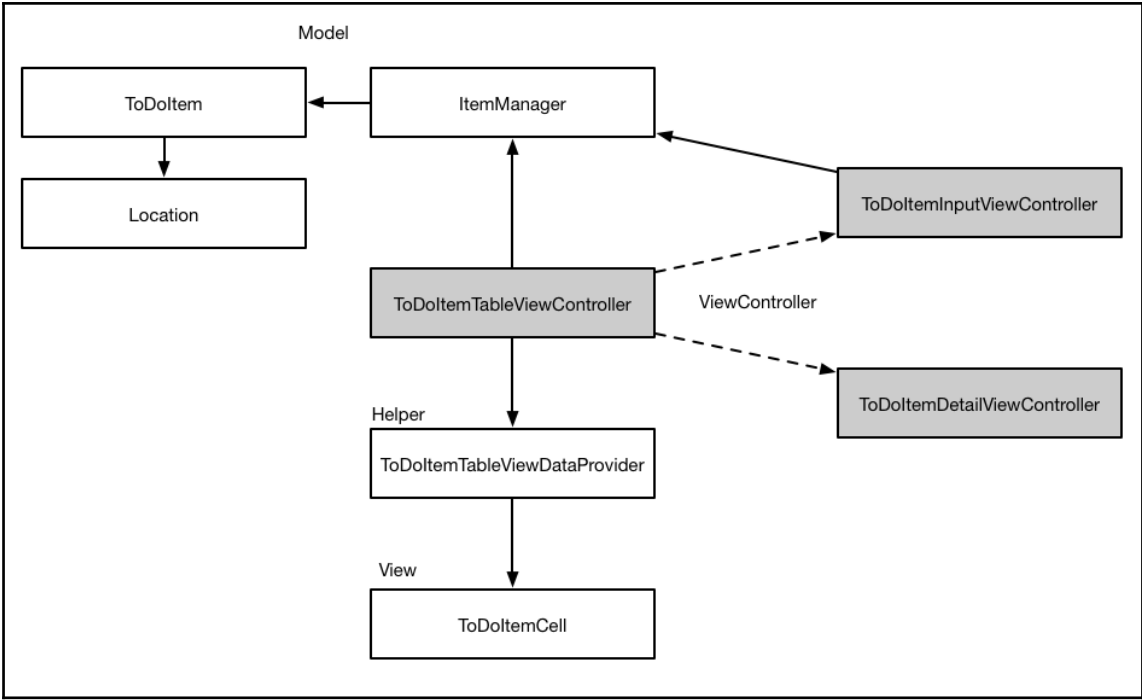
ItheI'm

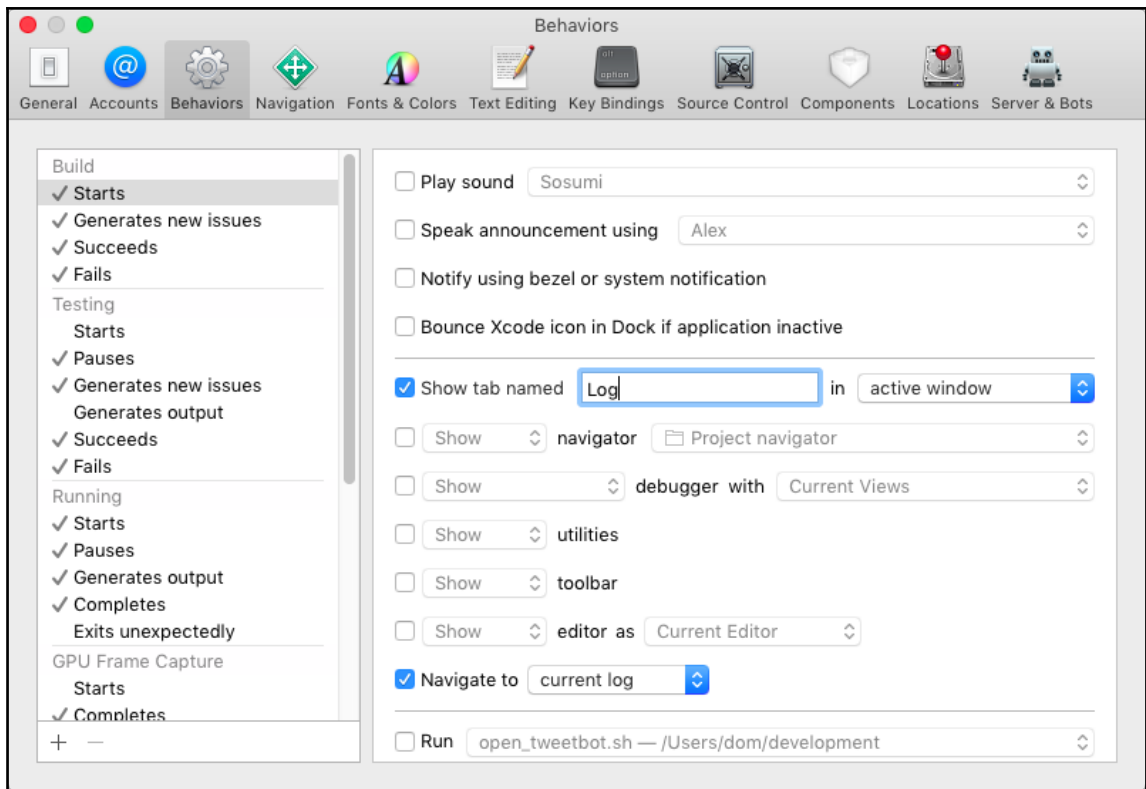
qwertyuio

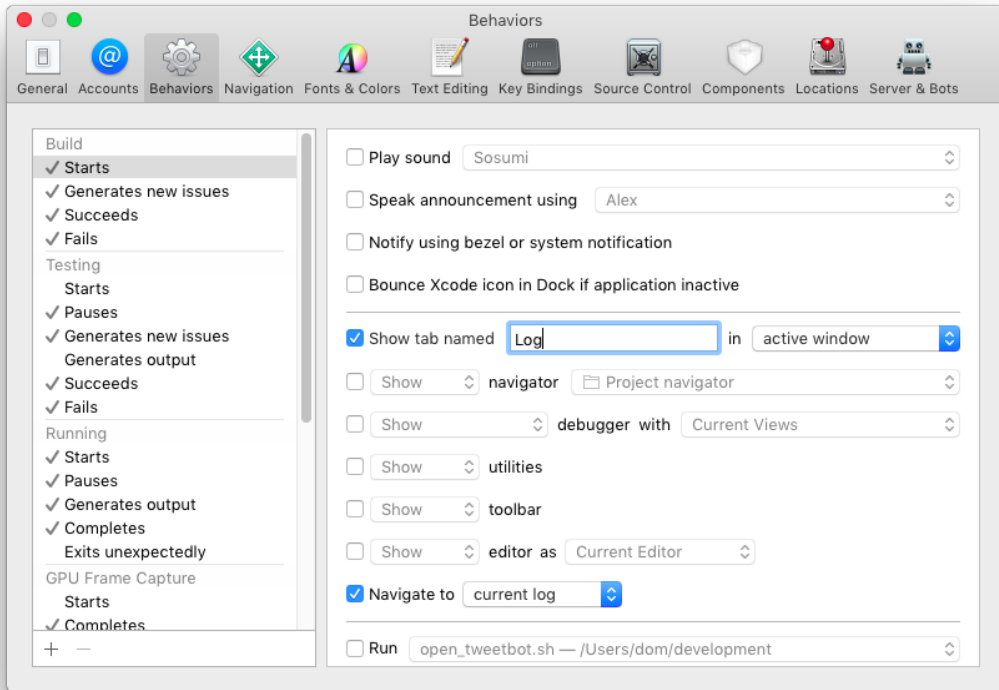
asdfghjkl

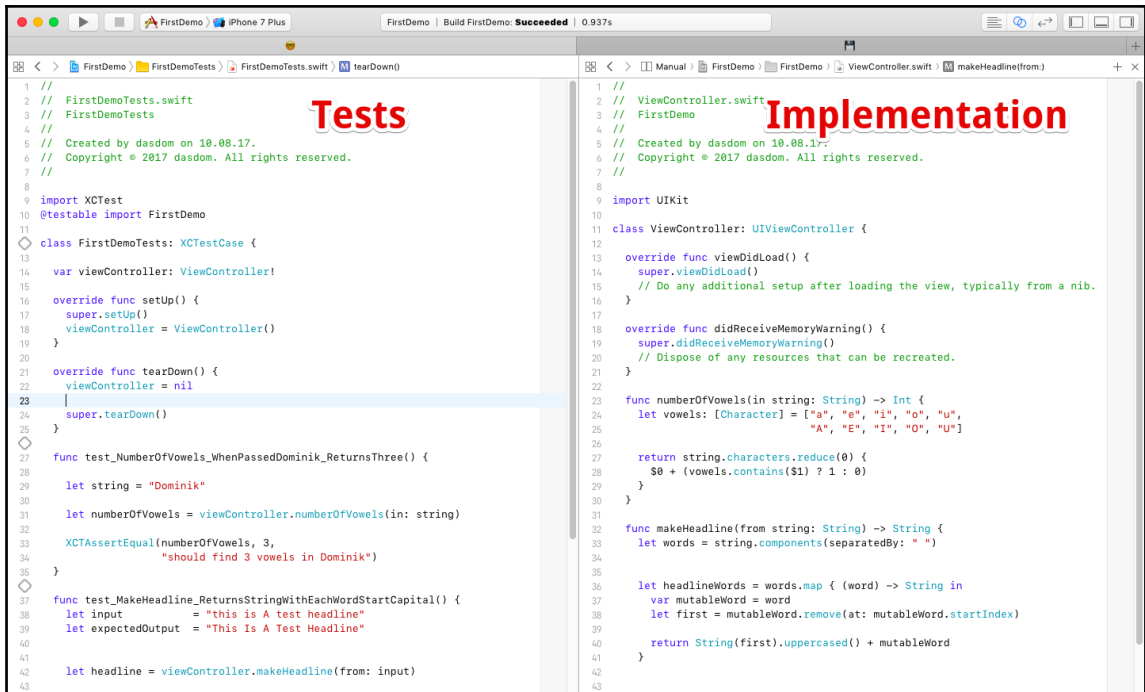
⬆zxcvbnm⬆

123😊spacereturn

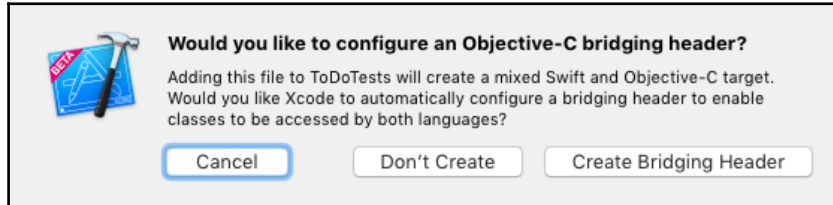








Chapter 3: A Test-Driven Data Model



```
func test_Init_TakesTitle() {  
25     ToDoItem(title: "Foo")  
26 }  
Use of unresolved identifier 'ToDoItem'
```

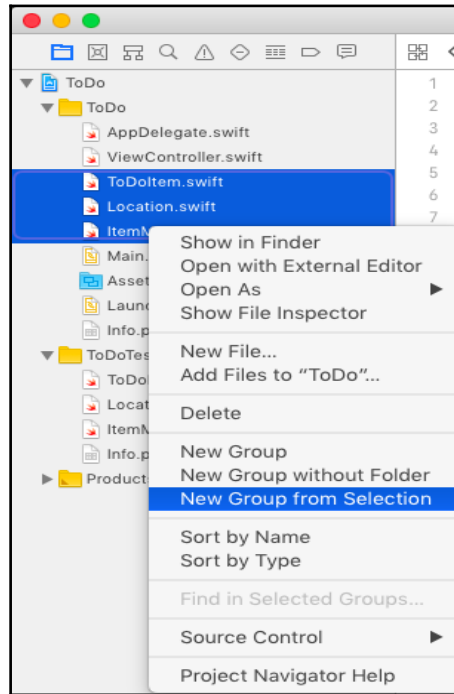
```

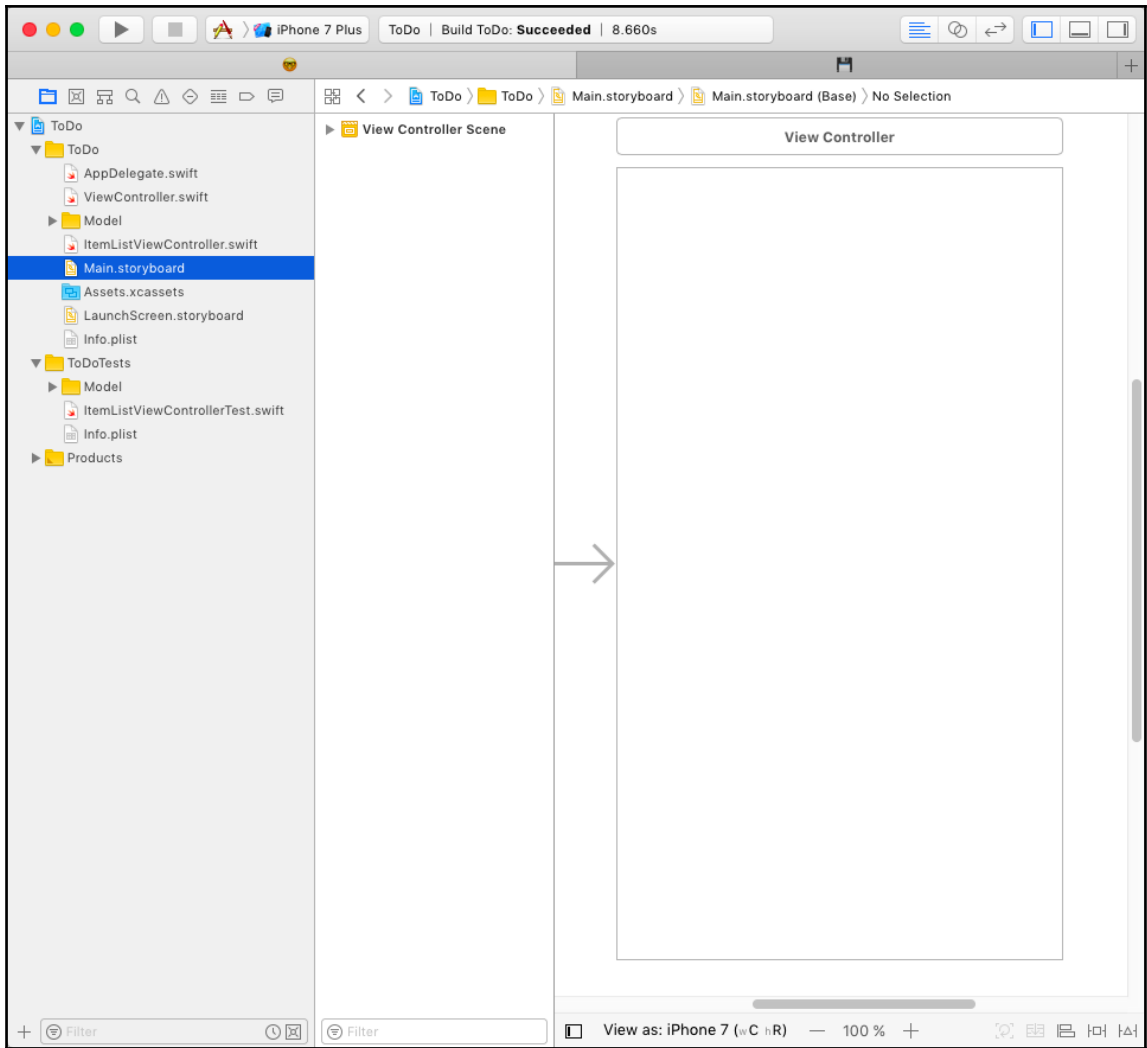
82 func assertLocationNotEqualWith(firstName: String,
83                                 firstLongLat: (Double,
84                                                  Double)?,
85                                 secondName: String,
86                                 secondLongLat: (Double,
87                                                  Double)?) {
88
89     var firstCoord: CLLocationCoordinate2D? = nil
90     if let firstLongLat = firstLongLat {
91         firstCoord =
92             CLLocationCoordinate2D(latitude: firstLongLat.0,
93                                     longitude: firstLongLat.1)
94     }
95     let firstLocation =
96         Location(name: firstName,
97                 coordinate: firstCoord)
98
99
100    var secondCoord: CLLocationCoordinate2D? = nil
101    if let secondLongLat = secondLongLat {
102        secondCoord =
103            CLLocationCoordinate2D(latitude: secondLongLat.0,
104                                    longitude: secondLongLat.1)
105    }
106    let secondLocation =
107        Location(name: secondName,
108                coordinate: secondCoord)
109
110
111    XCTAssertNotEqual(firstLocation, secondLocation)
112 }

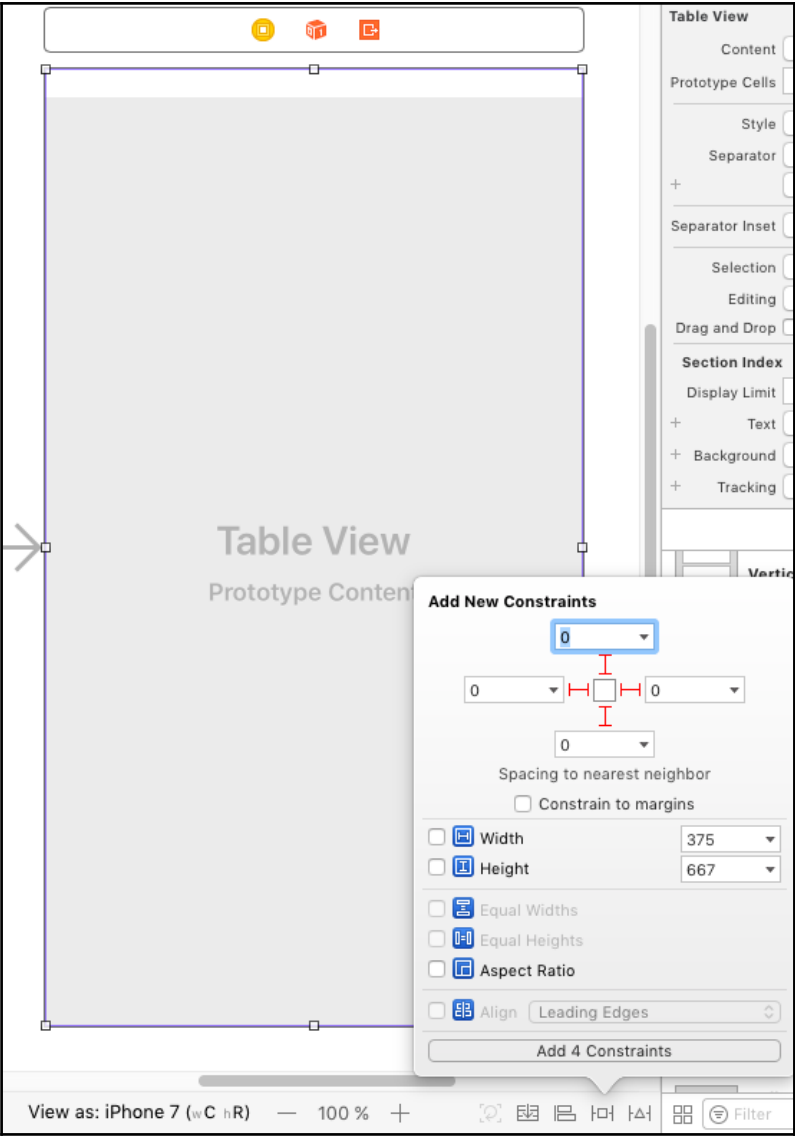
```

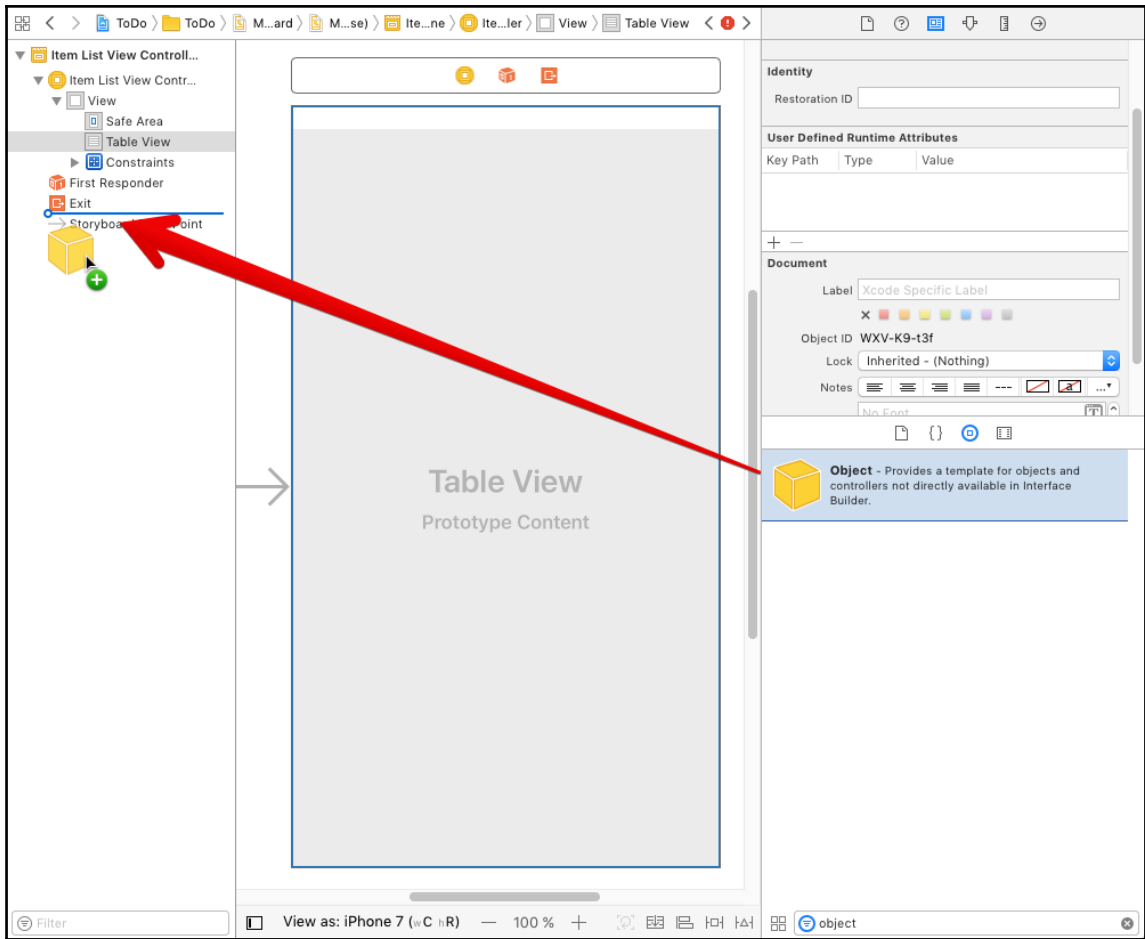
XCTAssertNotEqual failed: XCTAssertEqual failed: (Location) is not equal to (Location) - Location: name: secondName, coordinate: secondCoord

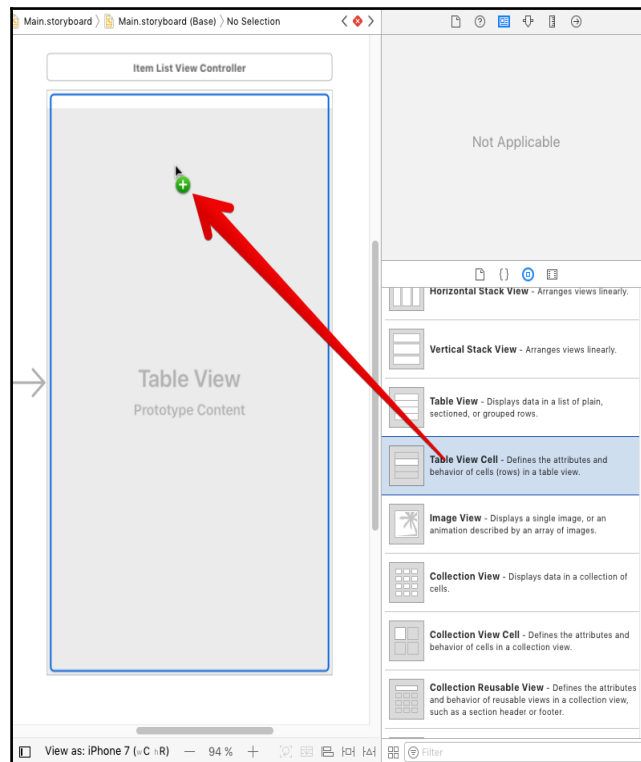
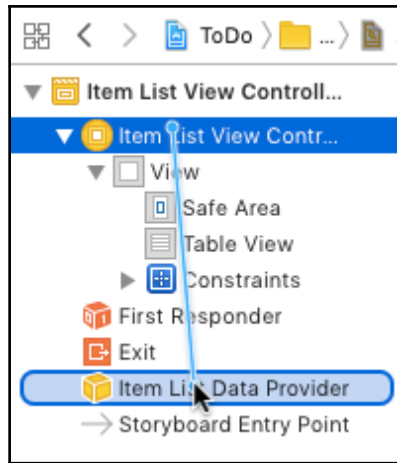
Chapter 4: A Test-Driven View Controller











Custom Class

Class

Module

☒ Inherit Module From Target

Identity

Restoration ID

Table View Cell

Style

Identifier

Selection

Accessory

Editing Acc.

Focus Style

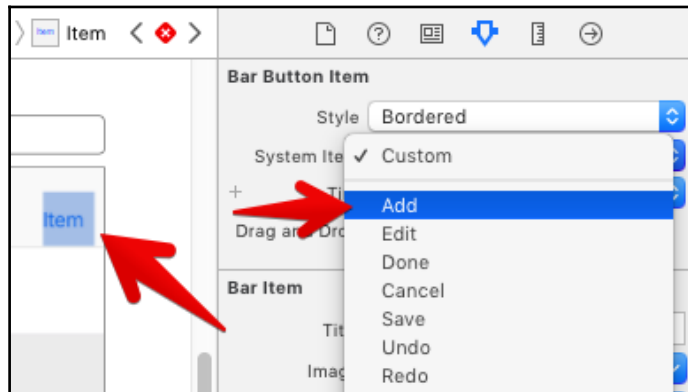
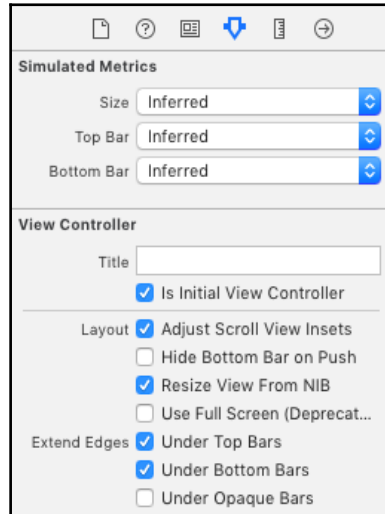
Prototype Cells

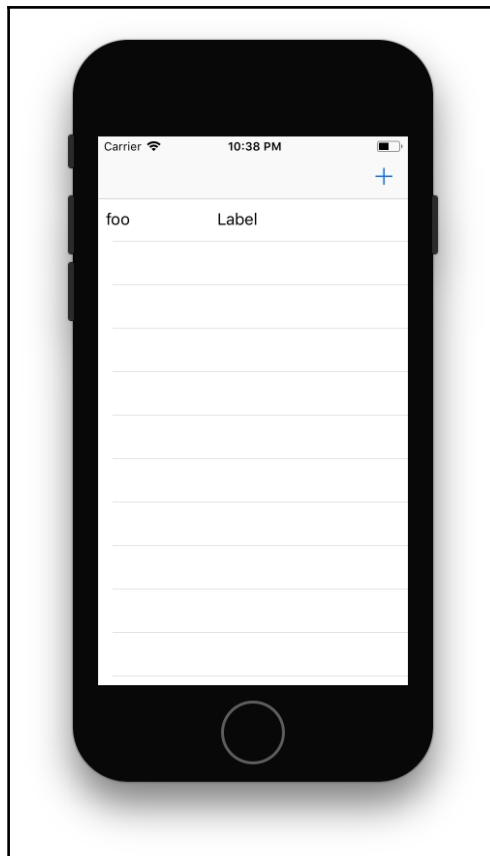
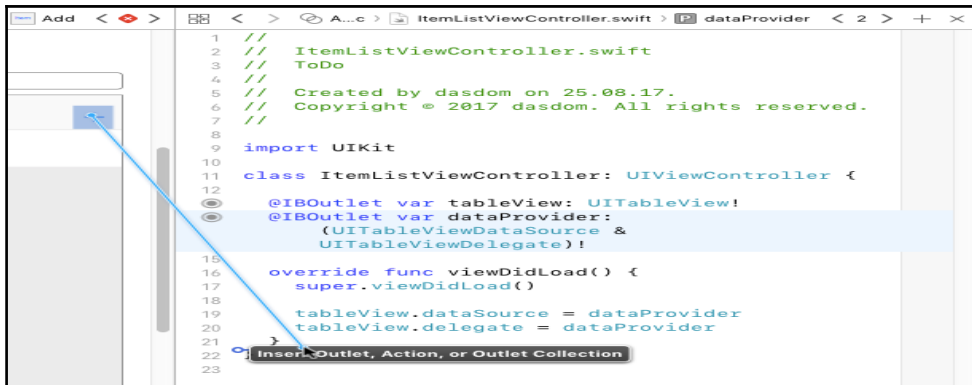
Label

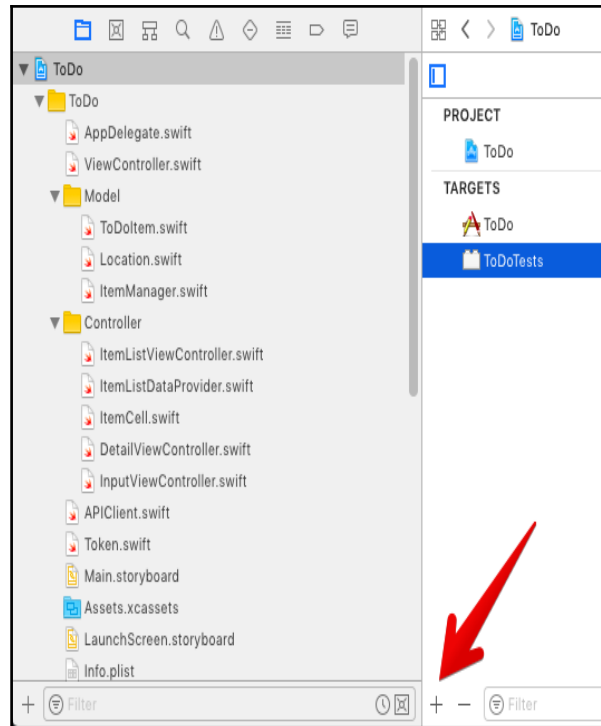
Chapter 5: Testing Network Code

```
130  
131 | XCTAssertEqual(latitude,  
132                0.0,  
133                accuracy: 0.001)  
134 | XCTAssertEqual(longitude,  
135                0.0,  
136                accuracy: 0.001)  
137
```

Chapter 6: Putting It All Together







Title

Date

Location

Address

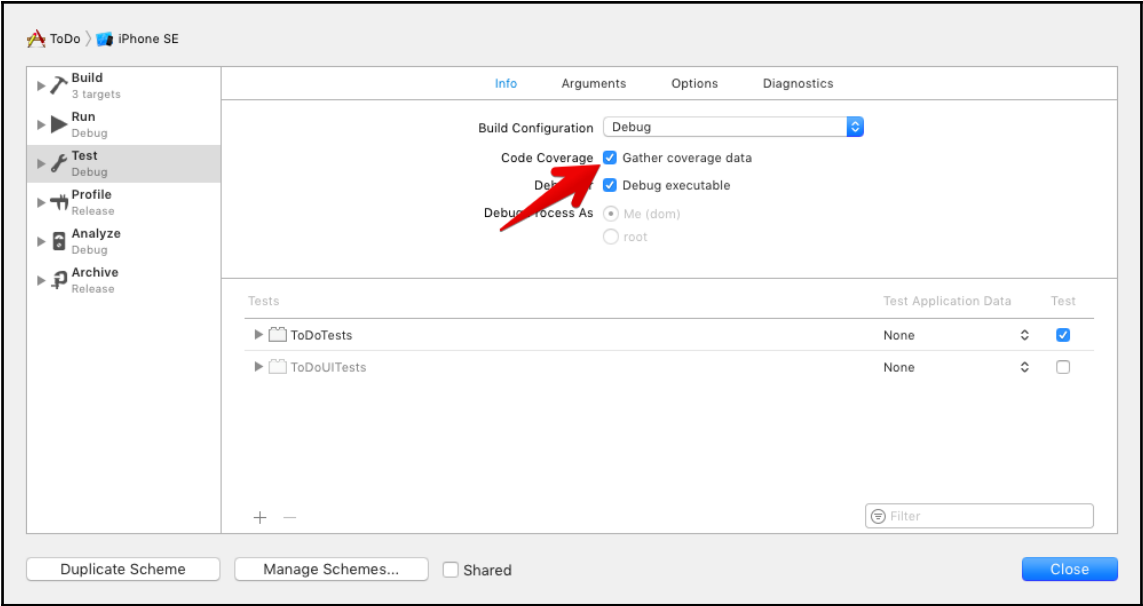
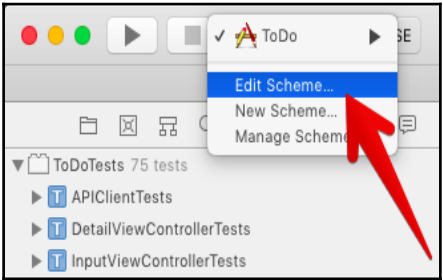
Description

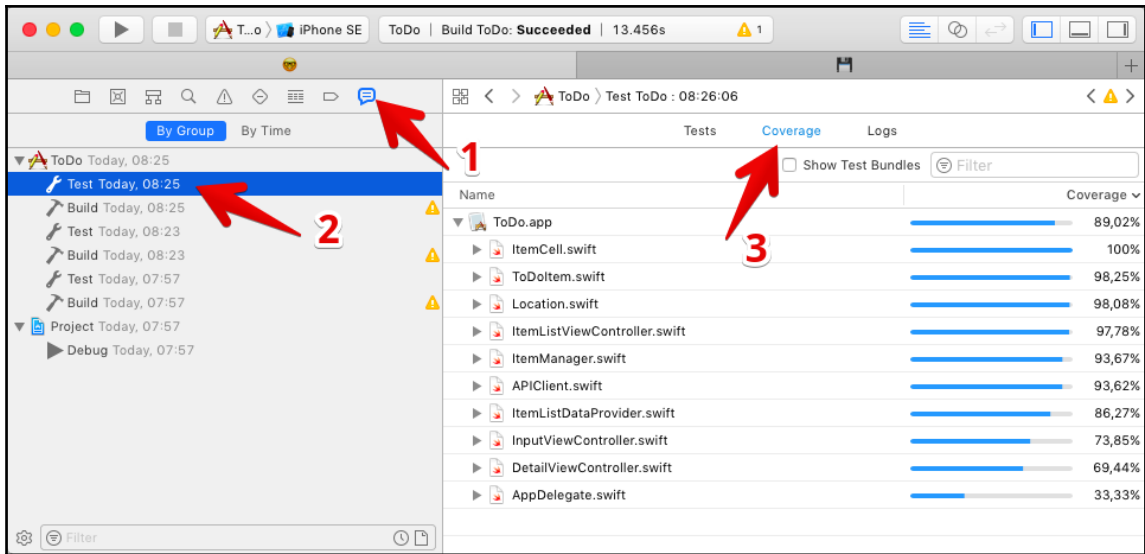
Cancel

Save

```
30  
31 func testExample() {  
32 |  
33 }  
34  
35 }  
36
```

Chapter 7: Code Coverage





```
20 var itemInfo: (ItemManager, Int)?
21
22 let dateFormatter: DateFormatter = {
23     let dateFormatter = DateFormatter()
24     dateFormatter.dateFormat = "MM/dd/yyyy"
25     return dateFormatter
26 }()
27
28 override func viewWillAppear(_ animated: Bool) {
29     super.viewWillAppear(animated)
30
31     guard let itemInfo = itemInfo else { return }
32     let item = itemInfo.0.item(at: itemInfo.1)
33
34     titleLabel.text = item.title
35     locationLabel.text = item.location?.name
36     descriptionLabel.text = item.itemDescription
37
38     if let timestamp = item.timestamp {
39         let date = Date(timeIntervalSince1970: timestamp)
40         dateLabel.text = dateFormatter.string(from: date)
41     }
42
43     if let coordinate = item.location?.coordinate {
44         let region = MKCoordinateRegionMakeWithDistance(coordinate,
45                                                         100, 100)
46         mapView.region = region
47     }
48 }
49
50 func checkItem() {
51     if let itemInfo = itemInfo {
52         itemInfo.0.checkItem(at: itemInfo.1)
53     }
54 }
55 }
56
```




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