

136. Removing objects from persistent store

The screenshot shows a Xcode interface with a video player at the bottom left featuring a man with glasses and a beard speaking into a microphone. The main area displays Swift code for a `GoalsVC.swift` file. A red box highlights the `removeGoal(atIndexPath: IndexPath)` function. The code uses a `managedContext` to delete a goal from the persistent store, handle errors, and then save the changes.

```
56
57
58 func tableView(_ tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {
59     guard let cell = tableView.dequeueReusableCell(withIdentifier: "goalCell") as? GoalCell else { return
60         UITableViewCell() }
61     let goal = goals[indexPath.row]
62     cell.configureCell(goal: goal)
63     return cell
64 }
65
66 extension GoalsVC {
67     func removeGoal(atIndexPath indexPath: IndexPath) {
68         guard let managedContext = appDelegate?.persistentContainer.viewContext else { return }
69
70         managedContext.delete(goals[indexPath.row])
71
72         do {
73             try managedContext.save()
74             print("Successfully removed goal!")
75         } catch {
76             debugPrint("Could not remove: \(error.localizedDescription)")
77         }
78     }
79
80     func fetch(completion: (_ complete: Bool) -> ()) {
81         guard let managedContext = appDelegate?.persistentContainer.viewContext else { return }
82
83         let fetchRequest = NSFetchedResultsController<Goal>(entityName: "Goal")
84
85         do {
86             goals = try managedContext.fetch(fetchRequest)
87             print("Successfully fetched data.")
88             completion(true)
89         } catch {
90             debugPrint("Could not fetch: \(error.localizedDescription)")
91             completion(false)
92         }
93     }
94 }
```

The Xcode interface includes a sidebar with file navigation, a top bar showing the app name and device, and a right-hand panel for file properties like identity and type, target membership, and text settings. A bottom navigation bar provides standard Xcode controls.

136. Removing objects from persistent store

The screenshot shows the Xcode interface with the following details:

- Project Navigator:** Shows the project structure for "goalpost-app".
- Editor:** Displays the Swift file `GoalsVC.swift` containing code for managing a UITableView.
- Callouts:** A red box highlights the code block from line 85 to 88, which defines a `UITableViewController` extension. A callout for "View Controller" provides a definition: "A controller that manages a view."
- Identity and Type:** Shows the file is named `GoalsVC.swift`, has a type of "Default - Swift Source", and is located relative to the group.
- Text Settings:** Shows encoding as "No Explicit Encoding", line endings as "No Explicit Line Endings", and indenting using "Spaces" with a width of 4.
- Bottom Bar:** Includes standard Xcode navigation icons like play, stop, and zoom, along with a progress bar showing 09:41 / 11:16 and a volume icon.

```
62     guard let cell = tableView.dequeueReusableCell(withIdentifier: "goalCell") as? GoalCell else { return
63         UITableViewCell()
64     }
65     let goal = goals[indexPath.row]
66     cell.configureCell(goal: goal)
67     return cell
68 }
69
70 func tableView(_ tableView: UITableView, canEditRowAt indexPath: IndexPath) -> Bool {
71     return true
72 }
73
74 func tableView(_ tableView: UITableView, editingStyleForRowAt indexPath: IndexPath) ->
75     UITableViewCellEditingStyle {
76     return .none
77 }
78
79 func tableView(_ tableView: UITableView, editActionsForRowAt indexPath: IndexPath) ->
80     [UITableViewRowAction] {
81     let deleteAction = UITableViewRowAction(style: .destructive, title: "DELETE") { (rowAction, indexPath)
82         in
83             self.removeGoal(atIndexPath: indexPath)
84             self.fetchCoreDataObjects()
85             tableView.deleteRows(at: [indexPath], with: .automatic)
86     }
87
88     deleteAction.backgroundColor = .red
89
90     return [deleteAction]
91 }
92
93 extension GoalsVC {
94     func removeGoal(atIndexPath indexPath: IndexPath) {
95         guard let managedContext = appDelegate?.persistentContainer.viewContext else { return }
96
97         managedContext.delete(goals[indexPath.row])
98     }
99 }
```

Xcode File Edit View Find Navigate Editor Product Debug Source Control Window Help

goalpost-app iPhone 7 Finished running goalpost-app on iPhone 7 Mon 5:47 PM Caleb Stultz

An internal error occurred. Editing functionality may be limited.

Report a Bug

goalpost-app

Extensions

Enums

View

Controller

AppDelegate.swift

Main.storyboard

Assets.xcassets

LaunchScreen.storyboard

Info.plist

goalpost_app.xcdatamodeld

Products

GoalsVC Scene

GoalsVC

View

Safe Area

View

Stack View

Table View

goalCell

Content View

Stack View

Stack View

Type:

Goal Type Lbl

Goal Progress Lbl

Constraints

First Responder

Exit

Storyboard Entry Point

Create GoalVC Scene

Finish GoalVC Scene

Prototype Cells

GOALPOST

Prototype Cells

Goal: Eat salad twice a week.

Type: Short Term

Welcome to Goalpost

To begin, create a goal.

7

+

What is your goal?

Create GoalVC

GOALPOST

No Selection

Select One:

SHORT TERM

LONG TERM

Table View

Prototype Content

View as: iPhone 7 (⌘C ⌘R)

— 100% +

Filter

View Controller - A controller that manages a view.

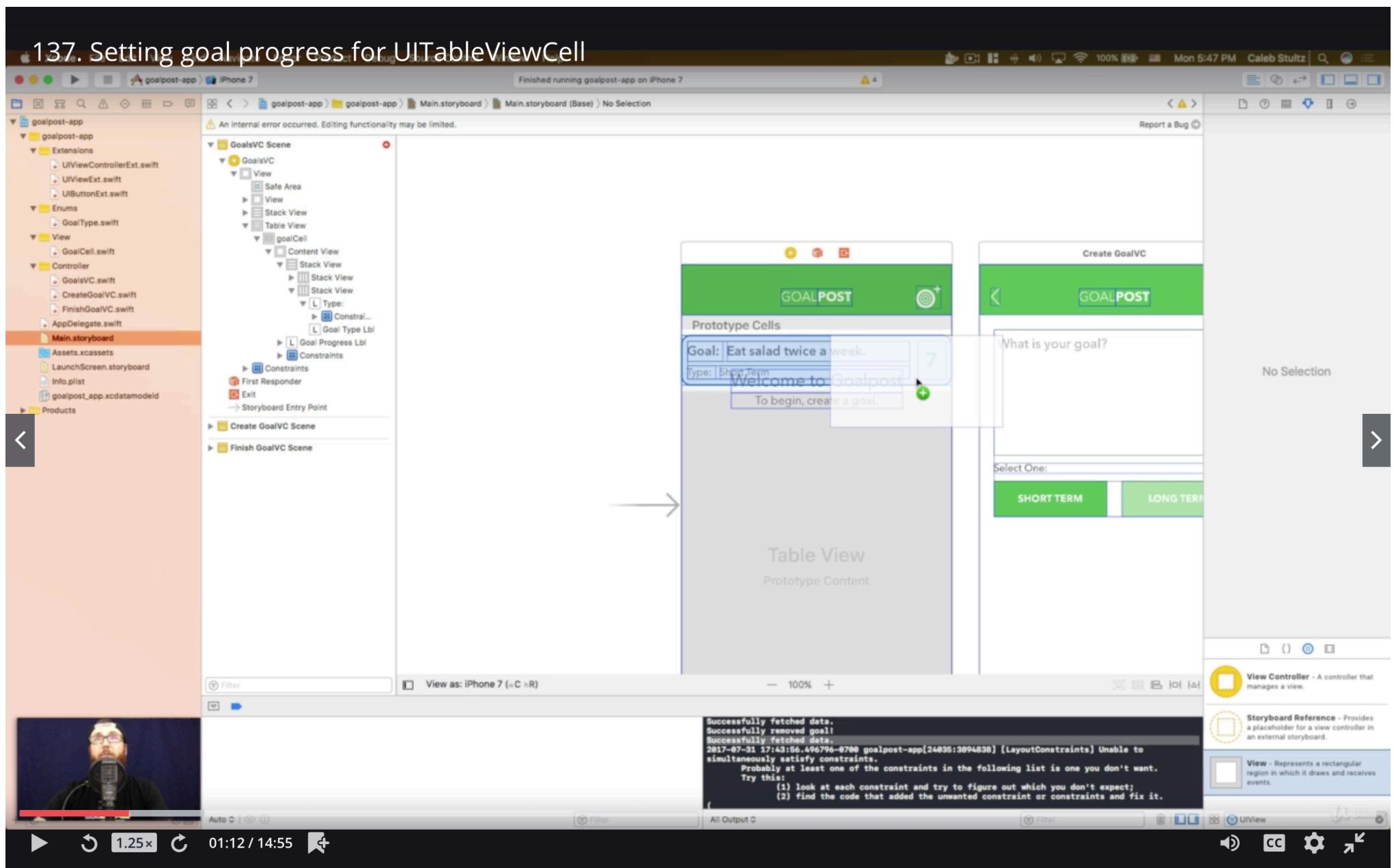
Storyboard Reference - Provides a placeholder for a view controller in an external storyboard.

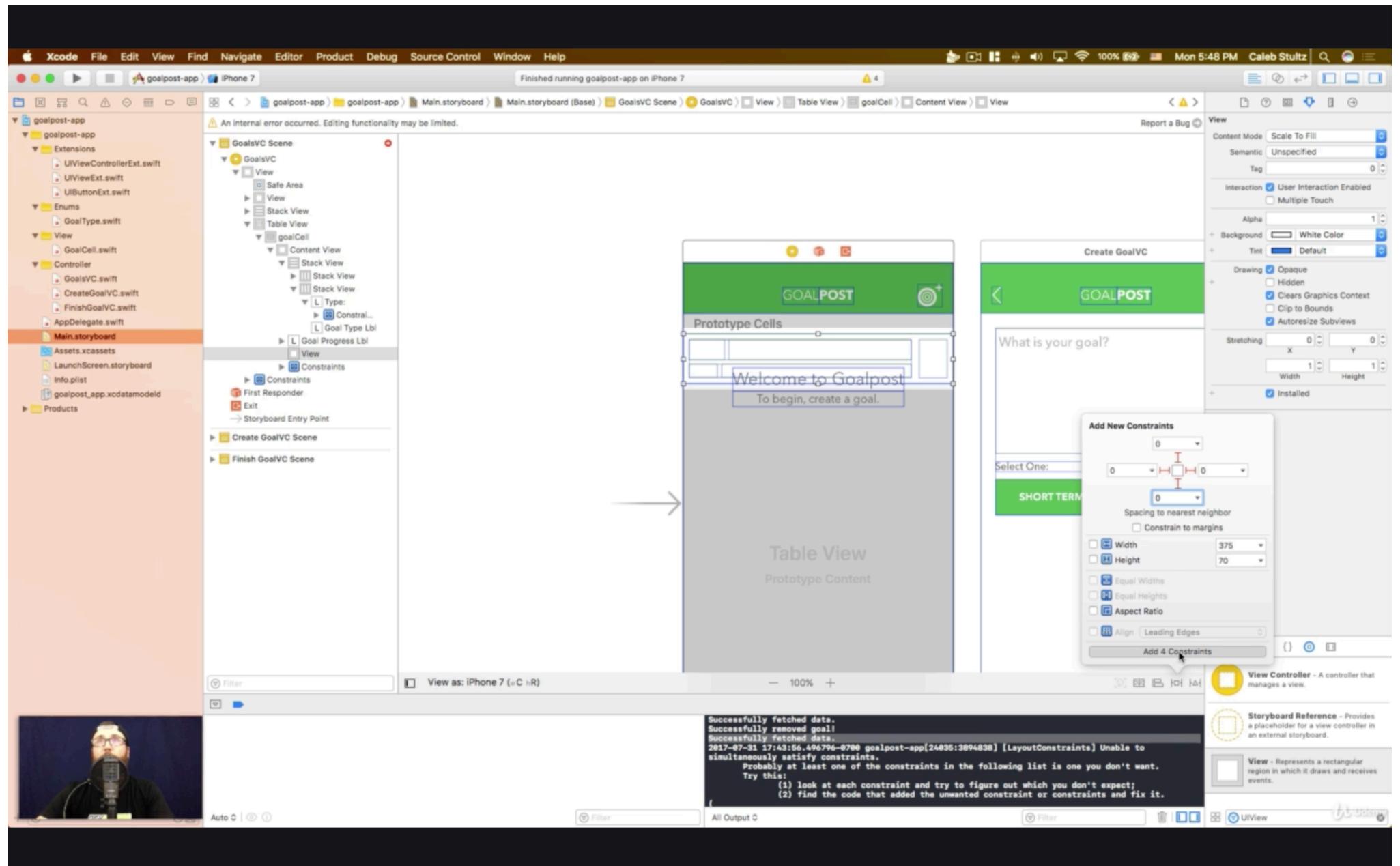
View - Represents a rectangular region in which it draws and receives events.

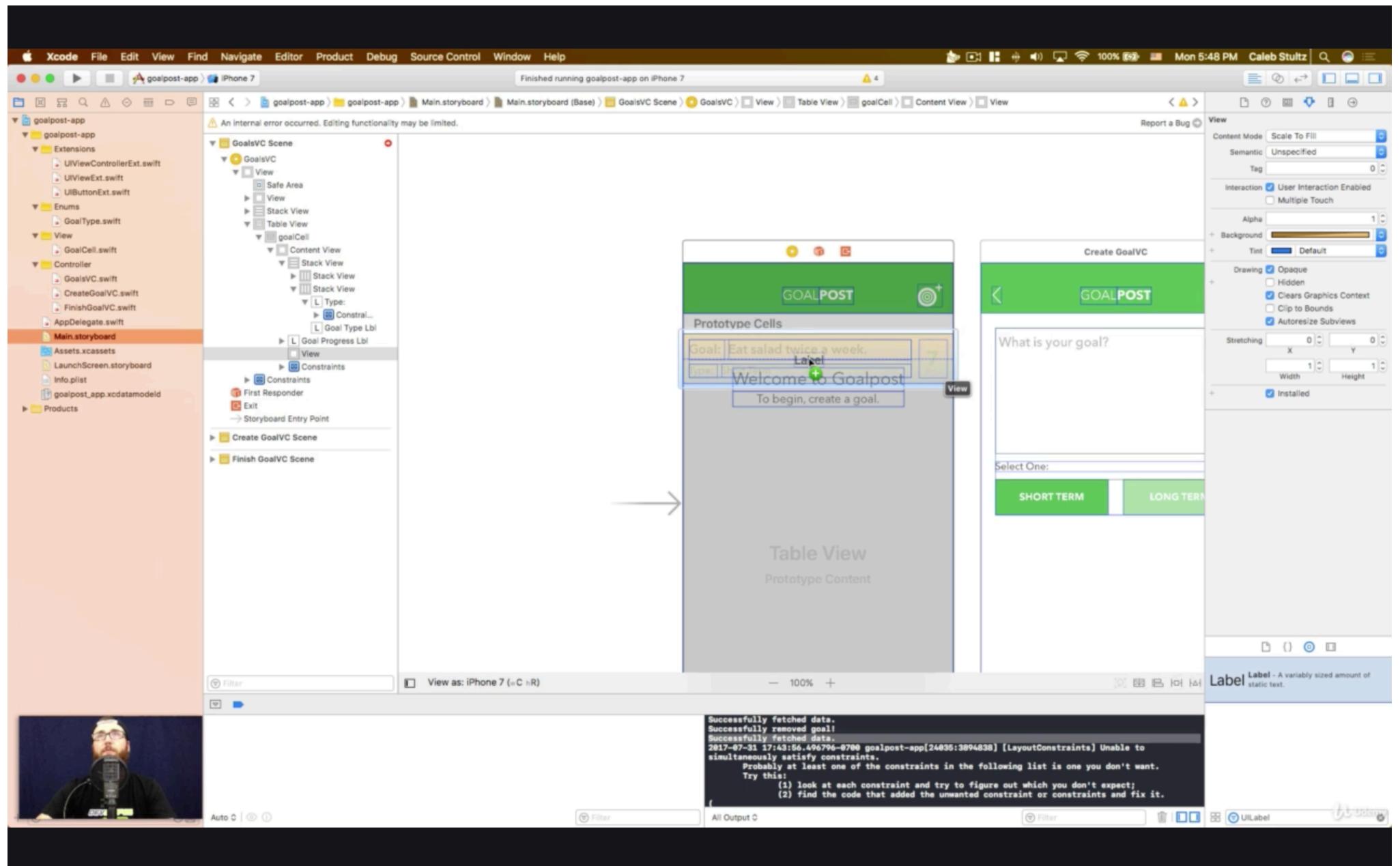
Auto | Filter | All Output |

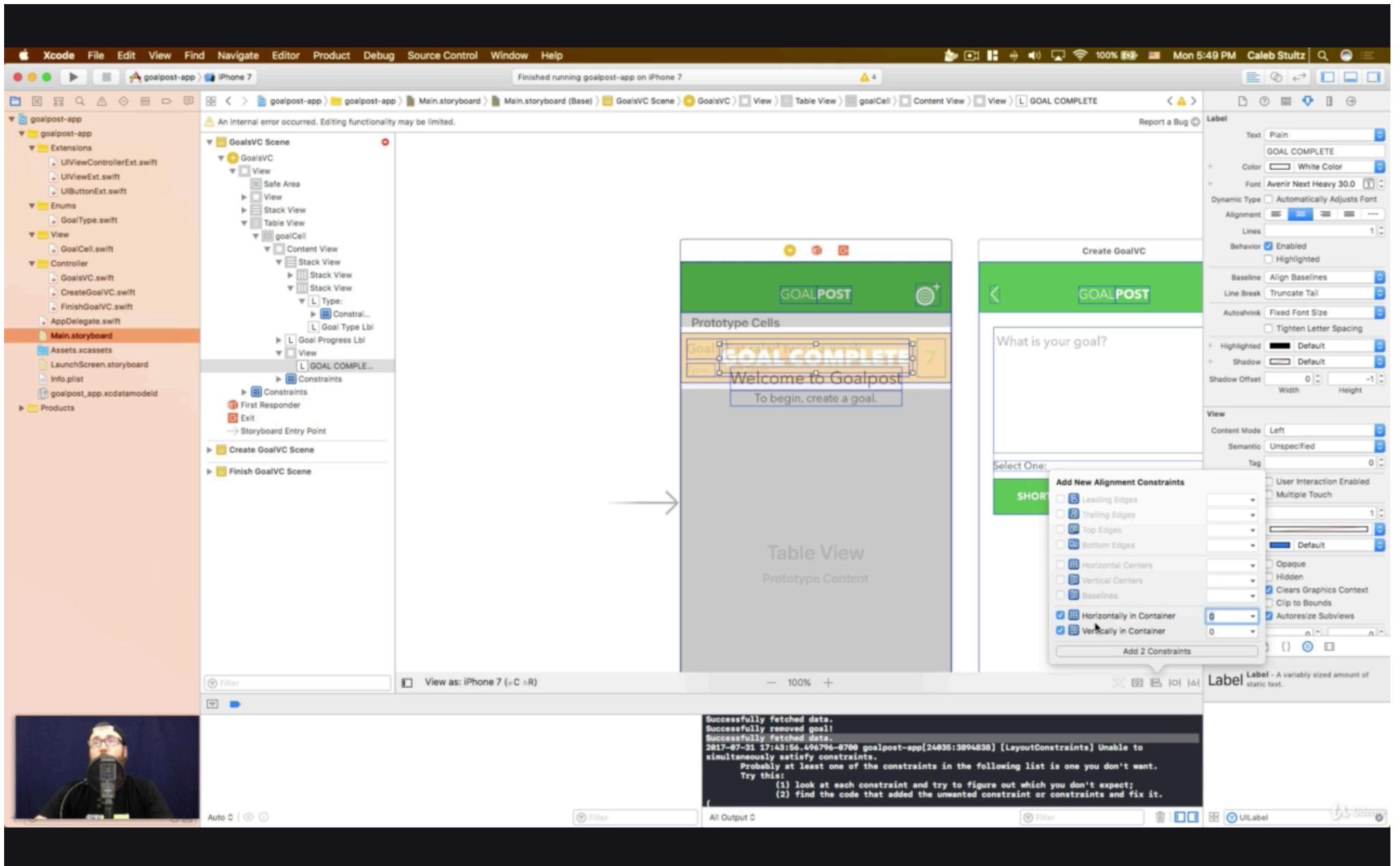
Successfully fetched data.
Successfully removed goal!
Successfully fetched data.
2017-07-31 17:43:56.496796-0700 goalpost-app[24095:3894838] [LayoutConstraints] Unable to simultaneously satisfy constraints.
Probably at least one of the constraints in the following list is one you don't want.
Try this:
(1) look at each constraint and try to figure out which you don't expect;
(2) find the code that added the unwanted constraint or constraints and fix it.
{

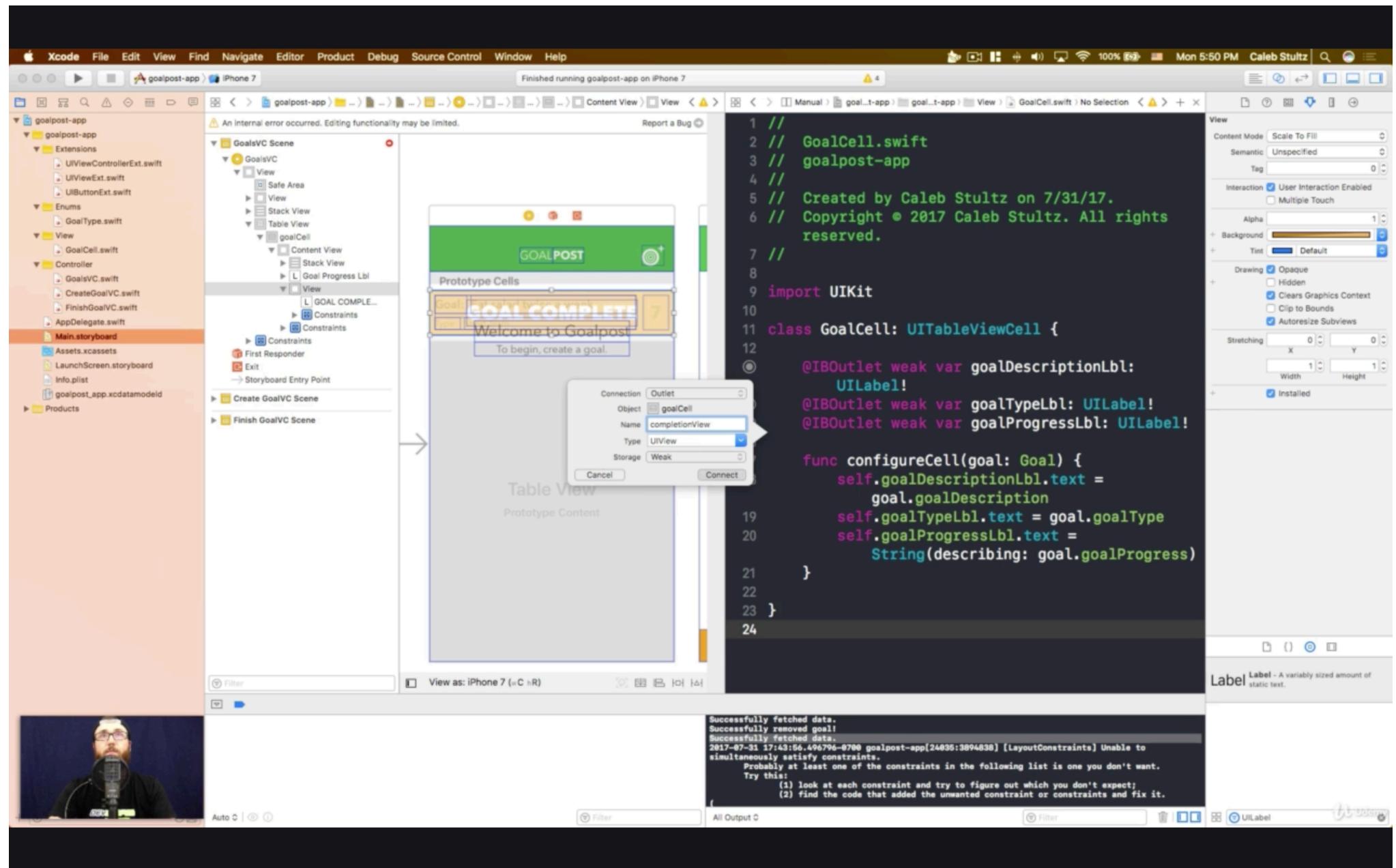
137. Setting goal progress for UITableViewCells











Xcode File Edit View Find Navigate Editor Product Debug Source Control Window Help

goalpost-app iPhone 7

Content View Completion View Report a Bug

An internal error occurred. Editing functionality may be limited.

GoalsVC Scene

GoalsVC View Safe Area Stack View TableView goalCell Content View Stack View Goal Progress Lbl Completion View GOAL COMPLETE L GOAL COMPLE...

Prototype Cells

Goal COMPLETE Welcome to Goalpost To begin, create a goal.

Table View Prototype Content

View as: iPhone 7 (C R)

Main.storyboard

Extensions

UIViewControllerExt.swift

UIViewExt.swift

UIButtonExt.swift

Enums

GoalType.swift

View

GoalCell.swift

Controller

GoalsVC.swift

CreateGoalVC.swift

FinishGoalVC.swift

AppDelegate.swift

Assets.xcassets

LaunchScreen.storyboard

Info.plist

goalpost_app.xcdatamodeld

Products

Report a Bug

// Created by Caleb Stultz on 7/31/17.
// Copyright © 2017 Caleb Stultz. All rights reserved.

import UIKit

class GoalCell: UITableViewCell {

 @IBOutlet weak var goalDescriptionLbl: UILabel!
 @IBOutlet weak var goalTypeLbl: UILabel!
 @IBOutlet weak var goalProgressLbl: UILabel!
 @IBOutlet weak var completionView: UIView!

 func configureCell(goal: Goal) {
 self.goalDescriptionLbl.text =
 goal.goalDescription
 self.goalTypeLbl.text = goal.goalType
 self.goalProgressLbl.text =
 String(describing: goal.goalProgress)

 if goal.goalProgress ==
 goal.goalCompletionValue {
 self.completionView.isHidden = false
 } else {
 self.completionView.isHidden = true
 }
 }

 Successfully fetched data.
 Successfully removed goal.
 Successfully fetched data.
 2017-07-31 17:43:56.496796-0700 goalpost-app[24095:3894838] [LayoutConstraints] Unable to simultaneously satisfy constraints.
 Probably at least one of the constraints in the following list is one you don't want.
 Try this:
 (1) look at each constraint and try to figure out which you don't expect;
 (2) find the code that added the unwanted constraint or constraints and fix it.

Label - A variably sized amount of static text.

Identity and Type

Name: GoalCell.swift

Type: Default - Swift Source

Location: Relative to Group

Full Path: /Users/calebstultz/Documents/Devs/ios/Courses/iOS 11/Core Data/App/goalpost-dev/goalpost-app/goalpost-app/View/GoalCell.swift

On Demand Resource Tags

Only resources are taggable

Target Membership

Goalpost-app

Text Settings

Text Encoding: No Explicit Encoding

Line Endings: No Explicit Line Endings

Indent Using: Spaces

Widths: Tab 4 Indent 4

Wrap lines

Filter

All Output Filter

UILabel

Auto C

Filter

137. Setting goal progress for UITableViewCell

The screenshot shows the Xcode interface with the following details:

- Project Structure:** The left sidebar shows the project structure for "goalpost-app".
- Code Editor:** The main editor shows the Swift file `GoalsVC.swift`. A red box highlights the following code block:

```
82     deleteAction.backgroundColor = #0070C0
83
84     return [deleteAction]
85 }
86 }
87 }
88
89 extension GoalsVC {
90     func setProgress(atIndexPath indexPath: IndexPath) {
91         guard let managedContext = appDelegate?.persistentContainer.viewContext else { return }
92
93         let chosenGoal = goals[indexPath.row]
94
95         if chosenGoal.goalProgress < chosenGoal.goalCompletionValue {
96             chosenGoal.goalProgress = chosenGoal.goalProgress + 1
97         } else {
98             return
99         }
100
101        do {
102            try managedContext.save()
103            print("Successfully set progress!")
104        } catch {
105            debugPrint("Could not set progress: \(error.localizedDescription)")
106        }
107    }
108
109    func removeGoal(atIndexPath indexPath: IndexPath) {
110        guard let managedContext = appDelegate?.persistentContainer.viewContext else { return }
111
112        managedContext.delete(goals[indexPath.row])
113    }
114 }
```

- Identity and Type:** The right sidebar shows the file's identity and type.
- Output Window:** The bottom window shows the console output with the following message:

```
0x7f9012420220-[UIViewController _layoutConstraints] (ACTIVE)
Make a symbolic breakpoint at UIViewAlertForUnsatisfiableConstraints to catch this in the debugger.
The methods in the UIConstraintBasedLayoutDebugging category on UIView listed in <UIKit/UIView.h>
may also be helpful.
Successfully removed goal!
Successfully deleted data.
2017-07-31 17:44:20.876927-0700 goalpost-app[24035:3094838] [LayoutConstraints] Unable to simultaneously satisfy constraints.
Probably at least one of the constraints in the following list is one you don't want.
```

137. Setting goal progress for UITableViewCell

The screenshot shows the Xcode interface with the following details:

- Project Structure:** The project is named "goalpost-app". The file "GoalsVC.swift" is selected in the Project Navigator.
- Code Editor:** The code for the `tableView(_:editActionsForRowAt:)` method is displayed. A red box highlights the section where `addAction` is defined and its background color is set to yellow.
- Identity and Type Inspector:** Shows the file is a Default - Swift Source located at `/Users/calebstultz/Documents/Devs/ios/Courses/iOS 11/Core Data/App/goalpost-dev/goalpost-app/goalpost-app/Controller/GoalsVC.swift`.
- Text Settings:** Text Encoding is No Explicit Encoding, Line Endings are No Explicit Line Endings, Indent Using is Spaces with a width of 4, and Wrap lines is checked.
- Output Window:** Displays a video player window showing a man with a beard and glasses, and a terminal window output:

```
0x7f9012420228-[UIViewController]-(active)-
Make a symbolic breakpoint at UIViewAlertForUnsatisfiableConstraints to catch this in the debugger.
The methods in the UIConstraintBasedLayoutDebugging category on UIView listed in <UIKit/UIKit.h>
may also be helpful.
Successfully removed goal.
Successfully fetched data.
2017-07-31 17:44:29.876927-0700 goalpost-app[24035:3094838] [LayoutConstraints] Unable to simultaneously satisfy constraints.
Probably at least one of the constraints in the following list is one you don't want.

```

At the bottom, the video player controls show a play button, volume, and time 10:55 / 14:55.