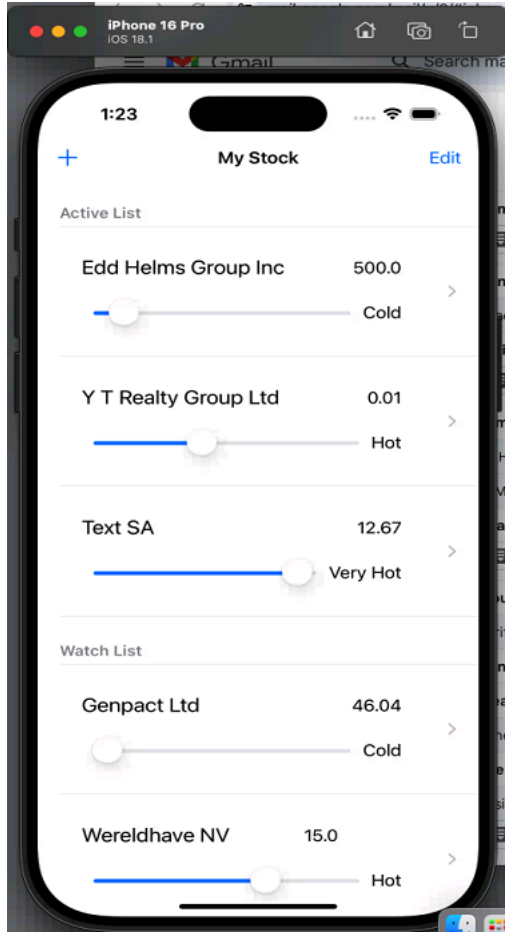


## Assignment 4: Stock App from [MS Finance](#)

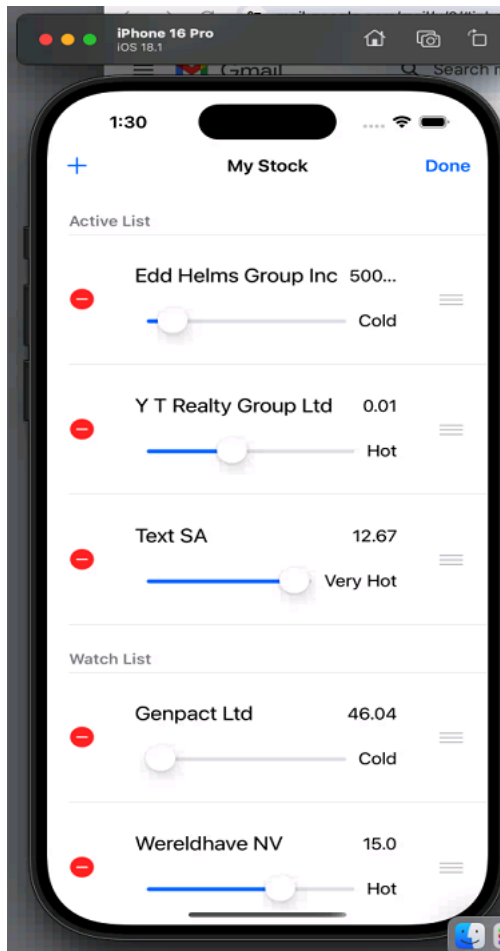
### Scene 1: Stock Selection and Monitoring (HomeController)



- Display all stocks available from previous selections by calculating current lastPrice from Ms finance rapid API and allow user to Add stock and Edit turns the TableView into editable mode.

## Edit

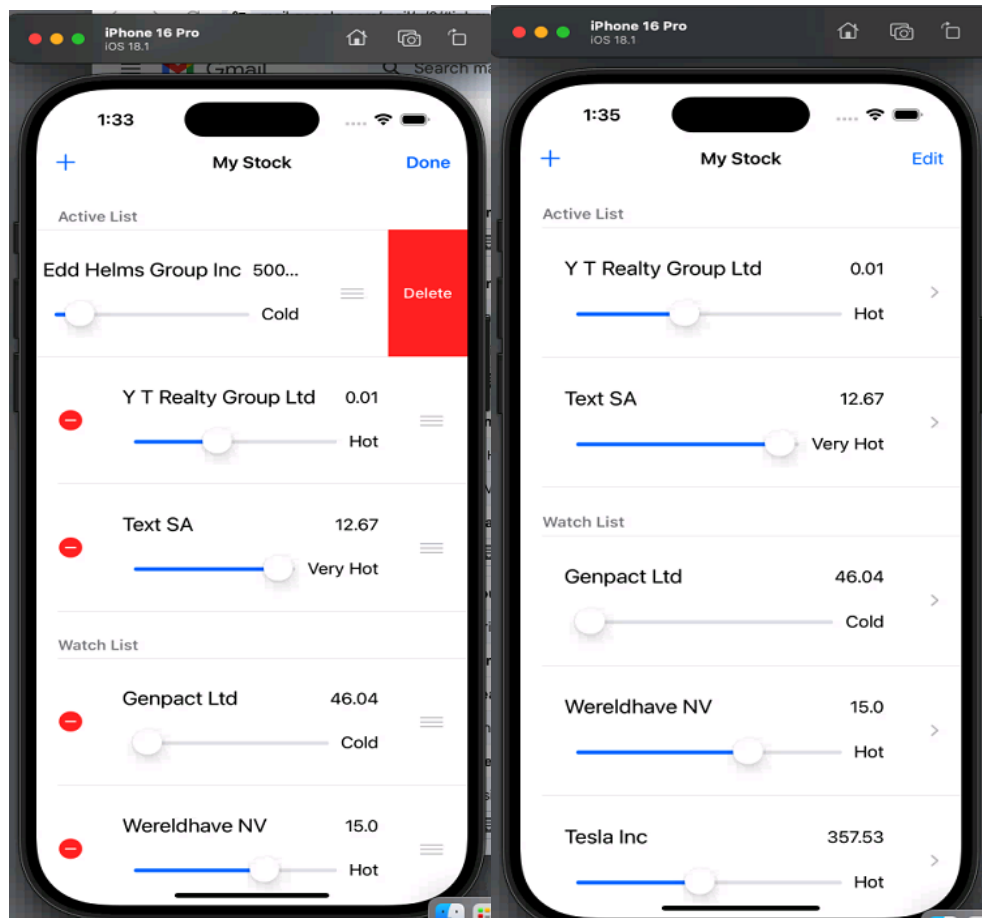
- When user press Edit it will display tableView in Editable mode



User can press the Hamburger menu to move between rows within the table

## Delete

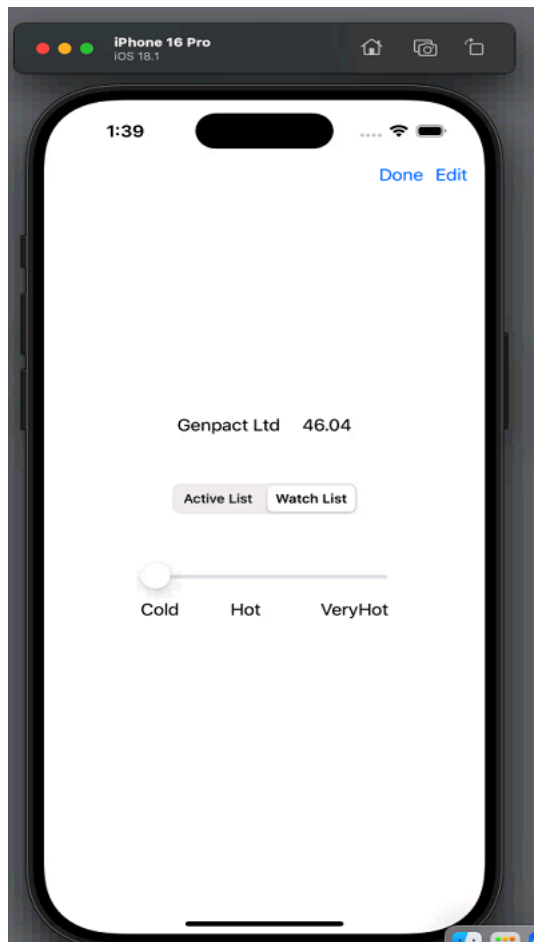
User can press – to delete current row from tableView



- User can press Done after delete the row take tableView to the first scene.

## Scene 2: StockDetailViewController

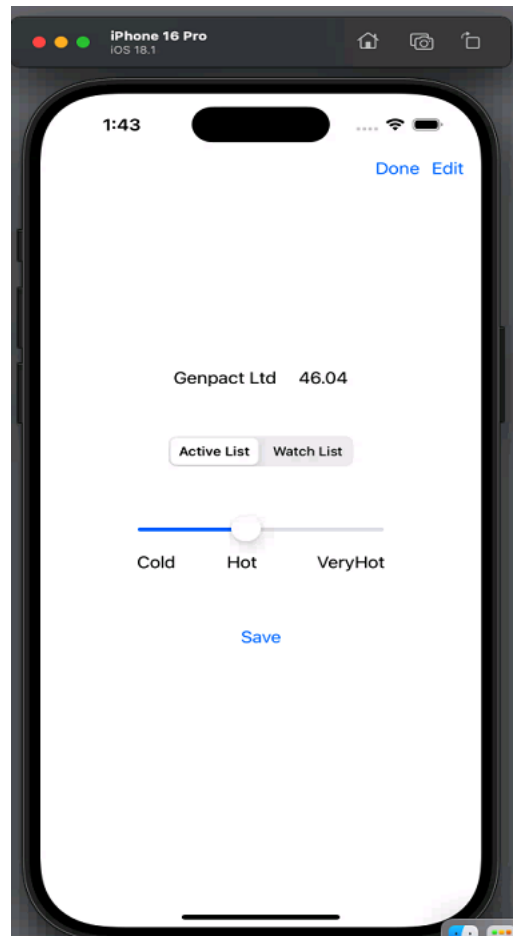
-By pressing the Accessory indicator for each row, it will take to the new Scene StockDetailViewController.



- It allows user can view the current stock name, lastprice, status and rank

**Edit:**

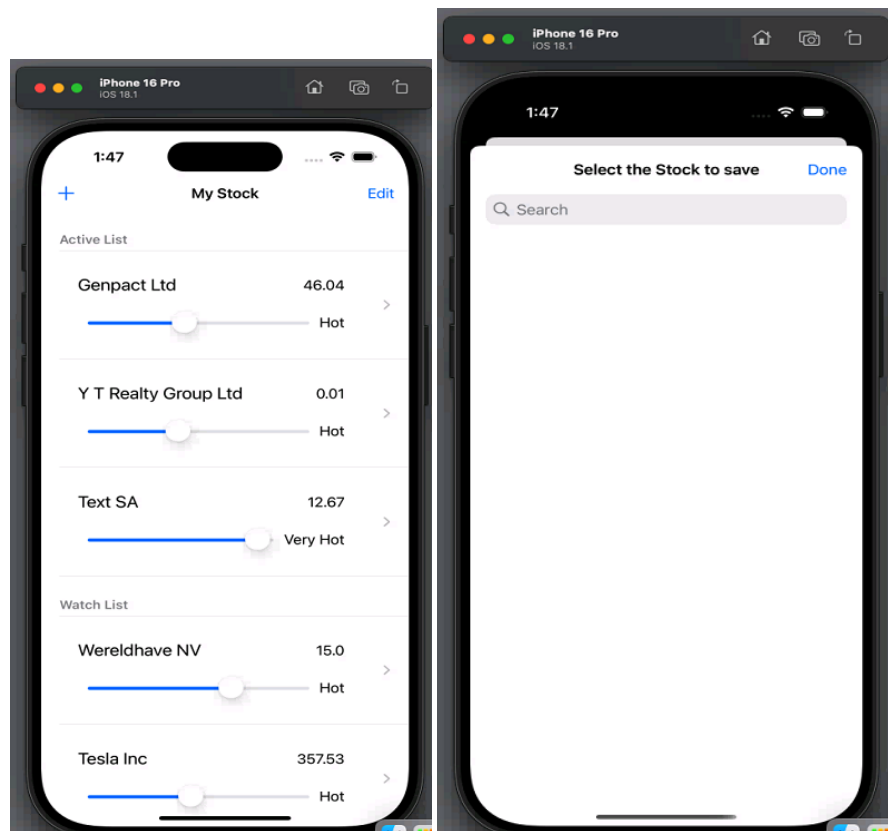
When user enters edit it will allow the user to edit status and rank from segment control and slider by displaying saveButton which is hidden initially.



- By pressing save it will save the status and rank to CoreData for the same entry.

### Done:

- After user done with save, save button hidden from Screen and When you press Done it segue to the HomeViewController with updated tableView.

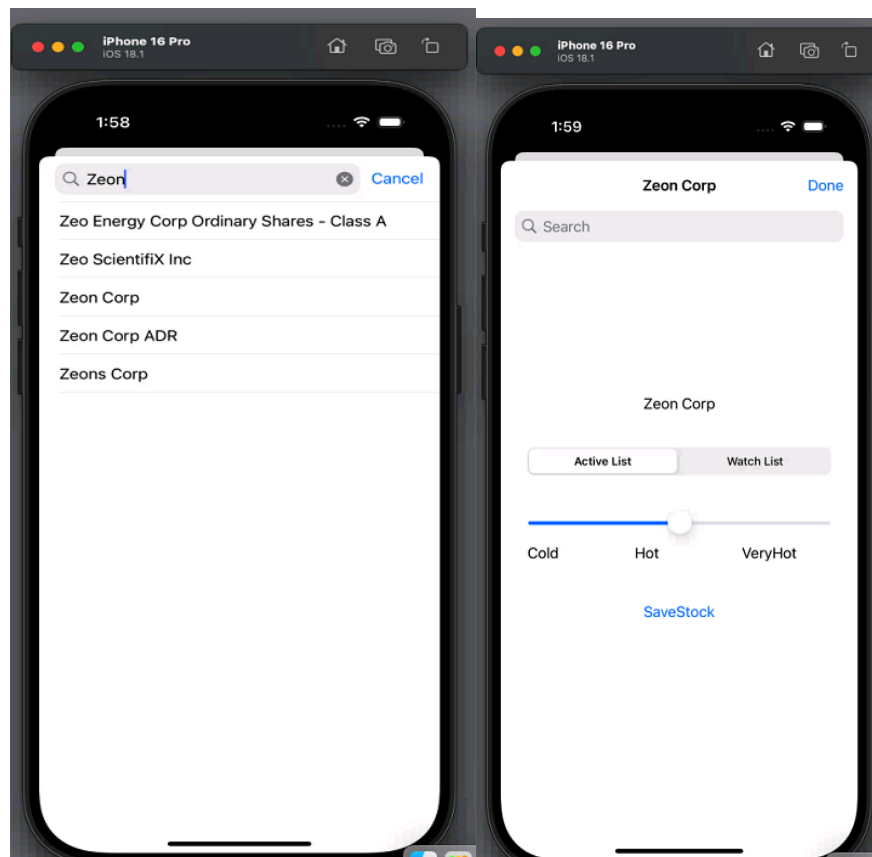


### Scene 3: StockViewController

It will allow the user to add the new stock into the Stock entity. It has searchBar as a navigation item (SearchResultController), to enter the stock name.

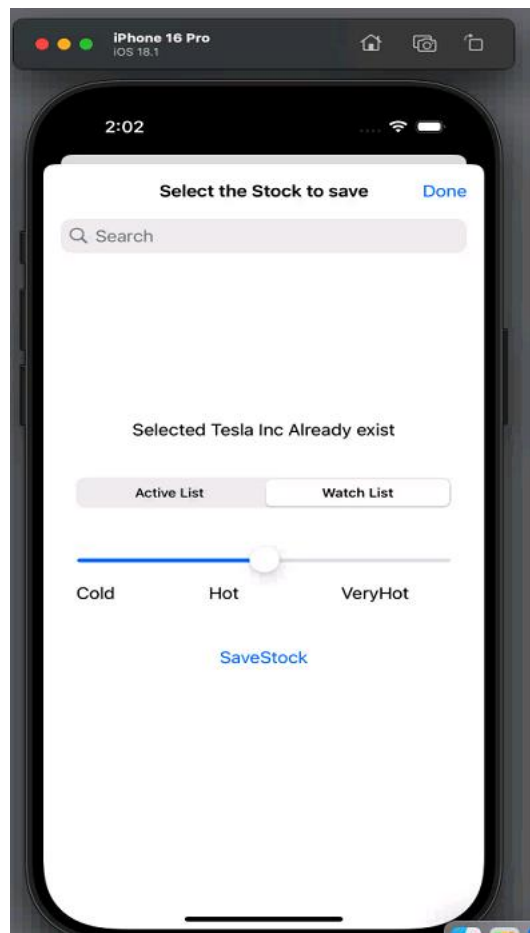
#### SearchBar:

When the user enters each character, it will give suggestions to select the name of stock.



Once the user selects the stock item, it will display the Stack view which will allow user to select status and rank. When user clicks save button, the details are saved to CoreData.

### Duplicate Entry:





If a stock item already exists, it will display the “Selected Stock item already exist” message which prevents duplicate entry to the Stock and allow the user to select another stock item.

**Done:**

When pressing the Done button, it will take the user to the HomeViewController.

**Feature:**

Added a feature to prevent duplication into Stock Entity by searching the name from Stock name, to verify the stock is previously available or not by setting isNewFlag to true.

//fetchStockDetails from CoreData and check the stock already exist

```
func fetchStockDetails(){  
    // Retrieve the AppDelegate and the viewContext for Core Data  
    guard let appDelegate = UIApplication.shared.delegate as?  
AppDelegate else {return  
    }  
  
    let context = appDelegate.persistentContainer.viewContext  
  
    // Create a fetch request for the "Stock" entity  
    let fetchRequest: NSFetchRequest<Stock> =  
Stock.fetchRequest()
```

```
// select stock with same name

let predicate = NSPredicate(format: "name == %@",
stockName)

fetchRequest.predicate = predicate


// Execute the fetch request

do {

    let stocks = try context.fetch(fetchRequest)

    for st in stocks{

        if st.name == stockName{

            isNewStock = false

            break

        }

    }

} catch {

    print("Failed to fetch stock details:
\\(error.localizedDescription)")

}

}
```