

Assignment 4 Report

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Assignment: Assignment 4

Date Submitted: April 21, 2025

1. Description of the Assignment

This assignment was divided into two sections based on Chapter 11 and Chapter 12 problems in the course.

Section I: Core Data Setup (Chapter 11)

- Designed a two-entity Core Data model:
 - RestaurantEntity: name, address, UUID
 - DishEntity: name, type, rating, UUID, and relation to Restaurant
- Created two ViewControllers: one for adding a restaurant and another for rating a dish
- Implemented Core Data saving logic
- Used segues to pass saved restaurants between screens
- Validated inputs and presented alerts when fields were empty

Section II: Display and Modify Data (Chapter 12)

- Added a UITableView under the restaurant input form to list dishes
- Used Core Data fetch requests to display all dishes linked to a restaurant
- Implemented tap-to-edit functionality by passing the selected dish to the dish screen
- Enabled swipe-to-delete, removing the dish from both view and Core Data
- Ensured newly added dishes appear instantly after saving
- Used viewWillAppear() and NotificationCenter to trigger refresh

2. Description of Logic, Input, and Output

Section I:

Inputs:

- Restaurant name, address, Dish name, type, rating

Logic:

- Validates text fields and saves to Core Data

Outputs:

- Saved data and console logs confirmation

Section II:

Inputs:

- Tap to edit, Swipe to delete

Logic:

- Filters dishes based on restaurant ID and updates UI

Outputs:

- Dishes shown in list, can be edited and deleted

3. Screenshots

Screenshot 1: Dish list below restaurant

Restaurant Name
6:52



Seafood • Pasta • ★ 3

e • wefd • ★ 5

gamed • gamed2 • ...

Restaurant Address

[Save and Rate Dishes](#)



Screenshot 2: Swipe-to-delete functionality

Restaurant Name
6:53



Seafood • Pasta • ⭐ 3

1 • ⭐ 5

Delete

gamed • gamed2 • ...

Restaurant Address

Save and Rate Dishes



Screenshot 3: Dish rating screen

7:03

Restaurant Name

Dish Name

adds

Dish Type

sdfsg

Rating

1 2 3 4 5

Save Dish

4. Conclusion

- Successfully implemented Core Data entities and relationships
- Supported dish creation, editing, and deletion with full UI integration
- Applied proper validation, UIKit patterns, and TableView mechanics
- Used NSPredicate and UUID to ensure correct dish filtering
- Learned how to integrate persistent storage with live UI updates