

Entity

Interface

Entity

Responsibilities

- Set the entities ID
- Get the entities ID

Collaborators

-

Entity

Implements Entity

GroceryList

Responsibilities

- Store ID of list
- Store name of list
- Stores User IDs associated with the list

Collaborators

- Entity

Entity

Implements Entity

User

Responsibilities

- An ID Number for identification
- Stores name
- Stores a username and password

Collaborators

- Entity

Entity

Implements Entity

GroceryItem

Responsibilities

- Stores GroceryList IDs associated with the item
- Store User IDs associated with the item (for default items)
- Stores how many times it is used by each user for the RecommendationManager

Collaborators

- Entity

Use Case

Interface

AuthAdapter

Responsibilities

- Receive raw data, performs some relevant data fetching operation, and returns a result
- The response will be of type Response
- Create a new user on receipt of username, password, and name
- Login an existing user on receipt of username and password

Collaborators

- ClassAuthAdapter
- UserSystem

Use Case

Implements AuthAdapter

ClassAuthAdapter

Responsibilities

- Receive raw data, performs some relevant data fetching operation, and returns a result
- The response will be of type Response
- Create a new user on receipt of username, password, and name
- Login an existing user on receipt of username and password
- Store User objects directly in EntityRepository
- Data fetched from EntityRepository will be available as Entity objects directly

Collaborators

- AuthAdapter
- EntityRepository

Use Case

Interface

GroceryAdapter

Responsibilities

- Receive raw data, performs some relevant data fetching operation, and returns a result
- The response will be of type Response
- Specifies the following behaviour:
 - Get grocery lists by user
 - Get grocery list given list ID
 - Create a new grocery list with a name
 - Set grocery items for a list given its ID
 - Delete grocery lists

Collaborators

- ClassGroceryAdapter
- GroceryListSystem

Use Case

Implements GroceryAdapter

ClassGroceryAdapter

Responsibilities

- Receive raw data, performs some relevant data fetching operation, and returns a result
- The response will be of type Response
- This class stores, fetches, and otherwise manipulates entities as Java objects directly in the EntityRepository class.
- Implements all behaviours specified in GroceryAdapter

Collaborators

- GroceryAdapter
- EntityRepository

Use Case

RecommendationManager

Responsibilities

- Generate recommendation based on user's GroceryLists
- Generate recommendation based on everyone's GroceryLists

Collaborators

- User
- GroceryItem

Controller

GroceryListSystem

Responsibilities

- Receive IO
 - Login → username, password
 - Logout → just method call (no parameters)
 - Create user → username, name, password
 - Recommendation → just method call (no parameters)
- With IO call use case methods with IO parameters
 - Login → get the user with given credentials
 - Create user → create a new user with given credentials
- Return use case data for UI to display
 - Login → return whether user was logged in
 - Logout → return whether user could be logged out
 - Create user → return whether user was created

Collaborators

- AuthAdapter
- Response
- Status
- RecommendationManager

Controller

UserSystem

Responsibilities

- Receive IO
 - Create grocery list → name, user id
 - Create grocery item → name, list id
 - Recommendation → just method call (no parameters)
- With IO call use case methods with IO parameters
 - Create grocery list → create a new list with given name
 - Create grocery item → create a new item with given name
- Return use case data for UI to display
 - Create grocery list → return whether list was created
 - Create grocery item → return whether item was created
 - Recommendation → return recommendations

Collaborators

- AuthAdapter
- Response
- Status
- RecommendationManager

Data Access

EntityRepository

Responsibilities

- Store all users, grocery lists, and grocery items
- Generate IDs when adding items
- Get grocery lists corresponding to users
- Get grocery items corresponding to a grocery list

Collaborators

- ClassAuthAdapter

UI

UI

Responsibilities

- Take in user input
 - User login/logout
 - Creating grocery list
 - Adding item to grocery list
 - Sharing list
 - Adding friends
- Display data
 - Display grocery lists
 - Display grocery items in a specific list
 - Display recommendations
- Navigate between functionalities

Collaborators

- GroceryListSystem