

CRC Model

Entities

Abstract

Parent

User

Children: Seller; Customer

- Store account name, account balance, password, nickname, phone number
- Login, Logout
- Withdrawal money from balance
- Add money
- Check balance
- Reset nickname
- Reset password

Collaborators

Customer

Parent: User

Children

- Store order to OrderHistory
- Remove order from OrderHistory
- Get all order history

Collaborators: order

<div><div>Seller</div><div>Parent: User</div><div>Children</div></div>	
<ul style="list-style-type: none">• Add FoodTruck to ownedFoodTruck• Remove FoodTruck from ownedFoodTruck• Get all own FoodTruck	<div>Collaborators: FoodTruck</div>

Order

Parent

Children

- Store an unique ID, foodTruck, foodList, total price, customer name, customer phone number, seller phone number, seller name, rating, status
- Change order status
- Rate order
- Calculate the total price
- Create a String representation of Order (like a receipt)
- Foodlist getter

Collaborators: Food, Food Truck

Food Truck

Parent

Children

- Store location, service start/end time, Truck name, menu, status, corresponding seller, rating, order history, order queue.
- Change status (open or close)
- Update menu
- Update order history
- Rename truck

Collaborators: Food, Seller, Order, FoodMenu

Food

Parent

Children

- Store name, price, description, id, label (Type of food)
- Change price, description of Food item

Collaborators:

FoodMenu

Parent

Children

- Store a list of Food as menu.
- Add new food or update exist food to menu
- Create a String representation of the Menu
- Create a copy of the food object in the menu.

Collaborators: Food

Use case

Order Manager

Parent

Children

- Store orders
- Create new order
- Change order status
- Get order detail
- Get the total price of the wished order
- Cancel order (only if order status is order received)

Collaborators: Order, FoodTruck,

Abstract class

User Manager

Parent

Children: CustomerManager; SellerManager

- Login(abstract)
- Withdrawal money from balance
- Add money to balance
- Check balance
- Cancel account
- Get order history
- Rate order
- Cancel order
- Check current order status
- Get information of all users
- Create new User(Customer or Seller)
- Store all users

Collaborators: User, Customer, Seller.

Customer Manager

Parent: User Manager

Children

- Login for customer
- Get information of all customers
- Order food
- Get all customers
- Store all customers

Collaborators: Customer

Parent: User Manager

Seller Manager

Children

- Login
- Get information of all sellers
- Add foodtruck
- Get foodtrucks of a seller
- Remove foodtruck
- Rename foodtruck
- Store all Sellers

Collaborators: Seller, FoodTruck

Food truck Manager

Parent

Children

- Store FoodTrucks
- Create a new FoodTruck
- Change status (open or close) of a food truck
- Change FoodTruck's status
- Get detail and description of a truck
- Get information of description of all trucks
- Get order history, menu, order queue, rating, seller of a food truck
- Update menu of a food truck
- Update order history of a food truck
- Rename a truck
- Search trucks with the specific food label
- Search the specific food truck

Collaborators: FoodTruck, SellerManager, FoodMenu, Seller

controller

Abstract

Parent

Scene

**Children: LoginScene, FoodTruckScene,
UserInformationScene, MarketScene**

- Construct output string content and send it to command line interface for display
- Accept input and make proper calls to use case classes to make changes

Collaborators: User Manager, OrderManager,
CustomerManager, SellerManager,
FoodTruckManager

UserInformationScene

Parent: Scene

Children

- Displays user information after logging in
- Allows users to change their password / nickname / phone number etc

Collaborators: User Manager, OrderManager, CustomerManager, SellerManager, FoodTruckManager, LoginScene, MarketScene

LoginScene

Parent: Scene

Children

- User login and registration

Collaborators: User Manager, OrderManager, CustomerManager, SellerManager, FoodTruckManager, UserInformationScene

MarketScene

Parent: Scene

Children

- Displays general information about all foodtrucks available
- Allows users to select foodtrucks for more detailed information

Collaborators: User Manager, OrderManager, CustomerManager, SellerManager, FoodTruckManager, UserInformationScene, FoodTruckScene

Food Truck Scene

Parent: Scene

Children

- Displays detailed information about a food truck (name, menu, rate etc)
- Allows users to add food to their shopping cart and check out to create order

Collaborators: User Manager, OrderManager, CustomerManager, SellerManager, FoodTruckManager, MarketScene, UserinformationScene

Interface

Command line

Parent

Children

- Display information to users
- Pass in user commands to the scenes for them to handle

Collaborators: All controller classes