Group 24: Assignment #2: Front End Rapid Prototype
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(1) A design document in PDF format for your Front End, giving the overall structure of your
solution, showing the classes and methods as a diagram or table, with a brief (one sentence)
description of the intention of each.

Class	Description
Restaurant	Class for individual restaurants, contains methods for displaying menu and restaurant information.
ShoppingCart	Maintains a shopping cart, with functionality to add items from RestaurantMenu, as well as view cart and cancel order.
RestaurantMenu	Displays a restaurant's menu via an Item class, which has attributes storing info about each item on the restaurant's menu (name, category, description, price).
UserProfile	Maintains a user's profile information, with functionality to modify the profile, as well as view profile information and validate login credentials.
PaymentManager	Maintains payment methods and has functionality to add/remove/modify payment methods, as well as show all payment methods for the user.

Class	Method(s)	Description
Restaurant	get_menu()	Create and set menu for restaurant.
	show_menu()	Show the restaurant's menu (calls RestaurantMenu.show_menu()).
ShoppingCart	add_item()	Add items to the shopping cart.
	cancel_order()	Remove all items from the shopping cart / cancel order.
	cart_total_price()	Display total price of all items currently in cart.
	view_cart()	View all items currently in the cart.

RestaurantMenu	load_menu()	Load restaurant menu from a csv file into the restaurant object.
	show_menu()	Show the restaurant's menu.
UserProfile	valid_credentials()	Validate phone number, password, and email to ensure they meet the criteria - password at least 8 characters, and valid email & phone number.
	modify_profile()	Modify profile information. Users must input their current password before changing any information.
	show_profile()	Displays users profile information.
	login()	Takes email and password, returns True or False if email & password combination match any of the existing users that have registered.
main	view_restaurants()	Display all restaurants.
	view_menu()	Display menu of selected restaurant.
	add_to_cart()	Add an item to the cart.
	remove_from_cart()	Remove an item from the cart.
	view_cart()	Display all items in the cart.
	check_out()	Checkout and place order.

Classes
- Restaurant
- ShoppingCart
    - Item
- RestaurantMenu
- UserProfile
- PaymentManager
    - PaymentMethod

Methods
- Restaurant
    - Display menu (items, prices, ect)
    - Display restaurant info (location, name, etc)
- Shopping cart
    - Add item to cart

- Remove item from cart
- Cancel order
- Cart total price
- Menu - Grace
    - View items
    - View specific item price
- Payment information
    - Add info
    - Remove info
    - Modify info
- User profile - Trayden
    - User registration
    - User login
    - Modify user info
- Order
    - View order details
    - Place order
    - Show order list
    - Withdraw order
- Main / other
    - Display all restaurants (need a list variable with all restaurant objects)
    - Show restaurant menu
    - Show item detail

Main method:

Welcome to our delivery app! Please choose an option: (prompt for input)
- View restaurants
    - View restaurant menu
    - Add item to cart
    - Remove item from cart
    - View order details
    - Checkout/ place order
    - View placed order
    - Withdraw order
- Show order list
- Register
- Login
    - Logout
    - Display profile info
    - Modify profile info
    - Modify payment methods
        - Add payment
        - Remove payment

- Modify payment
- Show all payment methods