FOOD ORDERING SYSTEM REQUIREMENT DOCUMENT

Project Description:

The Food Ordering System (FOS) is designed to streamline the process of ordering food online from various restaurants and food outlets. It aims to provide a seamless connection between customers and food services, enhancing the dining experience through technology. This system addresses the need for an efficient, user-friendly platform that supports browsing menus, placing orders, and managing deliveries or pickups.

Project Scope:

The scope of the Food Ordering System is to create an accessible online platform that caters to customers looking for an easy and efficient way to order food from a wide range of restaurants. It aims to support restaurants in extending their reach to a broader customer base, thereby increasing their sales and visibility. The platform will include features to manage user profiles, orders, payments, and feedback, ensuring a comprehensive service for both customers and restaurant partners.

Features:

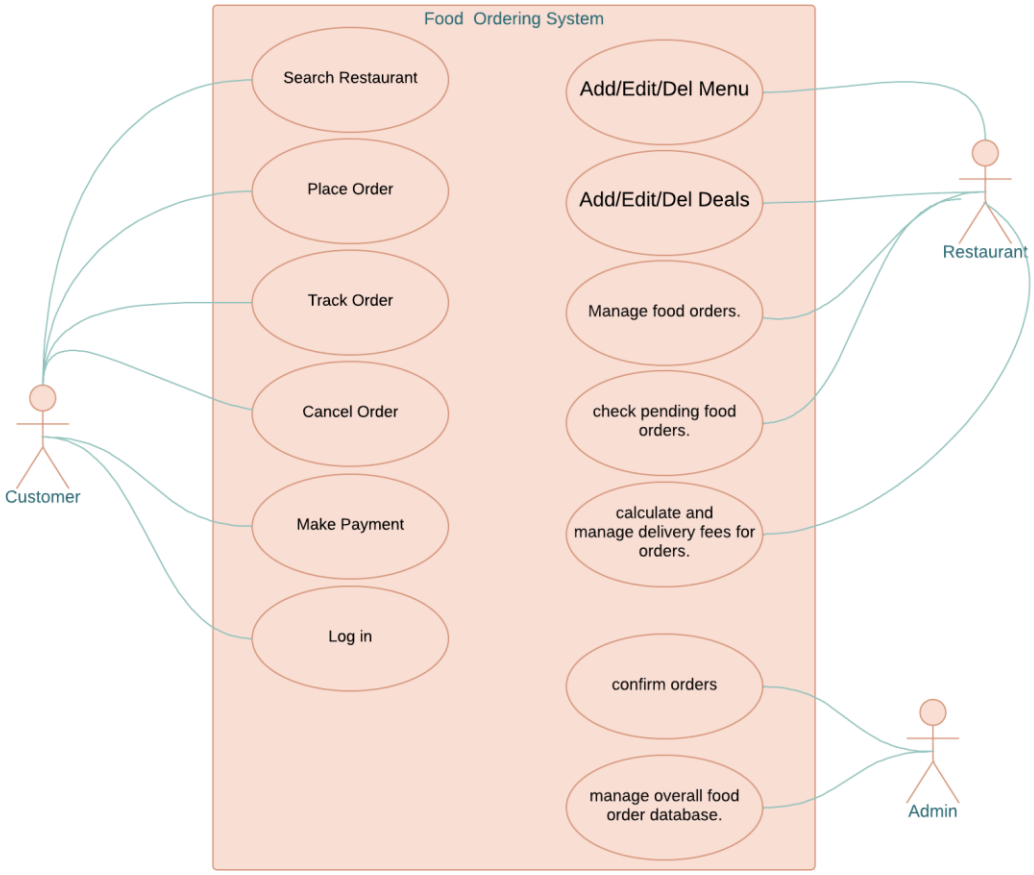
- User Registration: Enables new users to create a platform account.
- User Login: Provides a secure login for returning users.
- User Profile Management: Allows users to update personal information and preferences.
- Restaurant Search & Discovery: Users can search for restaurants by name, cuisine, or location.
- Customer Dashboard: Displays personal order history, recommendations, and current order status.
- Restaurant Owner Dashboard: Enables menu, order, and restaurant detail management.
- Admin Dashboard: Permits administrators to oversee user activities, manage restaurant listings, and handle disputes.
- Payment and Billing: Incorporates secure payment gateways for transaction processing.
- Communication Tools: Offers in-app messaging or chat for customer support and order queries.
- Menu Management: Allows restaurant owners to update menu items, pricing, and availability.
- Feedback and Rating System: Customers can review restaurants and specific menu items.

- Promotional Offers: Enables restaurants to issue discount codes and special offers.
- Notification System: Provides real-time updates on orders, promotions, and new menu items.
- FAQ and Help Section: Answers common questions and supports user inquiries.
- Logout: Securely ends user sessions.

Food Ordering System Requirements

Req Number	External Entity	Initial Requirement
1.1	Customer	Can browse and search for restaurants and food items.
1.2	Customer	Can place food orders.
1.3	Customer	Can track food order status.
1.4	Customer	Can cancel food orders.
1.5	Customer	Can make online payments.
2.1	Restaurant	Can manage restaurant listings and menu offerings.
2.2	Restaurant	Can receive and manage food orders.
2.3	Restaurant	Can check pending food orders.
2.5	Restaurant	Can calculate and manage delivery fees for orders.
3.1	Administrator	Can confirm orders received by the system.
3.2	Administrator	Can manage overall food order database.
4.1	System	Shall ensure secure login for Customers, Restaurants, Admin.
4.2	System	Shall process updates including order status and payments.
4.3	System	Shall provide a communication platform for support.
4.4	System	Shall securely handle transactions with various payment methods.
5.1	System	Ensures user data is securely stored and processed.
5.2	System	Implements industry-standard security measures.
5.3	System	Provides fast response times and handles peak loads.
5.4	System	Capable of scaling to accommodate growth in users and transaction volume.

Use Case Diagram



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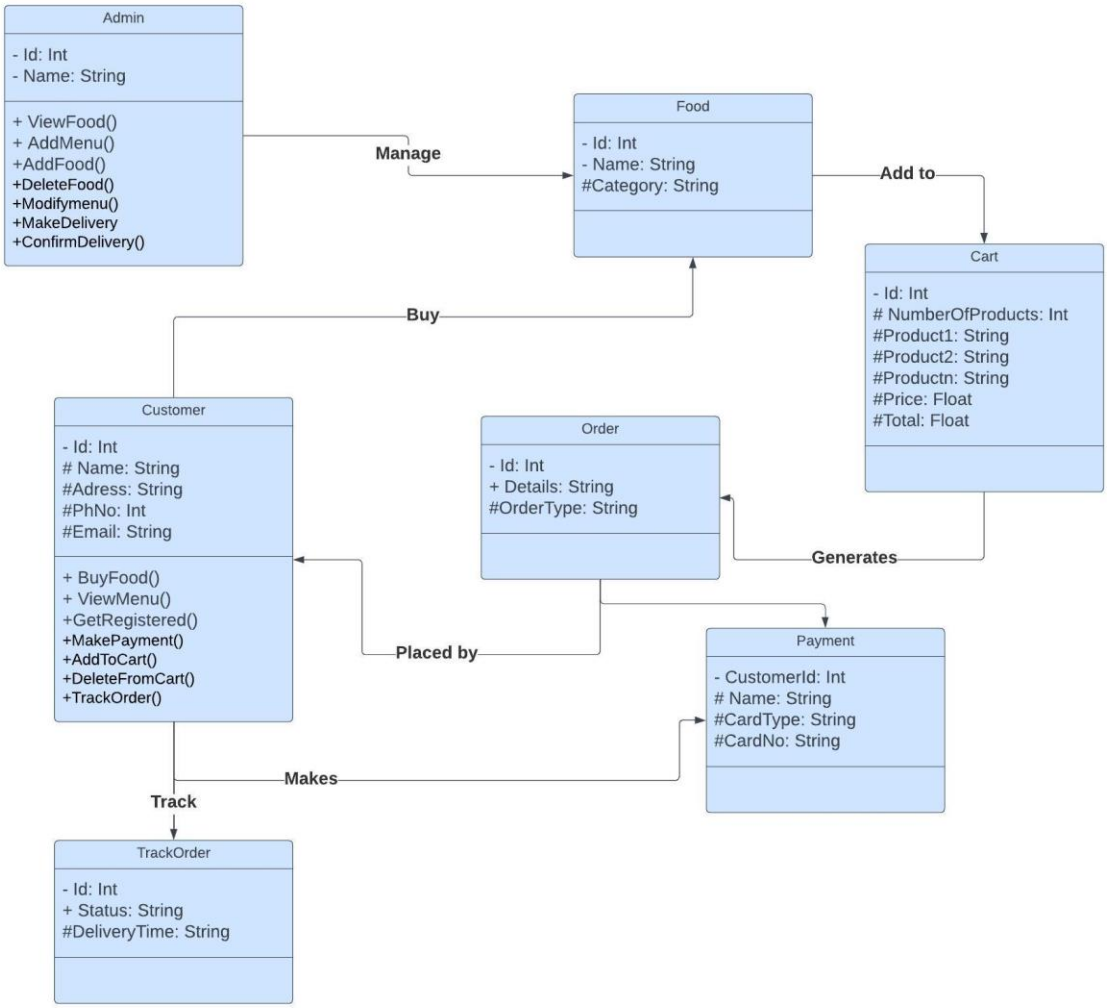
Class Diagram



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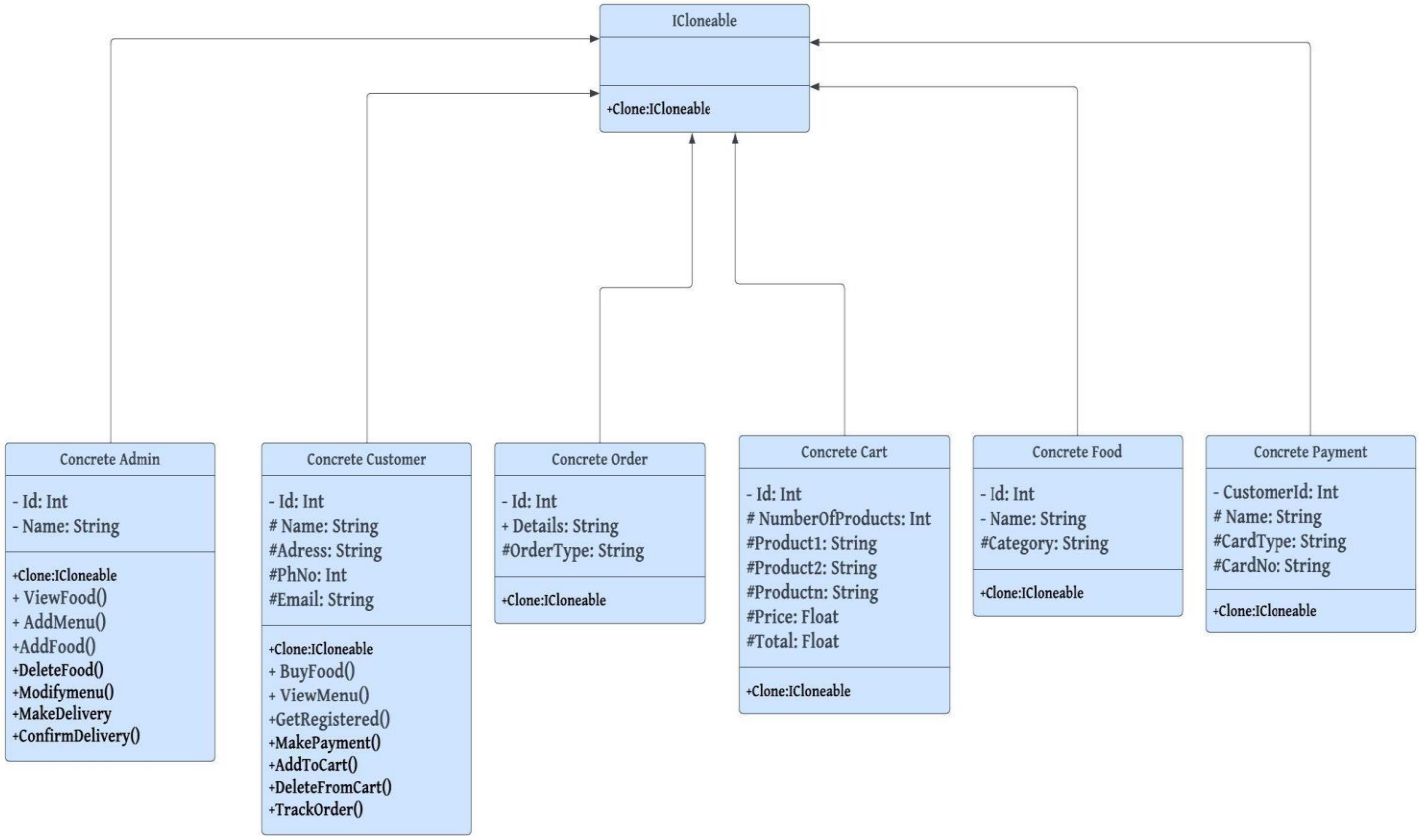
Refined Class Diagram (Prototype Design Pattern)