

Case Study and System Analysis: Online Fast Food Delivery System

1- Technology Stack:

- **Frontend:** HTML, CSS, JavaScript, Bootstrap
- **Backend:** ASP.NET Core Web API
- **Database:** Microsoft SQL Server
- **Authentication:** ASP.NET Core Identity + JWT
- **Payment Integration:** Stripe/PayPal
- **Hosting:** IIS or Azure App Services or AWS.

2- Stakeholder Analysis:

- Admin: Manages users, restaurants, orders, agents, and reports.
- Restaurant Owner: Manages menu and views orders.
- Customer: Orders food, tracks delivery, and provides feedback.
- Delivery Agent: Handles food deliveries and updates status.
- Developers/IT Team: Build and maintain system.

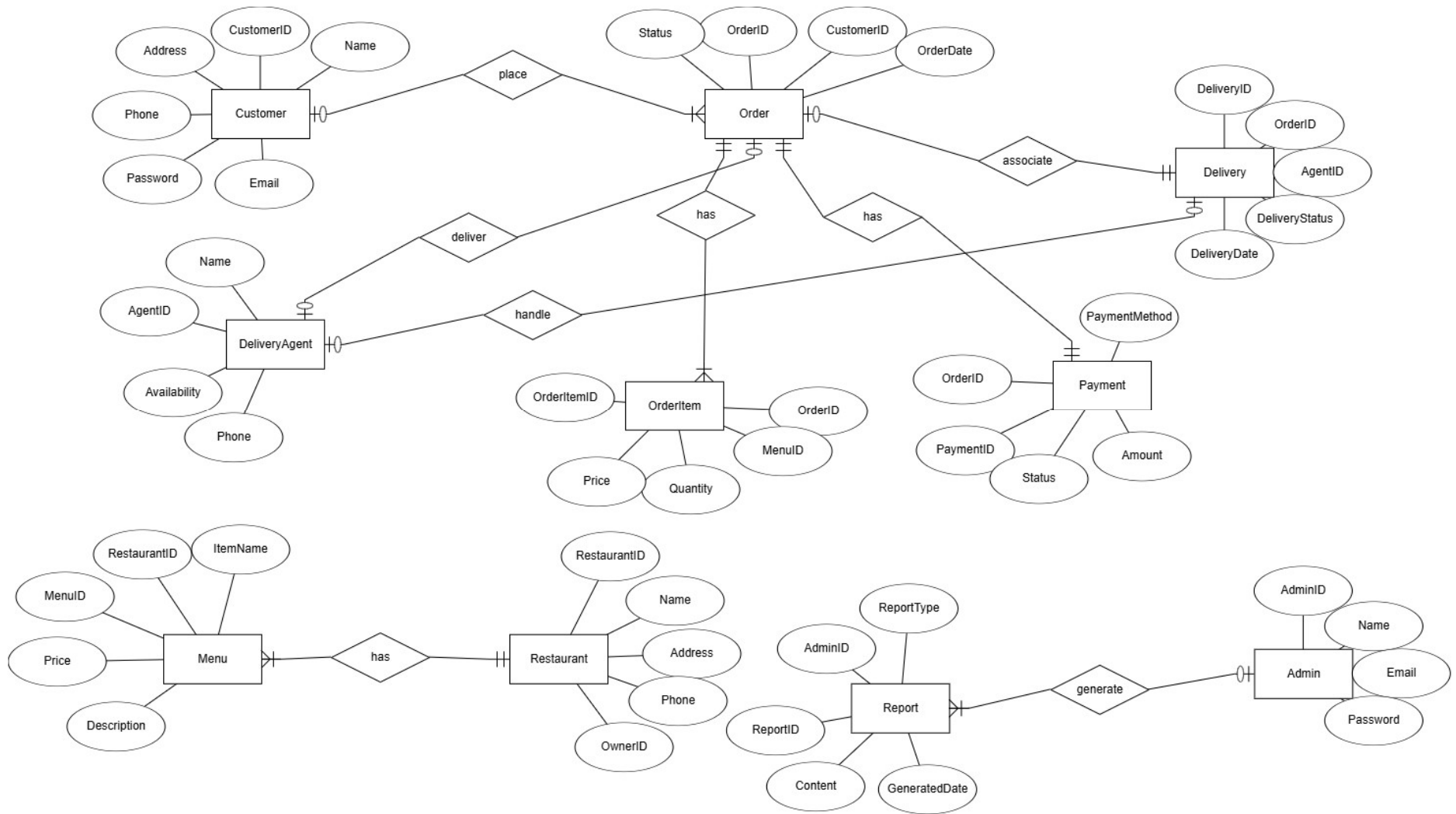
3. User Stories & Use Cases

- As a customer, I want to register and log in so I can place food orders.
- As a customer, I want to browse menus and securely pay for orders.
- As a restaurant owner, I want to manage my menu and view orders.
- As a delivery agent, I want to view my assigned orders and update status.
- As an admin, I want to view reports for analysis.

Use Case - Place Order:

1. User selects food items.
2. Adds to cart and proceeds to checkout.
3. Enters address and payment method.
4. Order is confirmed and sent to restaurant.
5. Delivery tracking starts.

4- Entity Relationship Diagram (ERD)



5- UML Use Case Diagram

Actors:

1. Customer

2. Restaurant Owner

3. Delivery Agent

4. Admin

Use Cases:

1. Customer

- Register
- Log In
- Browse Menu
- Place Order
- Make Payment
- Track Delivery

2. Restaurant Owner

- Manage Menu (Add/Update/Delete Items)
- View Orders

3. Delivery Agent

- View Assigned Orders
- Update Delivery Status

4. Admin

- Generate Reports
- View System Analytics

Use Case Description:

Use Case Name : Place Order

Actors : Customer

Preconditions:

- Customer is logged in.
- Menu items are available.

Main Flow:

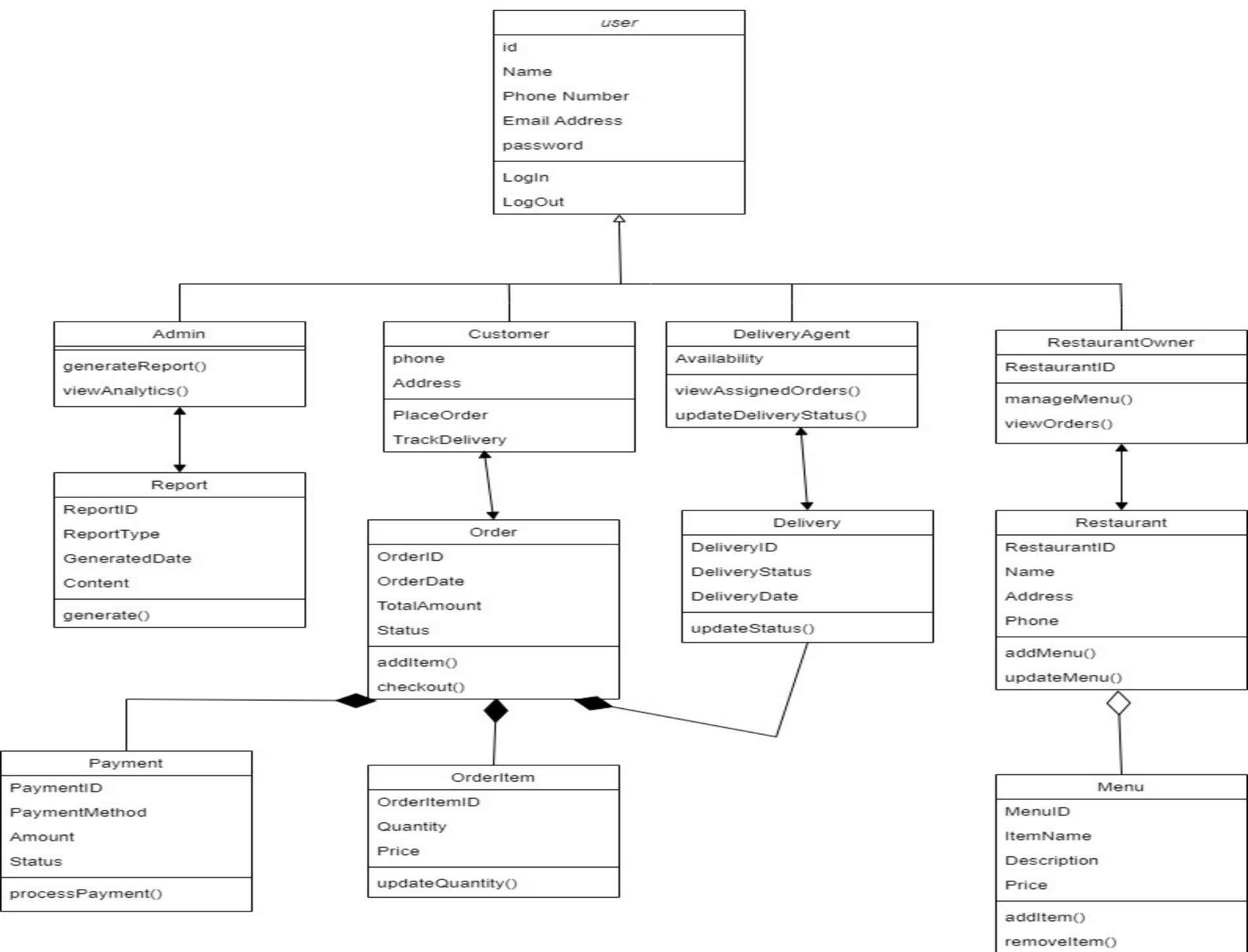
1. Customer selects food items from the menu.
2. Customer adds items to the cart.
3. Customer proceeds to checkout.
4. Customer enters delivery address and selects a payment method.

5. System validates payment and confirms the order.
6. Order is sent to the restaurant.
7. Delivery tracking is initiated.

Postconditions:

- Order is placed successfully.
- Payment is processed.
- Restaurant receives the order.
- Delivery tracking is active.

UML Use Case Diagram



Database Schema

