AbdelRahman Ammar 202102787

(M) = Must Have   **(S) = Should Have**   **(C) = Could Have**   **(W) = Won't Have**

Functional Requirements

RQ01 (M): The food delivery system **shall** store restaurant details, including name, address, cuisine type, and operating hours.
Justification: Required to display available restaurants and manage restaurant listings.

RQ02 (M): The food delivery system **shall** store customer registration information, including name, address, contact details, and login credentials.
Justification: Essential for user authentication and personalizing customer experience.

RQ03 (M): The food delivery system **shall** store menu items for each restaurant, including descriptions, prices, and availability.
Justification: Critical for order placement and processing.

RQ04 (M): The food delivery system **shall** store orders placed by customers, including items ordered, quantities, and total price.
Justification: Necessary for managing and tracking customer orders.

RQ05 (M): The food delivery system **shall** store delivery agent details, including name, contact information, and current location.
Justification: Required to assign delivery agents to customer orders.

RQ06 (M): The food delivery system **shall** assign delivery agents to orders based on proximity and availability.
Justification: Critical for efficient delivery assignment and real-time order tracking.

RQ07 (M): The food delivery system **shall** store payment details for each order, including payment method, total amount, and transaction reference.
Justification: Needed for processing payments and managing financial transactions.

RQ08 (M): The food delivery system **shall** store customer order history for reference and re-ordering.
Justification: Useful for user experience and convenience when re-ordering.

RQ09 (M): The food delivery system **shall** store customer feedback and ratings for restaurants and delivery agents.
Justification: Required to improve service quality and provide insights to restaurants.

RQ10 (M): The food delivery system **shall** store promotional offers and discount codes available to customers.
Justification: Important for attracting and retaining customers with special offers.

RQ11 (M): The food delivery system **shall** track and store real-time delivery statuses for each order.
Justification: Required for accurate tracking of orders and customer satisfaction.

RQ12 (S): The food delivery system **shall** notify customers and delivery agents of order status updates via push notifications or SMS.
Justification: Improves communication and customer engagement.

RQ13 (S): The food delivery system **shall** allow customers to select and store multiple payment methods for flexibility.
Justification: Enhances customer convenience and provides more options.

RQ14 (S): The food delivery system **shall** allow customers to cancel orders and store the reasons for cancellations.
Justification: Enables analysis of cancellation reasons and improves customer service.

RQ15 (S): The food delivery system **shall** store search queries entered by customers to optimize restaurant or dish recommendations.
Justification: Enhances customer experience by making relevant suggestions.

RQ16 (S): The food delivery system **shall** store delivery fee calculations based on factors such as location, order size, and demand.
Justification: Ensures transparent and accurate fee calculations.

RQ17 (C): The food delivery system **shall** store details of peak delivery times and optimize delivery assignments accordingly.
Justification: Improves delivery efficiency during high-demand periods.

RQ18 (C): The food delivery system **shall** store customer loyalty points and rewards for future redemption.
Justification: Enhances customer retention and engagement through loyalty programs.

RQ19 (C): The food delivery system **shall** store dynamic pricing models for delivery charges based on time, location, and weather conditions.
Justification: Enables more flexible and dynamic pricing strategies to optimize profitability.

RQ20 (W): The food delivery system **shall** not store social media activity such as shares or likes directly within the app.
Justification: Social media interactions are managed externally by platforms like Facebook, Twitter, etc.

Non-Functional Requirements

RQ21 (M): The food delivery system **shall** ensure data security and encryption for sensitive information like passwords, payment details, and personal data.
Justification: Security is essential to protect user privacy and avoid data breaches.

RQ22 (M): The food delivery system **shall** ensure 99.99% uptime to handle peak traffic and provide continuous service availability.
Justification: Downtime can severely impact user experience and reduce customer trust.

RQ23 (M): The food delivery system **shall** be scalable to accommodate increasing numbers of users, restaurants, and orders.
Justification: Scalability is important for supporting growth and maintaining performance.

RQ24 (S): The food delivery system **shall** ensure database queries are processed within 2 seconds for common operations such as search and order placement.
Justification: Performance directly impacts the user experience and service efficiency.

RQ25 (C): The food delivery system **shall** support multi-language capabilities to cater to a diverse user base across different regions.
Justification: Enhances user experience by supporting multiple languages.