

## **Assignment 4 SEG2105**

### **Functional Requirements:**

1. User Authentication:
  - Users are able to authenticate their email and password
2. Browse Restaurants and Menus:
  - Customers are able to browse a list of restaurants and view their menus
3. Place and Track Orders:
  - Customers are able to place orders, track the orders in real time, and specify the details.
4. Delivery Management:
  - Delivery Drivers are able to accept and manage delivery requests, track earnings, and view past deliveries.
5. Restaurant Management:
  - Restaurants are able to update their menus, change their availability status, and provide special offers.
6. Secure Payment Processing:
  - Customers are able to make payments securely when placing orders.
7. Real-time Tracking System:
  - The system should allow for real-time tracking for customers to locate their delivery
8. Rating and Feedback:
  - Customers are able to rate and provide feedback on delivery experience
9. Order History and Reordering:
  - Customers and Delivery Drivers are able to access order history and repeat old orders
10. Global Scalability:
  - The system is able to scale horizontally, adding servers as needed to accommodate increased demand during peak times

### **Non-functional Requirements:**

1. Performance:
  - The system must respond to user requests within a time frame, even while there is high traffic
2. Reliability:
  - The platform should be reliable, with minimal downtime and data should be transferred seamlessly from backup servers in case of failures.
3. Security:
  - User authentication and payments must be secured and sensitive info must be protected
4. Scalability:
  - The system is able to handle a high volume of users and increased demand by adding servers horizontally
5. User Experience:
  - The platform should provide an intuitive and user-friendly interface for customers, Delivery Drivers, and Restaurants to enhance the overall user experience