Introduction

- **Purpose:** The purpose of this project is to build a system to manage orders, customers, and staff for greater efficiency and creating a seamless ordering process.
- **Scope:** The system will have an online ordering system, inventory tracking, integrated payment options, and customer relationship management.
- **Objectives:**
- Make order placement more efficient through a digital interface.
- Improve Customer experience with order tracking.
- Ensure secure transactions and data storage.
- Optimize work scheduling and restaurant workflow.

User Requirements

1. **Order Placement.**
   The software should allow the customers to place orders online through a website or mobile app.
   Customers should be able to select items, customize orders, and add special instructions.
   The system should have an estimated preparation time before confirming the order.
   Customers should receive a confirmation notification via email or text message.
2. **Order Tracking.**
   The software should allow customers to track their orders in real time.
   The system should give the customer periodic updates on the order.
   Estimated delivery or pickup time should be updated based on order prep progress.
3. **Payment Processing.**
   The software should support multiple payment options.
   Secure encryption should be applied to protect the customer's payment details.
   A digital receipt should be sent to the customer with a successful payment.
4. **Customer Profile Management.**
   Customers should be able to create and manage their profiles.
   Order history and favorite items should be stored for reordering.
   Customers should be able to save multiple delivery addresses.

System Requirements

1. **Order Management.**
   The system must allow customers to place orders online through a website or a mobile app.
   The restaurant should receive a notification on new orders.
   Orders should be categorized by preparation stage.
   System should integrate with the restaurant's kitchen display system for streamlined order prep.
2. **Order Tracking.**
   The system must give order tracking for customers.
   Order status updates should be visible on the customer's profile.

Estimated Prep and delivery times should be calculated dynamically.

3. **Inventory Management.**
   The system should automatically track stock levels and update the availability of menu items.
   Notifications should be sent when stock levels are low.
   Inventory reports should be generated to assist in restocking.
4. **Staff Management.**
   The system Should allow managers to create and manage staff schedules.
   Employee login credentials should be role based.
   A dashboard should display staff availability and assigned shifts.

Non-Functional Requirements

1. **Security.**
   The system must secure customers personal and payment info using encryption
   2 factor authentication should be used for admin and staff access.
   Regular security audits should be used to check system integrity.
2. **Performance.**
   The system should handle at least 1000 concurrent users without performance drop offs.
   Response times for order placement should be less than 2 seconds.
   Load balancing should be implemented to distribute traffic efficiently.
3. **Usability.**
   The system should have a user-friendly interface.
   Accessibility features should be implemented for users with disabilities.
   A feedback mechanism should be included to hear customer or staff input.