Solution Requirements Document

Date	19 JUNE 2025
Team ID	LTVIP2025TMID31579
Project Name	To Supply Leftover Food to Poor
Maximum Marks	

1. Introduction

This document outlines the solution requirements for the "To Supply Leftover Food to Poor" project. The goal of the project is to create a platform that connects food donors with recipients, automating the process of food donation and distribution while minimizing food waste.

2. Functional Requirements

Functional requirements describe the specific behaviors and functions of the system. The following are the key functional requirements for the project:

2.1. User Management

- FR-1: User Registration
 - Users (donors and recipients) can register on the platform.
 - Users must provide necessary details such as name, email, and role (donor or recipient).
- FR-2: User Authentication
 - Users can log in and log out securely.
 - Password recovery options must be available.

2.2. Food Donation Management

- FR-3: Create Food Donation
 - Donors can create new food donation entries, specifying details such as type, quantity, and pickup time.
- FR-4: Edit Food Donation
 - Donors can edit existing food donation entries.
- FR-5: View Food Donations
 - Recipients can view available food donations and request them.

2.3. Recipient Request Management

- FR-6: Request Food
 - Recipients can submit requests for food donations based on their needs.
- FR-7: Track Request Status
 - Recipients can track the status of their food requests (submitted, approved, rejected).

2.4. Logistics Coordination

- FR-8: Schedule Pickup and Delivery
 - The system allows for scheduling pickups and deliveries of food donations.
- FR-9: Notification System
 - Automated notifications are sent to donors and recipients regarding food availability and request updates.

2.5. Reporting and Analytics

- **FR-10**: Generate Reports
 - The system can generate reports on food donations, recipient requests, and overall impact metrics.

2.6. Feedback Management

- FR-11: Collect Feedback
 - Users can provide feedback on their experience with the platform.

3. Non-Functional Requirements

Non-functional requirements describe the quality attributes of the system. The following are the key non-functional requirements for the project:

3.1. Usability

- NFR-1: User-Friendly Interface
 - The platform must have an intuitive and user-friendly interface for both donors and recipients.

3.2. Security

- NFR-2: Data Protection
 - User data must be protected from unauthorized access through encryption and secure authentication methods.

3.3. Reliability

- NFR-3: System Availability
 - The system should be available 99.9% of the time to ensure users can access it when needed.

3.4. Performance

- NFR-4: Response Time
 - The system should respond to user actions within 2 seconds under normal load conditions.

3.5. Scalability

- NFR-5: Handle Increased Load
 - The system must be able to scale to accommodate an increasing number of users and food donations without performance degradation.

3.6. Compliance

- NFR-6: Regulatory Compliance
 - The system must comply with local food safety regulations and guidelines.

4. Conclusion

The Solution Requirements Document outlines the functional and non-functional requirements for the "To Supply Leftover Food to Poor" project. By adhering to these requirements, the project aims to create a robust and efficient platform for food donation and redistribution, ultimately reducing food waste and improving access to food for those in need.