## Requirement Analysis Solution Requirements (Functional & Non-functional)

Date	27 June 2025
Team ID	LTVIP2025TMID38851
Project Name	TO SUPPLY LEFTOVER FOOD TO POOR

## **Solution Requirements:**

Solution Requirements specify what is needed to build and implement the solution to meet both the business needs and the functional/non-functional requirements.

## **Functional Requirements:**

These define what the system should do. Following are the functional requirements of the proposed solution.

ID	Requirement	Description
FR-1	User Management	Allow NGOs, Volunteers, and Admins to register, log in, and manage their accounts with appropriate roles.
FR-2	Venue Management	Enable creation and modification of food pickup locations (venues) including details such as name, address, contact info, and geolocation.
FR-3	Food Donation Entry	Allow NGOs/Donors to submit and record food availability data including food type, quantity, and expiry details.
FR-4	Drop-Off Point Management	Enable entry and management of delivery destinations, including auto-calculation of distances between venues and drop-off points
FR-5	Task Assignment	Create delivery tasks and assign volunteers based on their availability and proximity.
FR-6	Volunteer Management	Maintain volunteer data (availability, contact info, age, gender) and track task assignments per volunteer.
FR-7	Execution Tracking	Record the status of each delivery (delivered, failed) and store feedback and ratings from beneficiaries or NGOs.
FR-8	Reporting & Dashboards	Generate dynamic reports and dashboards that show metrics such as tasks completed, distance covered, and number of people served.
FR-9	Sharing & Access Rules	Implement data sharing rules based on user roles (e.g., NGOs, volunteers, etc.) ensuring appropriate data visibility.

## **Non-Functional Requirements:**

These define how the system performs its tasks. Following are the non-functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
NFR-1	Performance	The system should respond to actions within 2 seconds and load reports in under 5 seconds for typical datasets.
NFR-2	Scalability	Must support growth in the number of users, venues, and tasks without degradation in system performance.
NFR-3	Security	Enforce role-based access controls, secure authentication, and restrict data visibility per Salesforce sharing rules.
NFR-4	Usability	Interfaces must be intuitive with clear labels and easy navigation to enhance user experience for food entry, task assignment, and report viewing.
NFR-5	Availability	Ensure the system maintains at least 99.9% uptime to provide constant access for NGOs and volunteers.
NFR-6	Data Accuracy	Maintain high accuracy for geolocation data and distance calculations (accurate to 4 decimal places) with automatic field updates.
NFR-7	Maintainability	The system configurations (flows, reports, dashboards) should be easily modifiable by a Salesforce admin without requiring code-level changes.
NFR-8	Compliance	The system should comply with applicable data privacy laws and regulations (e.g., GDPR or local data protection standards).