Requirement Analysis
Technology Stack (Architecture & Stack)

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

Technology Stack:

The project uses the Salesforce Platform as the core technology stack to manage food donations, volunteer coordination, and delivery tracking.

Technology Stack Overview:

- **Frontend (UI):**
  - **Salesforce Lightning App** – Custom app called *FoodConnect*.
  - **Lightning Pages & Flows** – Used for forms, dashboards, and record views.

- **Backend (Logic & Automation):**
  - **Apex Triggers** – For custom automation (e.g., distance calculation).
  - **Screen Flows & Process Builder** – For dynamic workflows and record creation.
  - **Validation & Sharing Rules** – Data integrity and access control.

- **Database:**
  - **Custom Salesforce Objects** – Venue, Drop-Off Point, Volunteer, Task, and Execution Detail.
  - **Relationships** – Lookup and master-detail relationships for data linkage.

- **Reports & Analytics:**
  - **Salesforce Reports & Dashboards** – For tracking performance, volunteer activity, and delivery statistics.

- **Security:**
  - **Profiles, Roles, Public Groups** – To manage access based on user type (e.g., NGOs, Admins).

Here's a detailed view of Technology Stack:

Frontend / User Interface:

Component	Description
Salesforce Lightning App	Custom app FoodConnect for internal users (NGOs, volunteers)
Lightning Pages	For home page, record detail views, dashboards
Screen Flows	For form input (e.g., Venue creation)

Backend / Logic Layer:

Component	Description
Salesforce Apex Triggers	Used for automation, like calculating distance fields
Flow Automation	For creating records, routing tasks, and coordinating workflows
Validation Rules	Ensures correct data entry (e.g., required fields, valid ratings)
Sharing Rules	Control access to drop-off points based on volunteer distance logic

Database / Data Storage:

Component	Description
Salesforce Objects	Custom Objects like Venue, Drop-Off Point, Volunteer, Task, Execution Details
Relationships	Lookup and Master-Detail relationships between records for traceability
Reports & Dashboards	Store and visualize data in real time

Security & Access Control:

Component	Description
Profiles & Roles	Controls access for different users (e.g., NGO, Admin)
Public Groups	Grouping users for sharing and permission rules
Field-Level Security	Ensures sensitive data is visible only to authorized users

Analytics & Monitoring:

Tool	Usage
Salesforce Reports	Track food pickups, deliveries, volunteers, ratings
Dashboards	Real-time visual analytics for NGO admins or managers
Custom Report Types	Venue-Volunteer or Task execution insights

Outcome:
- Centralized Data Management
- Automated Workflows
- Real-Time Monitoring & Reports
- Controlled Access & Security
- Scalable & Extensible