

Requirement Analysis

Data Flow Diagrams and User Stories

Date	02 NOVEMBER 2025
Team ID	NM2025TMID01349
Project Name	To Supply Leftover Food to Poor
Maximum Marks	4 Marks

Level 0 – System Context Overview

Flow:

[Food Donor] → (Central Salesforce Platform) → [Volunteer / NGO Partner] → [Beneficiaries]

Explanation:

- Food donors log details about surplus food into the Salesforce platform.
- The system automatically identifies and assigns an available volunteer for pickup.
- Assigned volunteers collect and transport the food to the designated NGO or distribution point.
- All collection and delivery updates are recorded in real time within Salesforce for tracking and reporting.

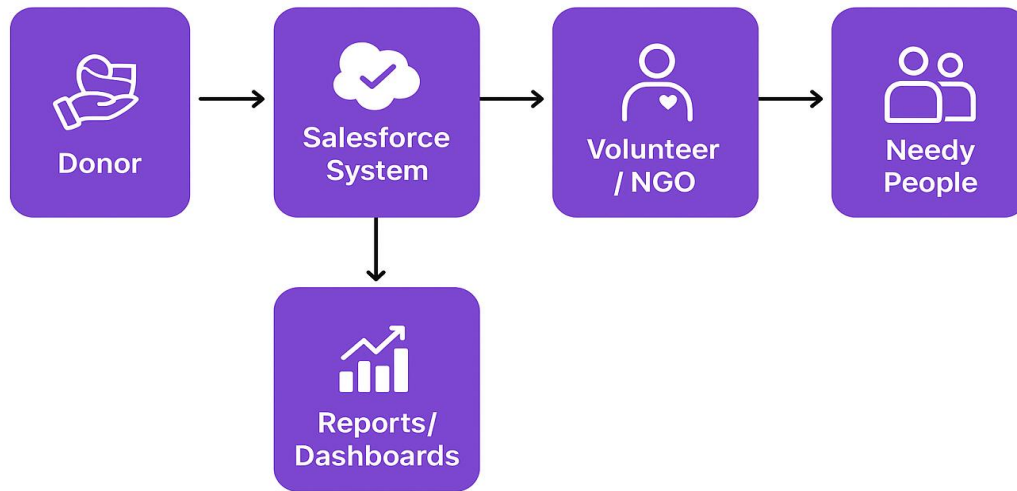
Key Data Repositories:

- **Donor Records** – Stores donor and contact details.
- **Food Inventory** – Tracks type, quantity, and expiry of donated food.
- **Volunteer Details** – Maintains volunteer information and assigned deliveries.
- **Distribution Logs** – Records delivery completion and receiver details.
- **Analytics Module** – Provides insights through reports and dashboards.

Primary Data Interactions:

1. Donor submits food donation details.
2. System triggers volunteer assignment for pickup.
3. Volunteer updates delivery and completion status.
4. Dashboard visualizes live data for administrators.

Food Distribution Process



User Roles and System Flow Explanation

1. Donor (Food Provider)

- Logs into the Salesforce portal.
 - Enters key details such as food type, quantity, and pickup location.
 - Submits the donation request for processing.
 - Receives an acknowledgment and assigned volunteer information.
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2. Volunteer

- Accesses the system through the Volunteer profile.
- Views nearby food collection tasks available for pickup.
- Accepts a suitable task and collects the food from the donor's location.
- Updates the delivery status once the food is successfully handed over to the NGO or beneficiaries.

3. NGO / Administrator

- Oversees all donation and delivery operations through the dashboard.
 - Validates donation and volunteer data entries for accuracy.
 - Generates periodic analytical reports (daily, weekly, monthly).
 - Ensures transparency and identifies zones with high or low food supply.
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4. Salesforce System (Automation Layer)

- Uses **Flow Builder** or **Apex Triggers** to automatically assign volunteers to donation requests.
 - Sends real-time email or in-app notifications to donors and volunteers.
 - Continuously updates all object records in the system database.
 - Displays live dashboards summarizing donations, active volunteers, and delivery success rates.
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Summary

The integrated **Data Flow and User Interaction Model** illustrates how each role—**Donor, Volunteer, NGO, and the System**—collaborates through Salesforce.

This structured workflow enables **real-time tracking, process automation, and transparent food distribution**, ensuring that surplus food reaches those in need efficiently and responsibly.