

Requirement Analysis

Data Flow Diagram & User Stories

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

Data Flow Diagrams:

Creating Data Flow Diagrams (DFDs) for a system to supply leftover food to the poor helps to visualize how data moves across processes, users, and data stores. Let's define the DFDs across three levels: Level 0 (Context), Level 1 (Subsystems), and Level 2 (Detailed Processes). These diagrams align with your Salesforce project structure and objective.

Level 0 DFD – Context Diagram:

Purpose:

Show the system as a single process and its interactions with external entities.

Entities:

- Restaurants/Donors (who donate food)
- NGOs/Admins (manage logistics)
- Volunteers (deliver food)
- Beneficiaries (receive food)

Main System:

- Leftover Food Supply System (e.g., FoodConnect)

Data Flows:

- Donors send food availability
- Admin coordinates logistics
- Volunteers receive tasks
- Beneficiaries receive food

Level 1 DFD – Top-Level Subsystems:

Purpose:

Break the system into key functional components.

Processes:

1. Collect Food Donations
2. Manage Drop-Off Points & Venues
3. Assign and Notify Volunteers
4. Record Delivery Execution
5. Generate Reports & Dashboards

Data Stores:

- D1: Donated Food DB
- D2: Volunteer DB
- D3: Drop-Off Locations DB
- D4: Task / Delivery DB
- D5: Execution Details DB

Level 2 DFD – Process Details:

Purpose:

Here's a deeper dive into Process 3: Assign and Notify Volunteers

Sub-processes:

- 3.1: Match Volunteer to Task
- 3.2: Notify Volunteer
- 3.3: Update Task Assignment

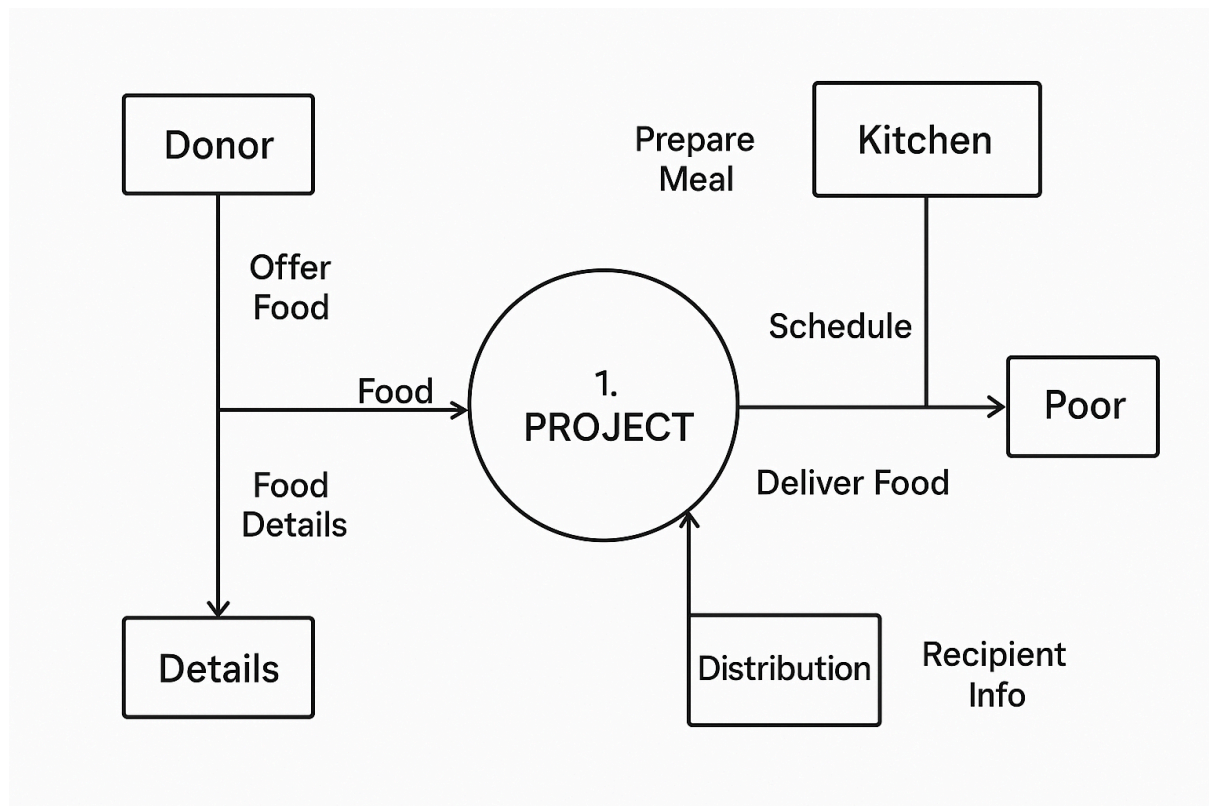
Data Stores:

- D2: Volunteer DB
- D4: Task DB

This DFD setup enables:

- **Traceability of food** from donation to delivery
- **Efficient coordination** between venues, volunteers, and NGOs
- **Data-driven insights** via dashboards and reports

Data Flow Diagram:



User Stories:

A user story is a short, simple description of a feature or requirement written from the perspective of an end user. It tells who the user is, what they need, and why they need it.

1. As a Food Donor (Venue):

I want to submit leftover food details,
So that it can be picked up and distributed to the needy.

2. As a Volunteer:

I want to view tasks assigned near my location,
So that I can pick up and drop off food efficiently.

3. As a Drop-Off Point Manager:

I want to register my location and food storage details,
So that food can be safely stored before distribution.

4. As a System Administrator:

I want to monitor reports and dashboards,
So that I can track food supply, delivery, and volunteer performance.

5. As a NGO User:

I want to access food drop-off data within my range,
So that I can plan food distribution to underprivileged areas.

6. As a Project Manager,

I want to track volunteer tasks and execution details,
So that I can ensure timely food delivery and identify bottlenecks.

7. As a Beneficiary (Poor Person),

I want food delivered on time and safely,
So that my basic hunger needs are met without waste.

Purpose of User Stories:

- Helps developers understand the needs of real users
- Facilitates Agile planning and task breakdown
- Keeps the focus on user value, not just technical details