

Requirement Analysis

Date	07 NOV 2025
Team ID	NM2025TMID06803
Project Name	Garage Management System
Maximum Marks	4 Marks

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** is a visual representation of how data moves through a system. It illustrates the flow of information between processes, external entities, and data stores — helping understand how the system functions.

In the project “*To Supply Leftover Food to Poor,*” the DFD depicts how leftover food details are collected, processed, and delivered to needy people. The diagram shows interactions between **food donors, NGOs/volunteers,** and the **system database**. When donors post leftover food details, the system stores the data, alerts nearby NGOs or volunteers, and manages the pickup and delivery flow until the food reaches poor communities.

This helps visualize the workflow of donation requests, availability checks, volunteer assignments, and delivery confirmations, ensuring transparency and efficiency.

Example (Context-Level DFD):

- **External Entities:** Donor, Volunteer, NGO/Receiver
- **Processes:** Food Registration, Availability Notification, Volunteer Assignment, Delivery Confirmation
- **Data Stores:** Donor Database, Food Listing, Volunteer Records, Delivery Log

User Stories:

User stories describe how different users interact with the system to fulfill their roles in food collection and distribution. Each story focuses on a specific goal, acceptance criteria, and delivery priority.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority Release
Donor	Food USN-1 leftover food donors to enter details so that it food type, 1	USN-1	As a food donor, I want to register	The system should allow	High Sprint- (Restaurant/Hotel) Registration
			can be collected quantity, and distributed to availability		

Volunteer	Food Collection & Delivery	USN-2	want to get notifications about available alerts for High Sprint- food near my available food 1 area so that I can within a collect and defined radius. deliver it on time.
NGO/Coordinator	Verification	USN-3	As an NGO The system coordinator, I should record want to verify the theand mark verification food Medium 2Sprint - food quality before delivery to as approved for ensure it is safe delivery. for consumption. As a system, I should Notifications automatically must reach all
		USN-4	
System (Auto Process)	Notification		notify nearby registered Sprint- volunteers and volunteers High 2
		USN-5	NGOs when new instantly after food donations donor are listed. submission.
Receiver (Needy People)	Feedback & Confirmation User		As a receiver, I want to provide Feedback
	User Story / Acceptance		feedback after should be Medium Sprint- receiving food so stored and 3 that service viewable by quality can be admins for improved. analysis.
Story	Task Criteria		
	Priority Release Number		
	the poor. time.		
	As a volunteer, I		

This structure ensures that every user' s needs are captured clearly — from donors contributing food, to volunteers collecting and distributing it, and NGOs verifying its quality.

The DFD and user stories together establish the foundation for building a reliable, sustainable food distribution network.