

# Project Design Phase-II

## Technology Stack (Architecture & Stack)

Date: 03/11/2025

Team ID: NM2025TMID04420

Project Name: To Supply Leftover Food to Poor

Maximum Marks: 4 Marks

## Technical Architecture

The technical architecture for the project 'To Supply Leftover Food to Poor' includes:

- Donor submits leftover food details.
- System processes request and assigns volunteers.
- Volunteers pick up and deliver food.
- Status updates stored in cloud database.
- Notification system alerts donors and volunteers.

<< Architecture Diagram Placeholder >>

## Reference

<https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>

## Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source	Uses free tech	Node.js / Python
2	Security	Role-based access	JWT / ACL
3	Scalable	Handles more users	Cloud Scaling
4	Availability	Always accessible	Load Balance
5	Performance	Fast response	Caching

## Components & Technologies

S.No	Component	Description	Technology
1	User Interface	Basic donor & volunteer UI	Web/Mobile UI
2	App Logic-1	Handles food submissions	Backend API
3	App Logic-2	Validates food safety	Validation Logic
4	Notifications	Alerts volunteers	Firebase / SMS API
5	Database	Stores core data	MySQL / MongoDB
6	Cloud DB	Scalable data storage	AWS / Firebase
7	File Storage	Food images	S3 / Cloud Storage
8	External API	Map routing	Google Maps API
9	ML Model	Optional predictions	Python Model
10	Infrastructure	Cloud hosting	AWS / Firebase