Date	01 NOVEMBER 2025
Team ID	NM2025TMID09002
Project Name	Supply Leftover Food to Poor
Maximum Marks	4 Marks

Solution Architecture

Goals of the Architecture

- **Create a real-time platform to connect food donors, volunteers, and beneficiaries**

- **Enable fast and safe leftover food collection and distribution**

- **Ensure food quality, proper tracking, and hygiene compliance**

- **Reduce food wastage and support hunger-relief activities**

- **Build a scalable and community-driven support system**

Key Components

- **Donor Module (Restaurants, Hotels, Homes, Events)**

- **Volunteer Module (Pickup & Delivery Partners)**

- **Recipient/NGO Module (Poor communities, shelters)**

- **Database System (Stores donor, volunteer, location & food safety details)**

- **Mobile/Web Application for coordination**

- **Real-Time Notification System (Pickup alerts & status updates)**

- **Food Quality & Safety Checks**

- **Tracking & Delivery Confirmation System**

Development Phases

1. **Identify and register food donors (Restaurants, Events, Homes)**

2. **Create volunteer network and assign coverage zones**

3. **Build food request & pickup notification system**

4. **Implement food safety checklist & verification**

5. **Enable live tracking and delivery confirmation**

6. Test with sample donors, volunteers, and poor communities

7. Monitor and scale to more locations

🗒 Solution Architecture Description

The solution architecture is designed to rescue leftover food efficiently and deliver it safely to poor and hungry individuals. Donors register surplus food through a digital platform and notify available volunteers. The system checks food quality and freshness and assigns the nearest volunteer for quick pickup. Volunteers collect the food, ensure hygienic handling, and deliver it to needy communities or NGOs.

Real-time communication between donors, volunteers, and receivers ensures rapid distribution to avoid spoilage. The database maintains donor history, pickup logs, food safety checks, and delivery records. This architecture improves transparency, saves time, reduces food wastage, and strengthens hunger-relief efforts through community and technology integration.

Example - Solution Architecture Diagram

(You can attach a food distribution app architecture diagram in your report/PPT)

Reference:
https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-researchpowered-by-ai-on-aws-part-1-architecture-and-design-considerations/