Phase 3: Project Design Phase - Proposed Solution

Project Title: To Supply Leftover Food to Poor (Salesforce Platform)

Date: November 01, 2025

Team ID: NM2025TMID07011

Maximum Marks: 2 Marks

Proposed Solution Template

S.No.	Parameter	Description
1	**Problem Statement** (Problem to be solved)	Food wastage is a critical global issue. Simultaneously, many people lack access to nutritious meals. The challenge is to efficiently connect surplus food from donors (restaurants, hotels, events, households) with recipients in need (NGOs, shelters, poor communities) in real-time using technology. Manual processes are slow, inefficient, and prone to errors.
2	**Idea / Solution description**	A comprehensive Salesforce-based platform is developed to automate food donation collection, recipient matching, volunteer coordination, and real-time distribution tracking. The system includes automated workflows that notify volunteers, assign dropoff locations, and track deliveries end-to-end. Business rules prevent accidental deletion of critical records (volunteers, events) assigned to ongoing distributions.
3	**Novelty / Uniqueness**	The solution addresses a real-world social impact problem by combining cloud technology (Salesforce) with volunteer management and logistics automation. It uses native Salesforce features (Process Builder, Flows, Business Rules) without requiring external plugins, making it simple, scalable, and cost-effective for NGOs and food distribution organizations.
4	**Social Impact / Customer Satisfaction**	The solution directly reduces food wastage, improves meal access for underprivileged communities, and empowers volunteers through clear task assignments and real-time communication. It enhances organizational efficiency, donor satisfaction through transparent tracking, and recipient satisfaction through reliable, timely food delivery.
5	**Business Model (Revenue Model) / Sustainability**	The platform is designed for nonprofit NGOs and social enterprises. Potential revenue models include: donations from food donors, partnerships with restaurants/hotels, sponsorships from CSR programs, and government food security initiatives. The system reduces operational costs through automation and improves resource allocation.
6	**Scalability of the Solution**	The solution can be extended to include multiple food categories, geographic regions, and distribution channels. It can adapt to seasonal demand changes, integrate with logistics partners, add SMS/WhatsApp notifications for mobile users, and support rolebased access for donors, volunteers, NGO staff, and beneficiaries.

Solution Description

To efficiently supply leftover food to the poor, a comprehensive Salesforce-based platform is implemented with the following architecture and workflow:

System Architecture

The Salesforce platform connects three main stakeholder groups:

1. **Food Donors:** Restaurants, hotels, events, households, and food businesses register surplus meals daily.
2. **Volunteers & Logistics:** Trained volunteers are assigned food collection and delivery tasks through automated workflows.
3. **Recipients:** NGOs, shelters, community centers, and beneficiaries receive verified, timely food deliveries.

Key Features & Workflow

- **Donor Registration & Food Listing:** Donors input surplus food details (quantity, type, expiry time, location) through user-friendly Salesforce forms.
- **Automated Recipient Matching:** The system uses geolocation and demand data to match surplus food with nearby recipients, ensuring minimal transit time and maximum freshness.
- **Volunteer Assignment & Notification:** Automated Salesforce flows assign collection/delivery tasks to available volunteers. Instant SMS and email notifications ensure rapid response.
- **Real-Time Tracking & Confirmation:** Volunteers update status (collected, en-route, delivered) through mobile-friendly interfaces. Recipients confirm receipt. All activities are logged for transparency and audit.
- **Data Protection & Integrity:** Business rules prevent accidental deletion of volunteers or events assigned to active distributions, ensuring data continuity and accountability.
- **Dashboard & Analytics:** Real-time dashboards track key metrics: food distributed (kg/meals), donors engaged, volunteers active, recipients served, and impact (cost per meal, waste reduction %).

Implementation Approach

- **Phase 1:** Design Salesforce data model (custom objects for Donors, Food Items, Recipients, Delivery Events, Volunteers).
- **Phase 2:** Build user interfaces (forms, dashboards) and automated workflows (notification, assignment, status tracking).
- **Phase 3:** Implement business rules for data protection and validation.
- **Phase 4:** Test with pilot NGO partner; gather feedback; scale nationally or regionally.

Benefits

Stakeholder	Benefit
Food Donors	Transparent tracking, CSR credit, tax deductibility documentation, brand visibility
Volunteers	Clear task assignments, flexible scheduling, impact measurement, community recognition
Recipients	Reliable, nutritious meal access; dignity-preserving delivery; community support

NGOs	Reduced operational costs, data-driven decision-making, scalable impact
Society	Food waste reduction, poverty alleviation, stronger community engagement

Conclusion

The proposed Salesforce-based solution for "To Supply Leftover Food to Poor" addresses a critical social need through innovative technology. By automating donor-recipient matching, volunteer coordination, and logistics tracking, the platform maximizes food distribution efficiency while minimizing waste. The solution is scalable, cost-effective, and sustainable—making it a powerful tool for nonprofits, social enterprises, and communities committed to fighting hunger and food wastage.