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| Date | 29-05-2025 |
| Team ID | LTVIP2025TMID28821 |
| Project Name | TO SUPPLY LEFTOVER FOOD TO POOR |
| Maximum Marks | 4 Marks |

**PROJECT DESIGN PHASE**

**Problem-Solution Fit**

**Introduction**

The coexistence of excess and scarcity is one of the most painful contradictions in modern urban society. On one hand, restaurants, caterers, and food outlets dispose of large quantities of edible food daily. On the other, millions—including children, elderly citizens, and migrant workers—go to bed hungry. The project *“To Supply Leftover Food to the Poor”* was initiated to resolve this gap through technology. This section explores how our solution (NourishBridge) precisely fits the problem it aims to solve, establishing both social value and technical feasibility.

**2. Understanding the Core Problem**

**2.1 The Paradox of Waste and Hunger**

Food waste is an avoidable tragedy. Despite food being prepared in abundance, logistical, legal, and operational barriers prevent it from reaching the needy in time. Studies show that a major portion of food waste is not due to spoilage, but rather due to lack of coordination and trust between donors and charitable distributors.

**2.2 Operational Inefficiencies**

Key issues that contribute to this disconnect include:

* Absence of a centralized platform to list, track, and verify donations.
* No real-time coordination between donors and NGOs.
* Manual processes involving phone calls, spreadsheets, and informal networking.
* Limited awareness of where food is most needed at any given time.

This creates a fragmented, unreliable donation ecosystem that wastes resources and hinders impact.

**3. Empathy-Informed Problem Framing**

Through empathy mapping and interviews with stakeholders (donors, NGO coordinators, volunteers), the following key frustrations were identified:

| **Stakeholder** | **Primary Concern** |
| --- | --- |
| Donor | “I want to help, but I don’t know who to contact—or how to do it safely and easily.” |
| NGO | “We receive food too late or not at all. We need structure and dependability.” |
| Volunteer | “We need clear routes and confirmation so food is picked up before it’s wasted.” |

These concerns shaped the very foundation of the solution's design.

**4. Proposed Solution: NourishBridge Platform**

NourishBridge is a Salesforce-powered platform that connects the dots between surplus food and hunger relief in a structured, automated, and transparent way.

**4.1 How the Solution Fits the Problem**

| **Identified Challenge** | **NourishBridge Solution** |
| --- | --- |
| Donor confusion and complexity | A “Post Donation” form that takes less than a minute to complete |
| Mismatched supply and demand | Real-time matching logic with verified NGOs |
| Delayed or missed pickups | Volunteer assignment system with route guidance |
| Low transparency and trust | Donation tracking status and visual impact dashboards |
| Manual coordination burden | Fully digital workflows and integrated communication tools |

This fit is not superficial—it’s deeply aligned with the lived experience of every stakeholder.

**5. Value Proposition**

The solution provides clear, measurable benefits across all user types:

* **For Donors**: Reduced food waste, improved brand image, easier compliance with safety guidelines, and a record of social impact.
* **For NGOs**: Predictable food supply, simplified logistics, accountability, and data for reporting.
* **For Volunteers**: Streamlined pickup planning, mobile access, and acknowledgment of contributions.
* **For Communities**: Greater food security, reduced urban hunger, and increased nutritional support.

**6. Technology Alignment**

Salesforce was chosen as the core platform due to its strengths in:

* Cloud scalability for growing user bases.
* Declarative tools like Flows for process automation.
* Custom object creation and relationship mapping for donation records.
* Integration capabilities with Twilio (SMS), maps, and future AI forecasting tools.

This technical foundation further enhances the solution's alignment with the problem.

**7. Real-World Example of Solution Fit**

Let’s consider a use case:

1. A restaurant has leftover food for 30 people.
2. Using the mobile-friendly Donor Portal, the manager posts the donation in under one minute.
3. NourishBridge matches the request with three nearby NGOs within seconds.
4. The first NGO coordinator receives a notification, accepts, and assigns a volunteer.
5. The volunteer picks up the food and updates delivery status via the app.
6. The restaurant receives a “Donation Delivered” message with an impact summary: “You helped feed 30 people today.”

This seamless sequence is exactly what a problem-solution fit looks like in action.

**8. Future Scalability**

The modular structure of the platform allows for:

* Expansion into donations of clothing, school supplies, or medicine.
* Predictive analytics to forecast donation peaks.
* Mobile app deployment for deeper user engagement.
* Gamification to increase repeat participation and volunteer motivation.

**9. Conclusion**

The problem-solution fit of *“To Supply Leftover Food to the Poor”* is not only strategic but empathetically engineered. Every design choice—from streamlined workflows to automated communication—directly addresses pain points faced by the food donation ecosystem. By building on real needs with real technology, NourishBridge doesn’t just promise change—it delivers it, one meal at a time.