

# To Supply Leftover Food to Poor

## Project Brief

This initiative focuses on a structured approach to channel excess food resources towards underprivileged communities. The solution leverages the Salesforce platform to optimize data handling, streamline volunteer coordination, and facilitate timely transportation to distribution points. With an emphasis on minimizing food waste, the project ensures operational efficiency and real-time oversight for sustainable impact.

## Goals

Key Business Objectives:

- Design an efficient framework for managing surplus food contributions.
- Enhance collaboration between collection points, volunteer networks, and delivery hubs for maximum reach.
- Deploy real-time tracking and analytics tools to support strategic planning and measure impact.

Expected Results:

- Configured custom data entities and relationships to organize venues, volunteers, distribution points, and tasks.
- Implemented an analytics system to provide actionable insights into food allocation processes.
- Developed dashboards to visualize engagement metrics, volunteer participation, and demand at specific locations.

## Salesforce Features Employed

The initiative utilized the following Salesforce capabilities:

- Customized Data Entities: Defined objects to capture and manage data related to venues, tasks, and volunteer actions.
- Automation Scripts: Created an Apex trigger (DistanceAssigner) to automatically calculate and assign distance-based values.
- Lightning Application: Developed a centralized application, FoodBridge Lightning App, with custom modules for intuitive navigation.
- Controlled Access: Applied rule-based access permissions to ensure data visibility aligns with

proximity and user roles.

## **Solution Design Workflow**

Key Steps:

- **Data Architecture:** Established models for venues, drop-off points, tasks, and volunteer interactions, with necessary field mapping.
- **User Interface:** Designed and implemented user-friendly navigation features in the FoodBridge App.
- **Business Logic:** Developed the DistanceAssigner logic to streamline proximity-based task allocation.
- **Visual Features:** Integrated interactive components to enhance user engagement.

## **Validation and Testing**

Quality Assurance Steps:

- **Component Testing:** Validated individual scripts, including Apex Classes and automation triggers.
- **Interface Testing:** Reviewed user workflows for consistency and accuracy in data synchronization across application features.

## **Key Use Cases Addressed**

- **Scenario 1: Food Redistribution Coordination** - Established efficient systems for drop-off locations and optimized delivery distances.
- **Scenario 2: Volunteer Engagement** - Enabled streamlined volunteer monitoring and task assignments for enhanced productivity.
- **Scenario 3: Feedback Mechanisms** - Provided a structured feedback loop to assess performance and inform future enhancements.

## **Summary**

Leveraging Salesforce, this project successfully established a scalable system to manage food redistribution, volunteer coordination, and delivery processes. The platform effectively minimizes food wastage and maximizes its social impact by targeting underserved populations.