To Supply Leftover Food to the Poor

1. Project Overview

This initiative aims to efficiently manage food collection, volunteer coordination, and transportation to various drop-off points. By leveraging the Salesforce platform, the project ensures streamlined data management and real-time tracking. The ultimate goal is to minimize food waste and provide sustenance to underserved communities, improving operational efficiency, user experience, and data quality.

2. Objectives

Business Goals:

- Develop a system to manage surplus food donations effectively.

- Enhance coordination between collection points, volunteers, and delivery to optimize food distribution.

- Facilitate real-time tracking and reporting to guide decision-making and assess impact.

Specific Outcomes:

- Created custom objects and relationships to oversee venues, volunteers, drop-off points, and task assignments.

- Implemented real-time reporting for comprehensive food distribution insights.

- Designed dashboards to visualize data on distribution, volunteer participation, and location needs.

3. Salesforce Key Features and Concepts

The project utilizes the following Salesforce capabilities:

- **Custom Objects:** Tracking data for Venues, Drop-Off Points, Tasks, Volunteers, and Execution Details.

- **Triggers:** Automated assignment of distance values using custom Apex triggers (DropOffTrigger).

- **Lightning App and Custom Tabs:** Developed the FoodConnect Lightning App for intuitive navigation across objects.

- **Sharing Rules:** Configured access based on user proximity to drop-off points.

4. Solution Design Steps

The design process included:

- **Data Models:** Created data models with relevant fields and relationships for Venues, Drop-Off Points, Tasks, Volunteers, and Execution Details.

- **User Interface Design:** Developed custom tabs for seamless navigation within the FoodConnect Lightning App.

- **Business Logic:** Built the DropOffTrigger to automate distance assignment for better rule implementation.

5. Testing and Validation

Testing involved:

- **Unit Testing:** Assessed Apex classes and triggers, including DropOffTrigger and custom field changes.

- **User Interface Testing:** Evaluated UI components for usability and ensured accurate data flow.

6. Key Scenarios Addressed

1. **Food Collection and Distribution Coordination:**
   Established drop-off points and assigned access based on proximity.

2. **Volunteer Tracking and Assignment:**
   Monitored volunteer availability and task allocation to ensure efficient operations.

3. **Feedback and Reporting:**
   Collected volunteer feedback, tracked delivery ratings, and used this data to improve processes.

7. Conclusion

Achievements:
The project successfully utilized Salesforce to establish a system that coordinates food donations, volunteer efforts, and delivery logistics. By addressing food waste and promoting equity, this scalable solution supports food security and uplifts marginalized communities.