

Salesforce Project Documentation: Leftover Food Distribution

1. Project Overview

The goal of this project is to utilize Salesforce as a platform for managing leftover food donations from restaurants, events, and households, and efficiently distributing the food to the poor and needy. The system will allow users (donors) to register their donations, and volunteers or partner organizations to claim and deliver the food.

2. Objectives

- Create a streamlined process to capture leftover food donations.
- Organize and track food distribution efforts.
- Monitor the quantity and quality of donations.
- Ensure timely delivery to those in need.

3. Key Stakeholders

- **Donors:** Restaurants, households, events, supermarkets.
- **Receivers:** Non-profit organizations, shelters, food banks, or individual volunteers.
- **Admins:** Project administrators managing the entire process.
- **Beneficiaries:** Individuals in need of food.

4. Key Features

4.1. Donor Registration and Food Donation

- **Donor Account:** Donors create an account and provide basic information such as name, contact, and location.
- **Food Donation Form:** Donors fill out a form with the details of their leftover food, including:
 - Type of food (e.g., fresh, packaged).
 - Quantity.
 - Expiry date or freshness level.
 - Pickup location and time window.

4.2. Food Pickup and Distribution

- **Volunteer/Partner Organization Assignment:** Automatically assign volunteers or partner organizations based on the donor's location and availability.
- **Route Optimization:** Utilize integrated mapping services (like Google Maps) to optimize pickup and distribution routes.
- **Pickup Confirmation:** Volunteers confirm pickup by marking the donation as "collected" in Salesforce.
- **Food Delivery Confirmation:** Volunteers mark donations as "delivered" once they reach the intended recipients.

4.3. Reporting and Dashboards

- **Donation Reports:** Track the number of donations made, locations served, and quantity of food distributed over time.
- **Volunteer Activity:** Monitor volunteer pickup and delivery performance.
- **Impact Reports:** Provide statistics on the number of beneficiaries served, amount of food saved from waste, etc.

4.4. Automated Notifications

- **Donor Notifications:** Notify donors when their food has been picked up.
- **Volunteer Notifications:** Notify volunteers about new donations in their area.
- **Admin Alerts:** Send notifications to admins for any critical system updates or alerts.

5. Data Model

- **Custom Objects:**
 - **Donation:** Tracks each food donation.
 - **Volunteer:** Stores volunteer information.
 - **Recipient:** Tracks the organizations or individuals receiving food.
 - **Delivery:** Tracks the pickup and delivery status of donations.
- **Relationships:**
 - Donors to Donations: One-to-Many.
 - Volunteers to Deliveries: One-to-Many.
 - Donations to Recipients: Many-to-Many (with Junction Object).

6. Automation and Workflow

- **Approval Process:** Review and approve donations that require additional scrutiny (e.g., large-scale donations).
- **Assignment Rules:** Automatically assign pickups based on donor location and volunteer availability.
- **Email Notifications:** Automated emails sent to donors, volunteers, and recipients at key stages (donation confirmation, pickup, delivery).

7. Integration

- **Google Maps Integration:** For route optimization.
- **Third-Party Apps:** Integration with apps like Uber Eats or food delivery services (if applicable) for last-mile delivery.
- **SMS Integration:** For real-time notifications to donors and volunteers via SMS.

8. Security & Permissions

- **Donor Profiles:** Limited access to see their donations, update details, and view status.
- **Volunteer Profiles:** Can access donations assigned to them, confirm pickups and deliveries.
- **Admin Profiles:** Full access to all donation records, reports, and system configurations.
- **Field-Level Security:** Sensitive information, such as addresses, will be accessible only to authorized users (e.g., volunteers, admins).

9. Reporting and Analytics

- **Custom Reports:** Create reports on the number of food donations, distribution efficiency, and volunteer engagement.
- **Dashboards:** Provide visual insights into donation trends, volunteer activity, and overall impact.

10. Testing and Validation

- **Unit Testing:** Ensure all custom objects, workflows, and automations work as intended.
- **UAT (User Acceptance Testing):** Engage a small group of donors, volunteers, and admins to test the system before full rollout.

11. Training and Support

- **User Training:** Conduct training sessions for donors, volunteers, and admins on how to use the system.
- **Documentation:** Provide user guides and FAQs for all stakeholders.

12. Maintenance

- **Ongoing Support:** Regular updates and maintenance checks.
- **Feedback Loop:** Collect feedback from users to improve the system.