

Project Title: To Supply Leftover Food to Poor

Category: Salesforce

Skills Required: Salesforce Developer

1. Project Overview

1.1 Project Objectives and Goals

Objective: This project aims to develop a Salesforce-based application designed to manage and streamline the distribution of leftover food to underserved communities. The primary goal is to enhance the efficiency of food drop-offs, coordinate tasks, manage volunteers, and generate insightful reports.

2. Detailed Description of Implemented Features

2.1 Custom Objects

1. Drop-Off Point:

- **Purpose:** The Drop-Off Point object captures essential details about locations where food is dropped off. This helps in tracking and managing food distribution points effectively.
- **Fields:**
 - **Drop-Off Point Name:** A text field representing the name of the drop-off point.
 - **Location Details:** A text field for additional details about the drop-off point location.
 - **Distance:** A number field that records the distance from the drop-off point to the delivery area.
 - **Venue:** A lookup relationship field linking to the Venue object to provide a connection between drop-off points and venues.

SETUP > OBJECT MANAGER

Drop-Off Point

9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Distance	Distance__c	Number(18, 0)		
Distance Calculation	Distance_Calculation__c	Number(18, 0)		
Drop-Off Point Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Location 2	Location_2__c	Geolocation		
Owner	OwnerId	Lookup(User, Group)		✓
State	State__c	Picklist		
Venue	Venue__c	Lookup(Venue)		✓

2. Task:

- **Purpose:** The Task object is used to manage and track various tasks related to food distribution, including assigning tasks to volunteers and recording task details.
- **Fields:**
 - **Task Name:** A text field representing the name of the task.
 - **Date:** A date field indicating when the task is scheduled or completed.
 - **Rating:** A numeric field used to rate the task performance.
 - **Drop-Off Point:** A lookup relationship field linking to the Drop-Off Point object to associate tasks with specific drop-off points.
 - **Sponsored By:** A lookup relationship field linking to the Drop-Off Point object to indicate the sponsor of the task.

The screenshot shows the 'Fields & Relationships' section for the 'Task' object in Salesforce Setup. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main area displays a table of fields for the Task object, sorted by field label. The table includes columns for 'Last Modified By', 'LastModifiedById', and 'Lookup(User)'. The fields listed are: Name of the Person (Text(18)), Number of People Served (Number(18, 0)), Owner (Lookup(User, Group)), Phone (Phone), Rating (Picklist), Sponsored By (Lookup(Venue)), Task ID (Auto Number), Task Name (Text(80)), and Venue (Lookup(Drop-Off Point)).

Field Label	Field Name	Field Type	Required	Field Format
Name of the Person	Name_of_the_Person__c	Text(18)		
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Owner	OwnerId	Lookup(User, Group)	✓	
Phone	Phone__c	Phone		
Rating	Rating__c	Picklist		
Sponsored By	Sponsored_By__c	Lookup(Venue)	✓	
Task ID	Task_ID__c	Auto Number		
Task Name	Name	Text(80)	✓	
Venue	Venue__c	Lookup(Drop-Off Point)	✓	

3. Volunteer:

- **Purpose:** The Volunteer object keeps track of individuals who are involved in the food distribution process, including their contact information and assigned tasks.
- **Fields:**
 - **Volunteer Name:** A text field for the name of the volunteer.
 - **Contact Email:** An email field for the volunteer's contact email.
 - **Contact Phone:** A phone field for the volunteer's contact number.
 - **Assigned Tasks:** A related list showing tasks assigned to the volunteer.

The screenshot shows the 'New Relationship' page for the 'Volunteer' object in Salesforce Setup. The left sidebar lists various setup options, with 'New Relationship' selected. The main area displays the 'Step 6: Add custom related lists' section. The 'Field Label' is 'Drop-Off Point', the 'Data Type' is 'Master-Detail', and the 'Field Name' is 'Drop_Off_Point'. The 'Related List Label' is 'Volunteers'. The 'Page Layout Name' is 'Drop-Off Point Layout'. The 'Append related list to users' existing personal customizations' checkbox is checked. The 'Previous', 'Save & New', 'Save', and 'Cancel' buttons are visible at the bottom.

Field Label	Data Type	Field Name	Description
Drop-Off Point	Master-Detail	Drop_Off_Point	

Specify the title that the related list will have in all of the layouts associated with the parent.

Related List Label:

These are the page layouts that will include this field. Because this is a Master-Detail relationship, the field is required.

Add Related List	Page Layout Name
<input checked="" type="checkbox"/>	Drop-Off Point Layout

☒ Append related list to users' existing personal customizations

Previous Save & New Save Cancel

4. Execution Detail:

- **Purpose:** The Execution Detail object captures detailed information about food distribution activities, including which volunteers and task are associated with each distribution.
- **Fields:**
 - **Execution Detail Name:** A text field for naming the execution detail record.
 - **Volunteer:** A master-detail relationship field linking to the Volunteer object to associate execution details with a specific volunteer.
 - **Task:** A master-detail relationship field linking to the Task object to associate execution details with a specific task.
 - **Details:** A text field for additional information about the execution.

The screenshot shows the Salesforce Setup interface for the 'Execution Detail' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The left sidebar lists various setup options, with 'Fields & Relationships' selected. The main content area displays the 'Fields & Relationships' section for 'Execution Detail', showing 6 items sorted by Field Label. The table lists fields such as 'Created By', 'Execution Detail Name', 'Execution ID', 'Last Modified By', 'Task', and 'Volunteer', along with their data types and relationship types.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Execution Detail Name	Name	Text(80)		✓
Execution ID	Execution_ID__c	Auto Number		
Last Modified By	LastModifiedById	Lookup(User)		
Task	Task__c	Master-Detail(Task)		✓
Volunteer	Volunteer__c	Master-Detail(Volunteer)		✓

2.2 Object Relationships

- **Master-Detail Relationships:**
 - **Execution Detail to Volunteer:** Ensures that each execution detail record is linked to a volunteer, making volunteer information essential for each distribution record.
 - **Execution Detail to Task:** Ensures that each execution detail record is linked to a task, making task information essential for each distribution record.
- **Lookup Relationships:**
 - **Task to Drop-Off Point:** Connects tasks to drop-off points, providing context on where each task is executed.
 - **Task to Volunteer:** Connects tasks to volunteers, enabling tracking of which

volunteer is responsible for each task.

- **Drop-Off Point to Venue:** Links drop-off points to venues, facilitating a detailed understanding of where food is being dropped off.

2.3 Sharing Rules

To ensure that records are shared appropriately based on distance criteria, the following sharing rules were set up:

- **Rule 1:**
 - **Label:** Rule 1
 - **Criteria:** Records where the distance is less than 15 km
 - **Access:** Shared with Public Group - Iksha
- **Rule 2:**
 - **Label:** Rule 2
 - **Criteria:** Records where the distance is between 15 km and 30 km
 - **Access:** Shared with Public Group - NSS
- **Rule 3:**
 - **Label:** Rule 3
 - **Criteria:** Records where the distance is between 30 km and 50 km
 - **Access:** Shared with Public Group - Street Cause
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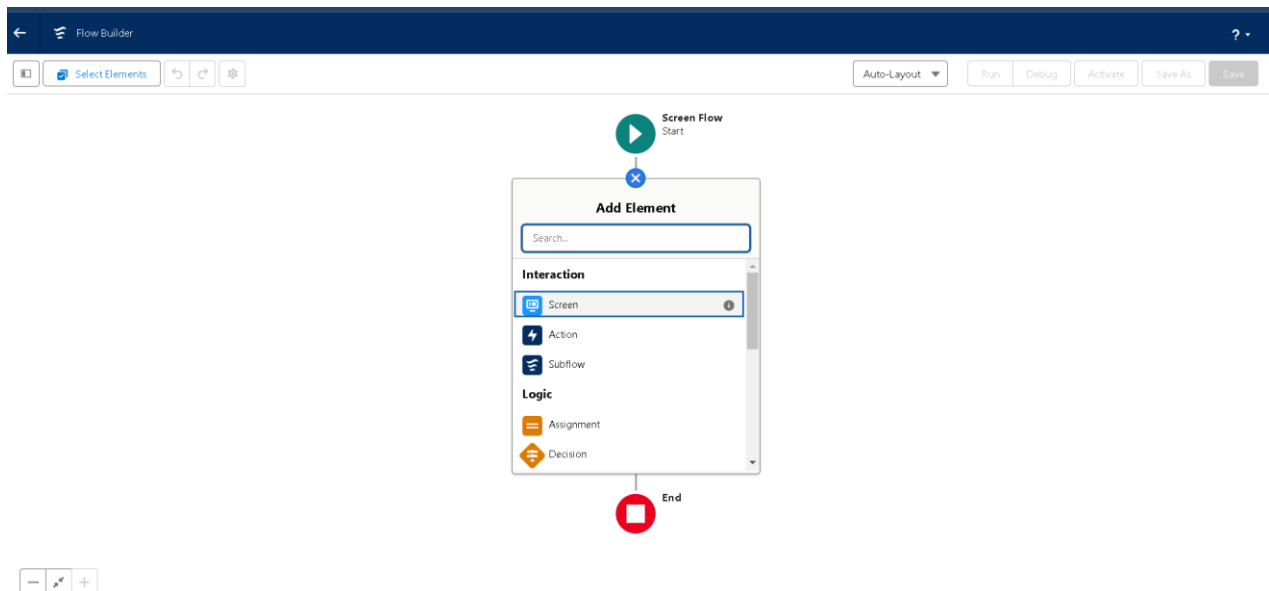
The screenshot displays the Salesforce Setup interface, specifically the 'Sharing Settings' page. The left sidebar contains navigation links: Setup, Home, and Object Manager. The main content area is titled 'Sharing Settings' and lists various rule categories: Work Step Template Sharing Rules, Work Type Sharing Rules, Work Type Group Sharing Rules, Drop-Off Point Sharing Rules, and Research Proposal Sharing Rules. The 'Drop-Off Point Sharing Rules' section is expanded, showing a table with columns for Action, Criteria, Shared With, and Access Level. The table lists three rules for the 'Drop-Off Point' object, each with specific distance criteria and access levels for the 'Group_Diya', 'Group_Evara', and 'Group_Iksha' groups.

Action	Criteria	Shared With	Access Level
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS THAN 50)	Group_Diya	Read/Write
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS THAN 30)	Group_Evara	Read/Write
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group_Iksha	Read/Write

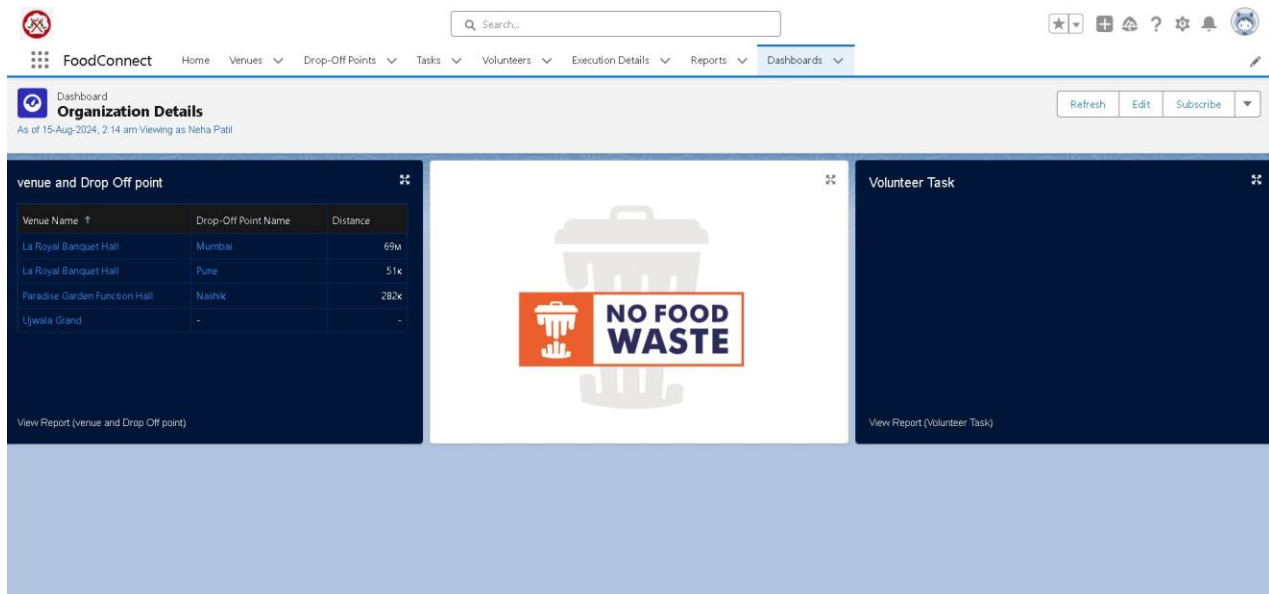
2.4 Flow and Dashboard

- **Flow:** Venue Flow

- **Purpose:** To manage and capture detailed information related to food drop-off points.
- **Components:**
 - **Text Component:** For entering the venue name.
 - **Email Component:** For entering the contact email of the venue.
 - **Phone Component:** For entering the contact phone number of the venue.
 - **Text Component:** For entering the venue location.
 - **Number Components:** For entering latitude and longitude values of the venue.



- **Dashboard:**
 - **Name:** Organization Details
 - **Components:**
 - **Lightning Table:** Displays detailed information about venues and drop-off points, facilitating a comprehensive view of the data.
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3. Configuration and Setup Instructions

3.1 Creating Custom Objects

1. **Drop-Off Point:**
 - Navigate to **Object Manager > Create > Custom Object**.
 - Enter details such as the label name, record name, and other settings for **Drop- Off Point**.
2. **Task:**
 - Navigate to **Object Manager > Create > Custom Object**.
 - Enter details such as the label name, record name, and other settings for **Task**.
3. **Volunteer:**
 - Navigate to **Object Manager > Create > Custom Object**.
 - Enter details such as the label name, record name, and other settings for **Volunteer**.
4. **Execution Detail:**
 - Navigate to **Object Manager > Create > Custom Object**.
 - Enter details such as the label name, record name, and other settings for **Execution Detail**.

3.2 Sharing Rules Setup

- Go to **Sharing Settings**.
- Define new sharing rules for **Drop-Off Point** based on distance criteria, ensuring appropriate access for different public groups.

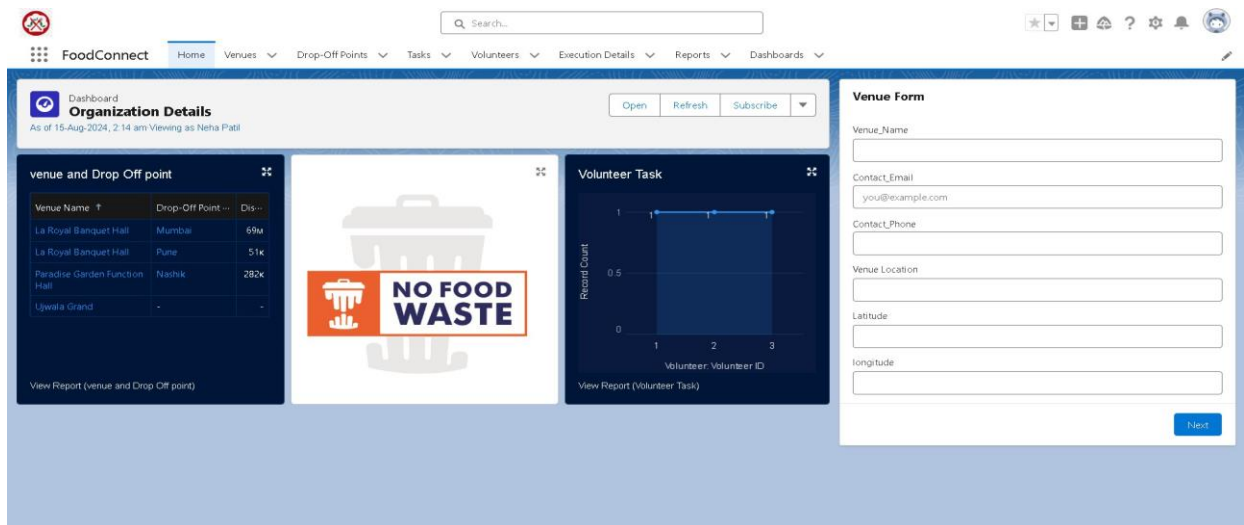
3.3 Lightning App Builder

1. Create Home Page:

- Go to **Lightning App Builder > New**.
- Select **Home Page** and name it "**HOME Page**".
- Add **Flow** and **Dashboard** components to the page.

2. Save and Activate:

- Click on **Save and Activation**.
- Set the page as the default for the **FoodConnect** app.



3.4 Report Types and Dashboards

1. Custom Report Types:

- Create report types for **Venue with Drop-Off with Volunteer** and **Volunteers with Execution Details and Tasks**.

2. Reports:

- Generate and configure reports using the custom report types to track and analyse relevant data.

3. Dashboards:

- Configure dashboards to visualise data from reports and other components, providing insights into the overall distribution process.

4. Deliverables

- **Code Files:** Include Apex triggers and any other code implemented.
- **Output Screenshots:** Provide screenshots of custom objects, flows, dashboards, and reports to illustrate the setup.
- **Project Documentation:** Detailed descriptions of implemented features, configurations, and setup instructions.
- **Project Demonstration Video:** A video showcasing the functionality of the application, including key features and processes.

