

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

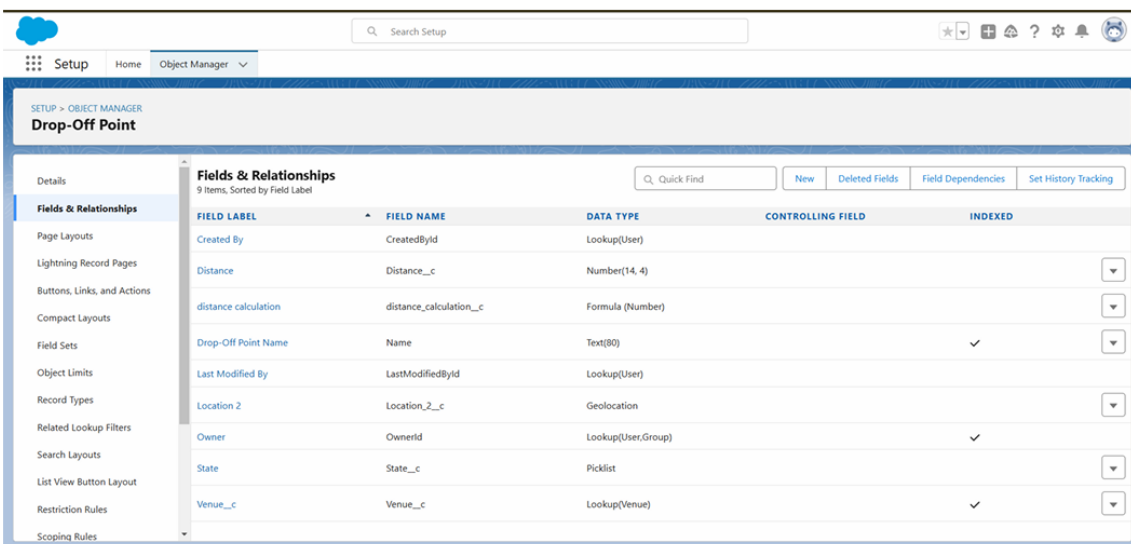
### 2.1 Custom Objects

#### 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.



The screenshot shows the Salesforce Setup interface for the 'Drop-Off Point' object. The 'Fields & Relationships' section is active, displaying a table of fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By (Lookup(User)), Distance (Number(14, 4)), distance calculation (Formula (Number)), Drop-Off Point Name (Text(80)), Last Modified By (Lookup(User)), Location 2 (Geolocation), Owner (Lookup(User,Group)), State (Picklist), and Venue\_\_c (Lookup(Venue)).

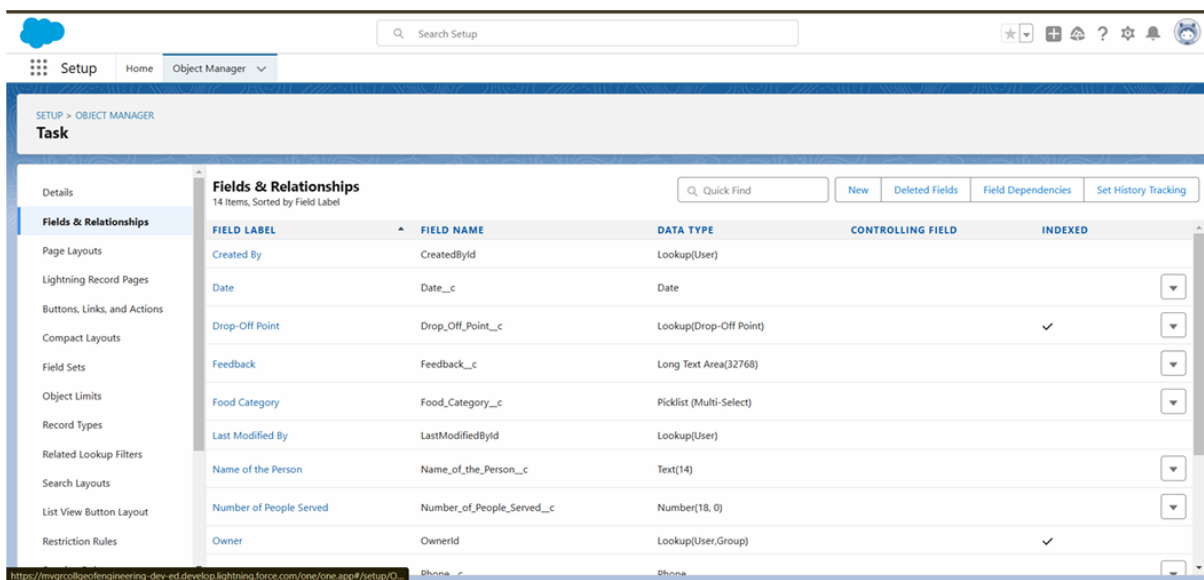
| FIELD LABEL          | FIELD NAME              | DATA TYPE          | CONTROLLING FIELD | INDEXED |
|----------------------|-------------------------|--------------------|-------------------|---------|
| Created By           | CreatedById             | Lookup(User)       |                   |         |
| Distance             | Distance__c             | Number(14, 4)      |                   |         |
| distance calculation | distance_calculation__c | Formula (Number)   |                   |         |
| 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__c             | 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 Salesforce Setup interface for the 'Task' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled 'Task' and shows the 'Fields & Relationships' section. It displays a table of 14 fields, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (Lookup(User)), Date (Date), Drop-Off Point (Lookup(Drop-Off Point)), Feedback (Long Text Area(32768)), Food Category (Picklist (Multi-Select)), Last Modified By (Lookup(User)), Name of the Person (Text(14)), Number of People Served (Number(18, 0)), and Owner (Lookup(User,Group)).

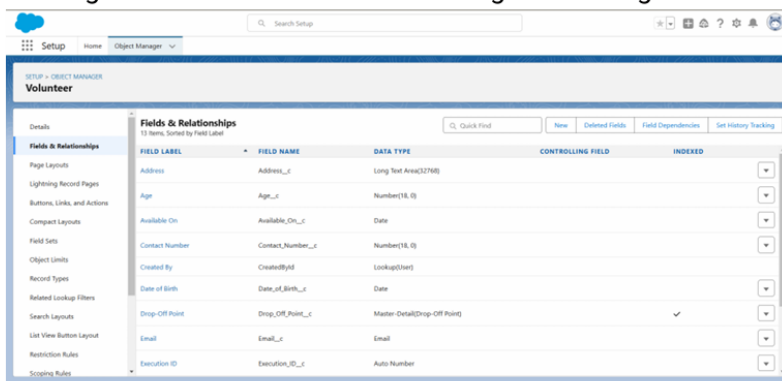
| FIELD LABEL             | FIELD NAME                 | DATA TYPE               | CONTROLLING FIELD | INDEXED |
|-------------------------|----------------------------|-------------------------|-------------------|---------|
| Created By              | CreatedById                | Lookup(User)            |                   |         |
| Date                    | Date__c                    | Date                    |                   |         |
| Drop-Off Point          | Drop_Off_Point__c          | Lookup(Drop-Off Point)  |                   | ✓       |
| Feedback                | Feedback__c                | Long Text Area(32768)   |                   |         |
| Food Category           | Food_Category__c           | Picklist (Multi-Select) |                   |         |
| Last Modified By        | LastModifiedById           | Lookup(User)            |                   |         |
| Name of the Person      | Name_of_the_Person__c      | Text(14)                |                   |         |
| Number of People Served | Number_of_People_Served__c | Number(18, 0)           |                   |         |
| Owner                   | OwnerId                    | Lookup(User,Group)      |                   | ✓       |

### 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

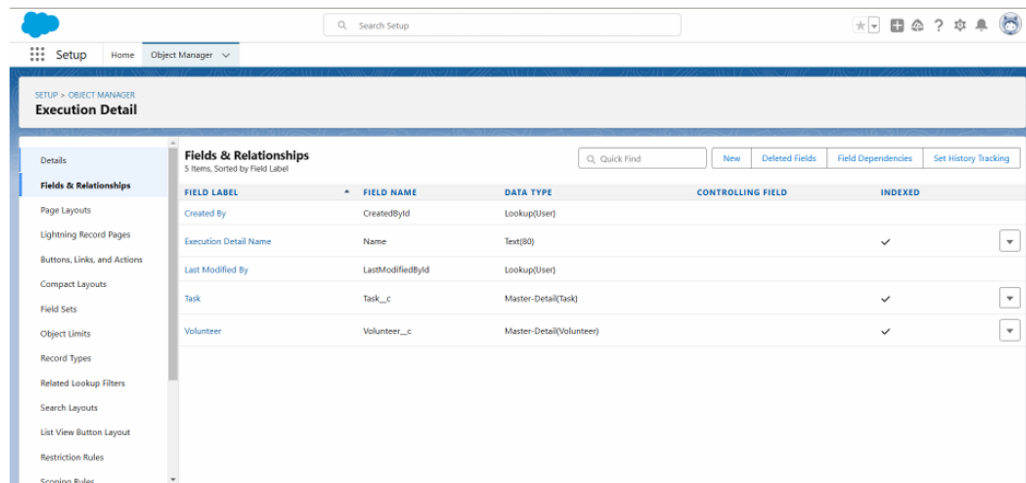


#### 4. Execution Detail:

■ 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.



## 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

The screenshot shows the Salesforce Setup interface. The left sidebar contains the 'Setup' menu with options like Home, Object Manager, and Security. The main content area is titled 'Sharing Settings' and lists several sharing rule categories: Work Step Template Sharing Rules, Work Type Sharing Rules, Work Type Group Sharing Rules, Drop-Off Point Sharing Rules, Task Sharing Rules, and Venue Sharing Rules. The 'Drop-Off Point Sharing Rules' section is expanded, showing two rules. Rule 1 has the criteria 'Distance LESS THAN 15' and is shared with the 'Group\_Iksha' group. Rule 2 has the criteria 'Distance GREATER THAN 15 AND Distance LESS OR EQUAL 30' and is shared with the 'Group\_nss' group. Both rules have 'Read Only' access level.

| Action     | Criteria   | Shared With | Access Level |
|------------|--|-------------|--------------|
| Edit   Del | Drop-Off Point: Distance LESS THAN 15  | Group_Iksha | Read Only    |
| Edit   Del | Drop-Off Point: Distance GREATER THAN 15 AND Drop-Off Point: Distance LESS OR EQUAL 30 | Group_nss   | Read Only    |

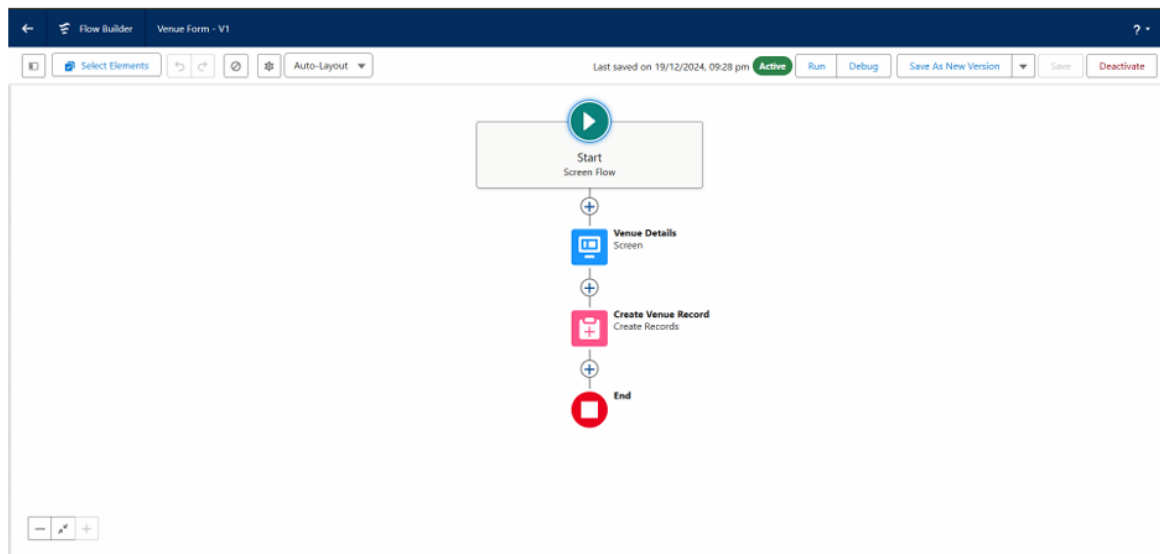
## 2.4 Flow and Dashboard

- 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.

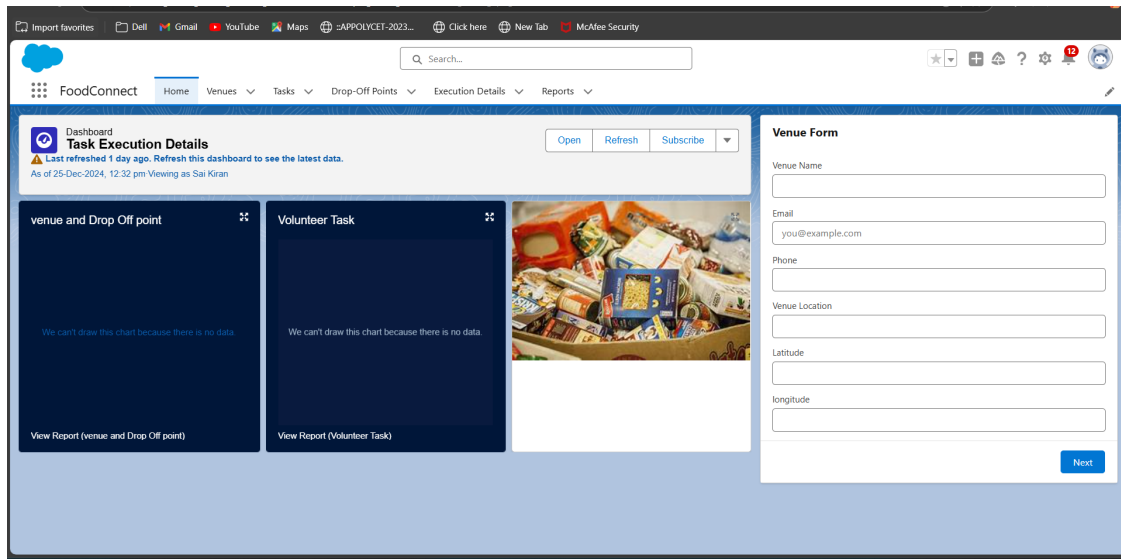


- Dashboard:

- Name: Organization Details

- Components:

- Lightning Table: Displays detailed information about venues and drop-off points, facilitating a comprehensive view of the data.



### 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.

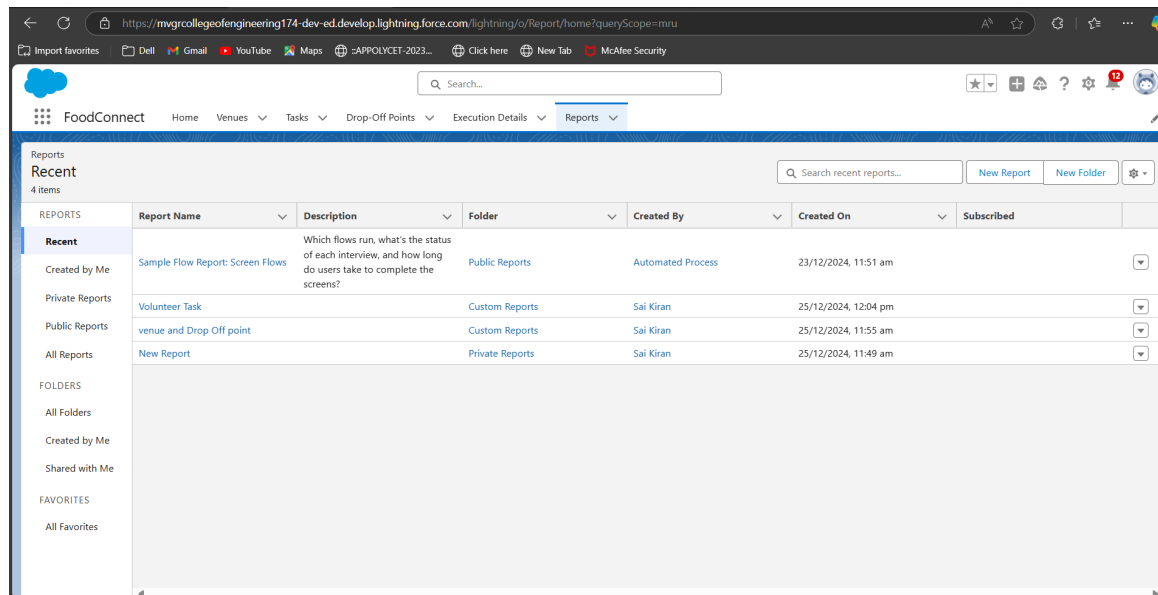
#### 3.2 Sharing Rules Setup

- 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.