

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.

Detailed Description of Implemented Features

1.2 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.

Search Setup

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Setup

Home

Object Manager

SETUP > OBJECT MANAGER

Drop-Off Point

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

Restriction Rules

Scoping Rules

Fields & Relationships

9 Items, Sorted by Field Label

Q Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

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 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, Restriction Rules, and Scoping Rules. The main content area is titled 'Task' and 'Fields & Relationships', showing 16 items sorted by field label. The table lists fields such as Last Modified By, Name of the Person, Number of People Served, Owner, Phone, Rating, Sponsored By, Task ID, Task Name, and Venue, along with their corresponding API names and data types. Checkmarks indicate which fields are active.

Field Label	API Name	Data Type	Active
Last Modified By	LastModifiedById	Lookup(User)	
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.

Setup > OBJECT MANAGER
Volunteer

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, Restriction Rules, Scoping Rules, Triggers, Flow Triggers

Volunteer New Relationship Help for this Page

Step 6. Add custom related lists Step 6 of 6

Previous Save & New Save Cancel

Field Label	Drop-Off Point	Data Type	Master-Detail	Field Name	Drop-Off Point	Description
Related List Label	Volunteers					

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

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.

Setup > OBJECT MANAGER
Execution Detail

Details

Fields & Relationships 6 Items, Sorted by Field Label Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Execution Detail Name	Name	Text(80)		<input checked="" type="checkbox"/>
Execution ID	Execution_ID__c	Auto Number		<input checked="" type="checkbox"/>
Last Modified By	LastModifiedById	Lookup(User)		
Task	Task__c	Master-Detail(Task)		<input checked="" type="checkbox"/>
Volunteer	Volunteer__c	Master-Detail(Volunteer)		<input checked="" type="checkbox"/>

1.3 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.

1.4 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

2:

- **Label:** Rule 2
- **Criteria:** Records where the distance is between 15 km and 30 km
- **Access:** Shared with Public Group - NSS

3:

- **Label:** Rule 3
- **Criteria:** Records where the distance is between 30 km and 50 km
- **Access:** Shared with Public Group - Street Cause
-

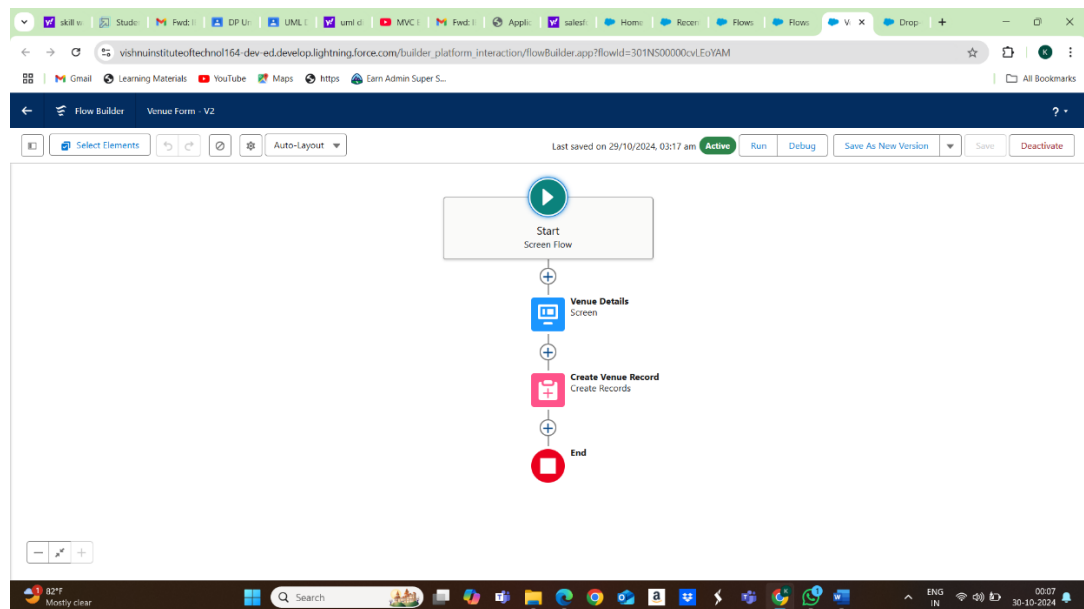
The screenshot displays the Salesforce Setup interface, specifically the 'Sharing Settings' page. The left sidebar contains navigation links: Setup, Home, and Object Manager. The main content area is titled 'Sharing Settings' and lists several rule categories: Work Step Template Sharing Rules, Work Type 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 different 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_Dava	ReadWrite
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS THAN 30)	Group_Evara	ReadWrite
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group_Iksha	ReadWrite

1.5 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.

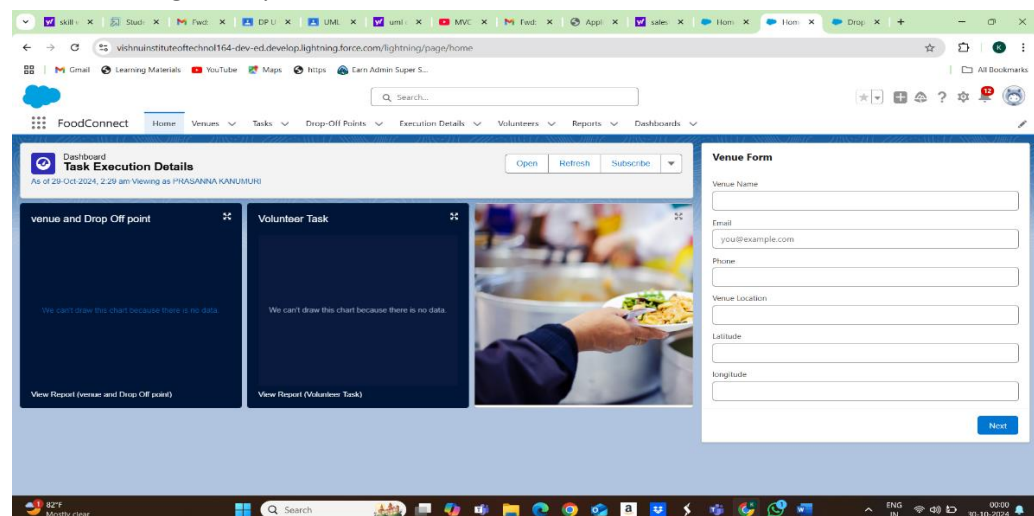


• Dashboard:

- **Name:** Organization Details ■

Components:

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



2. Configuration and Setup Instructions

2.1 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 **DropOff 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**.

2.2 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.

2.3 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.

2.4 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.

3. 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.

3.1 GitHub Repository Link: <https://github.com/prasanna-kanumuri/FoodConnect/tree/main>

