

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 and 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 connection between drop-off points and venues.

SETUP > OBJECT MANAGER

Drop-Off Point

Details

Fields & Relationships
9 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)		
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 complete
- **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 point
- **Sponsored By:** A lookup relationship field linking to the Drop-Off Point object to indicate the sponsor of the task.

SETUP > OBJECT MANAGER

Task

Details

Fields & Relationships
14 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)		
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)		✓
Phone	Phone__c	Phone		

https://mycollageofengineering-dev-ed.develop.lightning.force.com/one/app#/setup/O...

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

Details

Fields & Relationships
13 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Age	Age__c	Number(18, 0)		
Available On	Available_On__c	Date		
Contact Number	Contact_Number__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Drop-Off Point	Drop_Off_Point__c	Master-Detail(Drop-Off Point)		✓
Email	Email__c	Email		
Execution ID	Execution_ID__c	Auto Number		

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 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 'Execution Detail' and shows the 'Fields & Relationships' section with 5 items, sorted by Field Label. A table lists the fields: Created By (Lookup(User)), Execution Detail Name (Text(80)), Last Modified By (Lookup(User)), Task (Master-Detail(Task)), and Volunteer (Master-Detail(Volunteer)). The table includes columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The Task and Volunteer fields are marked as Controlling Fields and Indexed.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Execution Detail Name	Name	Text(80)		✓
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:

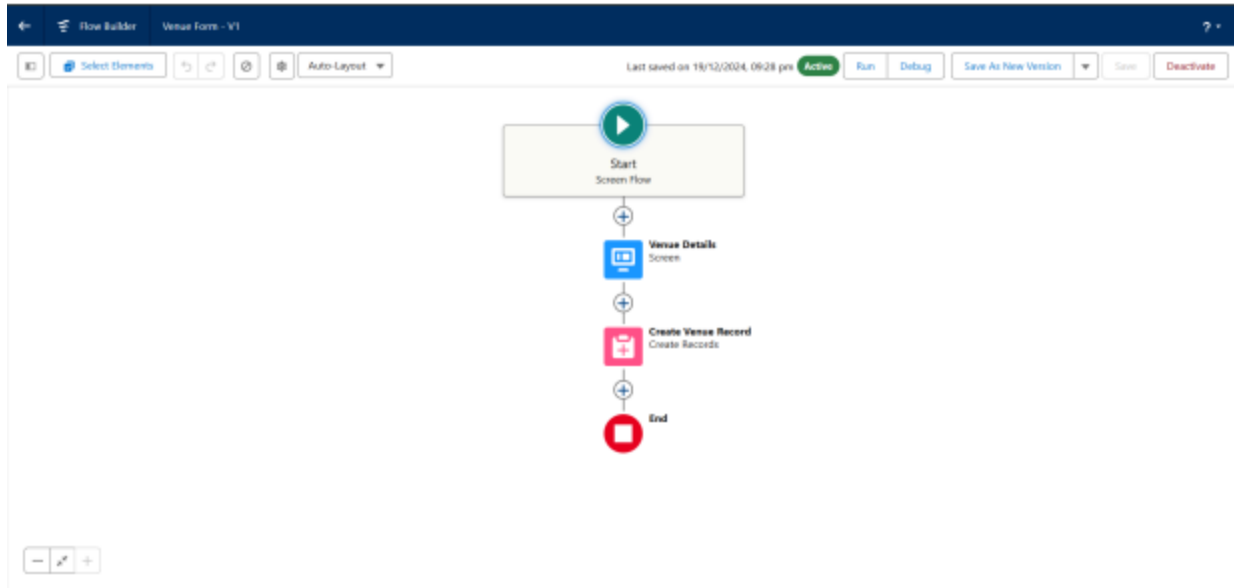
- Rule 1:
 - Label: Rule 1
 - Criteria: Records where the distance is less than 15 km
 - Access: Shared with Public Group - Iksha
- Rule 2:
 - Label: Rule 2
 - Criteria: Records where the distance is between 15 km and 30 km
 - Access: Shared with Public Group - NSS

The screenshot displays the Salesforce Setup page for Sharing Settings. The left sidebar shows the navigation menu with 'Setup' selected. The main content area is titled 'Sharing Settings' and lists several rule categories. The 'Drop-Off Point Sharing Rules' category is expanded, showing two rules. Rule 1 is labeled 'Drop-Off Point: Distance LESS THAN 15' and is shared with 'Group: Iksha' with 'Read Only' access. Rule 2 is labeled 'Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)' and is shared with 'Group: manu' with 'Read Only' access.

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: manu	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.

FoodConnect | Home | Venues | Drop-Off Points | Tasks | Volunteers | Execution Details | Reports | Dashboards

Task Execution Details
As of 05-Jan-2025, 7:29 pm Viewing as Sachith Balaka

venue and Drop Off point
We can't draw this chart because there is no data.
[View Report \(venue and Drop Off point\)](#)

Volunteer Task
We can't draw this chart because there is no d...
[View Report \(Volunteer Task\)](#)

Venue Form

Venue Name:

Email:

Phone:

Venue Location:

Latitude:

Longitude:

[Next](#)

3. Configuration and Setup Instructio

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.

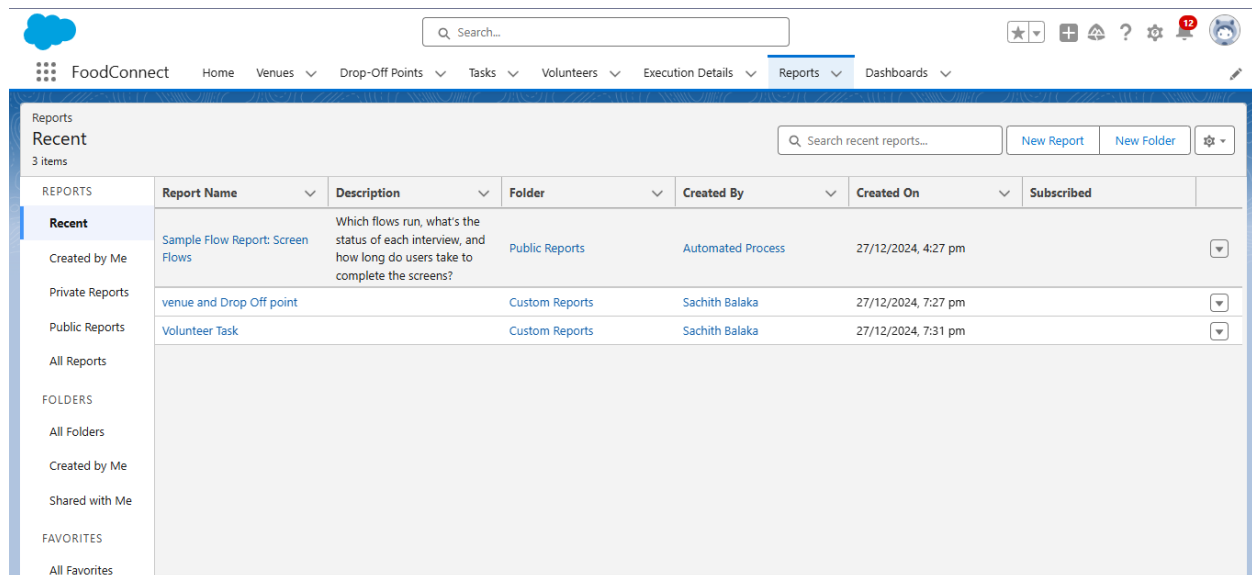
3.3 Lightning App Builder

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, configuration and setup instructions.
- Project Demonstration Video: A video showcasing the functionality of the application, including key features and processes.