

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

Q Quick Find

New Deleted Fields Field Dependencies Set History Tracking

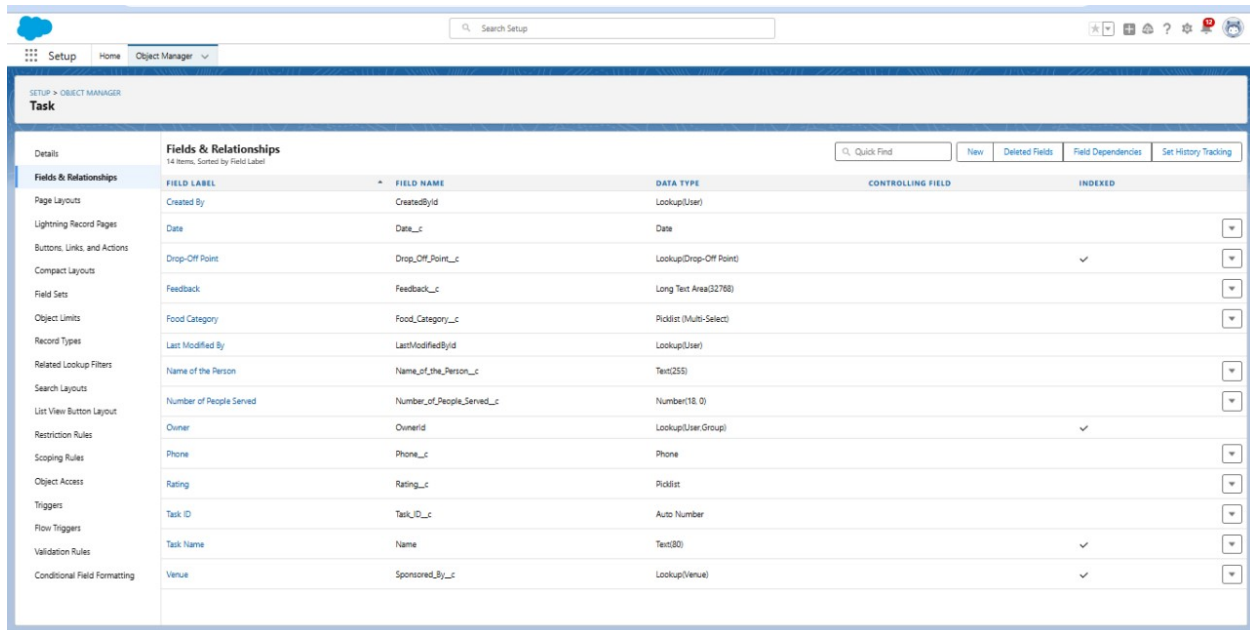
Created By	CreatedById	Lookup(User)	
Distance	Distance__c	Number(14, 4)	▼
distance calculation	distance_calculation__c	Formula (Number)	▼
Drop-Off Point Name	Name	Text(80)	✓ ▼
Last Modified By	LastModifiedById	Lookup(User)	
Location 2	Location_2__c	Geolocation	▼
Owner	OwnerId	Lookup(User,Group)	✓
State	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.



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**Task**

Fields & Relationships  
14 items, Sorted by Field Label

Quick Find: [ ] New Deleted Fields Field Dependencies Set History Tracking

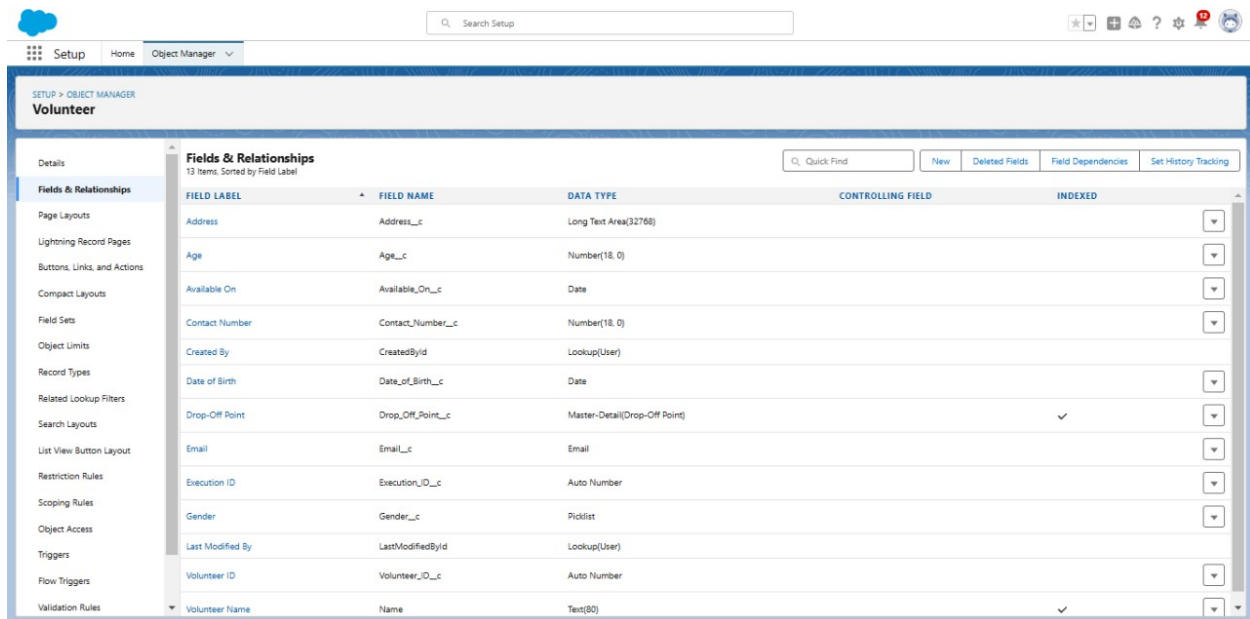
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Date	Date_c	Date		
Drop-Off Point	Drop_Off_Point_c	Lookup(Drop-Off Point)		✓
Feedback	Feedback_c	Long Text Area(32768)		
Food Category	Food_Category_c	Picklist (Multi-Select)		
Last Modified By	LastModifiedBy	Lookup(User)		
Name of the Person	Name_of_the_Person_c	Text(255)		
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		
Task ID	Task_ID_c	Auto Number		
Task Name	Name	Text(80)		✓
Venue	Sponsored_By_c	Lookup(Venue)		✓

### 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**

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	CreatedBy	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		
Gender	Gender_c	Picklist		
Last Modified By	LastModifiedBy	Lookup(User)		
Volunteer ID	Volunteer_ID_c	Auto Number		
Volunteer Name	Name	Text(80)		✓

#### 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', and 'List View Button Layout'. The 'Fields & Relationships' section is selected, 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', 'Execution Detail Name', 'Last Modified By', 'Task', and 'Volunteer'. The 'Task' and 'Volunteer' fields are marked as 'Master-Detail' relationships.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Execution Detail Name	Name	Text(80)		✓
Last Modified By	LastModifiedBy	Lookup(User)		
Task	Task__c	Master-Detail(Task)		✓
Volunteer	Volunteer__c	Master-Detail(Volunteer)		✓

## 2.2 Object Relationships

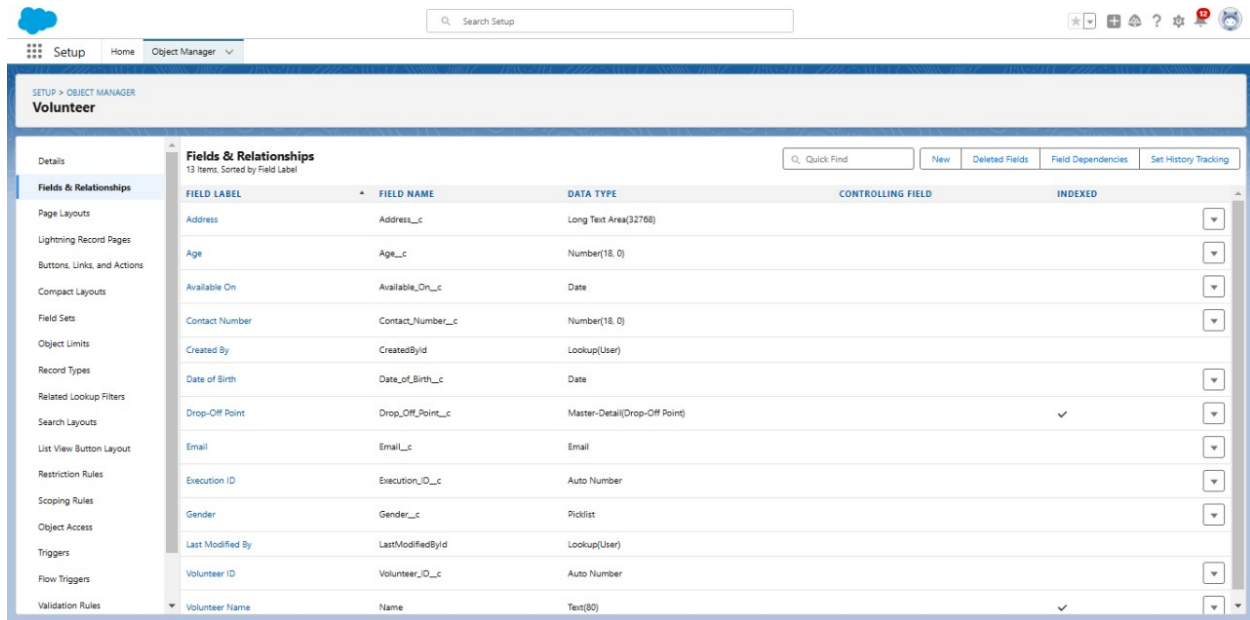
● Master-Detail Relationships:

■ 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.



The screenshot shows the Salesforce Setup interface for the 'Volunteer' object. The 'Fields & Relationships' tab is selected, displaying a table of 13 fields. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Address, Age, Available On, Contact Number, Created By, Date of Birth, Drop-Off Point, Email, Execution ID, Gender, Last Modified By, Volunteer ID, and Volunteer Name. The 'Drop-Off Point' field is highlighted with a checkmark in the INDEXED column.

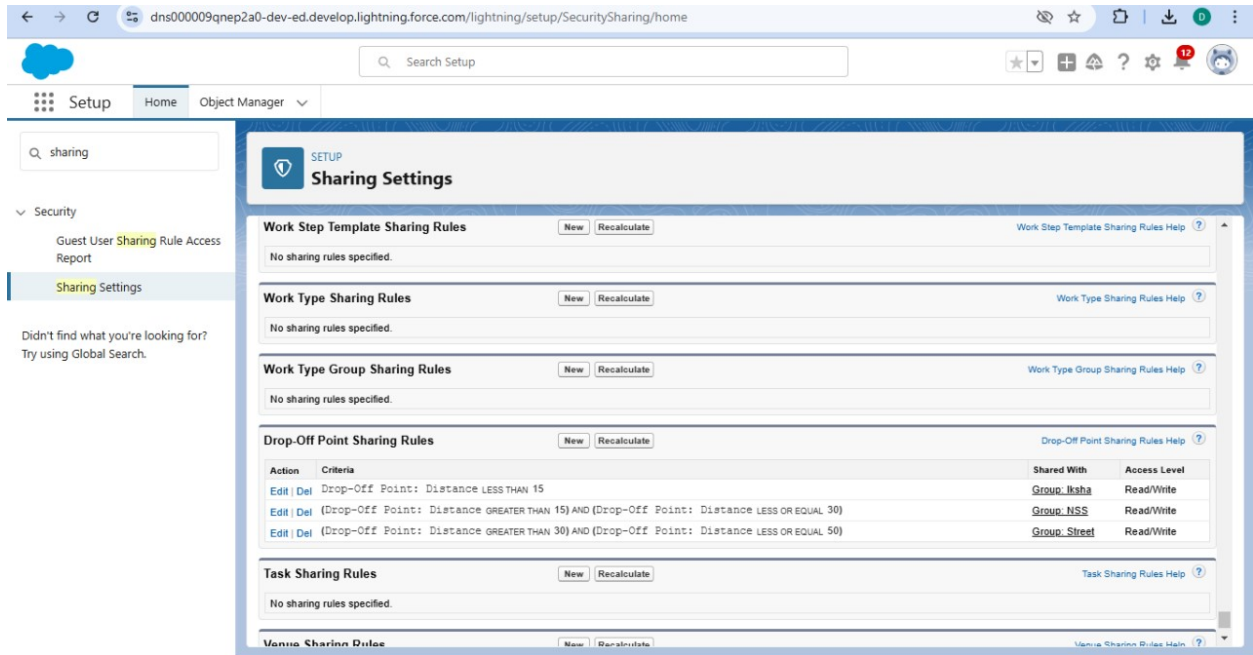
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Age	Age__c	Number(18, 0)		
Available On	Available_On__c	Date		
Contact Number	Contact_Number__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Drop-Off Point	Drop_Off_Point__c	Master-Detail(Drop-Off Point)		✓
Email	Email__c	Email		
Execution ID	Execution_ID__c	Auto Number		
Gender	Gender__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Volunteer ID	Volunteer_ID__c	Auto Number		
Volunteer Name	Name	Text(80)		✓

- 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

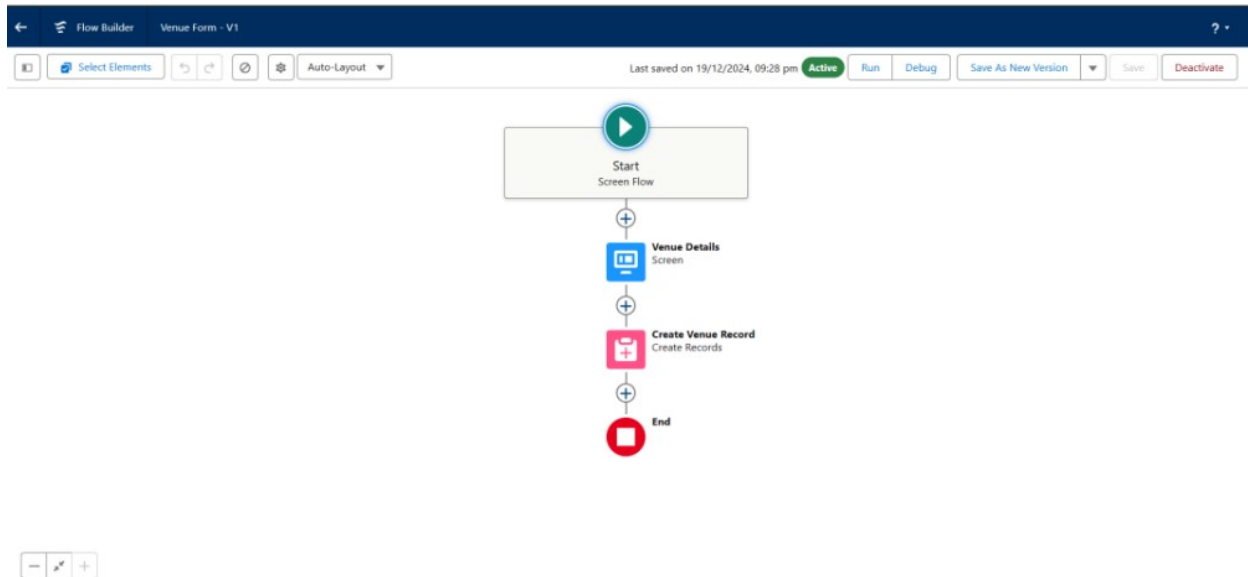
To ensure that records are shared appropriately based on distance criteria, the following sharing rules were set up:

- 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



## 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

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

**Dashboard Task Execution Details**  
As of 05-Jan-2025, 9:13 pm Viewing as DASARI YASWANTH SRI BALACHANDRA

**venue and Drop Off point**

Venue Name...	Drop-Off Point ID	Dista...
dasariyaswanth	a01NS00000shlt	5.5244x

[View Report \(venue and Drop Off point\)](#)

**Volunteer Task**

Record Count: 1

Volunteer ID-1  
Volunteer: Volunteer ID

[View Report \(Volunteer Task\)](#)

**Venue Form**

Venue Name:

Email:

Phone:

Venue Location:

Latitude:

Longitude:

[Next](#)

- #### 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

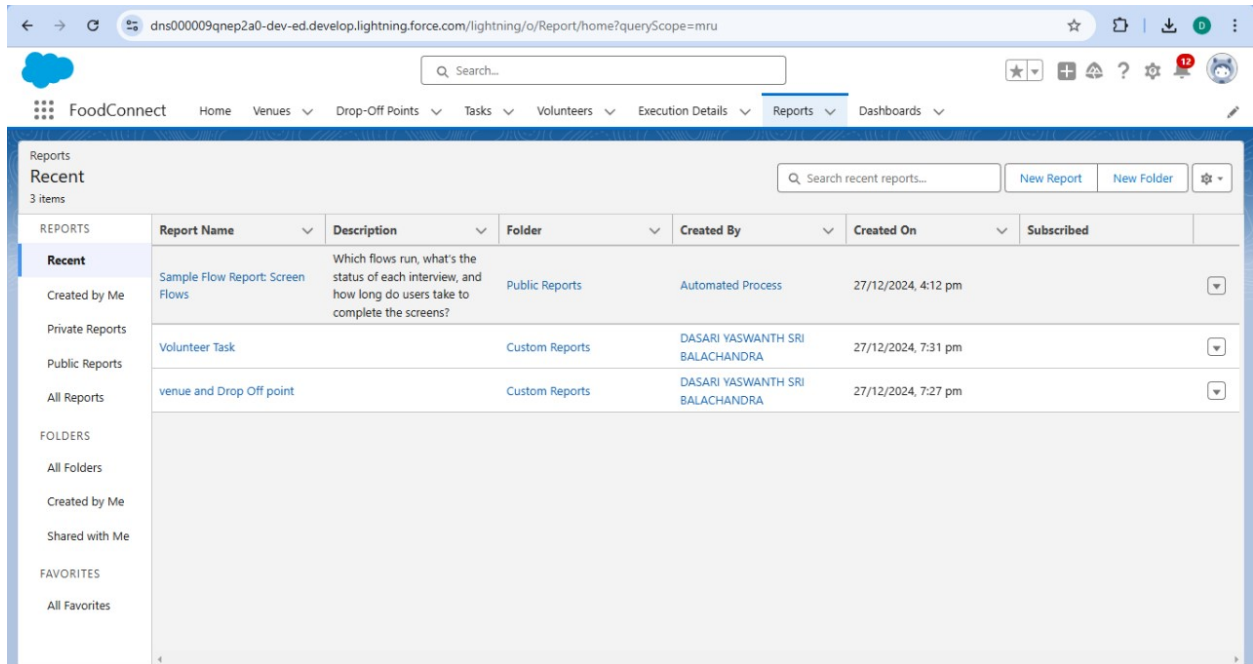
### 1. Create Home Page:

- 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 component 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.