

Project Title: To Supply Leftover Food to Poor

Category: Salesforce

Skills Required: Salesforce Developer

1. Project Overview

This section summarizes the purpose and scope of your project. It explains what your project aims to achieve:

- **Goal:** To streamline the process of leftover food distribution using Salesforce.
- **Impact:** Reducing food waste and addressing hunger by efficiently managing food drop-off points, tasks, and volunteers.
- **Technology:** Salesforce provides the tools to manage records, workflows, and data visualization, making the process seamless.

2. Objectives

Defines measurable and actionable goals for the project.

Business Goals:

- What organizational or societal issue the project addresses (e.g., food waste, hunger).
- How the project will improve operations, transparency, or accountability.

Specific Outcomes:

- These are tangible deliverables (e.g., custom objects, reports, flows) created during the project.

Objects created :

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 displays the Salesforce Setup interface, specifically the 'Drop-Off Point' object configuration page. The left sidebar shows the navigation menu with 'Setup' and 'Object Manager' selected. The main content area is titled 'Drop-Off Point' and shows the 'Fields & Relationships' section. A table lists the fields and their relationships:

Field Label	Field Name	Field Type	Relationship
Distance	Distance__c	Number(14, 0)	
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)	✓

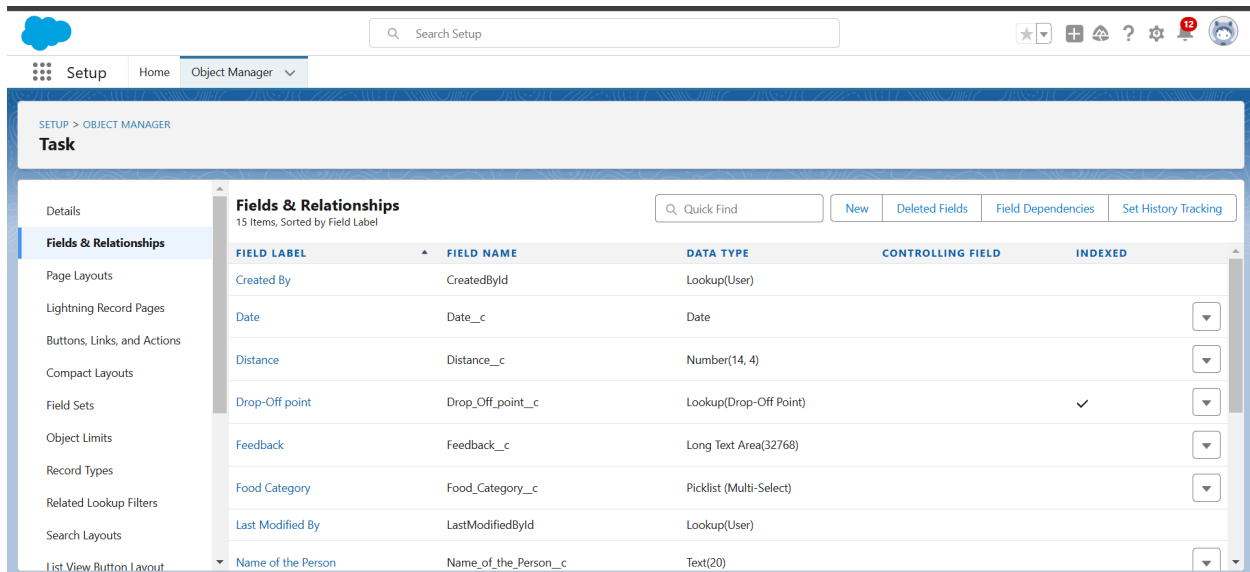
2. Task:

■ **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.



SETUP > OBJECT MANAGER

Task

Details

Fields & Relationships 15 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

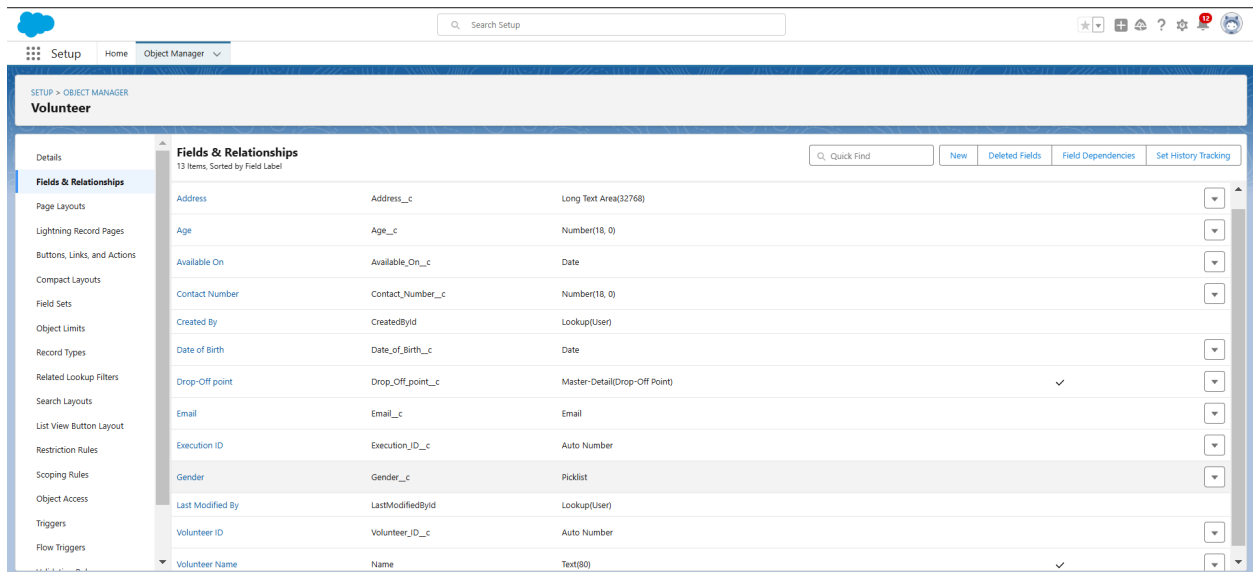
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date	Date_c	Date		
Distance	Distance_c	Number(14, 4)		
Drop-Off point	Drop_Off_point_c	Lookup(Drop-Off Point)		✓
Feedback	Feedback_c	Long Text Area(32768)		
Food Category	Food_Category_c	Picklist (Multi-Select)		
Last Modified By	LastModifiedById	Lookup(User)		
Name of the Person	Name_of_the_Person_c	Text(20)		

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

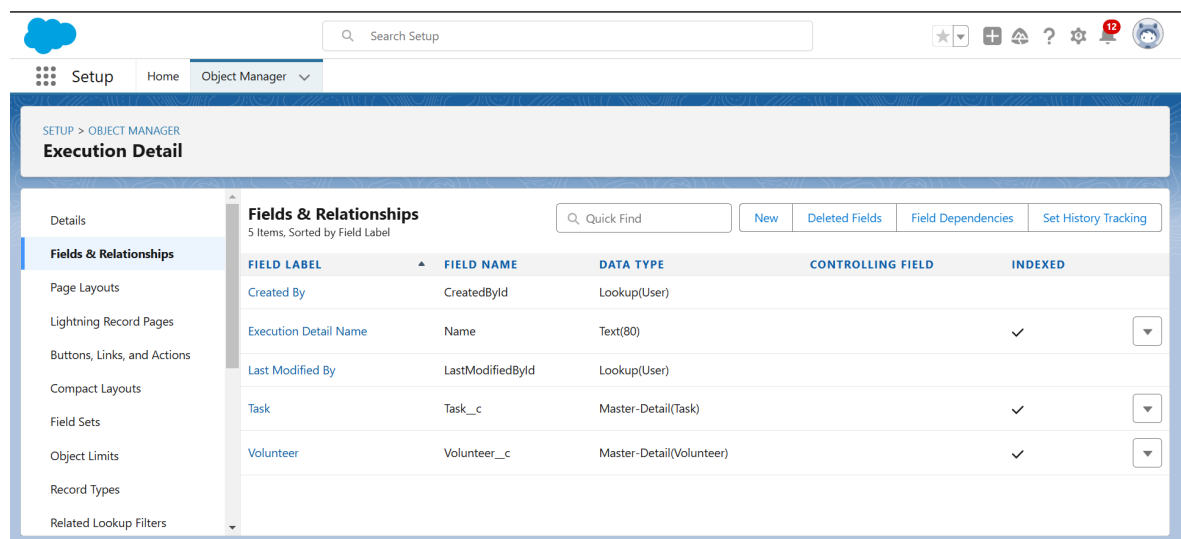
Fields & Relationships
13 Items, Sorted by Field Label

Q 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		
Gender	Gender_c	Picklist		
Last Modified By	LastModifiedById	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 eld for naming the execution detail record.
 - **Volunteer:** A master-detail relationship eld linking to the Volunteer object to associate execution details with a specic volunteer.
 - **Task:** A master-detail relationship eld linking to the Task object to associate execution details with a specic task.
 - **Details:** A text eld for additional information about the execution.



SETUP > OBJECT MANAGER

Execution Detail

Details

Fields & Relationships
5 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)		
Execution Detail Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Task	Task_c	Master-Detail(Task)		✓
Volunteer	Volunteer_c	Master-Detail(Volunteer)		✓

3.Salesforce Key Features and Concepts Utilized

Custom Objects:

These are specific data structures you create in Salesforce to store information. For your project:

- **Drop-Off Points:** Records details of food collection locations.
- **Tasks:** Tracks what needs to be done and who is responsible.
- **Volunteers:** Manages contact information and task assignments.
- **Execution Details:** Links volunteers and tasks for each food distribution.

Relationships:

Defines how these objects interact with each other:

- **Master-Detail Relationship:** A strict relationship where a child object (e.g., Execution Detail) depends on its parent (Volunteer or Task).
- **Lookup Relationship:** A more flexible connection, such as Drop-Off Points being associated with Venues.

Sharing Rules:

These control who can view or edit records. Your project uses criteria-based sharing (e.g., by distance).

The screenshot displays the Salesforce Setup interface. The left sidebar shows the navigation menu with 'Setup' selected. The main content area is titled 'Sharing Settings'. It contains four sections: '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 a table with three rules. Each rule has an 'Action' column with 'Edit' and 'Del' links, a 'Criteria' column with distance-based conditions, a 'Shared With' column with group names, and an 'Access Level' column with 'Read/Write'.

Action	Criteria	Shared With	Access Level
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS THAN 30)	Group_gs	Read/Write
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group_iksha	Read/Write
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group_sg	Read/Write

Custom Tabs

The screenshot shows the Salesforce Setup interface. At the top, there's a search bar labeled 'Search Setup' and a navigation bar with 'Setup', 'Home', and 'Object Manager'. A left sidebar contains a search bar with 'tabs' and a list of categories under 'User Interface', with 'Tabs' selected. The main content area is titled 'Custom Tabs' and includes a 'Help for this Page' link. Below the title, there's a brief explanation of custom tabs. A section titled 'Custom Object Tabs' features a table with columns for Action, Label, Tab Style, and Description. The table lists five tabs: Drop-Off Points (Boat style), Execution Details (Box style), Tasks (Desk style), Venues (Apple style), and Volunteers (Mail style). Each row has 'Edit' and 'Del' links in the Action column.

Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Custom Object Tabs [New](#) [What Is This?](#)

Action	Label	Tab Style	Description
Edit Del	Drop-Off Points	Boat	
Edit Del	Execution Details	Box	
Edit Del	Tasks	Desk	
Edit Del	Venues	Apple	
Edit Del	Volunteers	Mail	

Flows and Dashboards:

- **Flow:** Automates data entry and processes, like recording venue details.
- **Dashboards:** Summarize and visualize key metrics, such as the number of drop-offs or task completion rates.

A tab is like a user interface that is used to build records for objects and to view the records in the objects.

4. Detailed Steps to Solution Design

Describes how the solution was built, step-by-step:

Custom Object Creation:

- Each object (like Drop-Off Point or Volunteer) was created in Salesforce's Object Manager, with specific fields and relationships defined.

Sharing Rules:

- Configured in Sharing Settings to ensure the right people (Iksha, GS, etc.) have access based on distance.

Lightning App Builder Configuration:

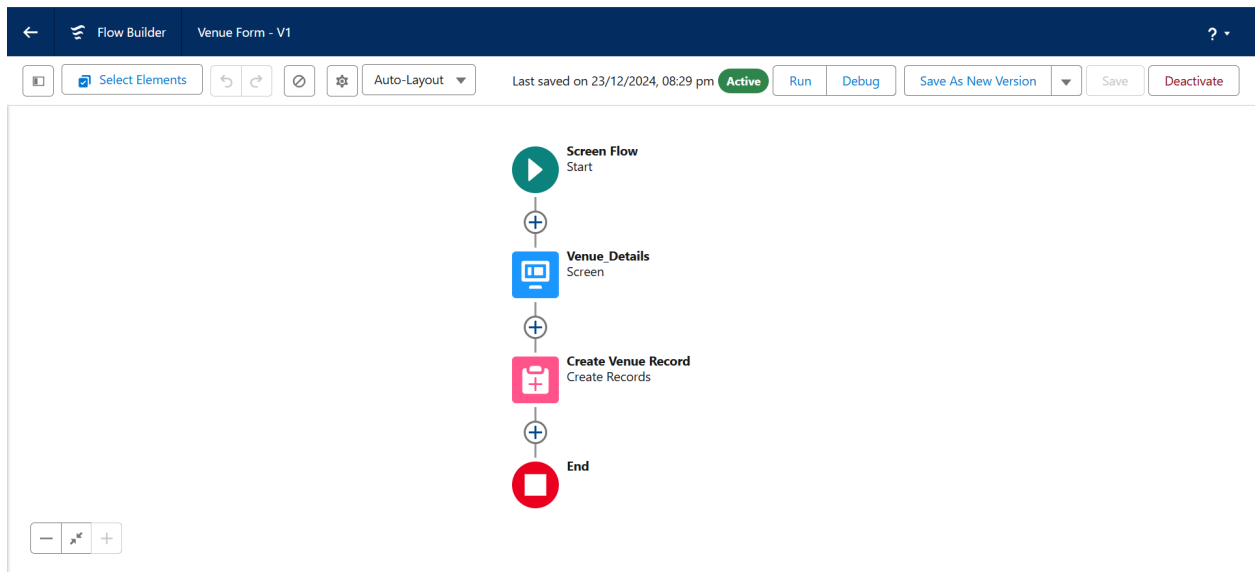
- Created a "Home Page" that includes flows and dashboards for easier navigation.

Report Types and Dashboards:

- Custom reports link different objects for analysis, and dashboards present this data in an easy-to-understand format.

Flows Diagram

- 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.

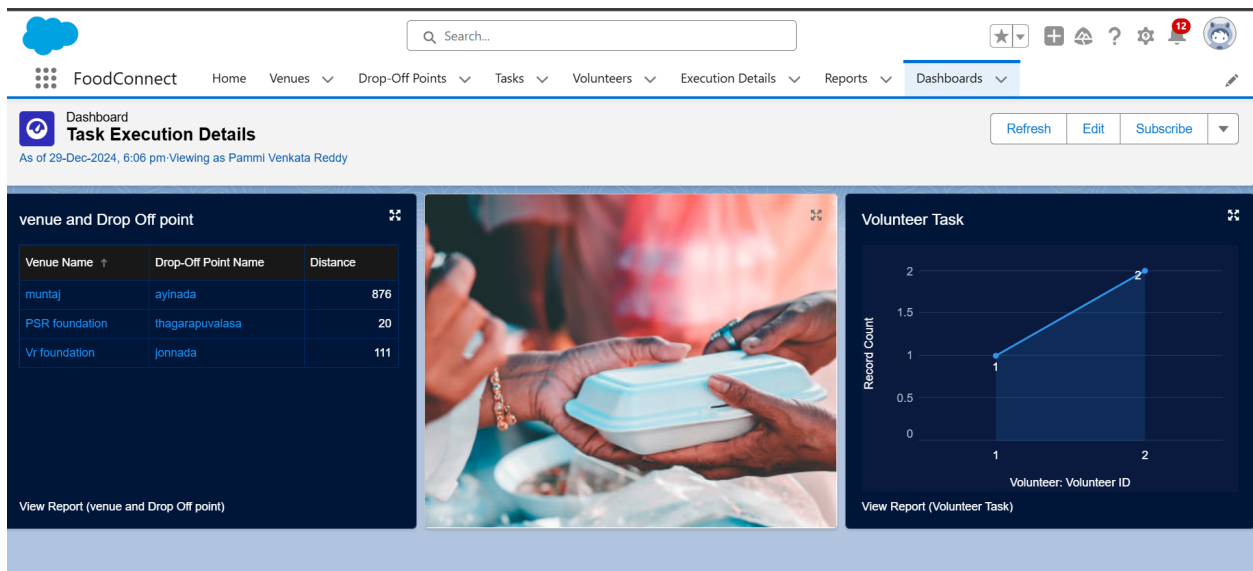


- **Dashboard:**

- **Name:** Task Execution Details

- **Components:**

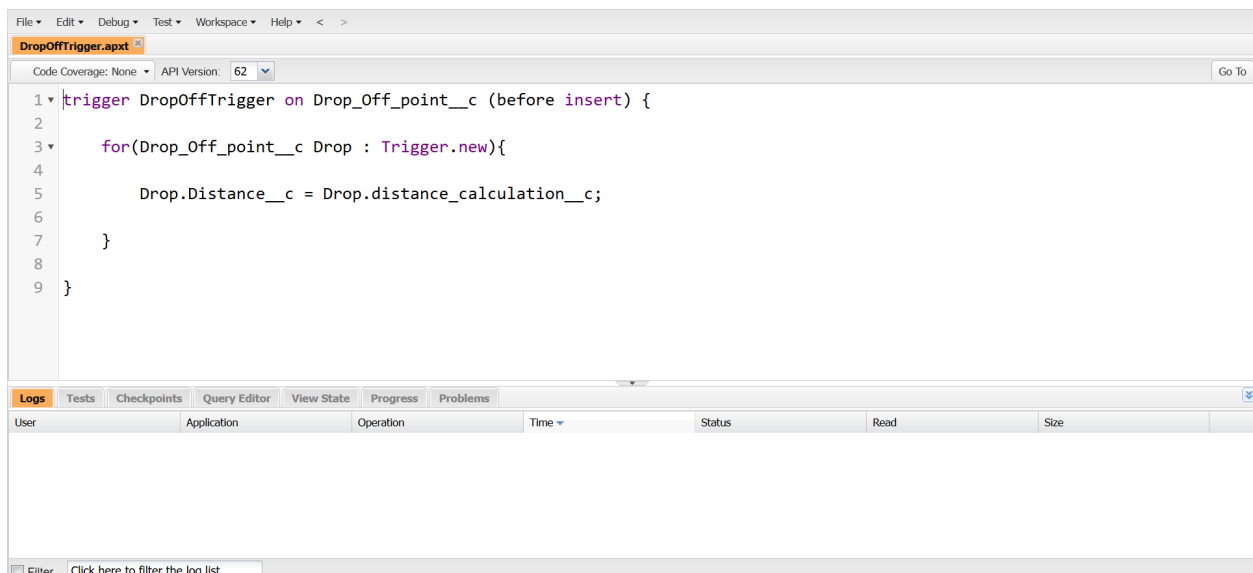
- Lightning Table: Displays detailed information about venues and drop-off points, facilitating a comprehensive view of the data.



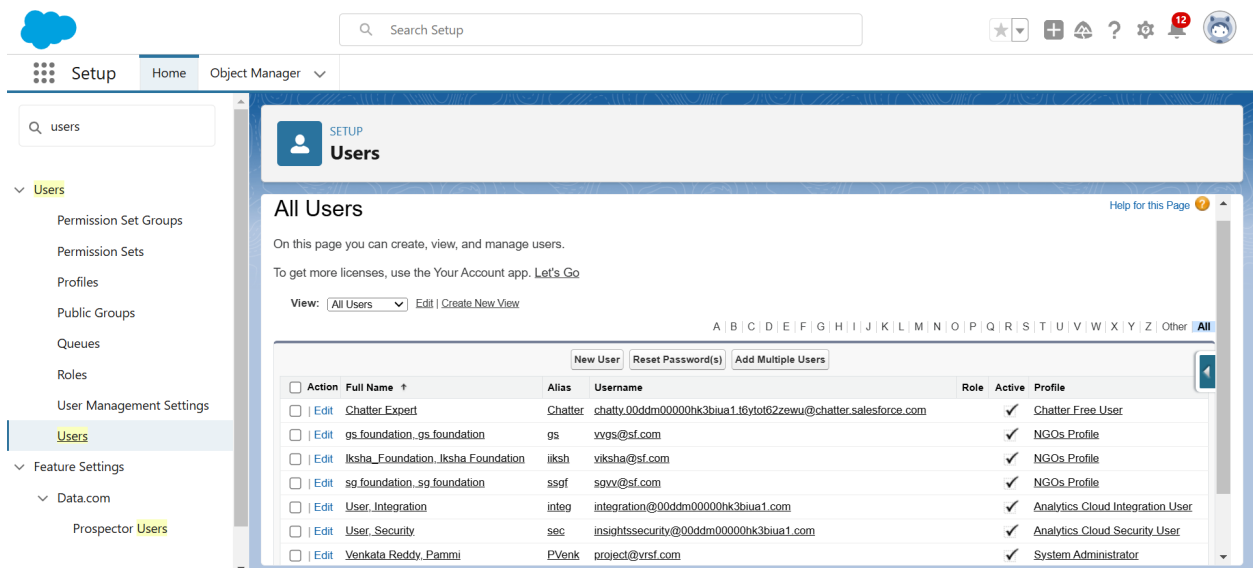
5. Testing and Validation

Ensures that the system works as intended:

- Unit Testing: Verifies that each component (e.g., Apex triggers, workflows) operates correctly.
- UI Testing: Checks the user interface for errors or usability issues.



```
1 trigger DropOffTrigger on Drop_Off_point__c (before insert) {
2
3     for(Drop_Off_point__c Drop : Trigger.new){
4
5         Drop.Distance__c = Drop.distance_calculation__c;
6
7     }
8
9 }
```



Setup

Search Setup

Users

All Users

On this page you can create, view, and manage users.

To get more licenses, use the Your Account app. Let's Go

View: All Users Edit Create New View

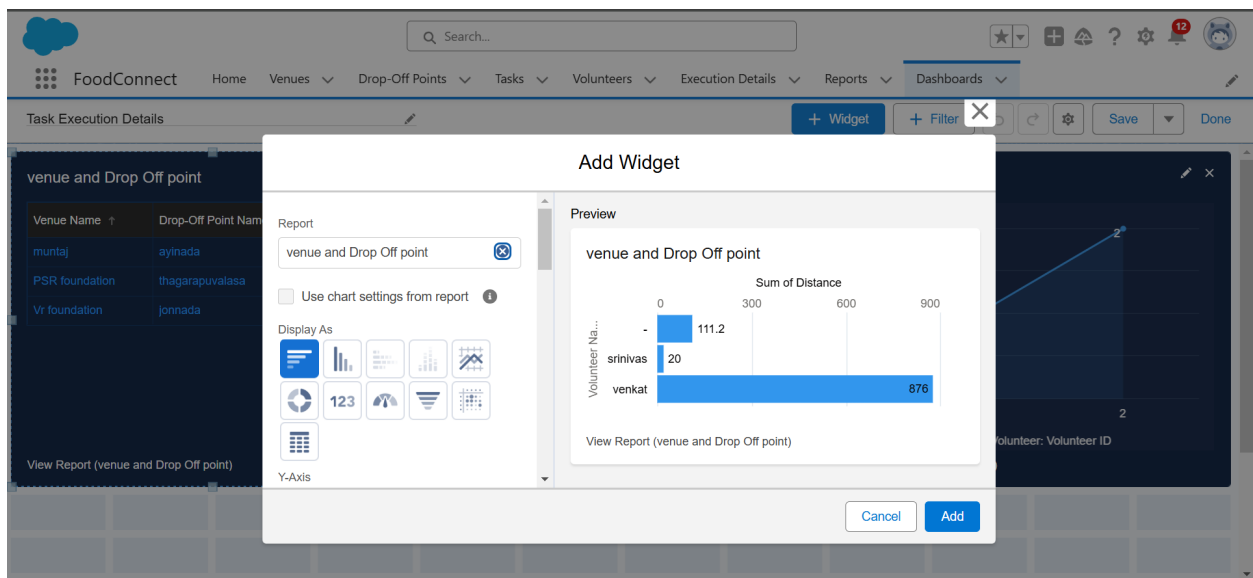
Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty.00ddm00000hk3biua1.f6yot62zewu@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	gs.foundation.gs.foundation	gs	vggs@sf.com		✓	NGOs Profile
<input type="checkbox"/> Edit	iksha.Foundation.Iksha.Foundation	iksh	viksha@sf.com		✓	NGOs Profile
<input type="checkbox"/> Edit	sg.foundation.sg.foundation	ssgf	sgvv@sf.com		✓	NGOs Profile
<input type="checkbox"/> Edit	User.Integration	integ	integration@00ddm00000hk3biua1.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User.Security	sec	insightssecurity@00ddm00000hk3biua1.com		✓	Analytics Cloud Security User
<input type="checkbox"/> Edit	Venkata.Reddy.Pammi	PVenk	project@vrsf.com		✓	System Administrator

6. Key Scenarios Addressed by Salesforce

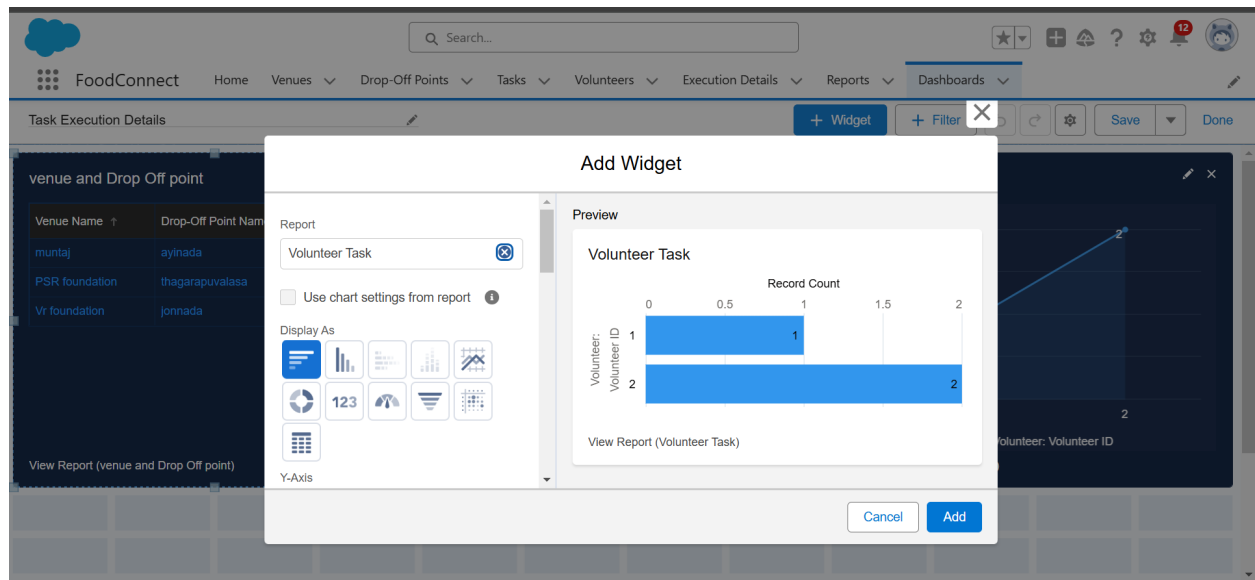
This is a use-case analysis showing how the project addresses real-world challenges:

- Food Distribution Coordination: Tracks where food is dropped off and which tasks are related.
- Volunteer Management: Links tasks to specific volunteers for accountability.
- Data Visibility: Dashboards and reports provide insights into operations, helping improve decision-making

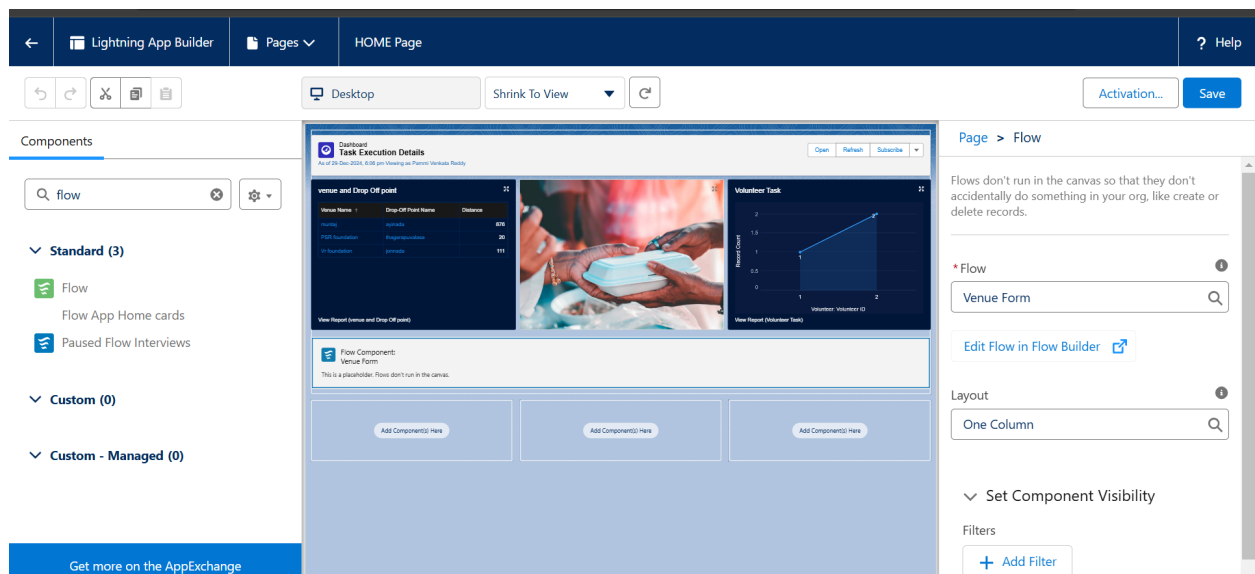
Adding Venue and Drop Off Point Report to The Dashboard



Adding Volunteer Task Graph to the Dashboard



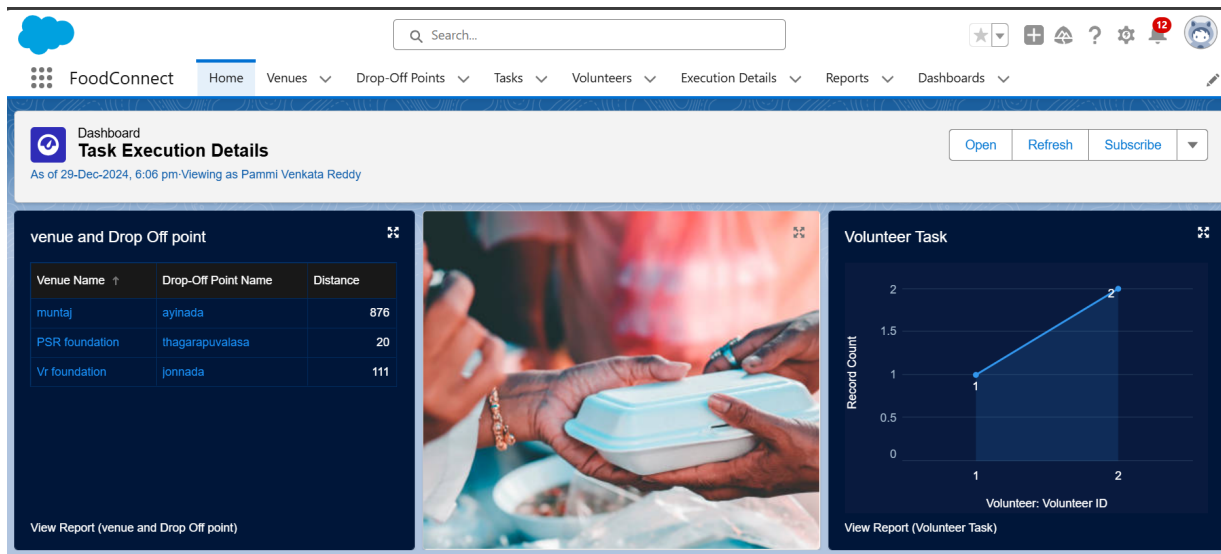
Adding Flow to Home page using Lightning app Builder



7.Conclusion

A brief summary of what the project achieved:

- Outcome: A functional Salesforce application that enhances food distribution efficiency.
- Impact: Improved coordination and transparency in food donation efforts.



The screenshot displays the 'Venue Form' in the FoodConnect application. The form includes fields for Venue Name, Email, Phone, Venue Location, Latitude, and Longitude, along with a 'Next' button.

Venue Form

Venue Name

Email

Phone

Venue Location

Latitude

Longitude

Next

Dashboard

Task Execution Details

As of 29-Dec-2024, 6:06 pm-Viewing as Pammi Venkata Reddy

Open

Refresh

Subscribe

FoodConnect

Home

Venues

Drop-Off Points

Tasks

Volunteers

Execution Details

Reports

Dashboards

Search...

★

+

?

⚙

12

muntaj

ayinada

876

PSR foundation

thagarapuvallasa

20

Vr foundation

jonnada

111

View Report (venue and Drop Off point)

View Report (Volunteer Task)

Venue Form

Venue Name

Email

you@example.com

Phone

Venue Location

Latitude

Longitude

Next

By leveraging the Salesforce platform, the project successfully established a streamlined and transparent system for managing surplus food donations. Through efficient coordination with volunteers and timely delivery to beneficiaries, the project effectively addressed food insecurity while maximizing the utilization of available resources.