PROJECT TITLE :

TO SUPPLY LEFTOVER FOOD TO POOR

COLLEGE NAME: SUGUNA COLLEGE OF ARTS & SCIENCE

COLLEGE CODE: brubk

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INTRODUCTION:

Food waste is a significant global issue, with millions of tons of edible food discarded every year, while millions of people face hunger and food insecurity. This disparity highlights the need for innovative solutions that can bridge the gap between food surplus and hunger. The Salesforce project, designed to supply leftover food to the poor, addresses this challenge by creating an organized, efficient, and scalable platform for food redistribution.

The project leverages Salesforce's comprehensive CRM and automation capabilities to connect food donors—such as restaurants, hotels, and event venues—with organizations that serve the underprivileged, including NGOs, shelters, and community kitchens. The platform simplifies the process of donating surplus food, ensuring that it reaches those in need promptly and safely. By automating notifications, optimizing logistics, and providing real-time tracking, the system minimizes food spoilage and ensures that surplus food is distributed where it can have the most impact.

This introduction sets the stage for a solution that not only reduces food waste but also contributes to social welfare by feeding the hungry. The Salesforce-based platform aims to create a sustainable, replicable model that can be adapted by communities worldwide, ultimately

fostering a more equitable distribution of resources and addressing the critical issue of food insecurity.

DEVELOPMENT PHASE :

Creating Developer Account: By using this URL

https://www.salesforce.com/form/developer-signup/?d=pd

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Role*
Your job role

Company*
Company Name

OBJECT

Salesforce objects are key components used to store and manage data within the Salesforce platform. There are two main types:

1. Standard Objects: Pre-built objects provided by Salesforce, such as:
   a. Account: Stores information about organizations like food donors or recipient NGOs.
   b. Contact: Holds details about individuals associated with these organizations.

c. Opportunity: Tracks potential food donations through various stages.

d. Case: Manages issues that arise during the food distribution process.

2. Custom Objects: User-defined objects tailored to specific needs, such as:

- Venue: Stores information about locations where surplus food is available, such as restaurants, hotels, or event sites.
- Dropoff Point: Captures details of locations where food will be delivered, such as shelters, NGOs, or community kitchens.

- Task: Manages specific actions or steps needed in the food redistribution process, like scheduling pickups, coordinating with volunteers, or confirming deliveries.

- Volunteer: Tracks details about individuals who are helping with the food distribution, including their availability, assigned tasks, and contact information.

- Execution Details: Holds information on the actual implementation of food distribution activities, including logistics, timing, and any issues encountered during the process.
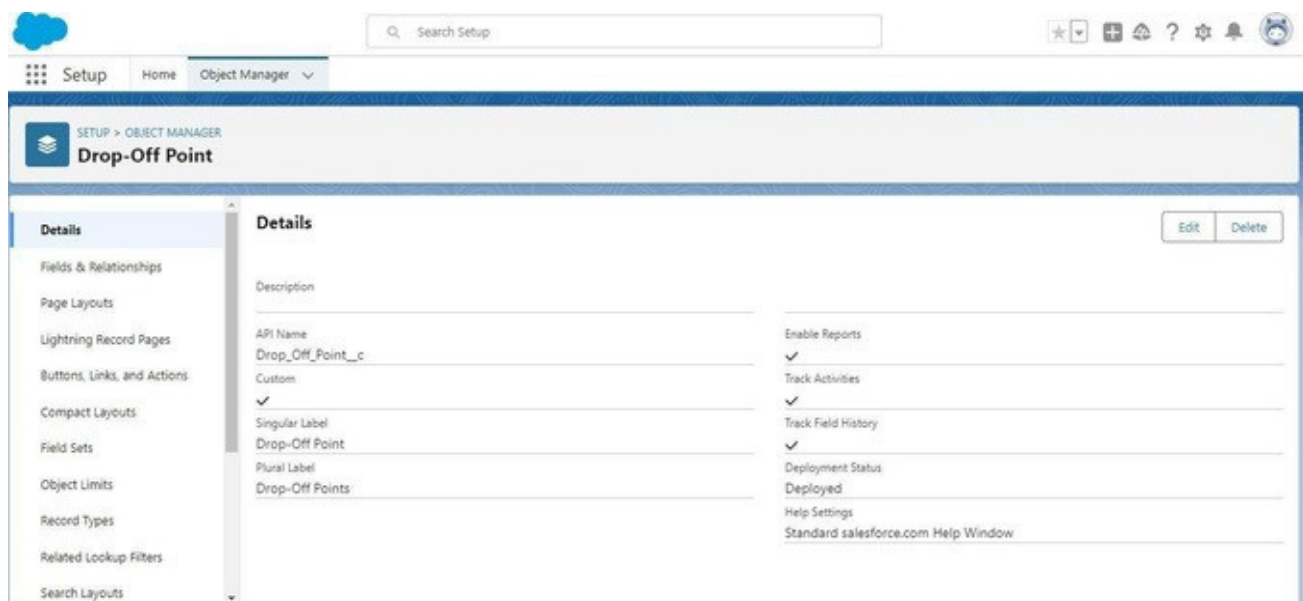
1. Create Customer DetailsObject

To create an object:

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

Enter the label name >> Customer Details Plural label name >> Customer Details

Enter Record Name Label and Format Record Name >> Customer Name Data Type >> Text
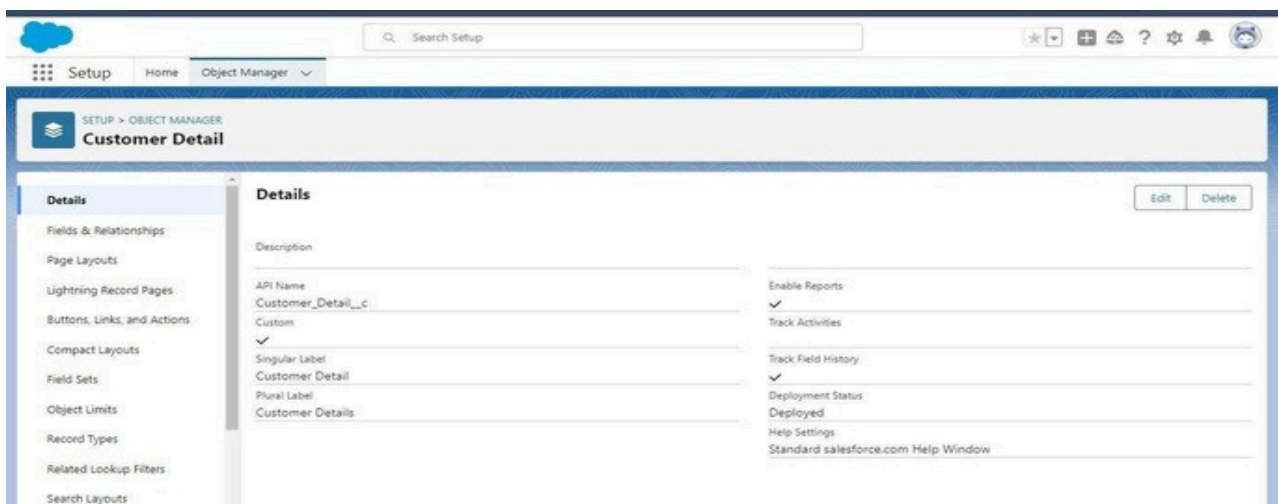
Click on Allow reports and Track Field History, Allow search >> Save

1. **Create Venue Object**

To create an object:
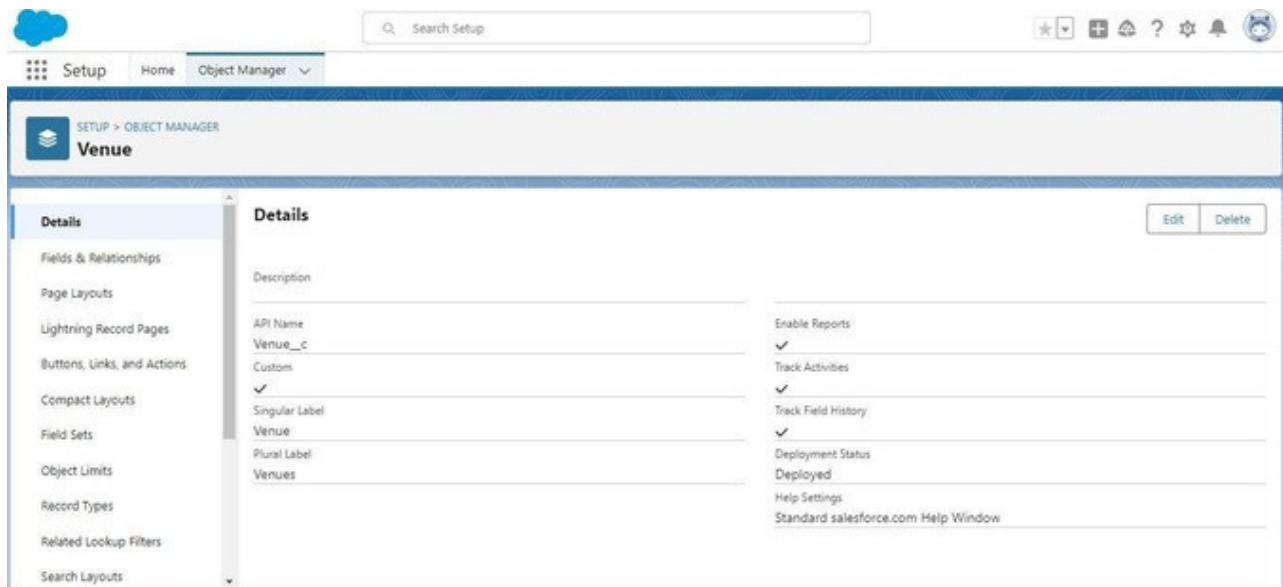
From the setup page >> Click on Object Manager >> Click on Create >>Click on Custom Object.

Enter the label name >> Venue Plural label name >> Venues

Enter Record Name Label and Format Record Name >> Venue Name

Data Type >> Text

Click on Allow reports and Track Field History,Allow Activities. Allow search >> Save.

1. Create Drop-Off Point Object

Tocreate anobject:

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

Enter the label name >> Drop-Off Point Plural label

name>> Drop-Off Points Enter Record Name Label and

Format Record Name >> Drop-Off point Name Data

Type >> Text

Click on Allow reports and Track Field History,Allow

Activities Allow search >> Save.

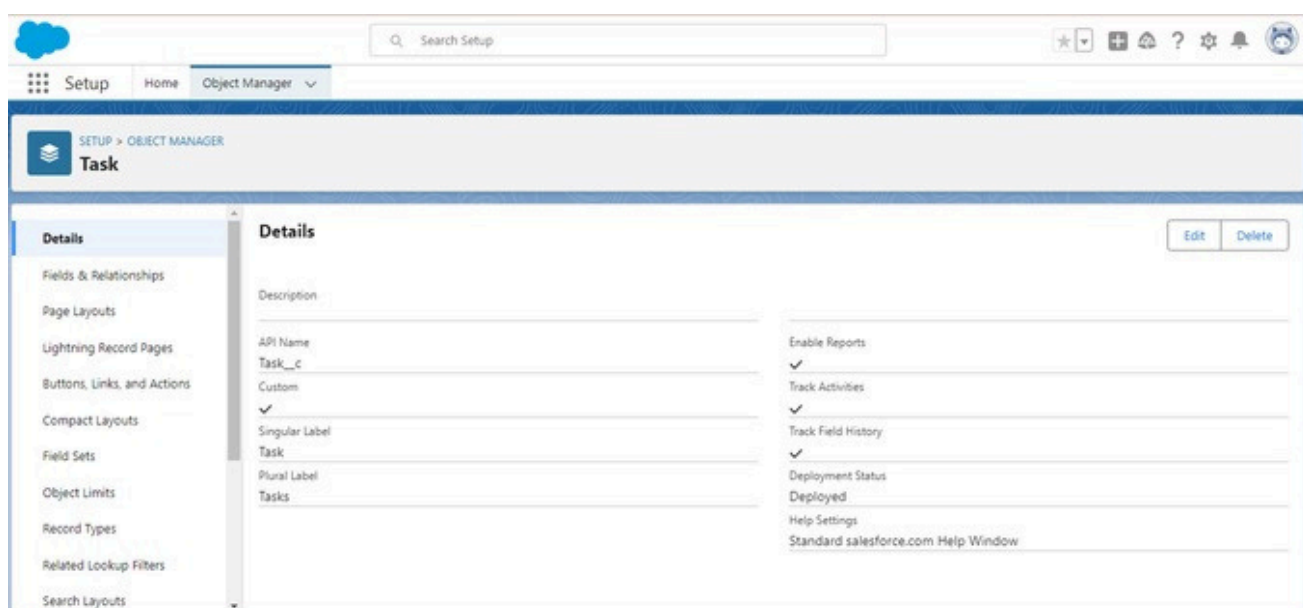# 1. Create Task Object

To create an object:

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

Enter the label name>> Task Plural label name>> Tasks

Enter Record Name Label and Format Record Name >>

Task Name

Data Type >> Text

Click on Allow reports and Track Field History,Allow

Activities Allow search >> Save.

5.Create Volunteer Object

To create an object:

From the setup page >> ClickonObject Manager>> Click on Create >> Click on Custom Object.

Enter the label name>> Volunteer Plural label name>>

Volunteers

Enter Record Name Label and Format Record Name >>

Volunteer Name Data Type >> Text

Click on Allow reports and Track Field History, Allow

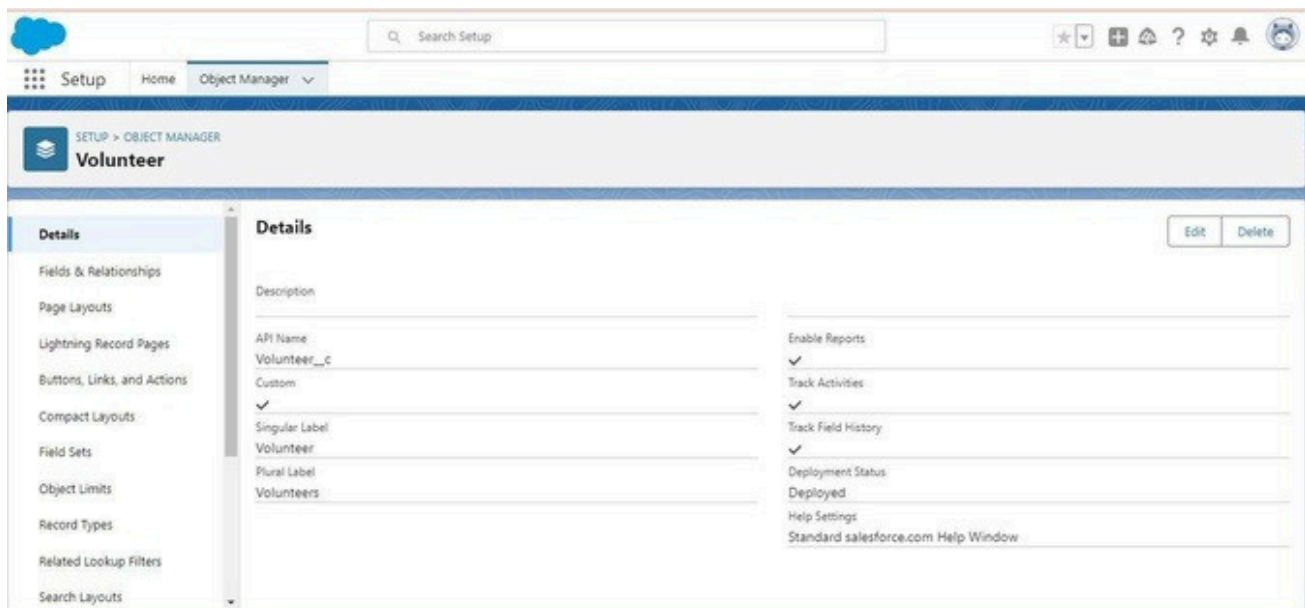Activities Allow search >> Save.

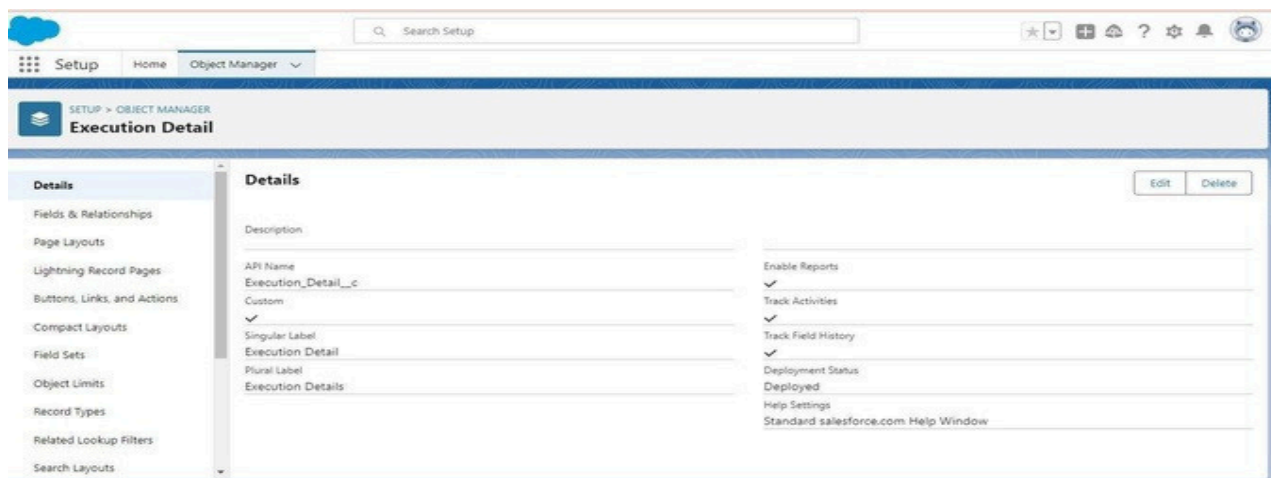## 1. Create Execution Details Object

To create an object:

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

Enter the label name >> Execution Detail Plural label name >> Execution Details Enter Record Name Label and Format Record Name >> Execution Detail Name Data Type >> Text

Click on Allow reports and Track Field History, Allow Activities Allow search >> Save.

TABS

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

Creating a Custom Tab

To create a Tab:

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab) (Venue)
2. Select Object(Venue) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click save
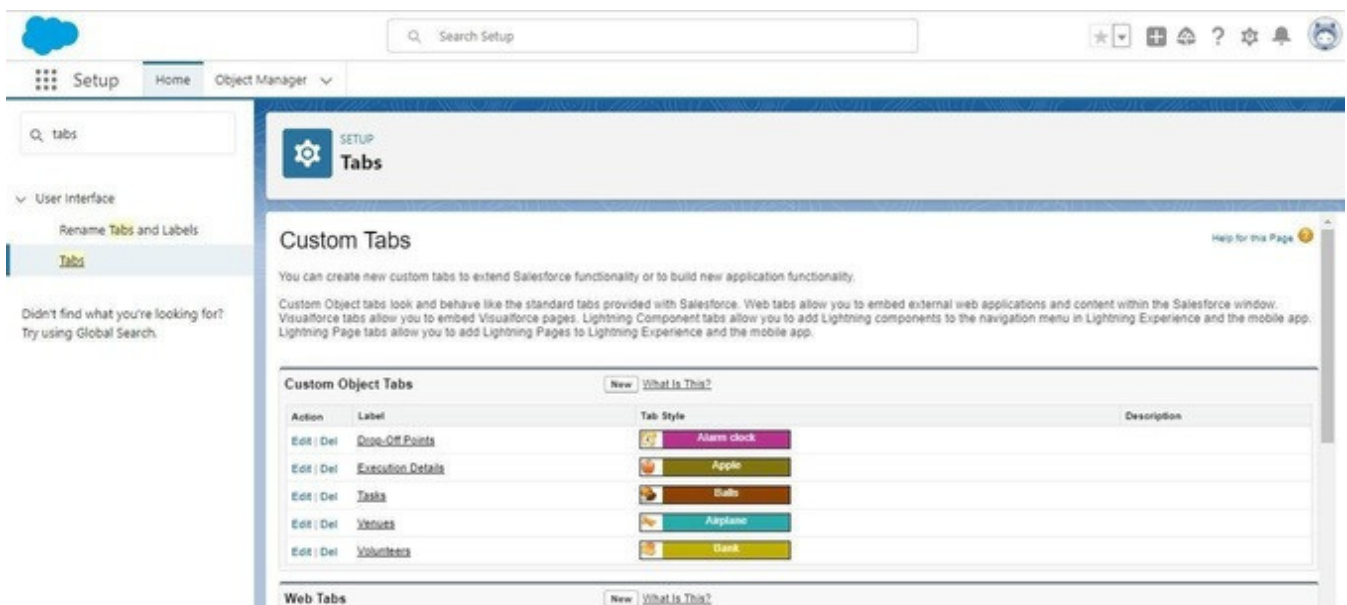
Creating Remaining Tabs

1. Now create the Tabs for the remaining Objects, they are "Drop-Off Point, Task, Volunteer, Execution Details".
2. Follow the same steps as mentioned above

THE LIGHTNING APP

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

Create a Lightning App

To create a lightning app page:

1. Go to setup page >> search "app manager" in quick find >> select "app manager" >> click on New lightning App.

1. Fill the app name in app details and branding as follow
   App Name : FoodConnect

Developer Name : This will auto populated

Image : optional (if you want to give any image you can otherwise not mandatory) Primary color hex value : keep this default.

1. Then click Next >> (App option page)Set Navigation Style as Standard Navigation >> Next.

1. (Utility Items) keep it as default >> Next.

1. To Add Navigation Items:

Search for the item in the (Home, Venue, Drop-Off Point, Task, Volunteer, Execution Details, Reports) from the search bar and move it using the arrow button >> Next >> Next.

1. To Add User Profiles:

Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.
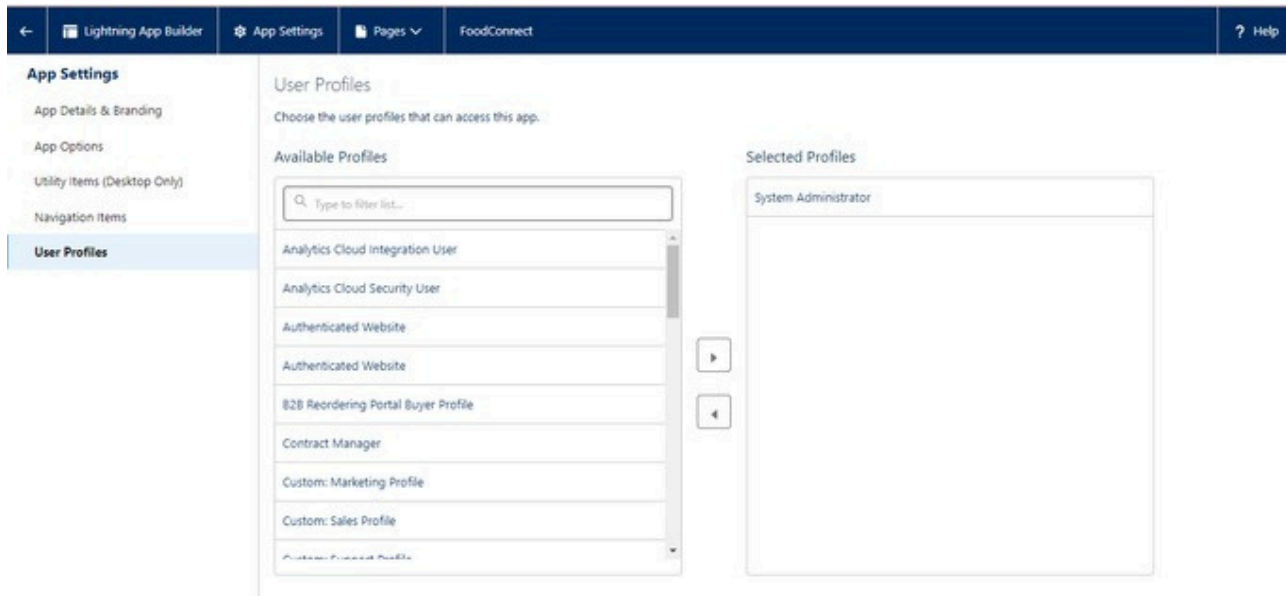
FIELDS

Creation of Lookup Relationship Field on Volunteer Object :

1. Go to setup >> click on Object Manager >> type object name(Volunteer) in the search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Master Detail relationship
4. Select the related object "Drop-Off point" and click next.
5. Field Name : Drop_Off_point
6. Field label : Auto generated

7. Next>>Next>>Save.

1.

1.

Next >> Next >> Save.

FLOWS

Create Flow to create a record in Venue object

1. Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.
2. Select the Screen flow. Click on create.
3. Click on the '+' icon in between start and end, and click on screen element.
4. Under the Screen Properties: Label : Venue Details

API Name : Venue_Details

1. Now lets add components in this flow. Click on Text Component and name it as: Label : Venue Name

API Name : Venue_Name

1. Click on Email Component and name it as: Label : Email

API Name : Contact_Email

1. Click on Phone Component and name it as: Label : Phone

API Name : Contact_Phone

1. Click on Text Component and name it as: Label : Venue Location

API Name : Venue_Location

1. Click on Number Component and name it as: Label : Latitude

API Name : Latitude

1. Click on Number Component and name it as: Label : longitude

API Name : longitude

1. Next click on Done. This would like below
2. Click on the '+' icon in between Venue details and end, and click on create record element.
3. Now label it as

Label : Create Venue Record

API Name : Create_Venue_Record How Many Records to Create : One

How to Set the Record Fields : Use separate resources, and literal values Object : Venue

Set Field Values for the Venue : Click on 'Add Field' 5 times Field : Value = Contact_Email c : {!Contact_Email.value} Field : Value = Contact_Phone c : {!Contact_Phone.value} Field : Value = Name : {!Venue_Name}

Field : Value = Venue_Location c : {!location} Field : Value = Location Latitude s : {!latitude}

Field : Value = Location Longitude s : {!longitude}
—

1. This would look like:
2. Click on Save as:

Flow Label : Venue Form Flow API Name : Venue_Form
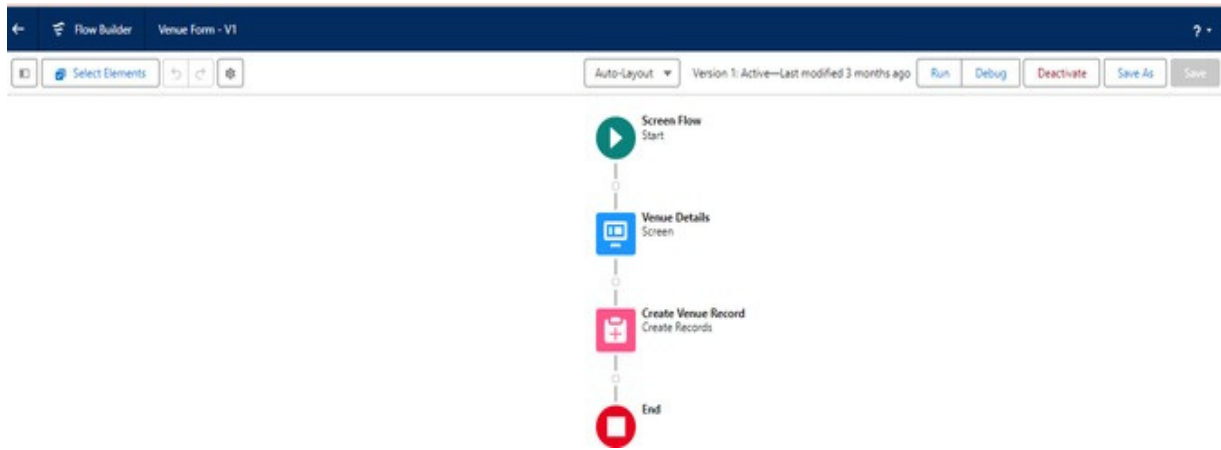
TRIGGERS
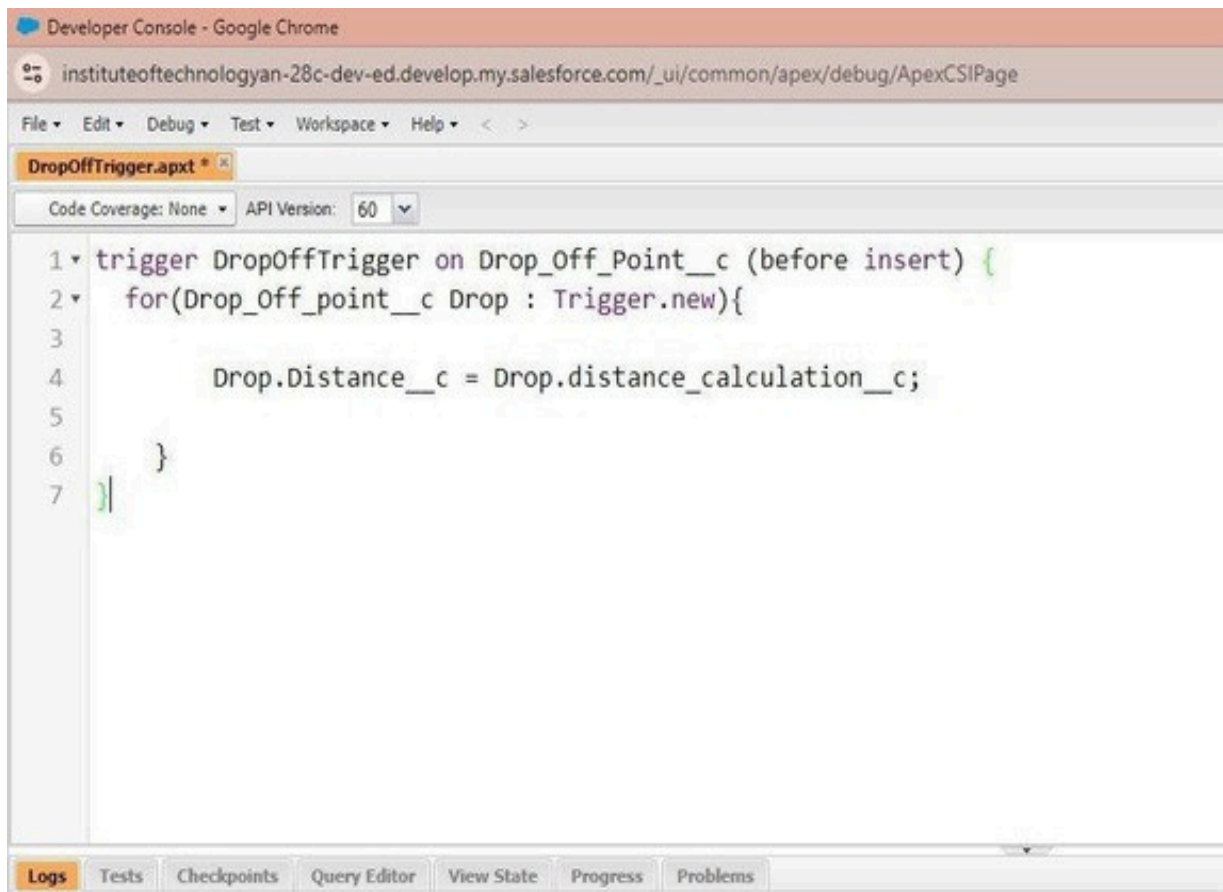
Create a Trigger

1. Log into the trailhead account, navigate to the gear icon in the top right corner.

1. Click on developer console and you will be navigated to a new console window.

1. Click on the File menu in the toolbar, and click on new >> Trigger.

1. Enter the trigger name and the object to be triggered.

1. Enter Name : DropOffTrigger sObject: Drop-Off Point
2. Click on Submit.

To create a matching rule to an Customer details Object

1. Go to quick find box in setup and search for matching Rule.
2. Click on matching rule >> click on New Rule.
3. Select the object as Customer details and click Next.
4. Give the Rule name : Matching customer details
5. Unique name : is auto populated
6. Define the matching criteria as
7. FieldMatching Method
   a. GmailExact
   b. Phone NumberExact

1. Click save.
2. After saving click on activate

PROFILES

1. Go to setup page >> type Profiles in Quick Find bar >> click on Profiles >> click on 'S'
2. Click on Clone beside Standard Platform User.
3. Under Clone Profile: Profile Name : NGOs Profile
4. Then click on Save
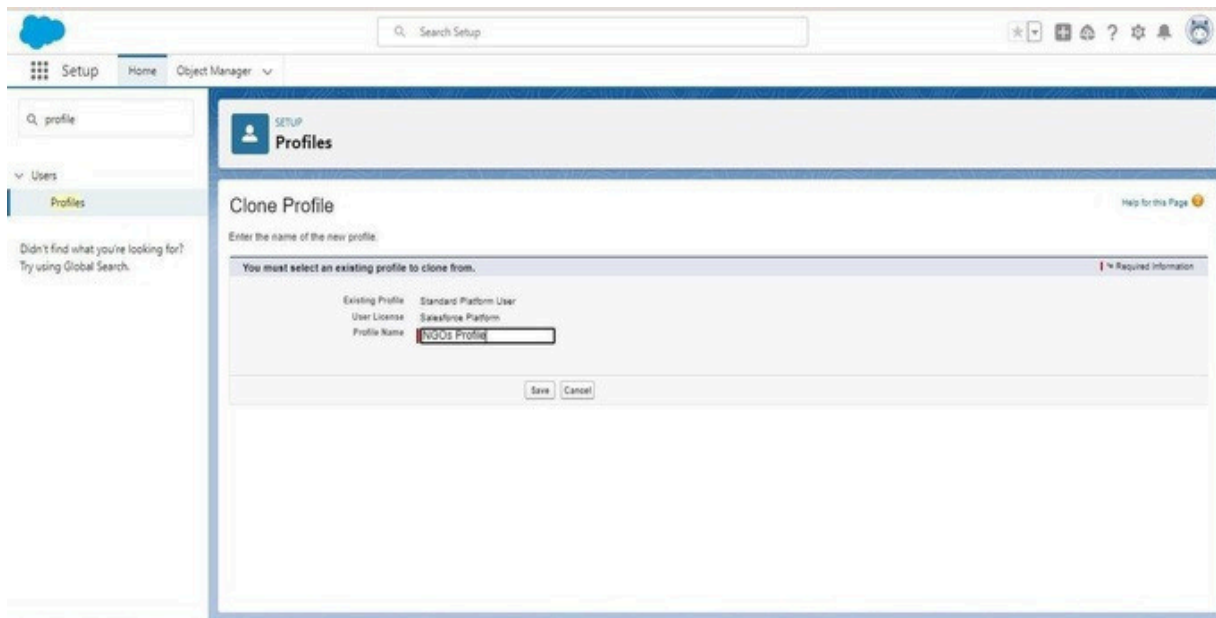
CREATION OF USERS

In our Project we consider them as NGO's

Creation of User1

1. Go to setup page >> type users in Quick Find bar >> click on users>> New user.
2. In General Information give details as: (Note : create users as per your wish NGO's) First Name : Iksha Foundation

Last Name : Iksha_Foundation Alias : iiksh

Email : Give Your Email

Username : ikshafoundation@sb.com (give the username different) Nickname : Auto Populated

User License : Salesforce Platform Profile : NGOs Profile

Active : Check

1. Click on Save
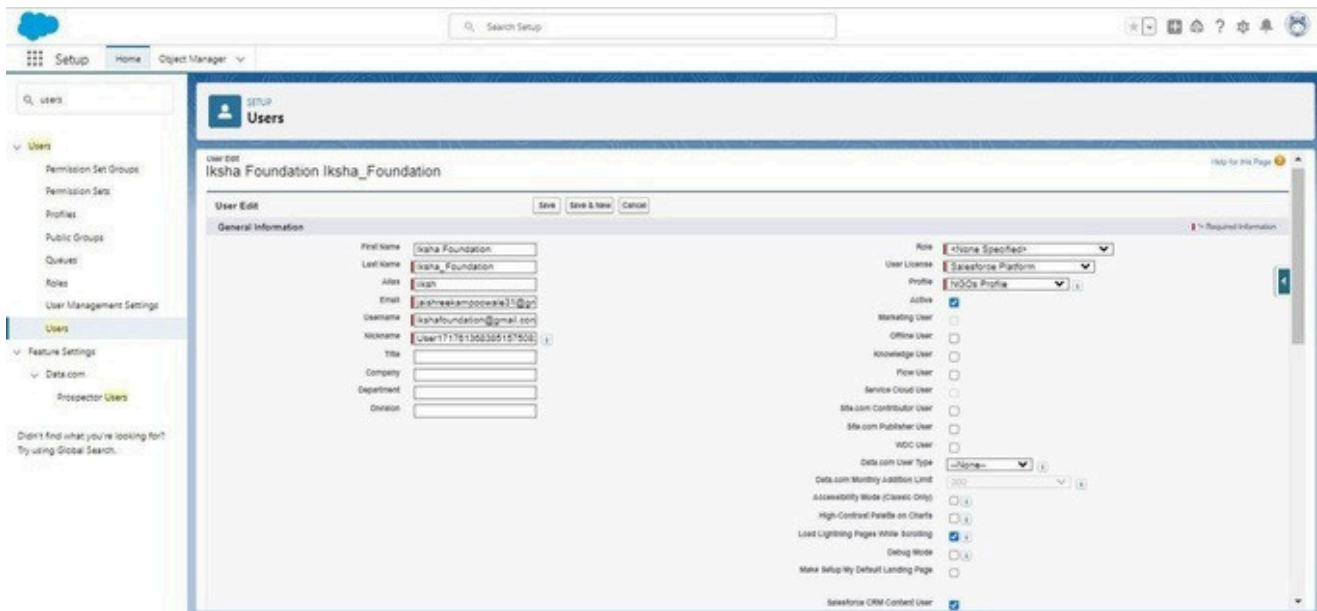
Creation of User2, User3

1. Create another Two Users by following steps in Activity - 1 with similar User License and Profile.
2. Give Different First Name, Last Name based on Different NGO's.

PUBLIC GROUPS

Creation of Public Group 1

1. Go to setup page >> type Public Groups in Quick Find bar >> click on Public Groups >> click on New.
2. Under Group Information: Label : Iksha

Group Name : Iksha

Grant Access Using Hierarchies : Check

1. In Search, Select Users.
2. In Selected Members Add Iksha Foundation and System Administrator
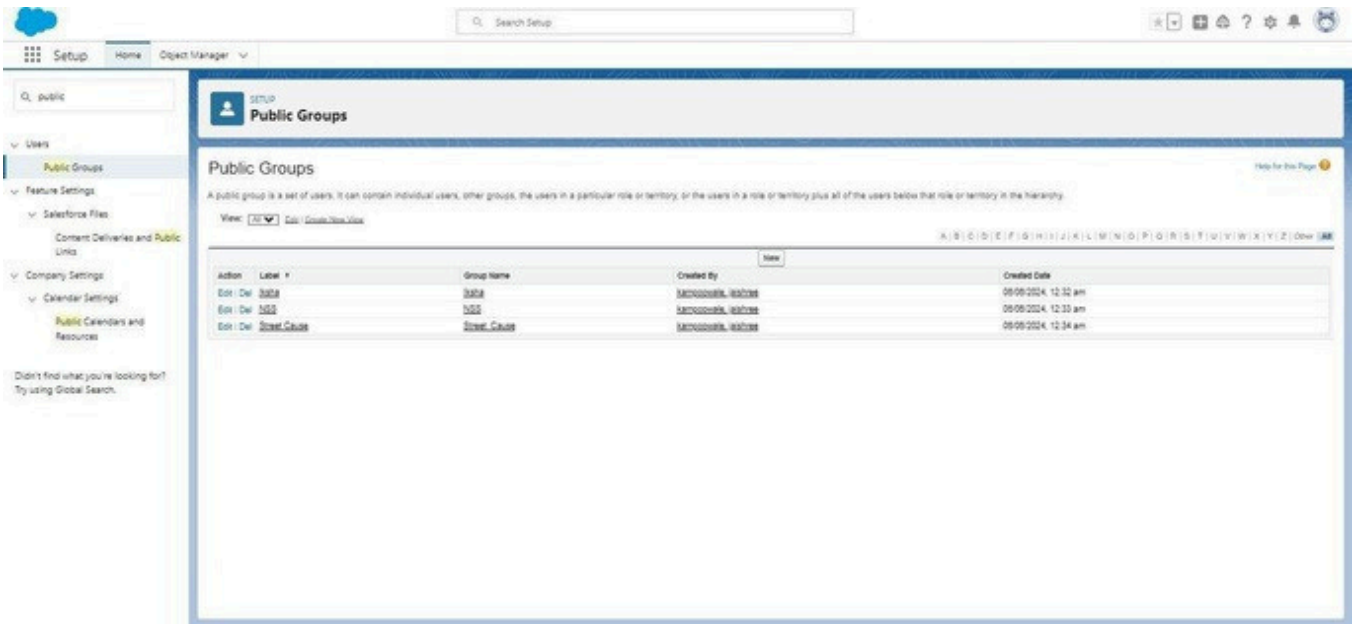
Creation of Public Group 2

1. By Following Steps in Activity 1, Create other two Public Groups for other two users.
2. After Saving this would look like this.

REPORT TYPES

Creation of Report Types

1. Go to setup page >> type Report Types in Quick Find bar >> click on Report Types >> click on Continue>> Click on New Custom Report Type.
2. In Define the Custom Report Type: Primary Object : Select Venues

Report Type Label : Venue with DropOff with Volunteer

Report Type Name : Venue_with_DropOff_with_Volunteer
Description : Venue with DropOff with Volunteer

Store in Category : Select Other Reports Deployment Status :

Deployed

1. Click on Next
2. Near Click to relate another Object Select Drop-Off Points.
3. And also select "A" records may or may not have related "B" records.
4. Now again Near Click to relate another Object Select Volunteers.
5. Now click on Save

Setup   Home   Object Manager ∨

Q report

- ∨ Feature Settings
  - ∨ Analytics
    - ∨ Reports & Dashboards
      - Access Policies
      - Historical Trending
      - **Report Types**
      - Reporting Snapshots
      - Reports and Dashboards Settings
- ∨ Security
  - Guest User Sharing Rule Access Report

Didn't find what you're looking for?
Try using Global Search.

SETUP
Report Types

Edit Custom Report Type
Venue with DropOff with Volunteer

Help for this Page ?

Define the Custom Report Type   Save   Cancel

Report Type Focus

I = Required Information

Primary Object   Venues

Identification

Report Type Label   Venue with DropOff with Volunteer

Report Type Name   Venue_with_DropOff_with_   i

Note: Description will be visible to users who create reports.

Description   Venue with DropOff with Volunteer

Report Type Category   Other Reports ∨

Deployment

A report type with deployed status is available for use in the report wizard. While in development, report types are visible only to authorized administrators and their delegates.

Deployment Status   ○ In Development
                    ● Deployed

Save   Cancel

Setup   Home   Object Manager ∨

Q report

- ∨ Feature Settings
  - ∨ Analytics
    - ∨ Reports & Dashboards
      - Access Policies
      - Historical Trending
      - **Report Types**
      - Reporting Snapshots
      - Reports and Dashboards Settings
- ∨ Security
  - Guest User Sharing Rule Access Report

Didn't find what you're looking for?
Try using Global Search.

SETUP
Report Types

Edit Custom Report Type
Volunteers with Execution Details and Tasks.

Help for this Page ?

Define the Custom Report Type   Save   Cancel

Report Type Focus

I = Required Information

Primary Object   Volunteers

Identification

Report Type Label   Volunteers with Execution Details and Tasks.

Report Type Name   Volunteers_with_Execution_   i

Note: Description will be visible to users who create reports.

Description   Volunteers with Execution Details and Tasks.

Report Type Category   Other Reports ∨

Deployment

A report type with deployed status is available for use in the report wizard. While in development, report types are visible only to authorized administrators and their delegates.

Deployment Status   ○ In Development
                    ● Deployed

Save   Cancel

REPORTS

Creation of Report on Venue with DropOff with Volunteer

1. Go to the app(FoodConnect) >> click on the reports tab
2. Click on New Folder.

Folder Label : Custom Reports

Folder Unique Name : CustomReports

1. Open Custom Reports and click on New Report
2. Select Report Type : Venue with DropOff with Volunteer
3. Then click on Start Report.
4. In GROUP ROWS : Add Volunteer Name
5. In Columns : Add Venue Name, Drop-Off point Name, Distance.
6. Now click on Save & Run.
7. Give Label as :
8. Report Name : venue and Drop Off point
9. Report Unique Name : Auto Populated

10. Click on Select Folder and select Custom Report, then click on Save.
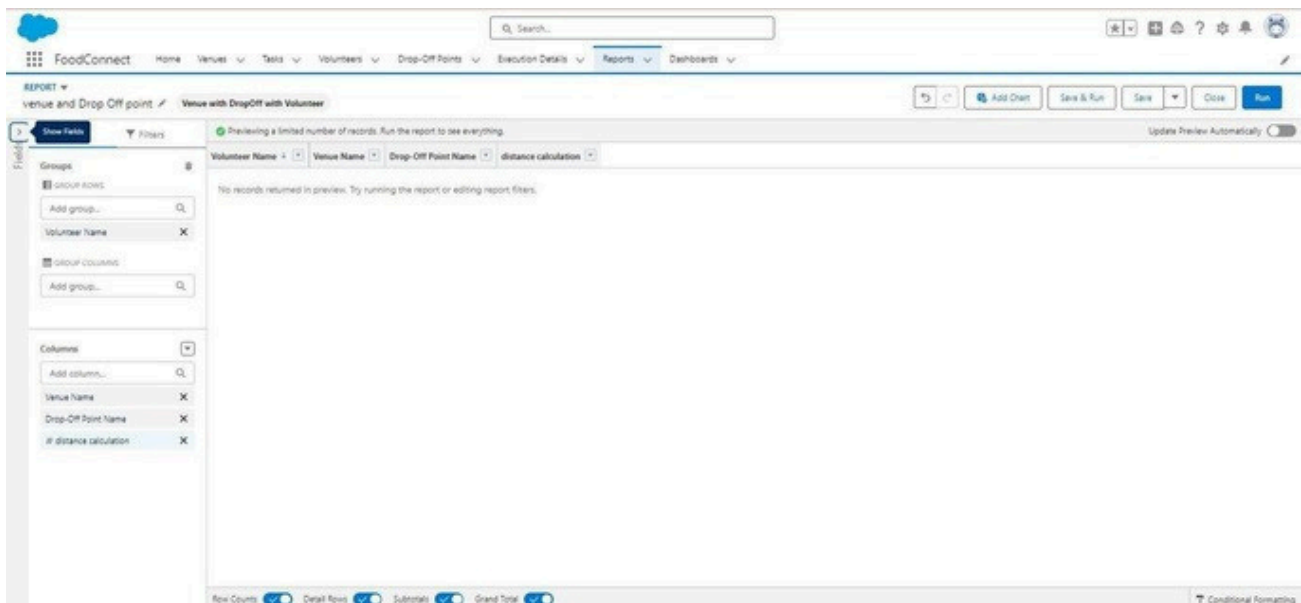
Creation of Report on Volunteers with Execution Details and Tasks

1. Go to the app(FoodConnect) >> click on the reports tab
2. Click on Custom Reports Folder and click on New Report
3. Select Report Type : Volunteers with Execution Details and Tasks.
4. Then click on Start Report.
5. In GROUP ROWS : Volunteer ID

6. In Columns : Add Volunteer : Volunteer Name, Task : Task Name, Execution Detail : Execution Detail Name, Volunteer: Owner Name, Task: Date, Task : Rating.

7. Now click on Save & Run.

8. Give Label as :

Report Name : Volunteer Task

Report Unique Name : Auto Populated

1. Click on Select Folder and select Custom Report, then click on Save.
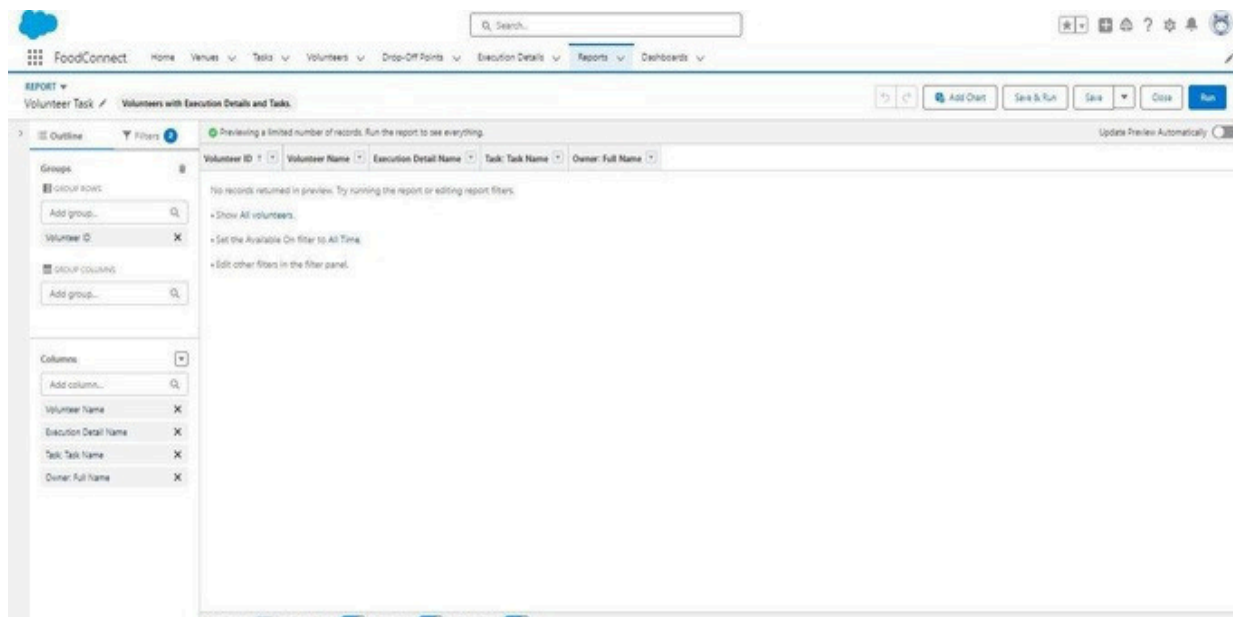
DASHBOARDS

Adding venue and Drop Off point Report to the Dashboard

1. Go to the app(FoodConnect) >> click on the Dashboards tab.
2. Click on New Folder.

Folder Label : Custom Dashboards Folder Unique Name :

Auto Populated

1. Open Custom Dashboards and click on New Dashboards
2. Name : Organization Details
3. Click on Widget and select Chart or Table
4. In Select Report : Select venue and Drop Off point Report.
5. Then click on select
6. In Add Component:

Display As : Select Lightning Table Component Theme :

Select Dark (Optional)

1. Now click on save.
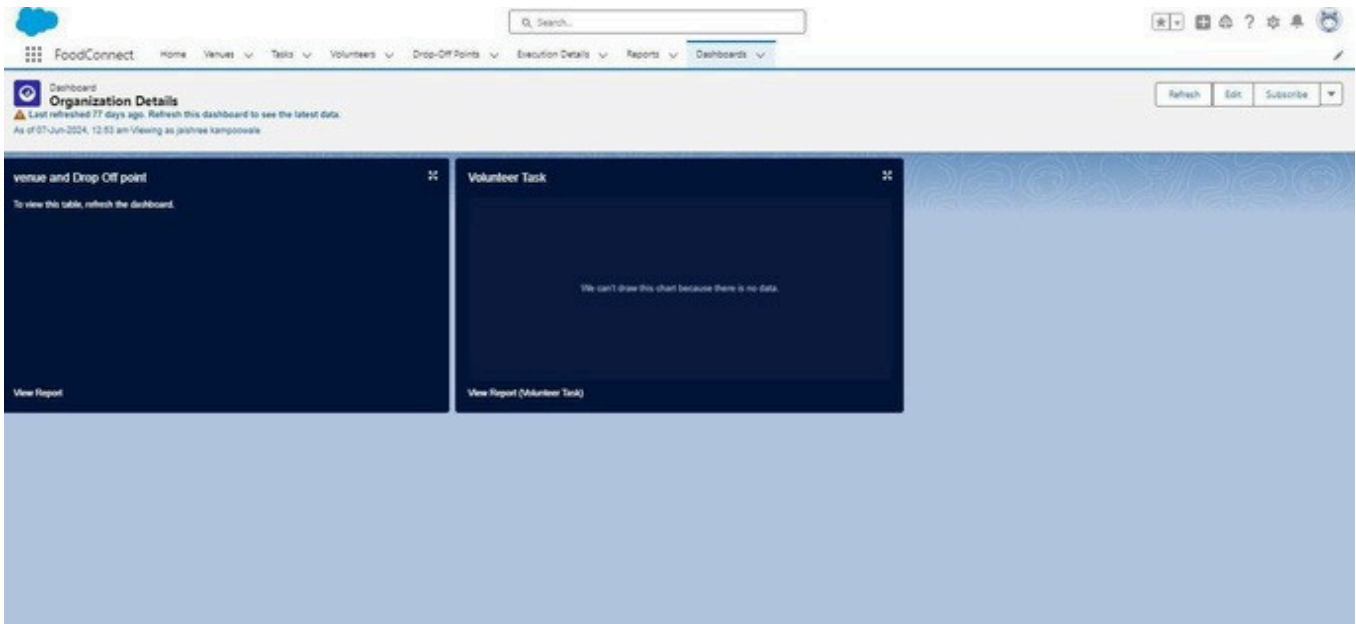
SHARING RULES

Creation of sharing rules

1. Go to setup >> type Sharing Settings in quick find box >> Click on the Sharing Settings.
2. Scroll down and find Drop-Off point Sharing Rules.
3. Click on new near Drop-Off point Sharing Rules and Name it as: Label : Rule 1

Rule Name : Rule_1

1. Select your rule type : Select Based on criteria.
2. Select which records to be shared:

Field : Operator : Value = Distance : less than : 15

1. Select the users to share with : Near Share With

Public Groups : Iksha

1. Click on Save.

1. Click on new near Drop-Off point Sharing Rules and Name it as:

Label : Rule 2

Rule Name : Rule_2

1. Select your rule type : Select Based on criteria.
2. Select which records to be shared:

Field : Operator : Value = Distance : greater than : 15 Field : Operator : Value = Distance : less or equal : 30

1. Select the users to share with : Near Share With

Public Groups : NSS

1. Click on Save.
2. Click on new near Drop-Off point Sharing Rules and Name it as: Label : Rule 3

Rule Name : Rule_3

1. Select your rule type : Select Based on criteria.
2. Select which records to be shared:

Field : Operator : Value = Distance : greater than : 30 Field : Operator : Value = Distance : less or equal : 50

1. Select the users to share with : Near Share With

Public Groups : Street Cause

1. Click on Save.
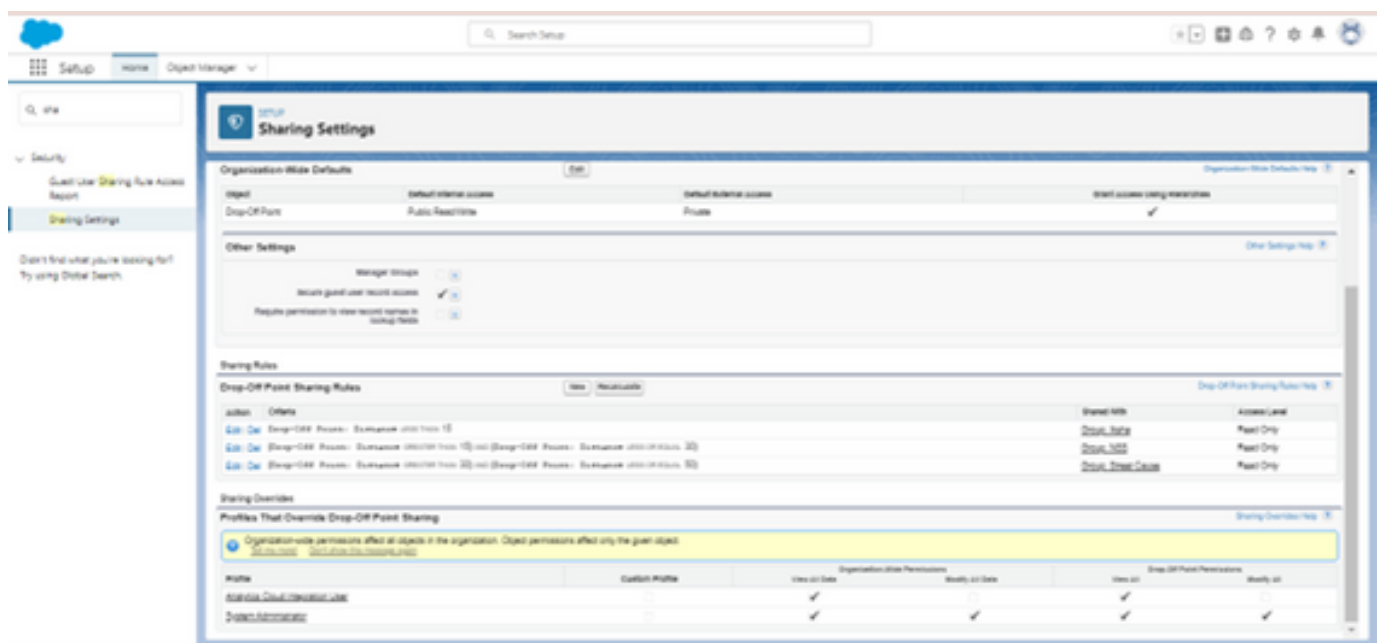
HOME PAGE

Creation of Home Page

1. Go to setup >> type Lightning App Builder in quick find box >> Click on the Lightning App Builder and Select the New.

2. Select Home Page and give Label as HOME Page.

3. Select Standard Home Page.

4. Near Components search for Flow and Drag and Drop in Right Side Section..

5. On the right hand side: Flow : Venue Flow

6. Near Components search for Dashboard, then Drag and Drop it in first Section.

7. Click on Save and Activation, then click on App Default, then Add Assignments.

8. Add FoodConnect App and then Save.

9. FoodConnect Home Page would Look Like this.
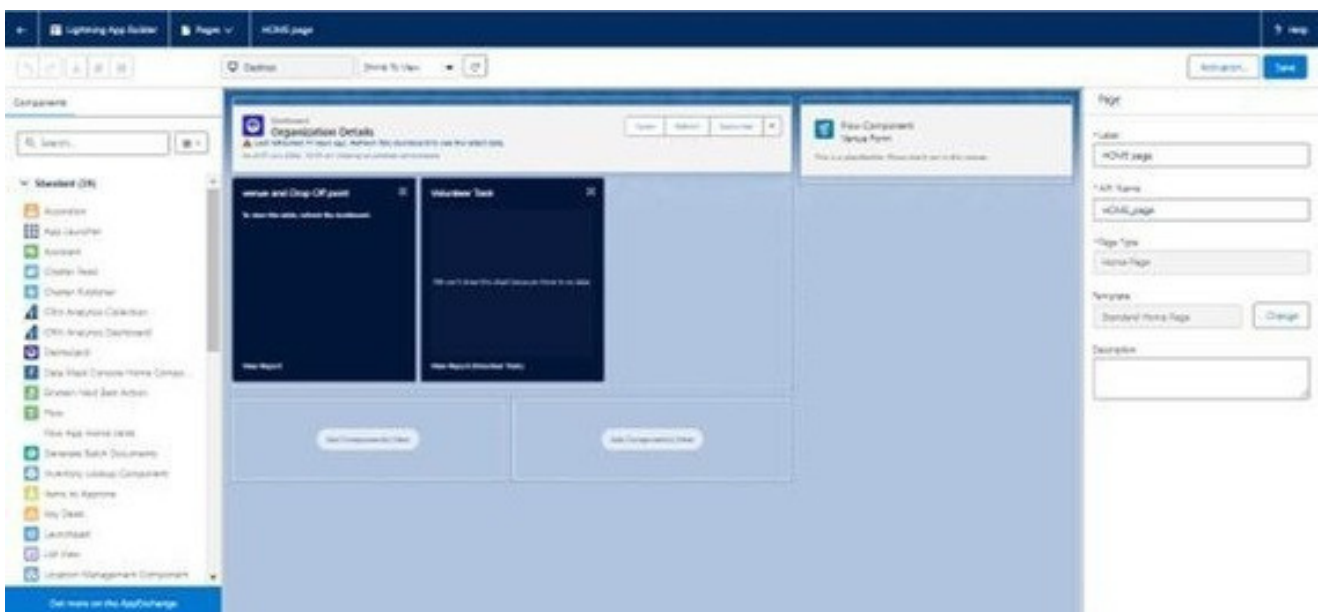
CONCLUSION

The Salesforce-based food redistribution project effectively addresses the dual challenges of food waste and hunger by

creating a streamlined, organized system for managing surplus food. Through the use of custom objects such as Venue, Dropoff Point, Task, Volunteer, and Execution Details, the platform ensures that all aspects of the food donation and distribution process are meticulously tracked and managed.

By automating key tasks, optimizing logistics, and providing real-time data insights, the project not only improves operational efficiency but also maximizes the impact of food donations. Volunteers are better coordinated, food is delivered promptly and safely, and the system adapts to the needs of both donors and recipients.

Ultimately, this project demonstrates the power of Salesforce in creating scalable, sustainable solutions that benefit both communities and the environment. It sets a precedent for how technology can be leveraged to tackle pressing social issues, offering a replicable model that can be adapted by other communities worldwide to address food insecurity.