

**TITLE: To Supply Leftover Food to Poor**

**COLLEGE: IMAYAM COLLEGE OF ENGINEERING**

**Team ID : NM2025TMID02209**

**Team Leader : David G (811022104011)**

**Team member : Dharani Dharan S (811022104012)**

**Team member : Dharshini B (811022104013)**

**Team member : Gayathiri R (811022104015)**

## **TABLE OF CONTENTS**

- 1. ABSTRACT**
- 2. IDEATION PHASE**
- 3. PROJECT PLANNING PHASE**
- 4. PROJECT DESIGN PHASE**
- 5. REQUIREMENT ANALYSIS**
- 6. PERFORMANCE TESTING**
- 7. SALESFORCE DEVELOPER ACCOUNT CREATION**
- 8. SALESFORCE ACCOUNT ACTIVATION**
- 9. CREATION OF CUSTOM OBJECTS**

- 10. CREATION OF TABS**
  - 11. CREATION OF LIGHTNING APP**
  - 12. CREATION OF FIELDS**
  - 13. CREATION OF FLOWS**
  - 14. CREATION OF TRIGGERS**
  - 15. CREATION OF PROFILES**
  - 16. CREATION OF USERS**
  - 17. CREATION OF PUBLIC GROUPS**
  - 18. CREATION OF REPORT TYPES**
  - 19. CREATION OF REPORTS**
  - 20. CREATION OF DASHBOARDS**
  - 21. SHARING RULES**
  - 22. CUSTOMIZATION OF HOME PAGE**
- 22. CONCLUSION**

## **ABSTRACT:**

Food wastage and hunger are two major global issues that coexist paradoxically. Every day, restaurants, hotels, and event organizers dispose of large quantities of edible food, while millions of people remain hungry. This project, “**Leftover Food Supply Management System**,” aims to bridge the gap between food donors and needy individuals through a digital platform.

The system, built on Salesforce, connects **food donors, NGOs, and volunteers** to facilitate efficient food distribution. By automating donation requests, notifications, and tracking, it minimizes manual effort and ensures timely delivery of food to those in need. The project

**promotes sustainability, community welfare, and social responsibility using technology.**

## **IDEATION PHASE**

### **Overview:**

The Ideation Phase involves identifying the real-world problem and conceptualizing a solution using Salesforce. The goal is to reduce food wastage by connecting food donors (restaurants, hotels, canteens) with NGOs and volunteers who distribute leftover food to the poor.

### **Problem Statement:**

Every day, large quantities of leftover food are discarded, while millions of people go hungry. The lack of coordination between donors and NGOs leads to inefficiency and food wastage.

### **Proposed Solution:**

A Salesforce-based Leftover Food Supply Management System automates and streamlines the donation process. It allows donors to register available food, NGOs to request it, and volunteers to handle delivery. Automation tools like Flows, Approval Processes, and Email Alerts make the system efficient and transparent.

### **Objectives:**

1. Reduce food wastage through effective redistribution.
2. Create a digital bridge between donors, NGOs, and volunteers.
3. Automate notifications, approvals, and reporting using Salesforce tools.
4. Provide real-time tracking and analytics.

5. Expected Outcome:
6. A cloud-based automated system that ensures leftover food reaches the needy quickly and safely while minimizing manual coordination.

## **PROJECT PLANNING PHASE**

### **Overview:**

This phase focuses on defining project scope, resources, milestones, and timelines. A clear plan ensures smooth development and successful delivery.

### **Scope:**

The system will manage:

- Donor registration and food details.
- NGO approval and assignment.
- Volunteer delivery tracking.
- Automated notifications and dashboards.
- Milestones:
  - Setup of Salesforce Developer Account
  - Object and Field Creation
  - Flow and Trigger Implementation
  - Testing and Validation
  - Dashboard and Report Creation
- Tools & Resources:
  - Salesforce Developer Edition

- Flow Builder, Process Builder, and Apex Triggers
- Salesforce Reports and Dashboards
- Roles & Responsibilities:
  - Team Leader: Project coordination and module integration.
  - Developers: Build objects, automation, and triggers.
  - Testers: Validate and test system performance.

## PROJECT DESIGN PHASE

### Overview:

This phase defines the architecture and data flow of the Salesforce application. The system is designed to handle relationships between donors, NGOs, and volunteers efficiently.

### System Architecture:

- Frontend: Salesforce Lightning App
- Backend: Salesforce Objects, Apex Triggers, and Automation Tools
- Database: Salesforce Cloud (Objects store records)
- Data Model (Custom Objects):
  - Donor – Stores donor information
  - Food Donation – Details of donated food items
  - NGO – Information about receiving organizations
  - Volunteer – Tracks delivery personnel
- Relationships:

- Donor → Food Donation (One-to-Many)
- Food Donation → NGO (Many-to-One)
- NGO → Volunteer (One-to-Many)
- Automation Design:
  - Flows: Triggered when new donations are created.
  - Approval Process: NGOs approve donations before pickup.
  - Email Alerts: Notify NGOs, donors, and volunteers.
- Dashboard Design:
  - Includes charts showing:
    - Total food donated
    - Active donations
    - Completed deliveries
    - NGOs served

## **REQUIREMENT ANALYSIS**

- Functional Requirements:
  - Donors can add food details.
  - NGOs can view and accept food donations.
  - Volunteers can update delivery status.
  - Admin can view reports and dashboards.
- Non-Functional Requirements:
  - Secure user authentication.

- Fast data retrieval and automation execution.
- Reliable email notifications.
- Scalability for multiple cities or organizations.
- Hardware Requirements:
  - Internet-enabled computer/laptop
  - Minimum 4GB RAM
- Software Requirements:
  - Salesforce Developer Edition
  - Web Browser (Google Chrome / Edge)

## **PERFORMANCE TESTING**

### **Overview:**

Performance testing ensures the Salesforce application runs smoothly under various user and data loads. It validates speed, reliability, and scalability.

### **Testing Scenarios:**

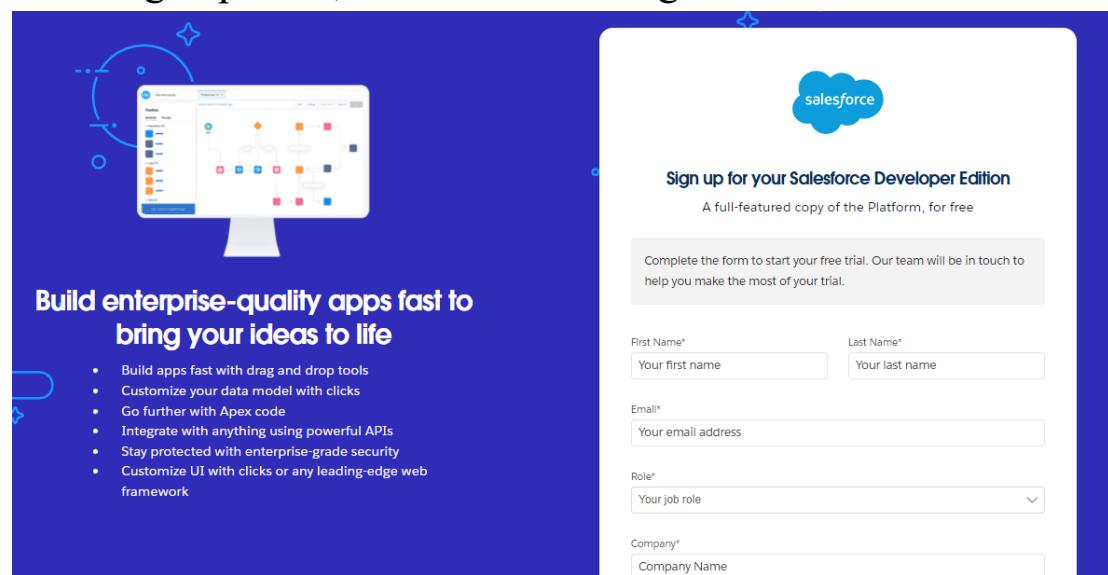
- Load Testing: Multiple donors and NGOs accessing the system simultaneously.
- Stress Testing: Checking response time when many records are created.
- Functional Testing: Validating each feature (Flows, Triggers, Reports).
- User Acceptance Testing (UAT): Verifying usability by end users.
- Tools Used:

- Salesforce Developer Console (for logs)
- Salesforce Inspector (for data checks)
- Built-in Reports for tracking performance metrics
- Expected Results:
  - Quick response and data updates.
  - Timely email notifications.
  - Error-free automation.
  - Stable performance with increased users and records.

## Creating Developer Account

Creating a developer org in salesforce.

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details



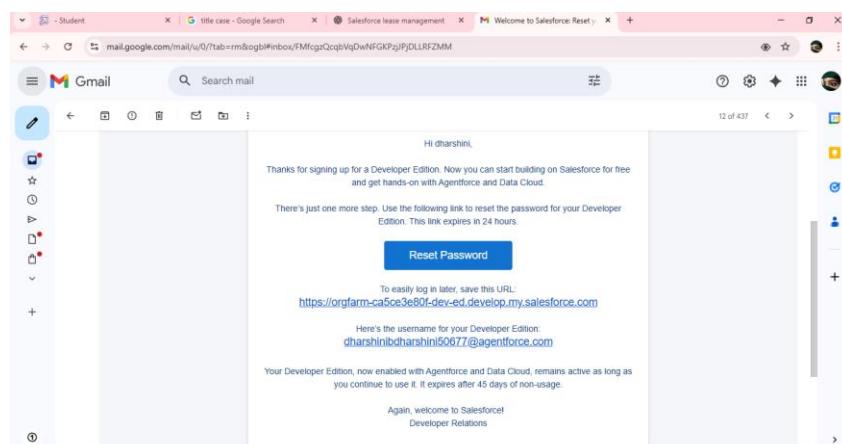
1. First name & Last name
2. Email
3. Role : Developer
4. Company : College or Company Name
5. County : India
6. Postal Code : pin code
7. Username : should be a combination of your name and company

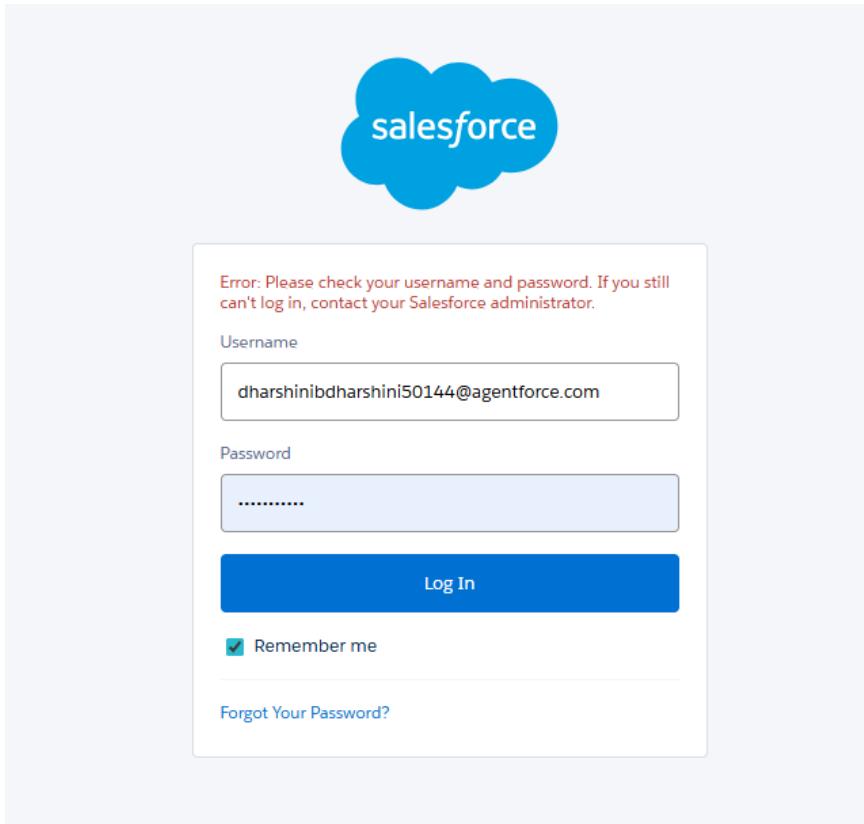
This need not be an actual email id, you can give anything in the format  
username@organization.com

Click on sign me up after filling these.

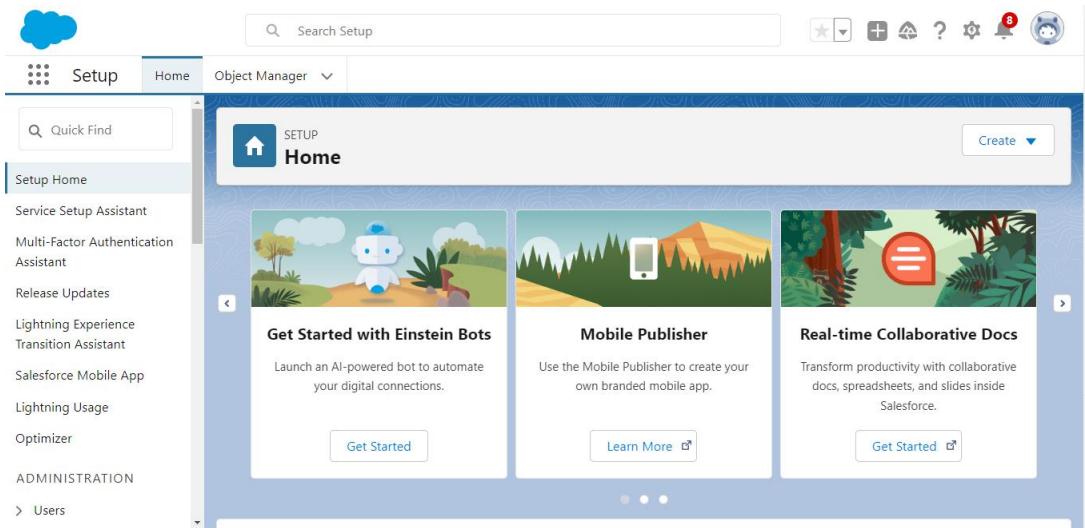
## Account Activation

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.





1. Click on Verify Account
2. Give a password and answer a security question and click on change password.
3. Give a password and answer a security question and click on change password.
4. Then you will redirect to your salesforce setup page.



## Create Venue Object

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
  1. Enter the label name >> Venue
  2. Plural label name >> Venues
  3. Enter Record Name Label and Format
    - Record Name >> Venue Name
    - Data Type >> Text
2. Click on Allow reports and Track Field History, Allow Activities.
3. Allow search >> Save.

## Create Drop-Off Point Object

To create an object:

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

1. Enter the label name >> Drop-Off Point
  2. Plural label name >> Drop-Off Points
  3. Enter Record Name Label and Format
    - Record Name >> Drop-Off point Name
    - Data Type >> Text
2. Click on Allow reports and Track Field History,Allow Activities
  3. Allow search >> Save.

## **Create Task Object**

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
  1. Enter the label name >> Task
  2. Plural label name >> Tasks
  3. Enter Record Name Label and Format
    - Record Name >> Task Name
    - Data Type >> Text
2. Click on Allow reports and Track Field History,Allow Activities
3. Allow search >> Save.

## **Create Volunteer Object**

To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
  1. Enter the label name >> Volunteer

2. Plural label name>> Volunteers
  3. Enter Record Name Label and Format
    - Record Name >> Volunteer Name
    - Data Type >> Text
2. Click on Allow reports and Track Field History, Allow Activities
  3. Allow search >> Save.

## **Create Execution Details Object**

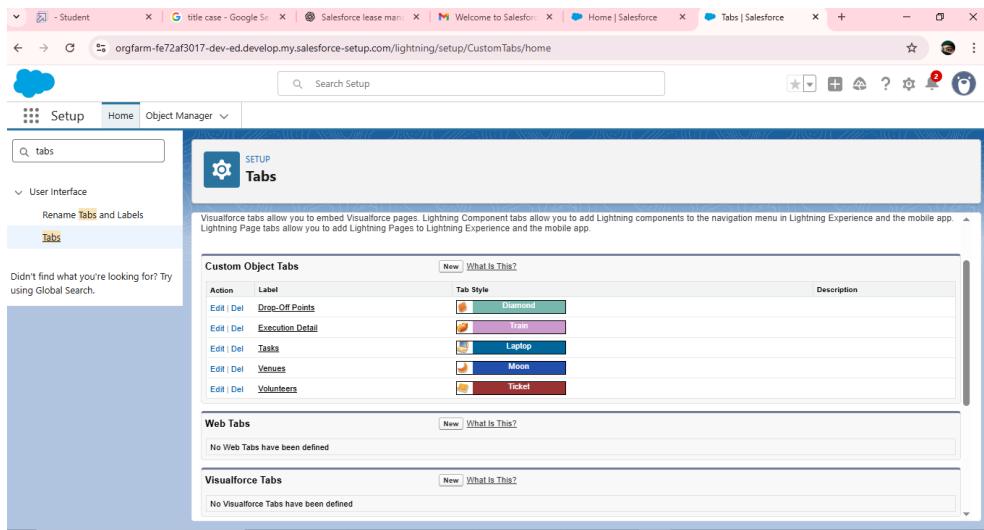
To create an object:

1. From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.
  1. Enter the label name >> Execution Detail
  2. Plural label name >> Execution Details
  3. Enter Record Name Label and Format
    - Record Name >> Execution Detail Name
    - Data Type >> Text
2. Click on Allow reports and Track Field History, Allow Activities
  3. Allow search >> Save.

## **Creating a Custom Tab**

To create a Tab:(Venue)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)



1. 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 .
2. Make sure that the Append tab to users' existing personal customizations is checked.
3. 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 in Activity -1 .

## 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.

Lightning Experience App Manager

App Name	Developer ...	Description	Last Modified ...	App Type	V ...
All Tabs	AllTabSet		9/20/2025, 10:36 A...	Classic	▼
Analytics Studio	Insights	Build CRM Analytics dashboards and apps	9/20/2025, 10:36 A...	Classic	▼
App Launcher	AppLauncher	App Launcher tabs	9/20/2025, 10:36 A...	Classic	▼
Approvals	Approvals	Manage approvals and approval flows	9/20/2025, 10:36 A...	Lightning	▼
Automation	FlowsApp	Automate business processes and repetitive tasks.	9/20/2025, 10:41 A...	Lightning	▼
Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your ind...	9/20/2025, 10:36 A...	Lightning	▼
Community	Community	Salesforce CRM Communities	9/20/2025, 10:36 A...	Classic	▼
Content	Content	Salesforce CRM Content	9/20/2025, 10:36 A...	Classic	▼
Data Cloud	Audience360	Build a thorough and complete understanding of your custom...	9/20/2025, 10:36 A...	Lightning	▼
Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage r...	9/20/2025, 10:36 A...	Lightning	▼
Developer Edition	Developer_Edition	Welcome to your Developer Edition Org.	9/20/2025, 10:57 A...	Lightning (Managed)	▼

2. 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.

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

New Lightning App

App Options

Navigation and Form Factor \*

Standard navigation

Console navigation

Desktop and phone

Desktop

Phone

Setup and Personalization \*

Setup (full set of Setup options)

Service Setup

Disable end user personalization of nav items in this app

Disable temporary tabs for items outside of this app

App Personalization Settings

Back Next

Progress Bar: 50%

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

5. To Add Navigation Items:

The screenshot shows two panels side-by-side. The left panel, titled 'Available Items', contains a search bar at the top followed by a list of items with icons: Accounts, All Sites, Alternative Payment Methods, Analytics, App Launcher, Appointment Categories, Appointment Invitations, Approval Requests, Asset Action Sources, and Asset Actions. The right panel, titled 'Selected Items', also has a search bar at the top and a list of items with icons: Home, Venues, Tasks, Drop-Off points, Execution Details, Volunteers, Reports, and Dashboards. Between the two panels are two small arrows pointing from left to right, indicating that items can be moved between the lists.

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.

6. To Add User Profiles:

The screenshot shows the 'New Lightning App' setup screen. On the left, there's a sidebar with categories like Apps, Experience, and Lightning. The main area has a search bar at the top. Below it, under 'User Profiles', it says 'Choose the user profiles that can access this app.' There are two sections: 'Available Profiles' (with a search bar containing 'sys') and 'Selected Profiles' (containing 'System Administrator'). At the bottom, there's a progress bar with several steps completed, and a 'Save & Finish' button on the right. A table at the very bottom lists various org settings and their status.

ID	Setting	Value	Description	Status
10	Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage r...	9/20/2025, 10:36 A... Lightning ✓
11	Developer Edition	Developer_Edition	Welcome to your Developer Edition Org.	9/20/2025, 10:57 A... Lightning (Managed) ✓

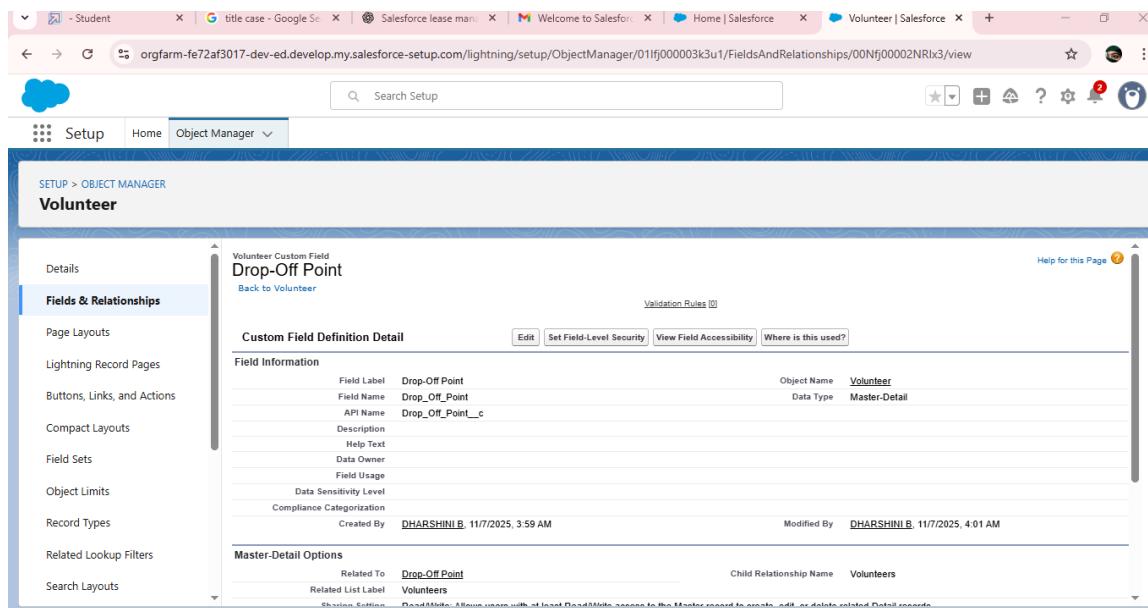
Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

## Fields:

### Creation of Relationship fields in objects

#### 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.

### **Creation of Master Detail Relationship Field on Execution Details Object :**

8. Go to setup >> click on Object Manager >> type object name(Execution Details) in the search bar >> click on the object.

9. Now click on “Fields & Relationships” >> New

10. Select Master Detail relationship

11. Select the related object “Volunteer” and click next.

12. Field Name : Volunteer

13. Field label : Auto generated

14. Next >> Next >> Save.

### **Creation of Master Detail Relationship Field on Execution Details Object :**

15. Go to setup >> click on Object Manager >> type object name(Execution Details) in the search bar >> click on the object.

16. Now click on “Fields & Relationships” >> New

17. Select Master Detail relationship

18. Select the related object “Task” and click next.

19. Field Name : Task

20. Field label : Auto generated

21. Next >> Next >> Save.

### **Creation of Lookup Relationship Field on Drop-Off Point Object :**

22. Go to setup >> click on Object Manager >> type object name(Drop-Off Point) in the search bar >> click on the object.
23. Now click on “Fields & Relationships” >> New
24. Select Lookup relationship
25. Select the related object “Venue” and click next.
26. Field Name : Venue
27. Field label : Venue\_c
28. Next >> Next >> Save.

Creation of Lookup Relationship Field on Task Object :

29. Go to setup>> click on Object Manager >> type object name(Task) in the search bar >> click on the object.
30. Now click on “Fields & Relationships” >> New
31. Select Lookup relationship
32. Select the related object “Venue” and click next.
33. Field Name : Sponsored By
34. Field label : Auto generated
35. Next >> Next >> Save.

Creation of Lookup Relationship Field on Task Object :

36. Go to setup>> click on Object Manager >> type object name(Task) in the search bar >> click on the object.
37. Now click on “Fields & Relationships” >> New
38. Select Lookup relationship
39. Select the related object “Drop-Off point” and click next.

40. Field Name : Drop-Off point
41. Field label : Auto generated
42. Next >> Next >> Save.

### **Creation of fields for the Venue object**

1. Go to setup>> click on Object Manager >> type object name(Venue) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Email” and Click on Next
4. Fill the Above as following:
  - Field Label : Contact Email
  - Field Name : Contact Email
  - Click on required check box
  - Click on Next >> Next >> Save and new.

### **To create another fields in an object:**

5. Go to setup >> click on Object Manager >> type object name(Venue) in search bar >> click on the object.
6. Now click on “Fields & Relationships” >> New
7. Select Data type as a “Phone” and Click on Next
8. Fill the Above as following:
  - Field Label : Contact Phone
  - Field Name : Contact Phone

- Click on required check box
- Click on Next >> Next >> Save and new.

**To create another fields in an object:**

1. Go to setup >> click on Object Manager >> type object name(Venue) in search bar >>click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Geolocation” and Click on Next
4. Fill the Above as following:
  - Field Label : Location
  - Decimal Places : 4
  - Field Name : Location
  - Description : Enter the Geolocation of your Venue
  - Click on Next >> Next >> Save and new.

**To create another fields in an object:**

9. Go to setup >> click on Object Manager >> type object name(Venue) in search bar >> click on the object.
10. Now click on “Fields & Relationships” >> New
11. Select Data type as a “Long Text Area” and Click on Next
12. Fill the Above as following:
  - Field Label : Venue Location
  - Field Name : Venue\_Location
  - Click on Next >> Next >> Save and new.

**Creation of fields for the Drop-Off point object**

Go to setup >> click on Object Manager >> type object name(Drop-Off point) in search bar >> click on the object.

2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Geolocation” and Click on Next
4. Fill the Above as following:

- Field Label : Location 2
- Field Name : gets auto generated
- Description : Enter the Geolocation of the Drop off Point
- Geolocation Options : select Decimal
- Decimal Places : 4
- Click on Next >> Next >> Save and new.

To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Drop-Off point) in search bar >> click on the object.
  2. Now click on “Fields & Relationships” >> New
  3. Select Data type as a “Formula” and Click on Next
  4. Fill the Above as following:
- Field Label : distance calculation
  - Field Name : distance\_calculation
  - Formula Return Type : Number
  - Formula Options : DISTANCE( Location\_2\_c , Venue\_r.Location\_c , 'km')
  - Click on Next >> Next >> Save and new.

To create another fields in an object:

5. Go to setup >> click on Object Manager >> type object name(Drop-Off point) in search bar >> click on the object.
6. Now click on “Fields & Relationships” >> New
7. Select Data type as a “Picklist” and Click on Next
8. Fill the Above as following:
  - Field Label : State
  - Field Name : State
  - Enter values, with each value separated by a new line :

Andhra Pradesh

Arunachal Pradesh

Assam

Bihar

Chhattisgarh

Goa

Gujarat

Haryana

Himachal Pradesh

Jharkhand

Karnataka

Kerala

Maharashtra

Madhya Pradesh

Manipur

Meghalaya

Mizoram

Nagaland

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Tripura

Telangana

Uttar Pradesh

Uttarakhand

West Bengal

Andaman & Nicobar (UT)

Chandigarh (UT)

Dadra & Nagar Haveli and Daman & Diu (UT)

Delhi [National Capital Territory (NCT)]

Jammu & Kashmir (UT)

Ladakh (UT)

Lakshadweep (UT)

Puducherry (UT)

- Click on required check box
- Click on Next >> Next >> Save and new.

To create another fields in an object:

9. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.

10. Now click on “Fields & Relationships” >> New

11. Select Data type as a “Number” and Click on Next

12. Fill the Above as following:

- Field Label : Distance
- Field Name : Distance
- Length : 14
- Decimal Places : 4
- Click on required check box
- Click on Next >> Next >> Save and new.

### **Creation of fields for the Task object**

Go to setup>> click on Object Manager >> type object name(Task) in search bar >> click on the object.

2. Now click on “Fields & Relationships” >> New

3. Select Data type as a “Auto Number” and Click on Next

4. Fill the Above as following:

- Field Label : Task ID

- Display Format : TASK-{0}
- Starting Number : 1
- Field Name : gets auto generated
- Click on required check box
- Click on Next >> Next >> Save and new.

To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Date” and Click on Next
4. Fill the Above as following:
  - Field Label : Date
  - Field Name : Date
  - Click on required check box
  - Click on Next >> Next >> Save and new.

To create another fields in an object:

5. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.
6. Now click on “Fields & Relationships” >> New
7. Select Data type as a “Picklist (Multi-Select)” and Click on Next
8. Fill the Above as following:
  - Field Label : Food Category
  - Field Name : Food Category

- Enter values, with each value separated by a new line :

Veg

Non-Veg

Salad

Snack

- Click on required check box
- Click on Next >> Next >> Save and new.

To create another fields in an object:

9. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.

10. Now click on “Fields & Relationships” >> New

11. Select Data type as a “Number” and Click on Next

12. Fill the Above as following:

- Field Label : Number of People Served
- Field Name : Number\_of\_People\_Served
- Click on required check box
- Click on Next >> Next >> Save and new.

To create another fields in an object:

13. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.

14. Now click on “Fields & Relationships” >> New

15. Select Data type as a “Text” and Click on Next

16. Fill the Above as following:

- Field Label : Name of the Person
- Field Name : Name\_of\_the\_Person
- Click on Next >> Next >> Save and new.

To create another fields in an object:

17. Go to setup>> click on Object Manager >> type object name(Task) in search bar >> click on the object.
18. Now click on “Fields & Relationships” >> New
19. Select Data type as a “Phone” and Click on Next
20. Fill the Above as following:

- Field Label : Phone
- Field Name : Phone
- Click on Next >> Next>> Save and new.

To create another fields in an object:

21. Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.
  22. Now click on “Fields & Relationships” >> New
  23. Select Data type as a “Pick List” and Click on Next
  24. Fill the Above as following:
- Field Label : Rating
  - Field Name : Rating
  - Enter values, with each value separated by a new line :
  - Click on Next >> Next >> Save and new.

To create another fields in an object:

Go to setup >> click on Object Manager >> type object name(Task) in search bar >> click on the object.

25. Now click on “Fields & Relationships” >> New
26. Select Data type as a “Long Text Area” and Click on Next
27. Fill the Above as following:
  - Field Label : Feedback
  - Field Name : Feedback
  - Click on Next >> Next >> Save and new.

### **Creation of fields for the Volunteer object**

1. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Auto Number” and Click on Next
4. Fill the Above as following:
  - Field Label : Volunteer ID
  - Field Name : gets auto generated
  - Click on required check box
  - Click on Next >> Next >> Save and new.
  - Click on Next >> Next >> Save and new.

To create another fields in an object:

1. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
2. Now click on “Fields & Relationships” >> New
3. Select Data type as a “Picklist” and Click on Next
4. Fill the Above as following:
  - Field Label : Gender
  - Field Name : Gender
  - Enter values, with each value separated by a new line :

Female

Male

- Click on Next >> Next >> Save and new.

To create another fields in an object:

5. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
6. Now click on “Fields & Relationships” >> New
7. Select Data type as a “Date” and Click on Next
8. Fill the Above as following:
  - Field Label : Available On
  - Field Name : Available On
  - Click on required check box
  - Click on Next >> Next >> Save and new.

To create another fields in an object:

9. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.

10. Now click on “Fields & Relationships” >> New

11. Select Data type as a “Number” and Click on Next

12. Fill the Above as following:

- Field Label : Age
- Field Name : Age
- Click on required check box
- Click on Next >> Next>> Save and new.

To create another fields in an object:

13. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.

14. Now click on “Fields & Relationships” >> New

15. Select Data type as a “Email” and Click on Next

16. Fill the Above as following:

- Field Label : Email
- Field Name : Email
- Click on required check box
- Click on Next>> Next >> Save and new.

To create another fields in an object:

17. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.

18. Now click on “Fields & Relationships” >> New

19. Select Data type as a “Number” and Click on Next

20. Fill the Above as following:

- Field Label : Contact Number
- Field Name : Contact\_Number
- Click on required check box
- Click on Next >> Next >> Save and new.

To create another fields in an object:

21. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.

22. Now click on “Fields & Relationships” >> New

23. Select Data type as a “Text Area (Long)” and Click on Next

24. Fill the Above as following:

- Field Label : Address
- Field Name : Address
- Click on Next >> Next >> Save and new.

To create another fields in an object:

25. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.

26. Now click on “Fields & Relationships” >> New

27. Select Data type as a “Date” and Click on Next

28. Fill the Above as following:

- Field Label : Date of Birth
- Field Name : Date\_of\_Birth

- Click on Next >> Next >> Save and new.

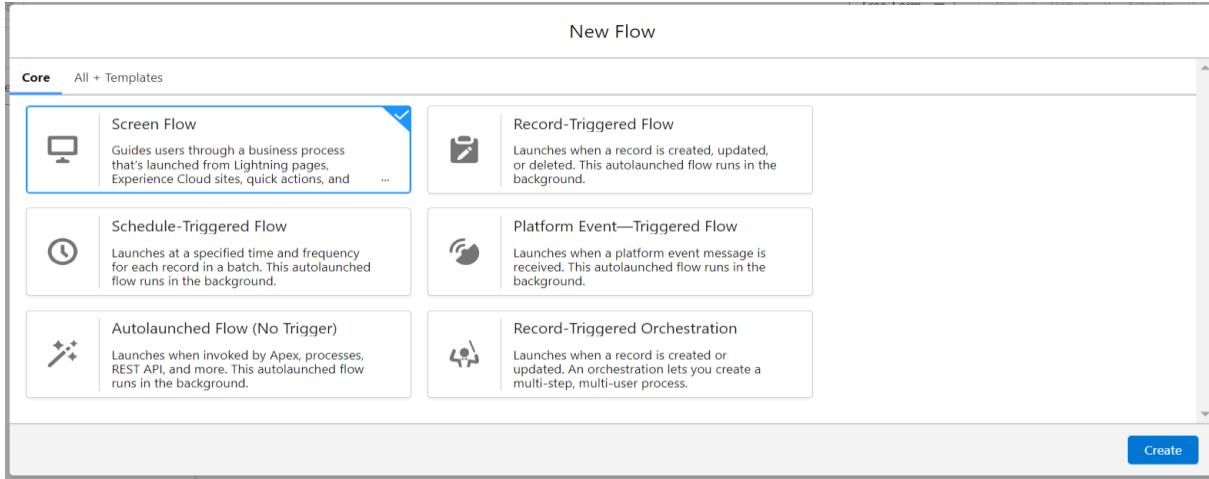
## **Creation of fields for the Execution Details object**

- 1. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
- 2. Now click on “Fields & Relationships” >> New
- 3. Select Data type as a “Auto Number” and Click on Next
- 4. Fill the Above as following:
- Field Label : Execution ID
- Field Name : gets auto generated
- Click on required check box
- Click on Next >> Next >> Save and new.

## **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

5. Now lets add components in this flow. Click on Text Component and name it as:

Label : Venue Name

API Name : Venue\_Name

6. Click on Email Component and name it as:

Label : Email

API Name : Contact\_Email

7. Click on Phone Component and name it as:

Label : Phone

API Name : Contact\_Phone

8. Click on Text Component and name it as:

Label : Venue Location

API Name : Venue\_Location

9. Click on Number Component and name it as:

Label : Latitude

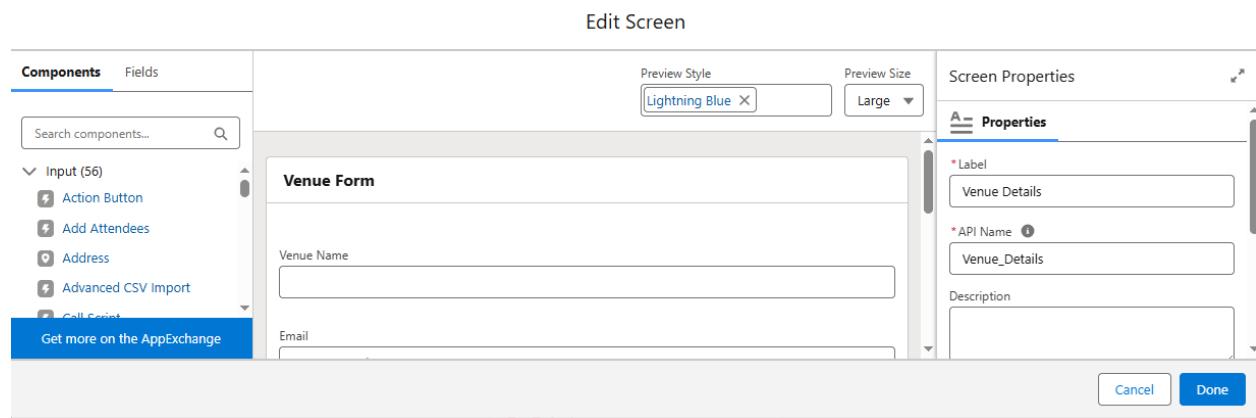
API Name : Latitude

10. Click on Number Component and name it as:

Label : longitude

API Name : longitude

11. Next click on Done. This would like below



12. Click on the '+' icon in between Venue details and end, and click on create record element.

13. 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}

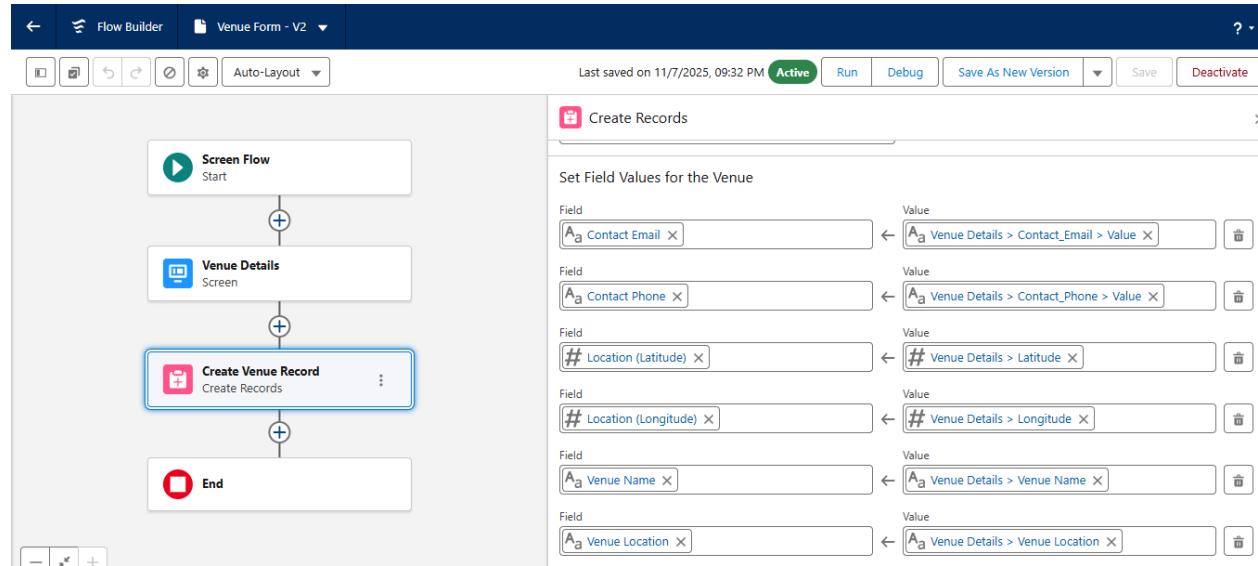
Field : Value = Name : {!Venue\_Name}

Field : Value = Venue\_Location\_\_c : {!location}

Field : Value = Location\_Latitude\_\_s : {!latitude}

Field : Value = Location\_Longitude\_\_s : {!longitude}

14. This would look like:



15. Click on Save as:

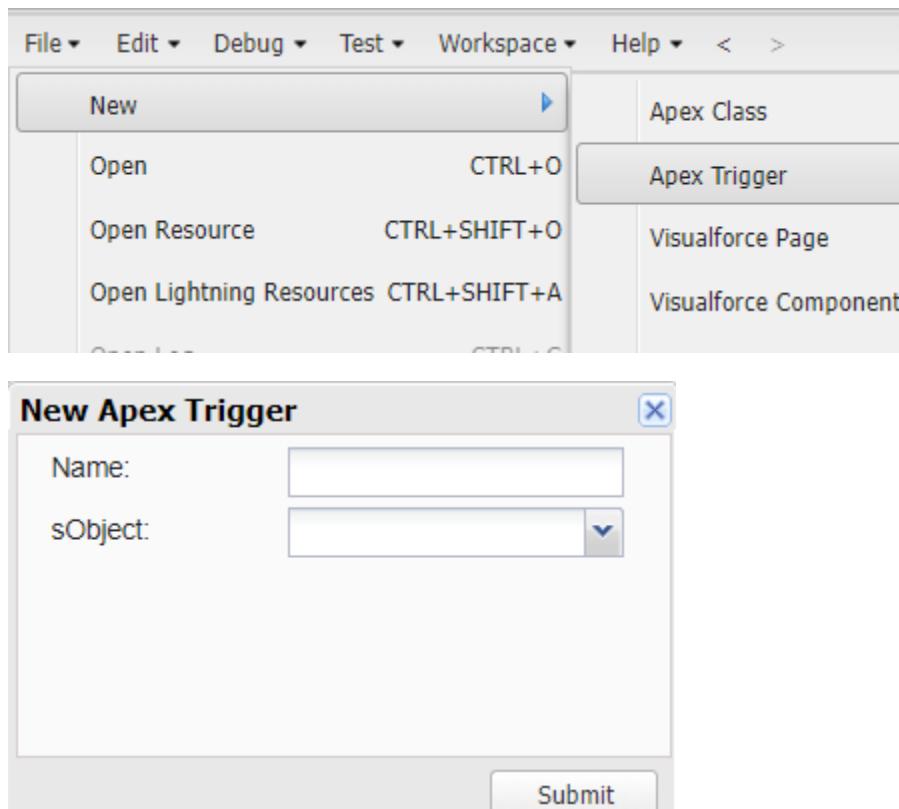
Flow Label : Venue Form

Flow API Name : Venue\_Form

**Trigger**

**Create a Trigger**

1. Log into the trailhead account, navigate to the gear icon in the top right corner.
2. Click on developer console and you will be navigated to a new console window.
3. Click on the File menu in the toolbar, and click on new >> Trigger.
4. Enter the trigger name and the object to be triggered.



5. Enter Name : DropOffTrigger

sObject: Drop-Off Point

6. Click on Submit.

## Trigger Code

7. (This Trigger is to assign Distance field to the Distance Calculation field. So that we can assign the distance in the sharing rules.)

8.

**9. Code:**

```
10. trigger DropOffTrigger on Drop_Off_point__c (before insert)
    {
11.     for(Drop_Off_point__c Drop : Trigger.new){
12.         Drop.Distance__c = Drop.distance_calculation__c;
13.     }
14. }
```

## **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

1. Then click on Save

## **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](mailto:ikshafoundation@sb.com) (give the username different)

Nickname : Auto Populated

User License : Salesforce Platform

Profile : NGOs Profile

Active : Check

The screenshot shows the 'User Edit' screen for a user named 'Iksha Foundation Iksha\_Foundation'. The 'General Information' section contains the following data:

Field	Value
First Name	Iksha Foundation
Last Name	Iksha_Foundation
Alias	iiksh
Email	dharshinibdharshini50@gma
Username	ikshafoundation21@sb.com
Nickname	User1762521584065467553
Title	
Company	
Department	
Division	

On the right side, there are several checkboxes for user roles and status:

- Role: <None Specified>
- User License: Salesforce Platform
- Profile: NGOs Profile
- Active:
- Marketing User:
- Offline User:
- Knowledge User:
- Flow User:
- Service Cloud User:
- Site.com Contributor User:
- Site.com Publisher User:
- WDC User:

3. Click on Save

### Creation of User2, User3

4. Create another Two Users by following steps in Activity - 1 with similar User License and Profile.

5. Give Different First Name, Last Name based on Different NGO's.

<input type="checkbox"/>   <a href="#">Edit</a>   <a href="#">Login</a> <u>Iksha_Foundation</u> , Iksha Foundation	iiksh	ikshafoundation@sb.com	<input checked="" type="checkbox"/> NGOs Profile
<input type="checkbox"/>   <a href="#">Edit</a>   <a href="#">Login</a> <u>NSS</u> , NSS	nss	nss@sb.com	<input checked="" type="checkbox"/> NGOs Profile
<input type="checkbox"/>   <a href="#">Edit</a>   <a href="#">Login</a> <u>Street_Cause</u> , Street Cause	sstre	streetcause@sb.com	<input checked="" type="checkbox"/> NGOs Profile

6.

## **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

3. In Search, Select Users.
4. 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.

Action	Label ↑	Group Name	Created By	Created Date
Edit   Del	Iksha	Iksha	Bhargavi_Paila	26/03/2024, 2:27 pm
Edit   Del	NSS	NSS	Bhargavi_Paila	26/03/2024, 2:27 pm
Edit   Del	Street Cause	Street_Cause	Bhargavi_Paila	26/03/2024, 2:26 pm

## **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

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

### 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

3. Open Custom Reports and click on New Report

4. Select Report Type : Venue with DropOff with Volunteer
5. Then click on Start Report.
6. In GROUP ROWS : Add Volunteer Name
7. In Columns : Add Venue Name, Drop-Off point Name, Distance.

The screenshot shows the Salesforce Report Builder interface. The report title is "venue and Drop Off point". Under "GROUP ROWS", "Volunteer Name" is selected. Under "Columns", "Venue Name", "Drop-Off Point Name", and "# Distance" are selected. The "Filters" section shows "Volunteer Name ↑" and "Venue Name ↓". The preview pane indicates "No records returned in preview. Try running the report or editing report filters." It also lists tips: "Show All venues.", "Set the Created Date filter to All Time.", and "Edit other filters in the filter panel." The bottom of the screen shows standard report settings like Row Counts, Detail Rows, Subtotals, and Grand Total.

8. Now click on Save & Run.
9. Give Label as :
10. Report Name : venue and Drop Off point
11. Report Unique Name : Auto Populated
12. 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.

The screenshot shows the Food Connect software interface with the following details:

- Top Navigation:** Food Connect, Home, Venues, Tasks, Drop-Off Points, Execution Detail, Volunteers, Reports, Dashboards.
- Report Title:** REPORT > Volunteer Task > Volunteers with Execution Details and Tasks.
- Left Sidebar (Groups):**
  - GROUP ROWS: Volunteer ID (selected)
  - GROUP COLUMNS: Add group...
- Filter Panel:**
  - Preview message: "Previewing a limited number of records. Run the report to see everything."
  - Filter fields: Volunteer ID ↑, Volunteer Name, Execution Detail Name, Task Name, Volunteer: Volunteer Name, Task: Task Name, Date, Rating.
  - Buttons: Update Preview Automatically (on), Save & Run, Save, Close, Run.
- Message Area:** "No records returned in preview. Try running the report or editing report filters." with instructions: "Set the Available On filter to All Time." and "Edit other filters in the filter panel."
- Bottom Options:** Row Counts, Detail Rows, Subtotals, Grand Total.

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.

## **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.

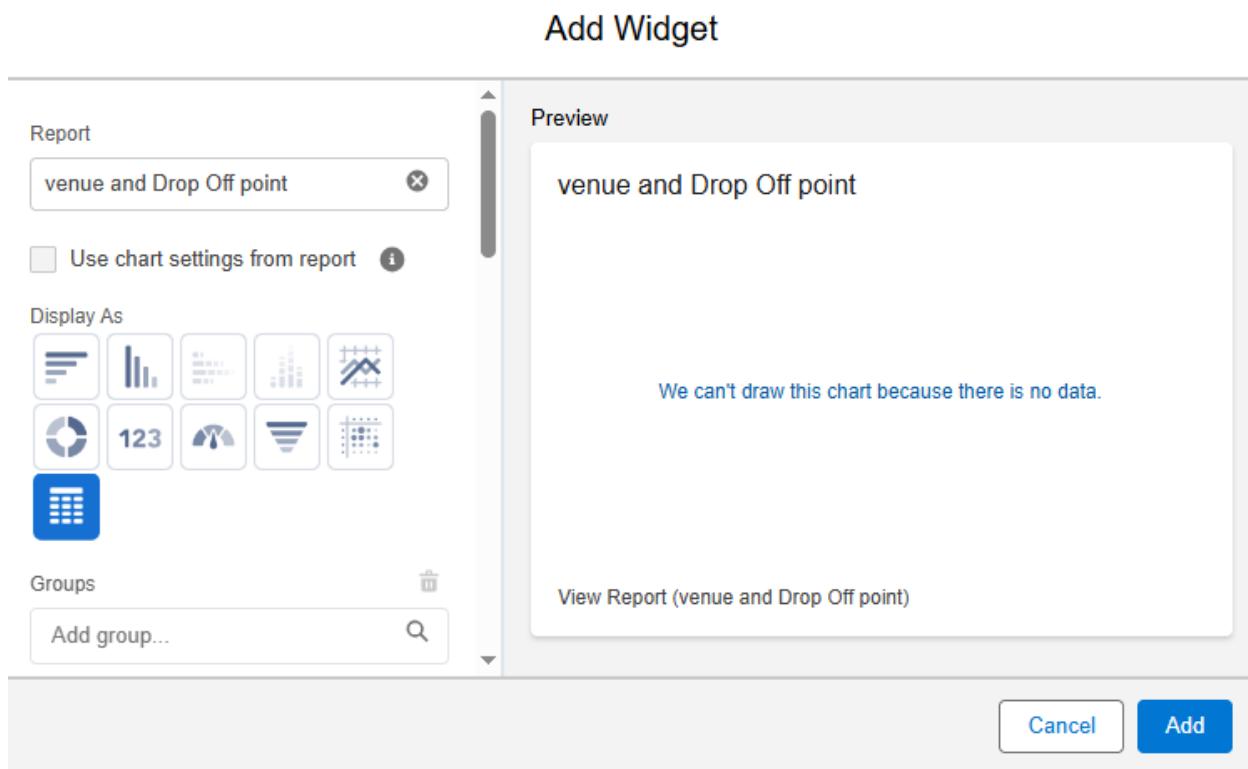
Folder Label : Custom Dashboards

Folder Unique Name : Auto Populated

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

Display As : Select Lightning Table

Component Theme : Select Dark (Optional)



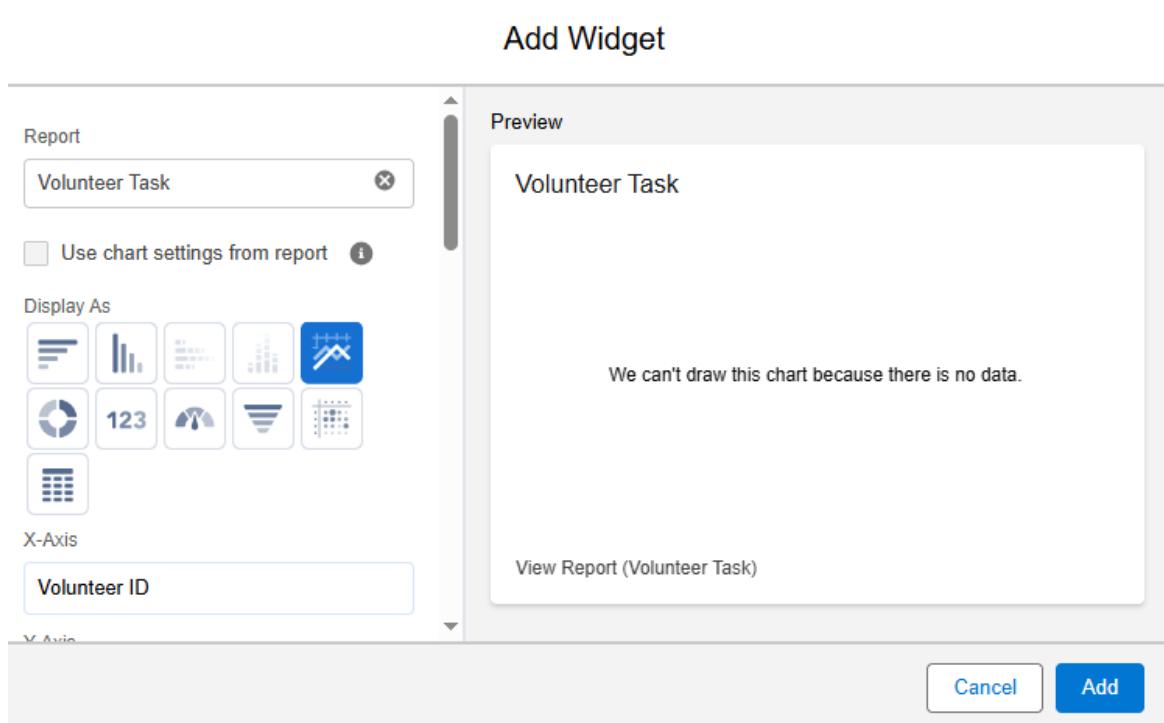
1. Now click on save.

## Adding Volunteer Task Report to the Dashboard

1. Click on Widget and select Chart or Table
2. In Select Report : Select Volunteer Task Report.
3. Then click on select
4. In Add Component:

Display As : Select Line Chart

Component Theme : Select Dark (Optional)



1. Now click on save.

## Adding a Picture to the Dashboard (Optional)

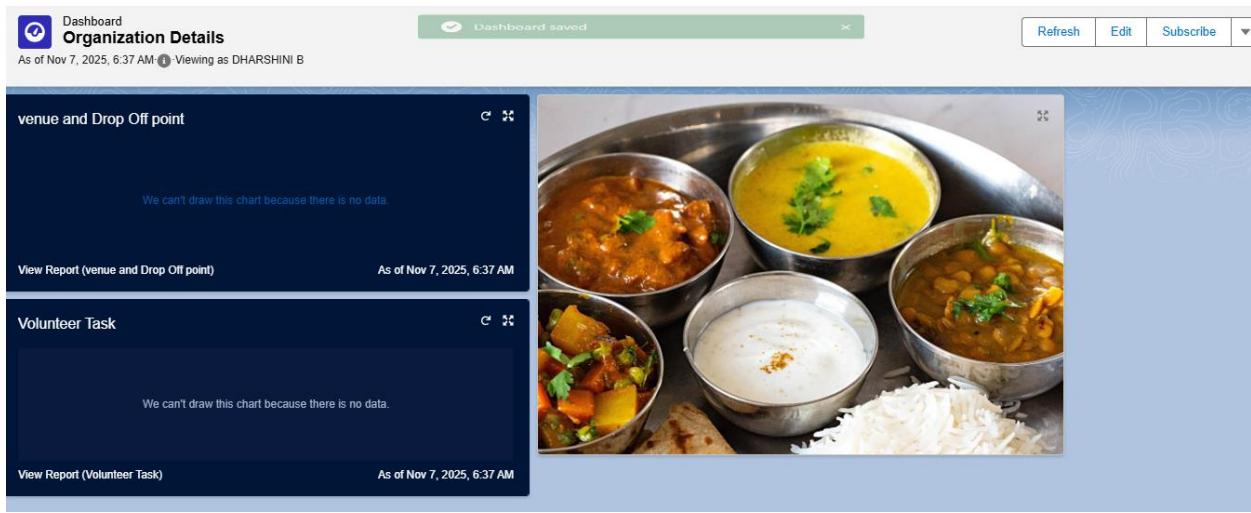
(Note : To upload an image into the Dashboard, we have to first download an image from google or other sources into your system)

1. Click on Widget and select Image. Then click on Browse Files.
2. Then Select the Picture you want to upload in this Dashboard.
3. Then click on Save As :

Name : Task Execution Details

Click on Select Folder and select Custom Dashboards

- Click on Select Folder and then Save.



## Sharing Rules:

### Creation of sharing rules

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

Label : Rule 1

Rule Name : Rule\_1

- Select your rule type : Select Based on criteria.

5. Select which records to be shared:

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

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

Public Groups : Iksha

7. Click on Save.

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

Label : Rule 2

Rule Name : Rule\_2

9. Select your rule type : Select Based on criteria.

10. Select which records to be shared:

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

Field : Operator : Value = Distance : less or equal : 30

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

Public Groups : NSS

12. Click on Save.

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

Label : Rule 3

Rule Name : Rule\_3

14. Select your rule type : Select Based on criteria.

15. Select which records to be shared:

Field : Operator : Value = Distance : greater than : 30

Field : Operator : Value = Distance : less or equal : 50

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

Public Groups : Street Cause

17. Click on Save.

Drop-Off point Sharing Rules		New	Recalculate	Drop-Off point Sharing Rules Help ?	
Action	Criteria			Shared With	Access Level
Edit   Del	Drop-Off point: Distance LESS OR EQUAL 15			Group: Iksha	Read/Write
Edit   Del	(Drop-Off point: Distance GREATER THAN 15) AND (Drop-Off point: Distance LESS OR EQUAL 30)			Group: NSS	Read/Write
Edit   Del	(Drop-Off point: Distance GREATER THAN 30) AND (Drop-Off point: Distance LESS OR EQUAL 50)			Group: Street Cause	Read/Write

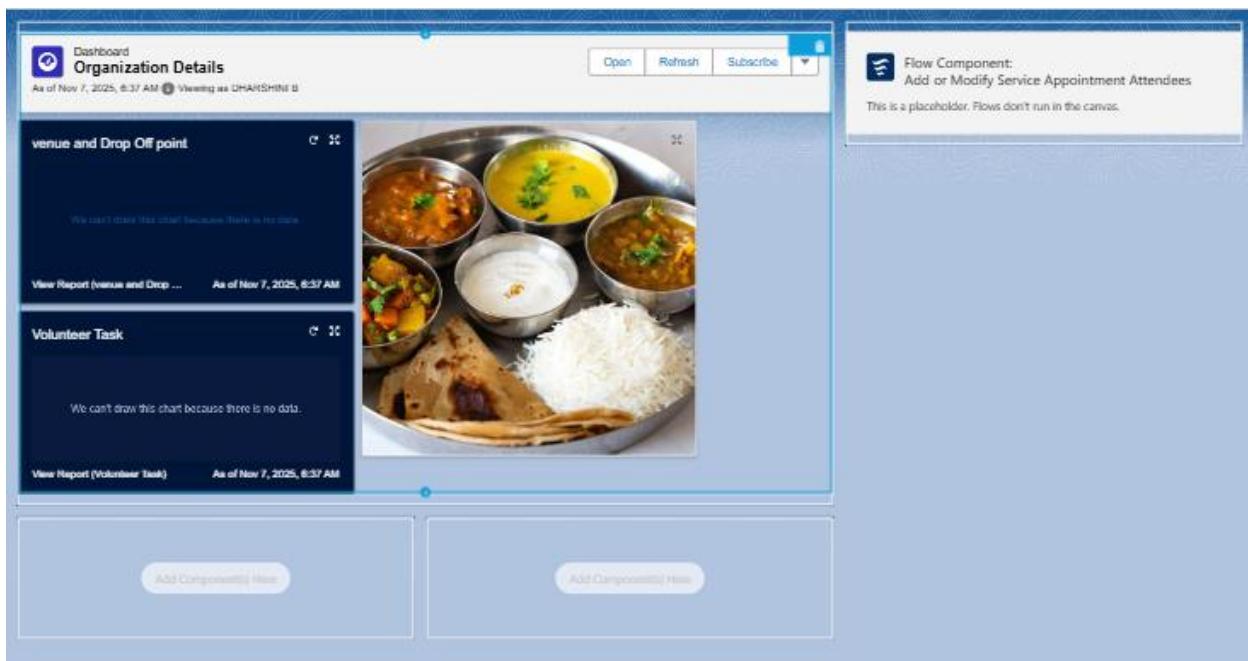
**Home Page**

**Creation of Home Page**

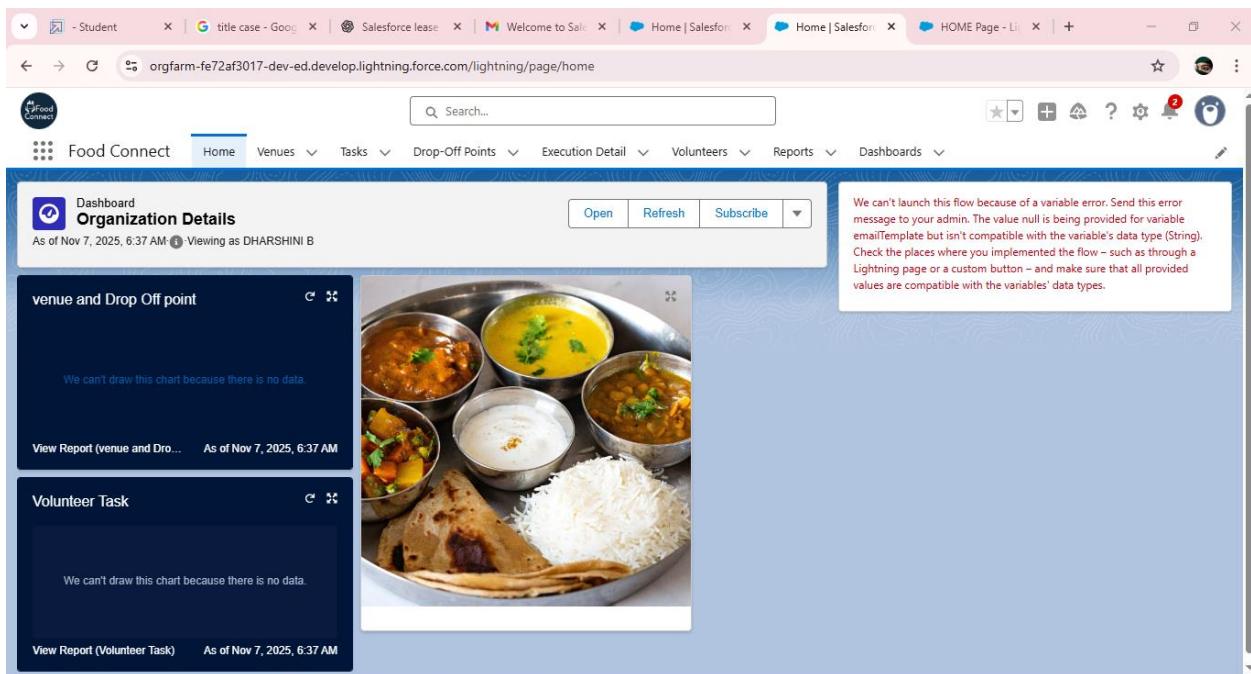
1. Go to setup >> type Lightning App Builder in quick find box >> Click on the Lightning App Builder and Select the New.
2. Select Home Page and give Label as HOME Page.
3. Select Standard Home Page.
4. Near Components search for Flow and Drag and Drop in Right Side Section..
5. On the right hand side:

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

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.