Project Title: To Supply Leftover Food to Poor

Category: Salesforce
Skills Required: Salesforce Developer

Project Overview

The CRM Application for Food Connect is designed to facilitate the efficient distribution of leftover food to communities in need. The application leverages Salesforce's robust CRM capabilities to streamline the food supply chain, improve interaction with partners, and ensure seamless food distribution operations. A notable feature of the application is its integration with communication tools to engage and collaborate effectively with food donors, recipients, and volunteers.

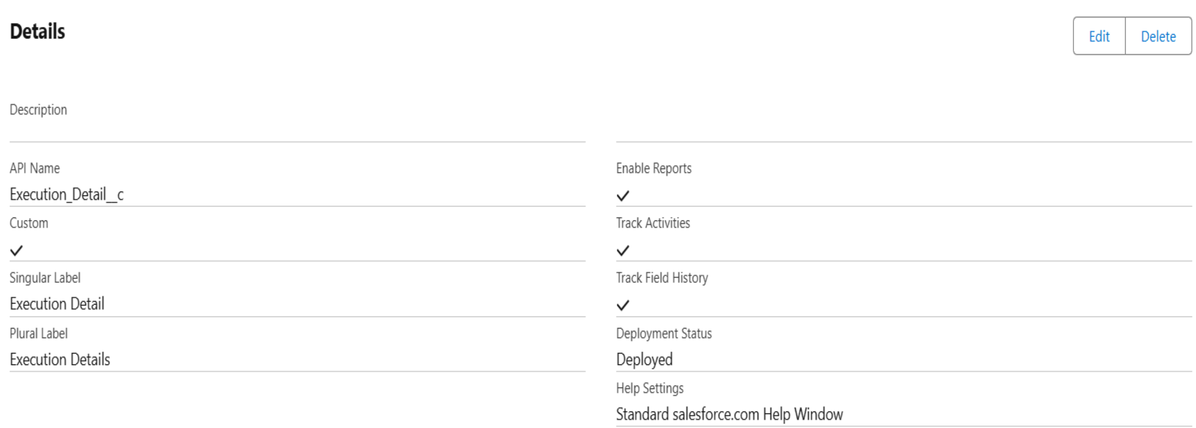
Features and Functionalities

● **Food Inventory Management:** Tracks and manages the inventory of surplus food available for distribution.
● **Donor and Recipient Management:** Maintains detailed records of donors, recipients, and their interactions with the food supply service.
● **Food Donation and Distribution Process:** Facilitates the scheduling and management of food donations and their distribution lifecycle.
● **Billing and Donation Tracking:** Automates tracking and reporting of donations and billing (if applicable for handling costs).
● **User Roles and Profiles:** Defines different levels of access and user roles, such as Admin, Donor, Volunteer, and Recipient Coordinator, to ensure proper data handling and security.
● **Validation Rules:** Ensures the accuracy and completeness of critical information such as contact details, donation specifics, and eligibility criteria for recipients.
● **Automation via Flows and Apex:** Utilizes Salesforce Flows and Apex triggers to automate key processes, such as scheduling donations and tracking food distribution status.
● **Reports and Dashboards:** Provides real-time insights into food distribution metrics, donation trends, and volunteer engagement through comprehensive reports and visual dashboards.

Detailed Setup Instructions

Objects

- **Navigate to Setup**:
    - From the setup page, click on **Object Manager**.
- **Create a Custom Object**:
    - Click on **Create** >> **Custom Object**.
- **Enter Details**:
    - **Label Name**: Enter the name (e.g., *Venue*, *Drop-Off Point*, *Task*, *Volunteer*, *Execution Detail*).
    - **Plural Label Name**: Enter the plural form (e.g., *Venues*, *Drop-Off Points*, etc.).
    - **Record Name Label**: Enter the record name (e.g., *Venue Name*, *Task Name*).
    - **Data Type**: Choose **Text**.
- **Enable Options**:
    - Check **Allow Reports**, **Track Field History**, and **Allow Activities**.
    - Enable **Allow Search**.
- **Save**:
    - Click **Save** to complete the creation.



Details

Edit | Delete

Description

API Name
Drop_Off_Point__c

Custom
✓

Singular Label
Drop-Off Point

Plural Label
Drop-Off Points

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Details

Edit | Delete

Description

API Name
Volunteer__c

Custom
✓

Singular Label
Volunteer

Plural Label
Volunteers

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Details

Edit | Delete

Description

API Name
Venue__c

Custom
✓

Singular Label
Venue

Plural Label
Venues

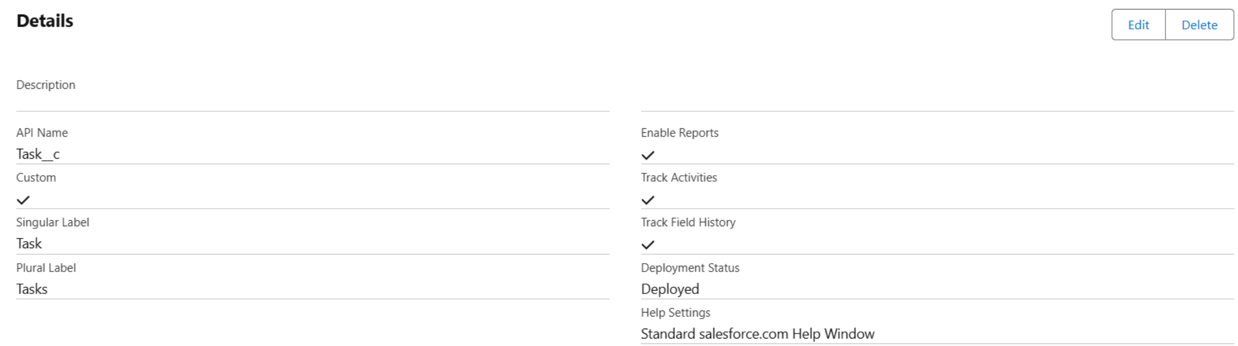
Enable Reports
✓

Track Activities
✓

Track Field History
✓

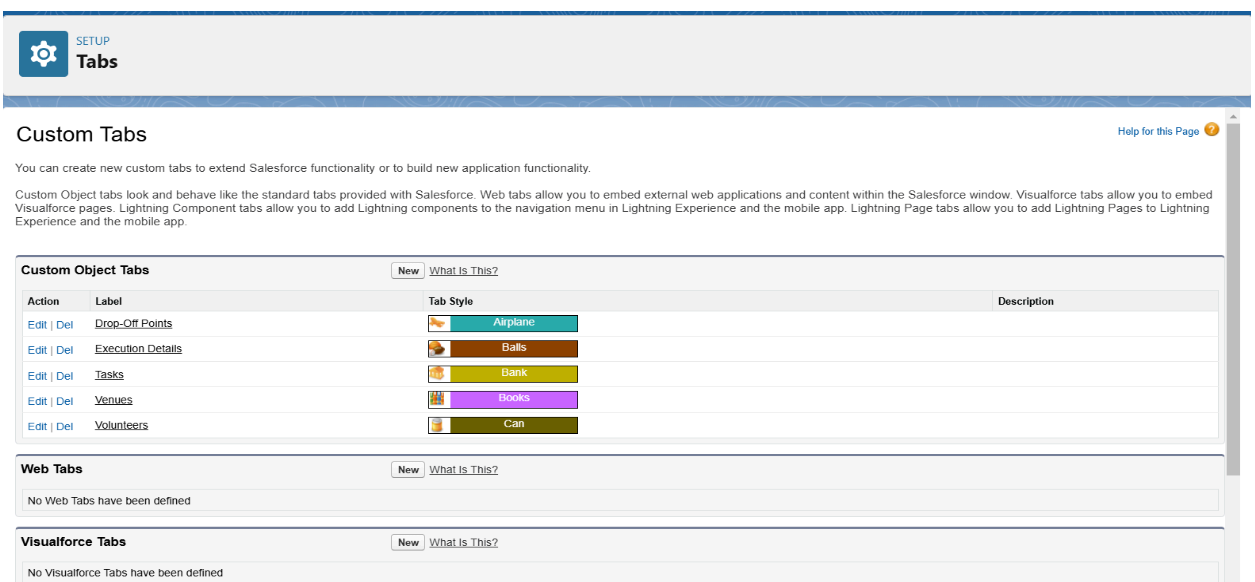
Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window



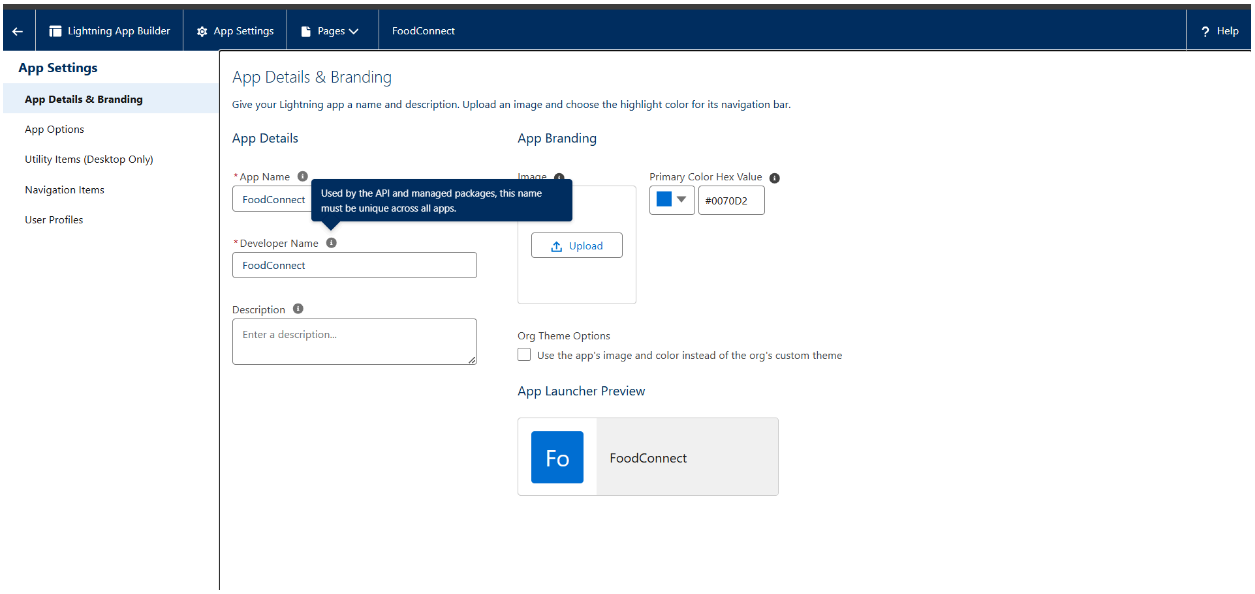
Creating Tabs

1. **Navigate to Setup**:
   a. Type **"Tabs"** in the Quick Find bar and select **Tabs**.
2. **Create a New Tab**:
   a. Click on **New** under **Custom Object Tabs**.
   b. Select the custom object (e.g., *Venue*) and choose a **Tab Style**.
   c. Keep default settings, ensure **Append tab to users' existing personal customizations** is checked, and uncheck **Include Tab in Custom App**.
   d. Click **Save**.
3. **Create Remaining Tabs**:
   - Repeat the steps for the following objects: a. *Drop-Off Point*
     b. *Task*
     c. *Volunteer*
     d. *Execution Details*



Creating a Lightning App Page

1. **Navigate to App Manager**:
   a. Go to the **Setup** page.
   b. Search for **"App Manager"** in the Quick Find bar and select **App Manager**.
2. **Create a New Lightning App**:
   a. Click on **New Lightning App**.
   b. Fill in the app details:
      - **App Name**: *FoodConnect*
      - **Developer Name**: (This will auto-populate)
      - **Image**: Optional (You can upload an image, but it's not mandatory).
      - **Primary Color Hex Value**: Keep the default.
      c. Click **Next**.
3. **App Options**:
   a. Set **Navigation Style** to **Standard Navigation**.
   b. Click **Next**.
4. **Utility Items**:
   a. Keep it as default and click **Next**.
5. **Add Navigation Items**:
   a. Search for the following items in the search bar:
      - **Home**, **Venue**, **Drop-Off Point**, **Task**, **Volunteer**, **Execution Details**, **Reports**.
      b. Use the arrow button to move them to the **Selected Items** section.
      c. Click **Next**.
6. **Add User Profiles**:
   a. Search for **System Administrator** in the search bar.
   b. Click the arrow button to add it.
   c. Click **Save & Finish**



Creating Fields

1. Create Master-Detail Relationship Field on Volunteer Object

- Go to **Setup** > **Object Manager** > Search for **Volunteer** > Click on it.
- Under **Fields & Relationships**, click **New**.
- Select **Master-Detail Relationship**.
- Choose the related object **Drop-Off Point**.
- Field Name: `Drop_Off_point`, Field Label: Auto-generated.
- Click **Next**, then **Save**.

2. Create Master-Detail Relationship Field on Execution Details Object

- Go to **Setup** > **Object Manager** > Search for **Execution Details** > Click on it.
- Under **Fields & Relationships**, click **New**.
- Select **Master-Detail Relationship**.
- Choose the related object **Volunteer**.
- Field Name: `Volunteer`, Field Label: Auto-generated.
- Click **Next**, then **Save**.

3. Create Lookup Relationship Fields

- For **Drop-Off Point** Object:

        - Go to **Setup** > **Object Manager** > Search for **Task** > Click on it.
        - Under **Fields & Relationships**, click **New**.
        - Select **Lookup Relationship**, choose **Drop-Off Point**.
        - Field Name: `Venue`, Field Label: `Venue__c`.
        - Click **Next**, then **Save**.
- For **Task** Object:
    - Go to **Setup** > **Object Manager** > Search for **Task** > Click on it.
    - Under **Fields & Relationships**, click **New**.
    - Select **Lookup Relationship**, choose **Venue**.
    - Field Name: `Sponsored By`, Field Label: Auto-generated.
    - Click **Next**, then **Save**.

4. Create Fields for the Venue Object

- Create **Email**, **Phone**, **Geolocation**, and **Long Text Area** fields as described in the instructions, following similar steps:
    - Go to **Setup** > **Object Manager** > Search for **Venue**.
    - Under **Fields & Relationships**, click **New**, choose the appropriate data type (Email, Phone, Geolocation, etc.), and fill in the necessary details (Field Label, Field Name).
    - Click **Next** and **Save**.

5. Create Fields for the Drop-Off Point Object

- Follow similar steps as for **Venue** to create **Geolocation**, **Formula**, and **Picklist** fields:
    - Geolocation: `Location 2`
    - Formula: `distance_calculation` (using `DISTANCE` formula function).
    - Picklist: `State` (with predefined states listed).

6. Create Fields for the Task Object

- Create fields like **Auto Number**, **Date**, **Picklist (Multi-Select)**, **Number**, and **Text** for the **Task** object:
    - Auto Number: `Task ID` (Format: `TASK-{0}`).
    - Date: `Date`.
    - Picklist: `Food Category`.
    - Number: `Number of People Served`.
    - Text: `Name of the Person`, etc.

7. Create Fields for the Volunteer Object

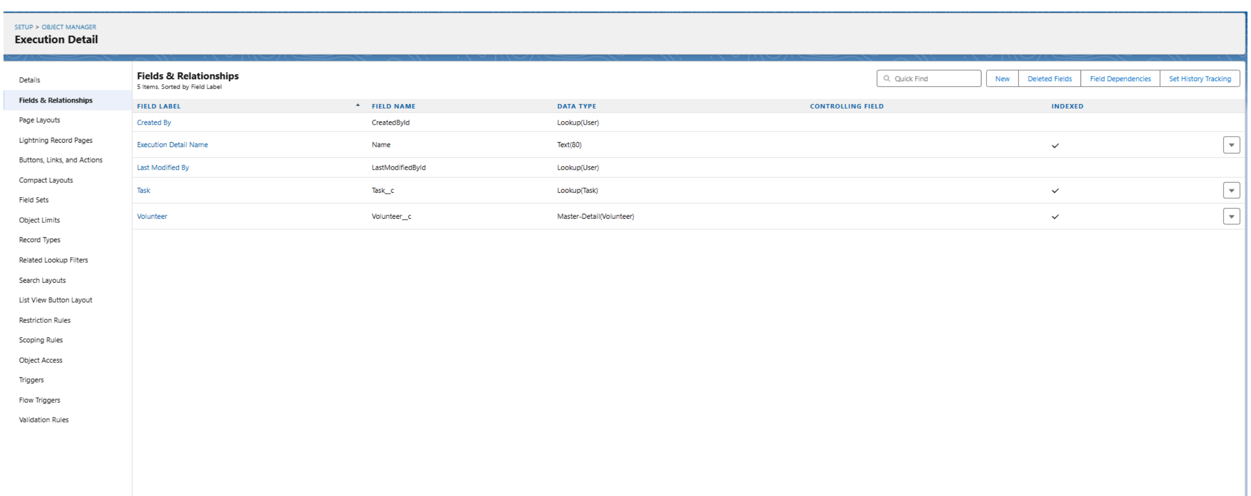
- For **Volunteer** object, create fields like **Auto Number**, **Picklist**, **Number**, **Email**, **Text Area**, etc., similar to the other objects:
  - Auto Number: `Volunteer ID`.
  - Picklist: `Gender`.
  - Date: `Available On`, `Date of Birth`.

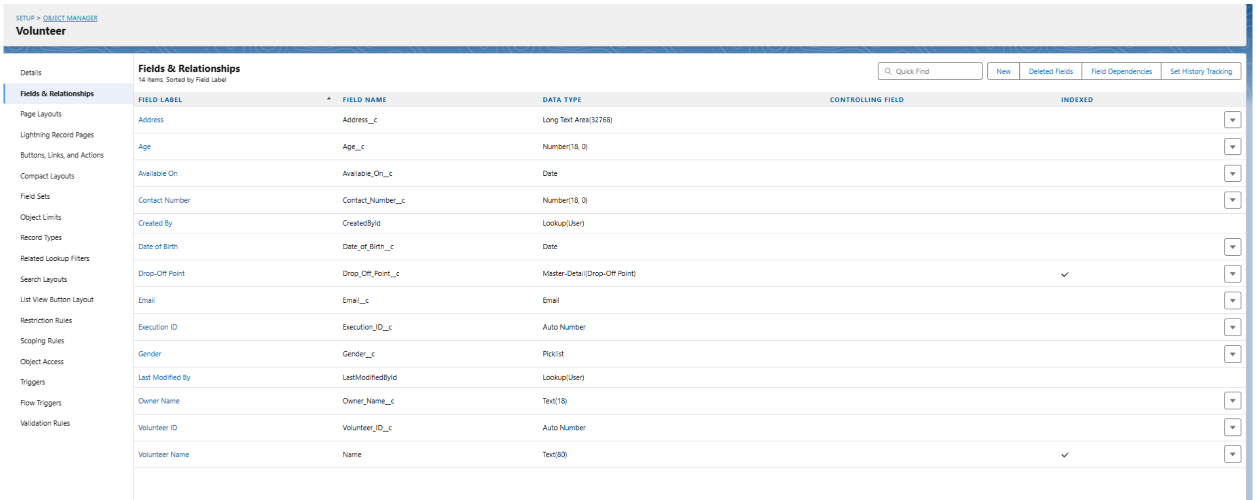
8. Create Fields for the Execution Details Object

- For **Execution Details** object, create an **Auto Number** field:
  - Auto Number: `Execution ID`.

For each field, follow these steps:

1. Go to **Setup** > **Object Manager**.
2. Select the object.
3. Under **Fields & Relationships**, click **New**.
4. Choose the field type, fill in the necessary details, then click **Save**.

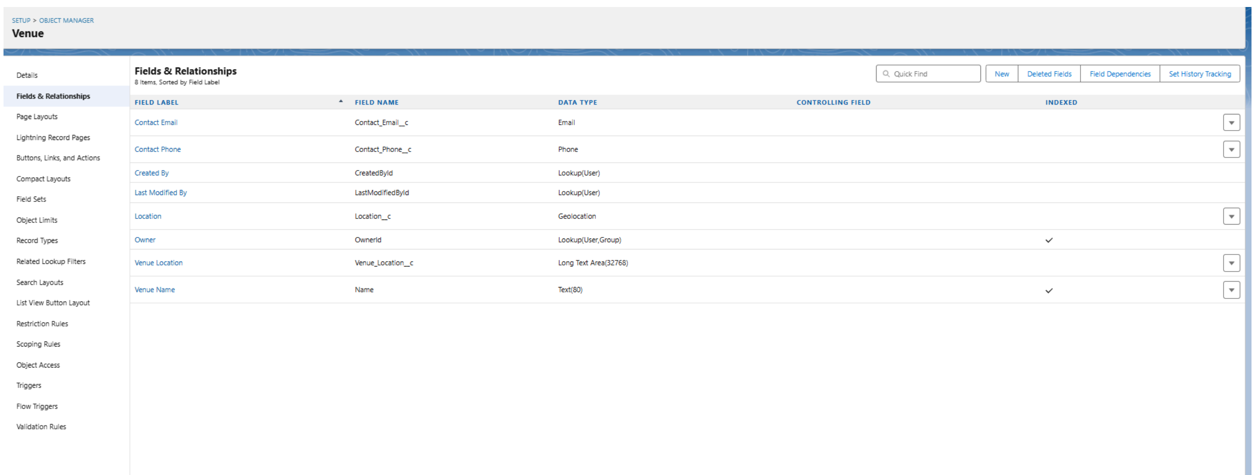




Fields & Relationships

14 Items, Sorted by Field Label

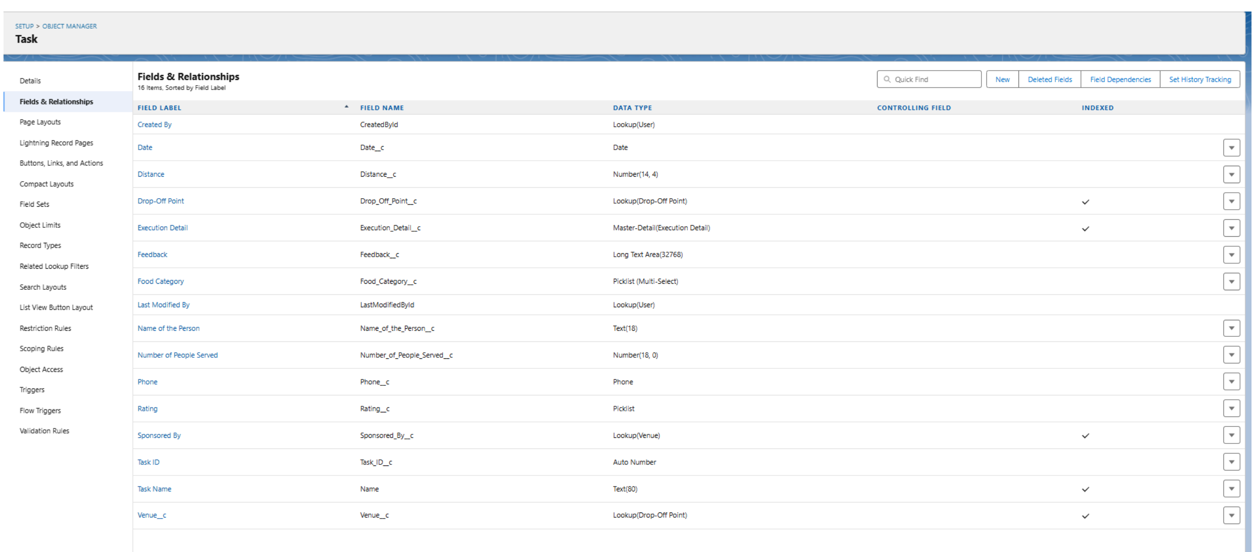
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Age	Age__c	Number(18, 0)		
Available On	Available_On__c	Date		
Contact Number	Contact_Number__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Drop-Off Point	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)		
Owner Name	Owner_Name__c	Text(18)		
Volunteer ID	Volunteer_ID__c	Auto Number		
Volunteer Name	Name	Text(80)		✓



Fields & Relationships

8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact Email	Contact_Email__c	Email		
Contact Phone	Contact_Phone__c	Phone		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location__c	Geolocation		
Owner	OwnerId	Lookup(User,Group)		✓
Venue Location	Venue_Location__c	Long Text Area(32768)		
Venue Name	Name	Text(80)		✓



Fields & Relationships

16 Items, Sorted by Field Label

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)		✓
Execution Detail	Execution_Detail__c	Master-Detail(Execution Detail)		✓
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(18)		
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Phone	Phone__c	Phone		
Rating	Rating__c	Picklist		
Sponsored By	Sponsored_By__c	Lookup(Venue)		✓
Task ID	Task_ID__c	Auto Number		
Task Name	Name	Text(80)		✓
Venue__c	Venue__c	Lookup(Drop-Off Point)		✓

Creating Flows

1. Create Flow:

- Go to **Setup** → Type "Flow" → Click **New Flow**.
- Select **Screen Flow** → **Create**.

2. Add Screen Element:

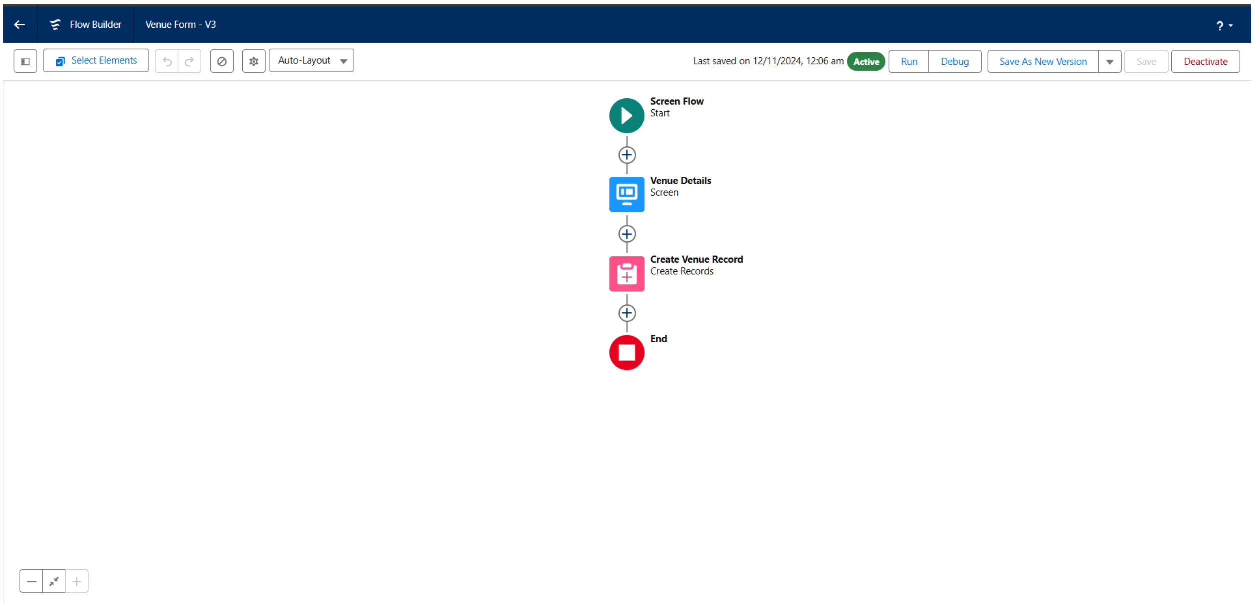
- Click **‘+’** → Select **Screen**.
- Set **Label**: Venue Details, **API Name**: Venue_Details.
- Add these components:
    - **Text**: Venue Name
    - **Email**: Contact Email
    - **Phone**: Contact Phone
    - **Text**: Venue Location
    - **Number**: Latitude
    - **Number**: Longitude
- Click **Done**.

3. Create Record Element:

- Click **‘+’** → Select **Create Record**.
- Set **Label**: Create Venue Record, **API Name**: Create_Venue_Record.
- Choose **One record** → Set fields:
    - **Contact_Email__c** = {!Contact_Email.value}
    - **Contact_Phone__c** = {!Contact_Phone.value}
    - **Name** = {!Venue_Name}
    - **Venue_Location__c** = {!Venue_Location}
    - **Location__Latitude__s** = {!Latitude}
    - **Location__Longitude__s** = {!Longitude}
- Click **Done**.

4. Save Flow:

- **Flow Label**: Venue Form
- **API Name**: Venue_Form
- Click **Save**.



TRIGGERS

1. Log into Trailhead:

- Click the **Gear Icon** → **Developer Console**.

2. Create Trigger:

- Go to **File** → **New** → **Trigger**.
- Set:
  - **Trigger Name**: DropOffTrigger
  - **Object**: Drop-Off Point

3. Write Trigger Code:

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

4. Submit to save the trigger.

Creating Profiles

1. Go to Setup:

- Type **Profiles** in the Quick Find box and select **Profiles**.

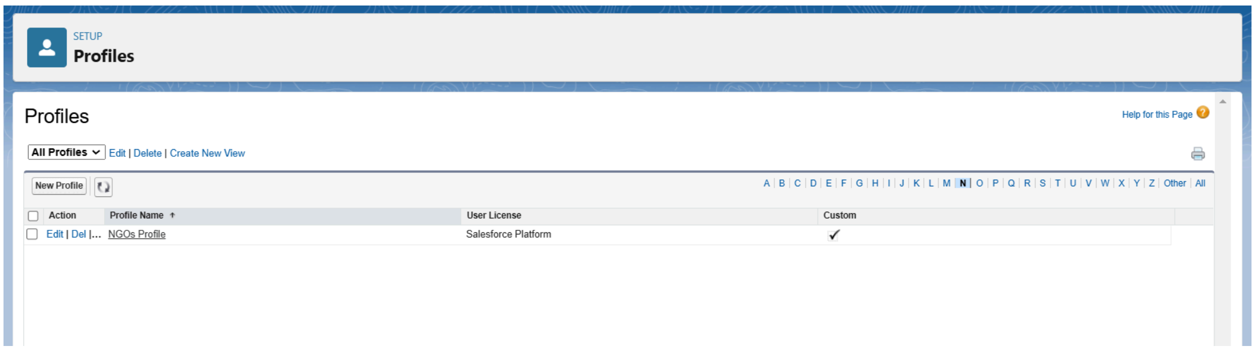
2. Clone Profile:

- Find **Standard Platform User**, and click on **Clone**.

3. Set Profile Name:

- Enter **Profile Name**: NGOs Profile.

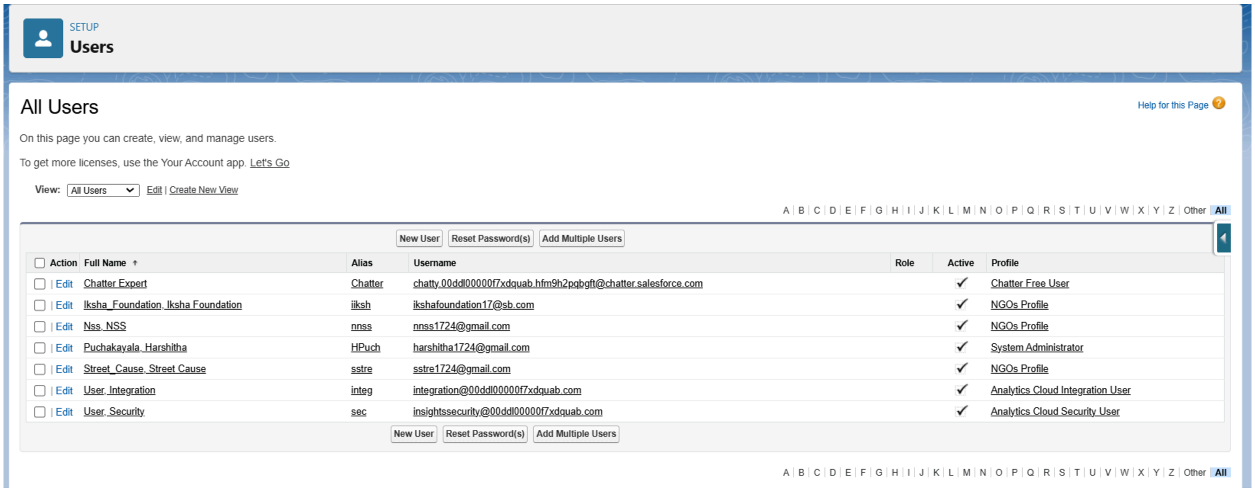
4. Save the profile.



Create User:

1. **Go to Setup**: Type **Users** in Quick Find and select **Users**.
2. **Click on New User**.
3. **Fill in General Information**:
   - **First Name**: Iksha Foundation
   - **Last Name**: Iksha_Foundation
   - **Alias**: iiksh
   - **Email**: Your Email
   - **Username**: ikshafoundation@sb.com (use a unique username)
   - **Nickname**: Auto Populated
   - **User License**: Salesforce Platform
   - **Profile**: NGOs Profile
   - **Active**: Check
4. **Click Save**

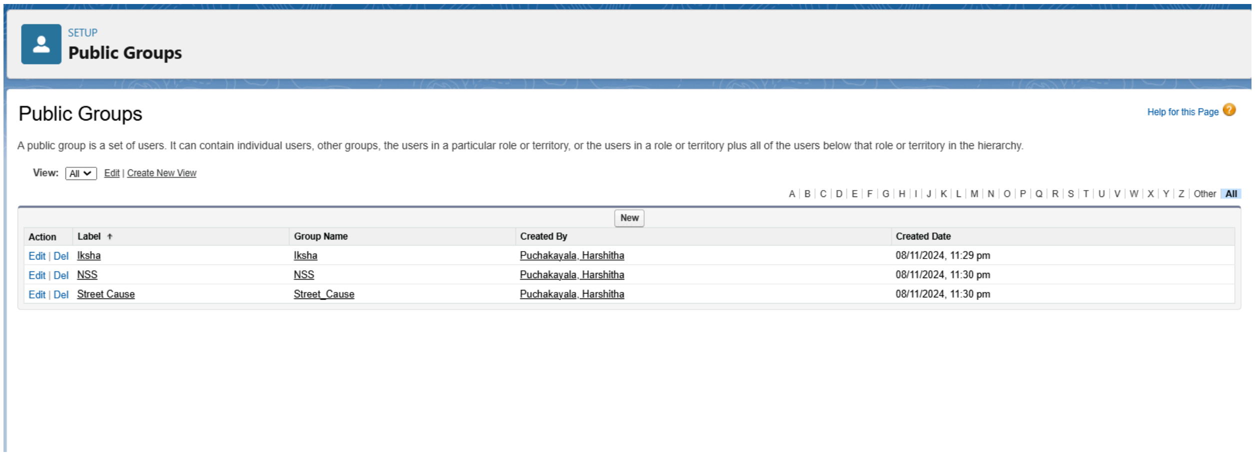
Follow the same steps to create two more users.
Use different **First Name** and **Last Name** based on other NGOs, but keep the same **User License** and **Profile**.



Create Public Group :

1. **Go to Setup**: Type **Public Groups** in Quick Find and select **Public Groups**.
2. **Click on New**.
3. **Group Information**:
   - **Label**: Iksha
   - **Group Name**: Iksha
   - **Grant Access Using Hierarchies**: Check
4. **Search for Users** and add:
   - **Iksha Foundation**
   - **System Administrator**
5. **Click Save**.

Follow the same steps to create two more public groups for the other two users.



Creation of Report Types

1. **Go to Setup**: Type **Report Types** in Quick Find, click on **Report Types**, then click **New Custom Report Type**.
2. **Define Custom Report Type**:
   - **Primary Object**: Venues
   - **Label**: Venue with DropOff with Volunteer
   - **Name**: Venue_with_DropOff_with_Volunteer
   - **Description**: Venue with DropOff with Volunteer
   - **Category**: Other Reports
   - **Deployment Status**: Deployed
3. **Relate Objects**:
   - First, relate to **Drop-Off Points** (Choose “A” records may or may not have related "B" records).
   - Then, relate to **Volunteers**.
4. **Click Save**.

SETUP

Report Types

Custom Report Type

Venue with DropOff with Volunteer

Help for this Page

Below is the information for this custom report type. You can click the buttons on this page to preview or update information for the custom report type.

Custom Report Type Definition

Edit Delete Clone

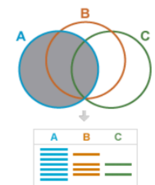
Report Type Label	Venue with DropOff with Volunteer	Report Type Category	Other Reports
Report Type Name	Venue_with_DropOff_with_Volunteer	Deployment Status	Deployed
Description	Venue with DropOff with Volunteer		
Created By	Harshitha Puchakayala, 08/11/2024, 11:34 pm	Modified By	Harshitha Puchakayala, 08/11/2024, 11:34 pm

Object Relationships

Edit

Object Relationships Help

Venues (A)
with or without related records from Drop-Off Points (B)
with or without related records from Volunteers (C)



Fields Available for Reports

Edit Layout Preview Layout

Fields Available for Reports Help

Source	Selected Fields
Venues	13

SETUP

Report Types

Custom Report Type

Volunteers With Execution Details And Tasks

Help for this Page

Below is the information for this custom report type. You can click the buttons on this page to preview or update information for the custom report type.

Custom Report Type Definition

Edit Delete Clone

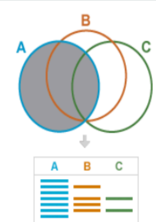
Report Type Label	Volunteers With Execution Details And Tasks	Report Type Category	Other Reports
Report Type Name	Volunteers_With_Execution_Details_And_Tasks	Deployment Status	Deployed
Description	Volunteers With Execution Details And Tasks		
Created By	Harshitha Puchakayala, 12/11/2024, 12:46 am	Modified By	Harshitha Puchakayala, 12/11/2024, 12:46 am

Object Relationships

Edit

Object Relationships Help

Volunteers (A)
with or without related records from Execution Details (B)
with or without related records from Tasks (C)



Fields Available for Reports

Edit Layout Preview Layout

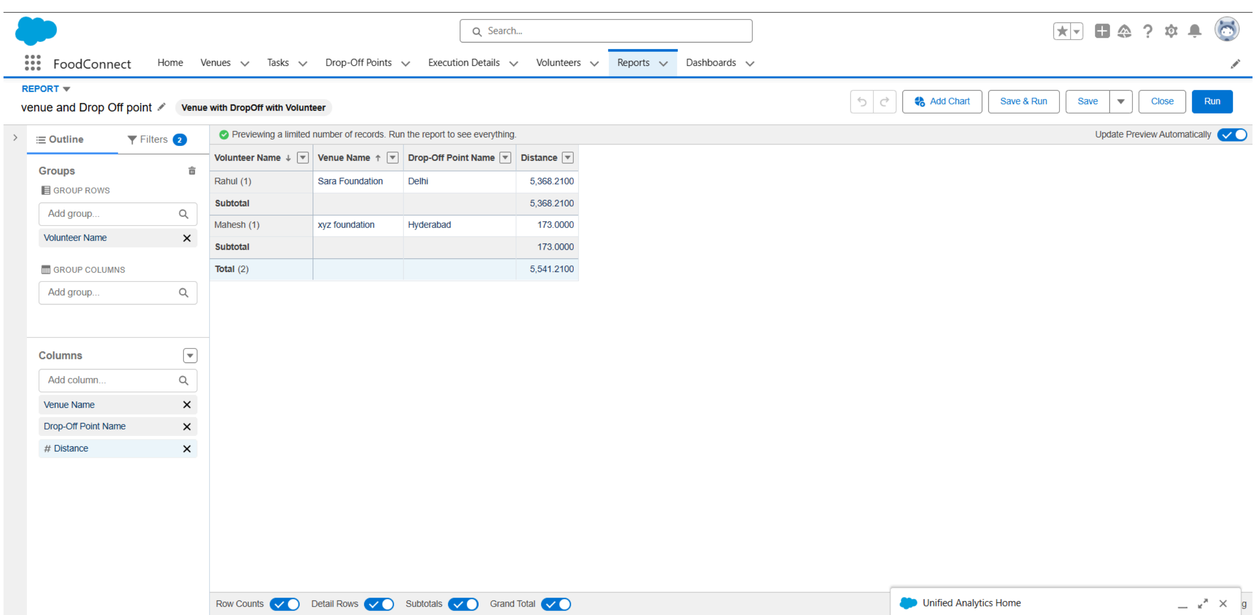
Fields Available for Reports Help

Source	Selected Fields
Volunteers	18

Reports

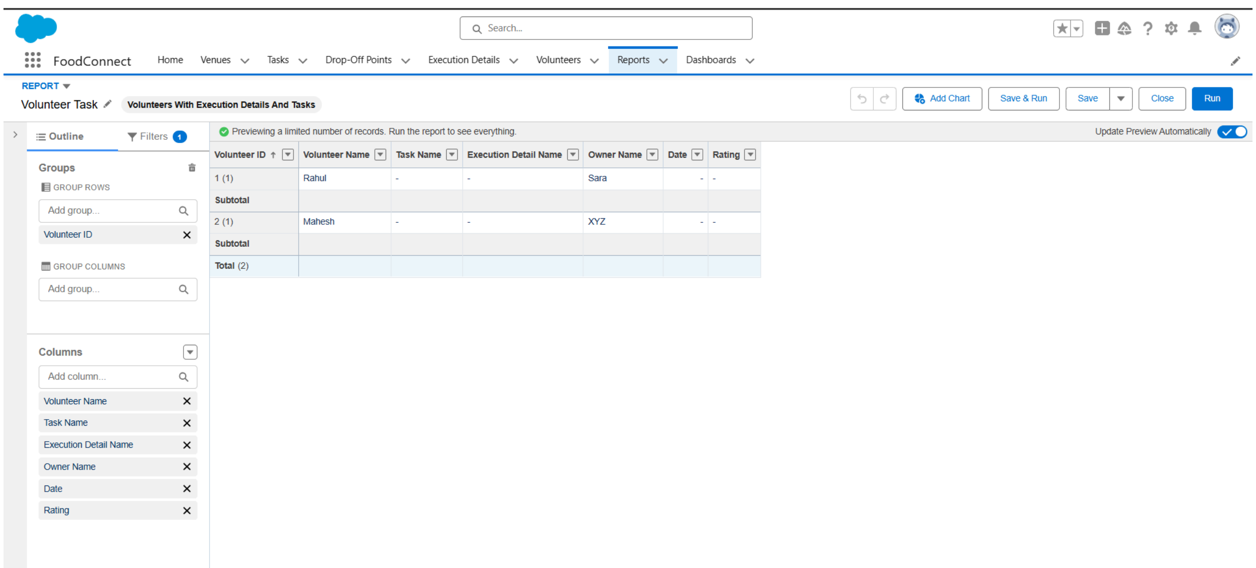
Creation of Report on Venue with DropOff with Volunteer

1. **Go to Reports Tab**: In the app, click **Reports**.
2. **Create Folder**:
   - Click on **New Folder**.
   - Name it **Custom Reports**.
   - Click **Save**.
3. **Create New Report**:
   - Select **Venue with DropOff with Volunteer**.
   - Click **Start Report**.
4. **Group Rows**: Add **Volunteer Name**.
5. **Add Columns**:
   - Venue Name
   - Drop-Off point Name
   - Distance
6. **Save & Run**:
   - **Name it**: Venue and Drop Off Point.
   - **Select Folder**: Custom Report.
   - **Click Save**.



Creation of Report on Volunteers with Execution Details and Tasks

1. **Go to Reports Tab**: In the app, click **Reports**.
2. **Create New Report**: Select **Volunteers with Execution Details and Tasks**.
3. **Start Report**: Group by **Volunteer ID**, and add columns:
   - **Volunteer Name**
   - **Task Name**
   - **Execution Detail Name**
   - **Owner Name**
   - **Date**
   - **Rating**
4. **Save & Run**: Name it **Volunteer Task**, select folder **Custom Report**, then save.



Dashboards

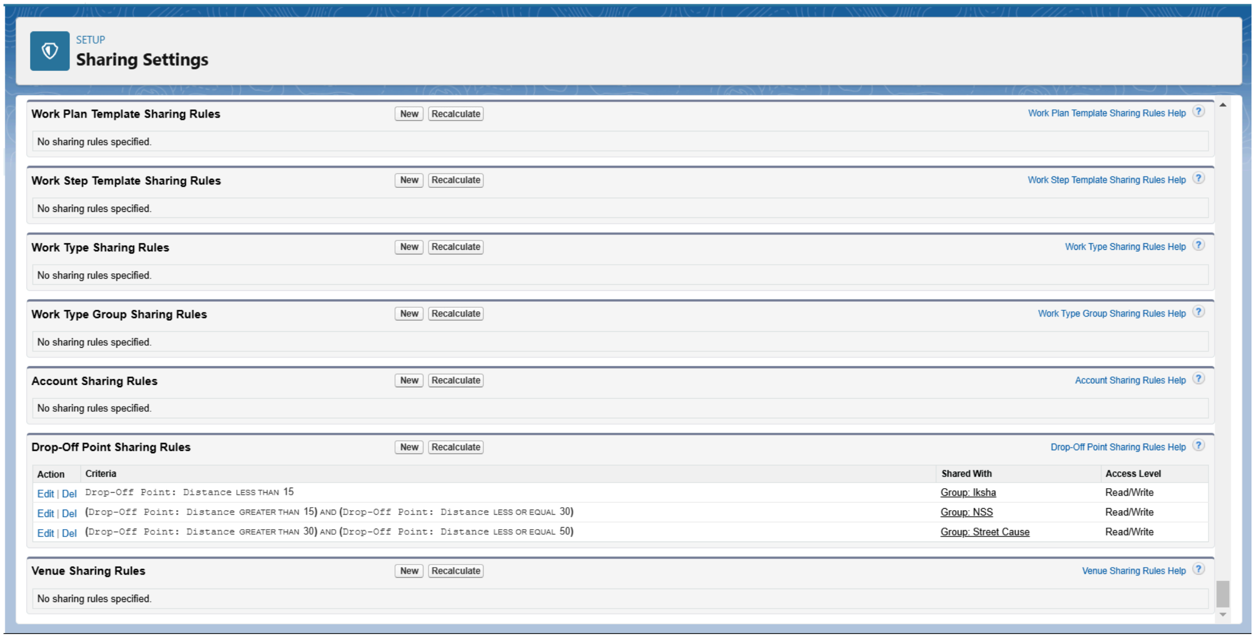
Adding Reports to Dashboard

1. **Go to Dashboards Tab**: Click on **New Folder**, name it **Custom Dashboards**, then save.
2. **New Dashboard**: Name it **Organization Details**.
3. **Add Widgets**:
   - For **Venue and Drop Off Point**: Select **Lightning Table** and save.
   - For **Volunteer Task**: Select **Line Chart** and save.

4. **Add Image** (Optional): Select **Image Widget**, browse files to upload, and save as **Task Execution Details**.

Creation of Sharing Rules

1. **Go to Setup**: Type **Sharing Settings** in Quick Find, click on **Sharing Settings**.
2. **Create Rules**:
   - **Rule 1**: Distance < 15, Share with **Iksha** public group.
   - **Rule 2**: Distance between 15-30, Share with **NSS** public group.
   - **Rule 3**: Distance between 30-50, Share with **Street Cause** public group.



Creation of Home Page

1. **Go to Setup**: Type **Lightning App Builder** in Quick Find, click on **Lightning App Builder**.
2. **Create Home Page**: Select **Standard Home Page**, name it **HOME Page**.
3. **Add Components**:
   - **Flow**: Add **Venue Flow**.
   - **Dashboard**: Add **Dashboard** component.
4. **Save & Activate**: Set **FoodConnect App**, then save.