

Project: To Supply Leftover Food To Poor

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1. Project Overview:

This project is focused on " To Supply Leftover Food to Poor ", designed to address the critical issue of food waste and hunger. The goal is to deliver a comprehensive solution by leveraging Salesforce's data management and automation capabilities. Through this project, we aim to enhance food distribution efficiency, community engagement, and data-driven decision making and support the long-term goals of reducing food waste and alleviating hunger in our community.

2. Objectives:

Business Goals:

Reduce Food Waste:

Significantly decrease the amount of food waste generated by local businesses and individuals.

Alleviate Hunger:

Provide nutritious meals to underprivileged communities, aiming to improve their overall health and well-being.

Community Engagement:

Foster a sense of community by involving local businesses, volunteers, and residents in the food redistribution process.

Specific Outcomes:

Reduction in Food Waste:

Achieve a measurable decrease in the amount of food waste from participating donors by 30% within the first year.

Increased Meals Provided:

Distribute an average of 1,000 meals per month to underprivileged communities, ensuring consistent access to nutritious food.

Expanded Donor Network:

Grow the network to include at least 50 new food donors, such as restaurants, grocery stores, and food producers, by the end of the first year.

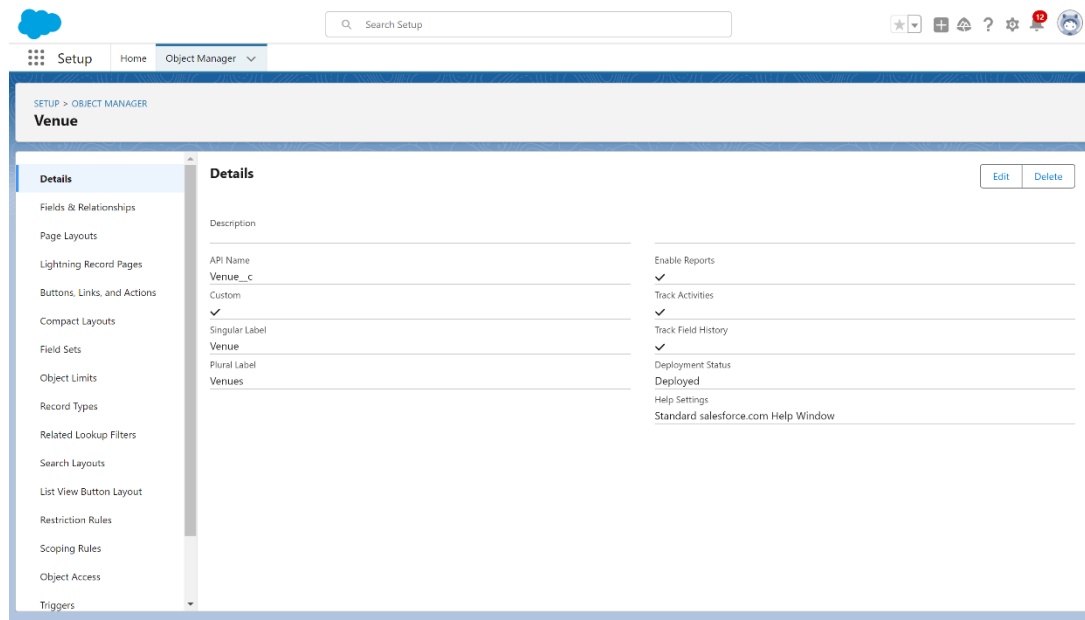
3. Salesforce Key Features and Concepts Utilized:

- **Custom Objects:** Created objects for Dropoff point, Volunteer, Venue, Task, and Execution Detail.
- **Lookup Relationships:** Connected objects (e.g., Dropoff point to Volunteer, Task to Dropoff point) for relational data management.
- **Salesforce Flow:** Automations for appointment Venue details, invoice generation, and status updates.
- **Validation Rules:** Ensuring correct data entry, such as valid delivery dates and Volunteer shift reminders.
- **Reports and Dashboards:** For tracking venue and dropoff point, volunteer task.
- **Page Layouts and Record Types:** Customized layouts for different users (e.g., food donor vs. volunteer coordinators)

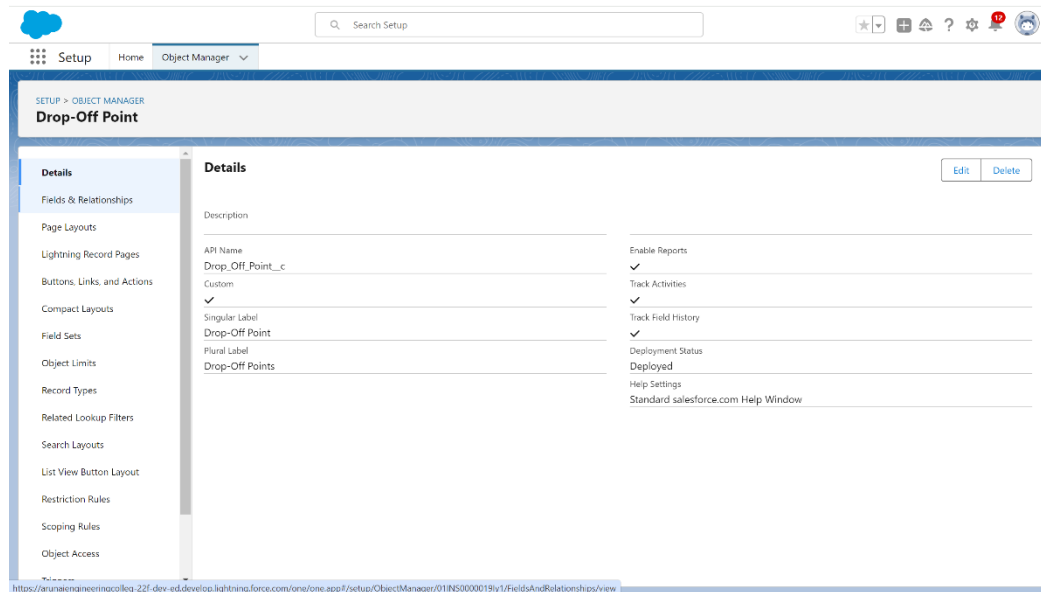
4. Detailed Steps to Solution Design:

1. To create an custom object

a. Venue object:



b. DropOff Point object:



c. Volunteer Object:

The screenshot shows the Salesforce Object Manager interface for the 'Volunteer' object. The left sidebar contains a list of configuration options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Object Access. The 'Details' section is selected, showing the following configuration:

| Field | Value |
|---------------------|-------------------------------------|
| 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 |

Buttons: Edit, Delete

URL: <https://runniengineeringcolleg-22f-dev-ed.develop.lightning.force.com/one/one.app#/setup/ObjectManager/01NS0000019122/FieldsAndRelationships/view>

d. Task Object:

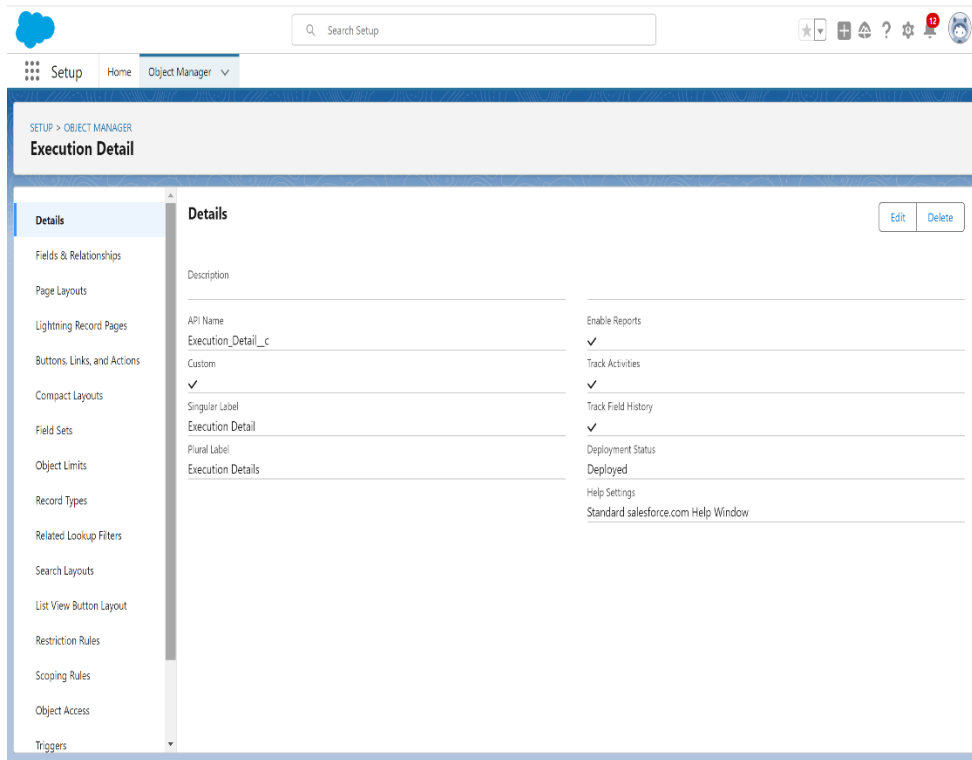
The screenshot shows the Salesforce Object Manager interface for the 'Task' object. The left sidebar contains a list of configuration options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Object Access. The 'Details' section is selected, showing the following configuration:

| Field | Value |
|---------------------|-------------------------------------|
| Description | |
| API Name | Task__c |
| Custom | ✓ |
| Singular Label | Task |
| Plural Label | Tasks |
| Enable Reports | ✓ |
| Track Activities | ✓ |
| Track Field History | ✓ |
| Deployment Status | Deployed |
| Help Settings | Standard salesforce.com Help Window |

Buttons: Edit, Delete

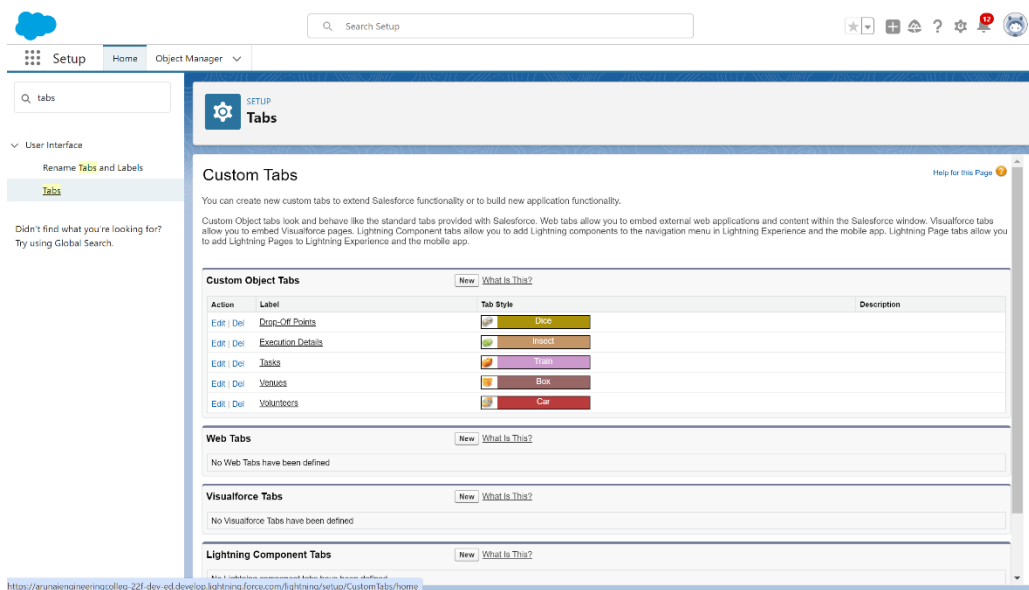
URL: <https://runniengineeringcolleg-22f-dev-ed.develop.lightning.force.com/one/one.app#/setup/ObjectManager/01NS000001911F/view>

e. Execution Detail Object:



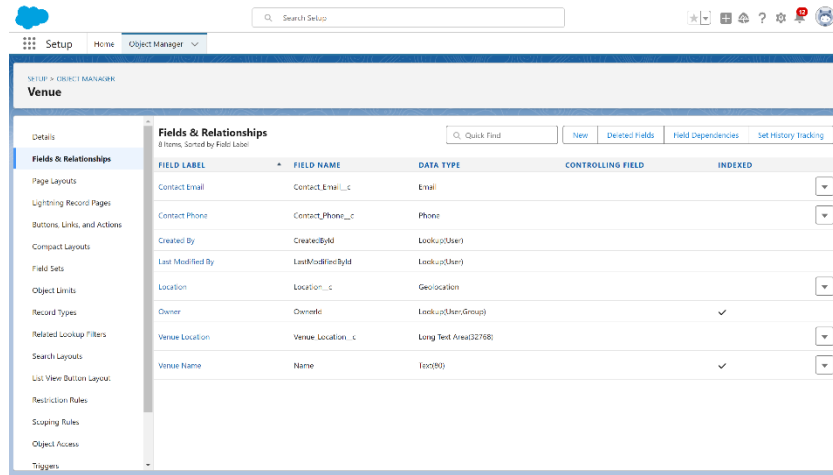
2.Tab:

Create a Custom tab:



3. Fields and Relationship:

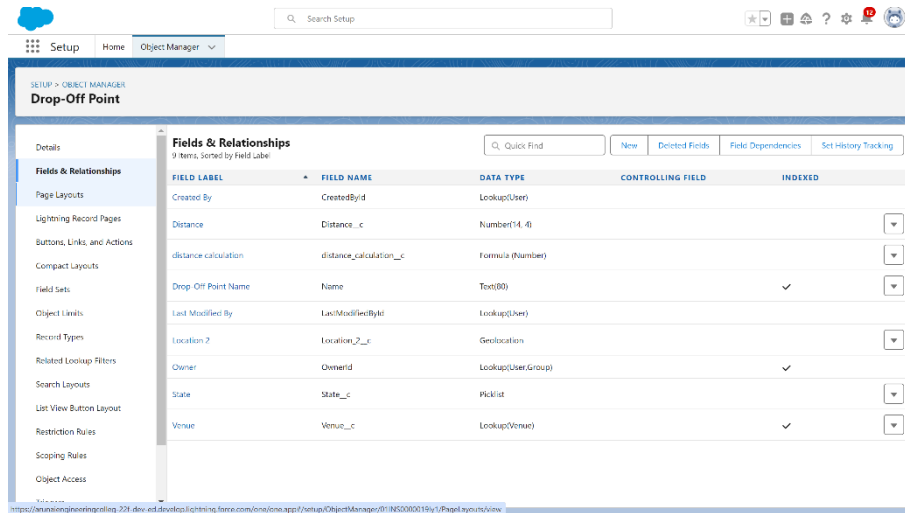
a. Venue:



The screenshot shows the Salesforce Setup interface for the 'Venue' object. The 'Fields & Relationships' tab is selected, displaying a list of 8 fields. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, and Triggers.

| 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(2768) | | |
| Venue Name | Name | Text(80) | | ✓ |

b. DropOff point:



The screenshot shows the Salesforce Setup interface for the 'Drop-Off Point' object. The 'Fields & Relationships' tab is selected, displaying a list of 9 fields. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, and Triggers.

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|----------------------|-------------------------|--------------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| Distance | Distance__c | Number(14, 4) | | |
| distance calculation | distance_calculation__c | Formula (Number) | | |
| Drop Off Point Name | Name | Text(80) | | ✓ |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Location 2 | Location_2__c | Geolocation | | |
| Owner | OwnerId | Lookup(User/Group) | | ✓ |
| State | State__c | Picklist | | |
| Venue | Venue__c | Lookup(Venue) | | ✓ |

c. Volunteer:

Setup > Object Manager

Volunteer

Fields & Relationships

15 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 | Lookup(Drop-Off Point) | | ✓ |
| Email | Email__c | Email | | |
| Execution ID | Execution_ID__c | Auto Number | | |
| Gender | Gender__c | Picklist | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |

d. Task:

Setup > Object Manager

Task

Fields & Relationships

15 Items, Sorted by Field Label

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|-------------------------|----------------------------|-------------------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| Date | Date__c | Date | | |
| Drop-Off Point | Drop_Off_Point__c | Lookup(Drop-Off Point) | | ✓ |
| Feedback | Feedback__c | Long Text Area(32768) | | |
| Food Category | Food_Category__c | Picklist (Multi-Select) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Name of the Person | Name_of_the_Person__c | Text(30) | | |
| Number of People Served | Number_of_People_Served__c | Number(18, 0) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Phone | Phone__c | Phone | | |
| Rating | Rating__c | Picklist | | |

e. Execution Detail:

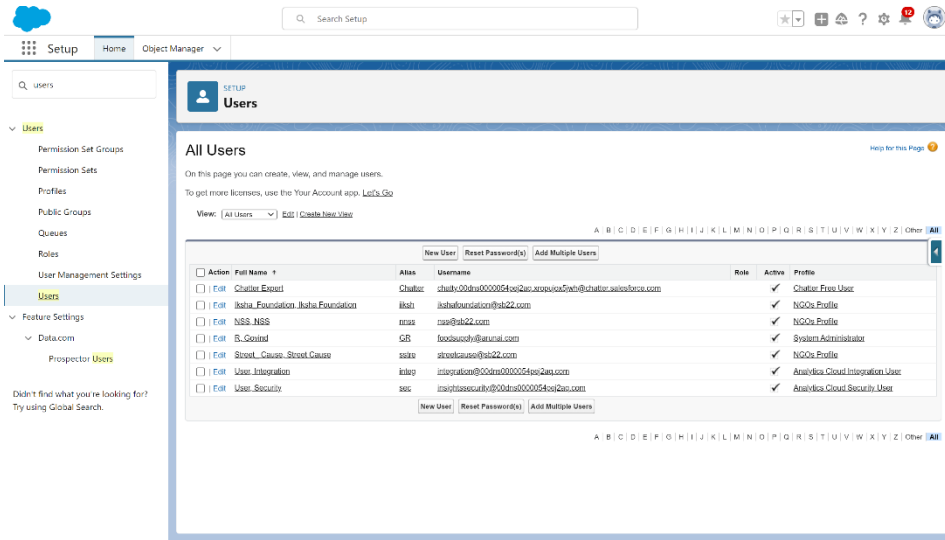
The screenshot shows the Salesforce Setup interface. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, and Triggers. The main content area is titled 'Execution Detail' and shows a table of fields and relationships for the Venue object. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are Created By, Execution Detail Name, Last Modified By, Task, and Volunteer.

| 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) | | ✓ |

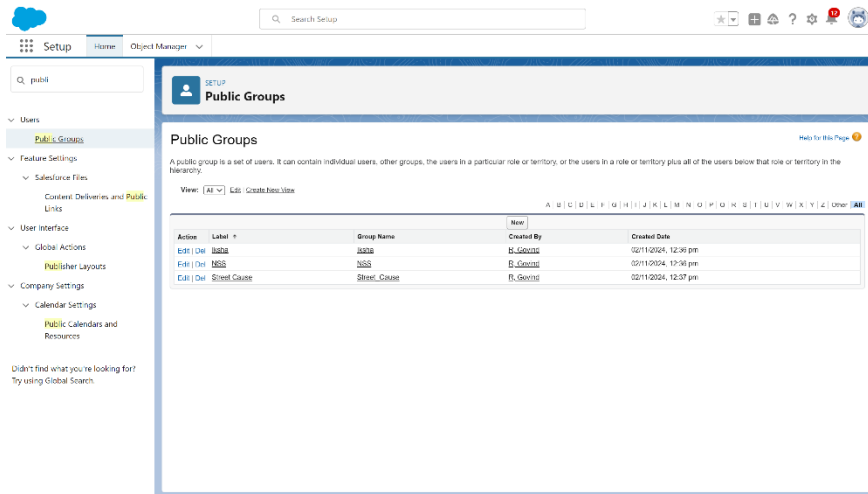
4.Flows:

The screenshot shows the Salesforce Flow Builder interface. The left sidebar contains a flow diagram with steps: Screen Flow Start, Venue Details Screen, Create Venue Record Create Records, and End. The main content area is titled 'Edit version properties' and shows a form for editing the flow version. The form has fields for Flow Label (Venue Form), Flow API Name (Venue_Form), and Description. The flow is currently active, as indicated by the 'Active' status in the top right corner.

5.Users:



6.Public Groups:



7.Report Types:

Report Types

| Action | Label | Description | Category | Deployed | Created By Alias | Created Date |
|--|--|---|---------------|----------|------------------|--------------|
| Edit Del | Drop-Off Points with Volunteers with Execution Details | Drop-Off Points with Volunteers with Execution Details | Other Reports | ✓ | GIS | 02/11/2024 |
| Edit Del | Orchestration Run Logs Spring '24 | Find out which orchestration run logs were created and what happened in their associated orchestration runs. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Orchestration Runs Spring '24 | Find out which orchestration runs were created. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Orchestration Stage Runs Spring '24 | Find out which orchestration stage runs were created and the current status of each run. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Orchestration Step Runs Spring '24 | Find out which orchestration step runs were created and the current status of each run. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Orchestration Work Items Spring '24 | Find out which orchestration work items were created, who's the associated assignee, and what's the current status of each work item. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Definition Spring '24 | Review your analytics with a program-like structure. See each program task, target day, results, and more directly in a report and dashboard. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Definition Summer '24 | Review your analytics with a program-like structure. See each program task, target day, results, and more directly in a report and dashboard. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Item Progress Spring '24 | Report on tasks like exercises, milestones, and outcomes progress. Overall program progress isn't captured in this report. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Item Progress Summer '24 | Report on tasks like exercises, milestones, and outcomes progress. Overall program progress isn't captured in this report. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Progress Spring '24 | Report on program progress. Specific progress on milestones and exercises aren't captured in this report. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Program Progress Summer '24 | Report on program progress. Specific progress on milestones and exercises aren't captured in this report. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Screen Flows | Find out which flows get executed and how long users take to complete each flow screen. | Other Reports | ✓ | autoproc | 02/11/2024 |
| Edit Del | Venue with DropOff with Volunteer | Venue with DropOff with Volunteer | Other Reports | ✓ | GIS | 02/11/2024 |

Show me [fewer](#) ▲ records per list page

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other [All](#)

8.Dashboard:

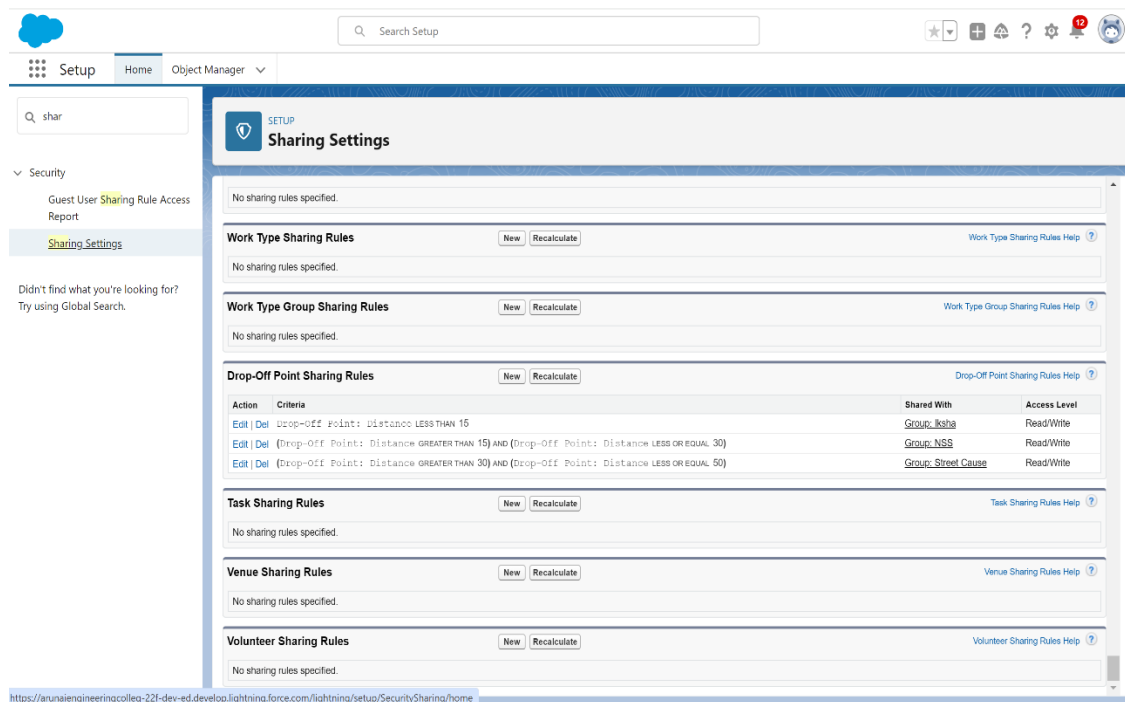
Dashboards

Recent

2 items

| DASHBOARDS | Dashboard Name | Description | Folder | Created By | Created On | Subscribed |
|--------------------|--|-------------|--------------------|------------|---------------------|-----------------------------|
| Recent | Task Execution Details | | Custom Dashboards | Govind R | 2/11/2024, 12:51 pm | Unsubscribe |
| Created by Me | Organization Details | | Private Dashboards | Govind R | 2/11/2024, 12:48 pm | Unsubscribe |
| Private Dashboards | | | | | | |
| All Dashboards | | | | | | |
| FOLDERS | | | | | | |
| All Folders | | | | | | |
| Created by Me | | | | | | |
| Shared with Me | | | | | | |
| FAVORITES | | | | | | |
| All Favorites | | | | | | |

9.Sharing Rules:

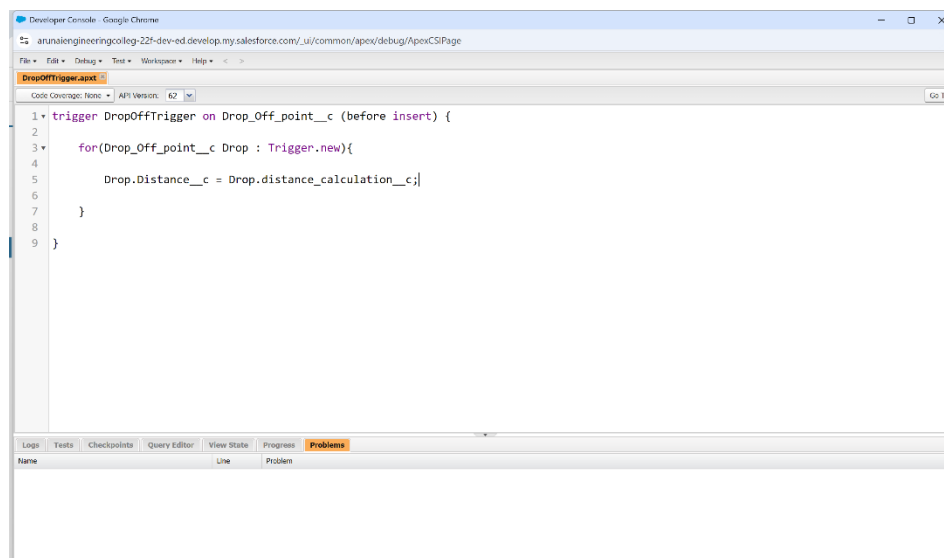


The screenshot shows the Salesforce Setup interface for Sharing Settings. The left sidebar contains navigation links for Setup, Home, and Object Manager. The main content area is titled "Sharing Settings" and lists various sharing rule categories, each with a "New" and "Recalculate" button. The "Drop-Off Point Sharing Rules" section is expanded, showing a table of rules.

| Action | Criteria | Shared With | Access Level |
|--|--|-------------------------------------|--------------|
| Edit Del | Drop-Off Point: Distance LESS THAN 15 | Group: Ksha | Read/Write |
| Edit Del | (Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30) | Group: NBS | 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 |

5.Testing and Validation:

Apex Triggers:

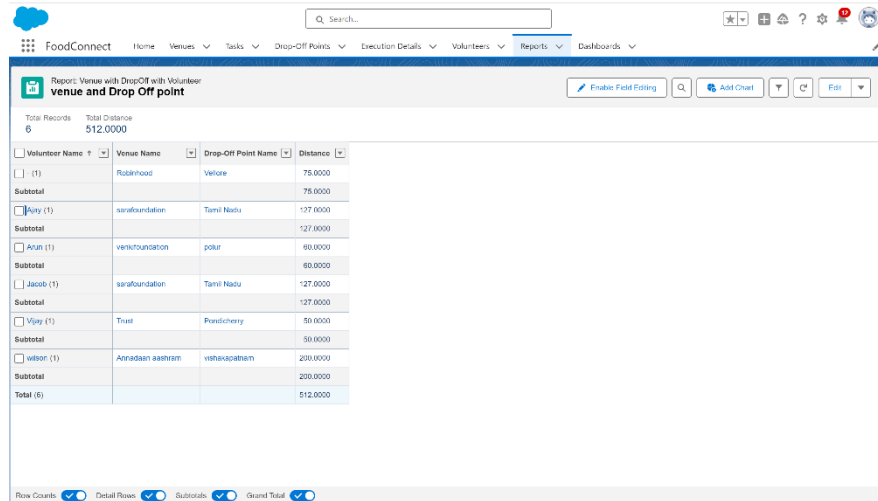


The screenshot shows the Salesforce Developer Console with an Apex Trigger named "DropOffTrigger.apex" open. The code is as follows:

```
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 }
```

Reports and Dashboards:

a. Venue and Drop Off Point records:



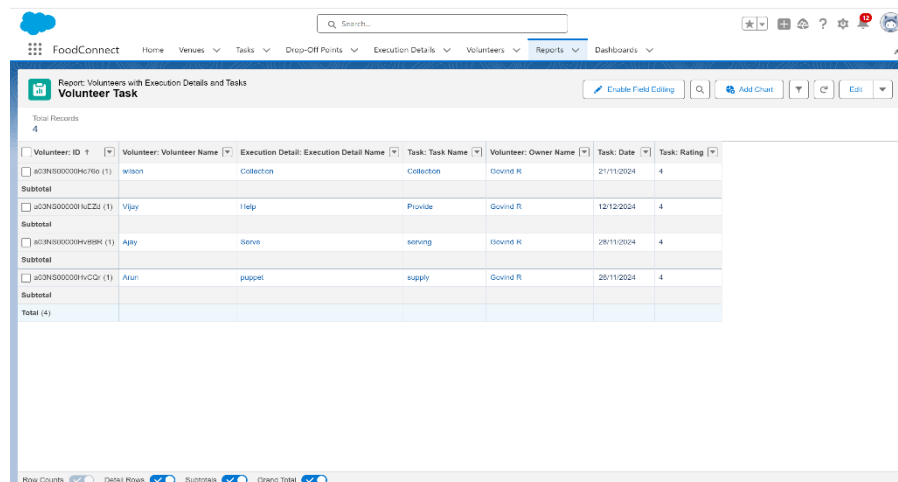
Report: Venue with DropOff with Volunteer
venue and Drop Off point

Total Records: 6, Total Distance: 512.0000

| Volunteer Name | Venue Name | Drop-Off Point Name | Distance |
|----------------|------------------|---------------------|----------|
| (1) | Rubikhood | Velore | 75.0000 |
| Subtotal | | | 75.0000 |
| (1) | saraloundation | Tamil Nadu | 127.0000 |
| Subtotal | | | 127.0000 |
| (1) | venufoundation | polar | 60.0000 |
| Subtotal | | | 60.0000 |
| (1) | saraloundation | Tamil Nadu | 127.0000 |
| Subtotal | | | 127.0000 |
| (1) | Trust | Pondicherry | 50.0000 |
| Subtotal | | | 50.0000 |
| (1) | Aaradash aashram | vishwakatham | 200.0000 |
| Subtotal | | | 200.0000 |
| Total (6) | | | 512.0000 |

Row Counts: ☒ Detail Rows: ☒ Subtotals: ☒ Grand Total: ☒

b. Volunteer Task records:



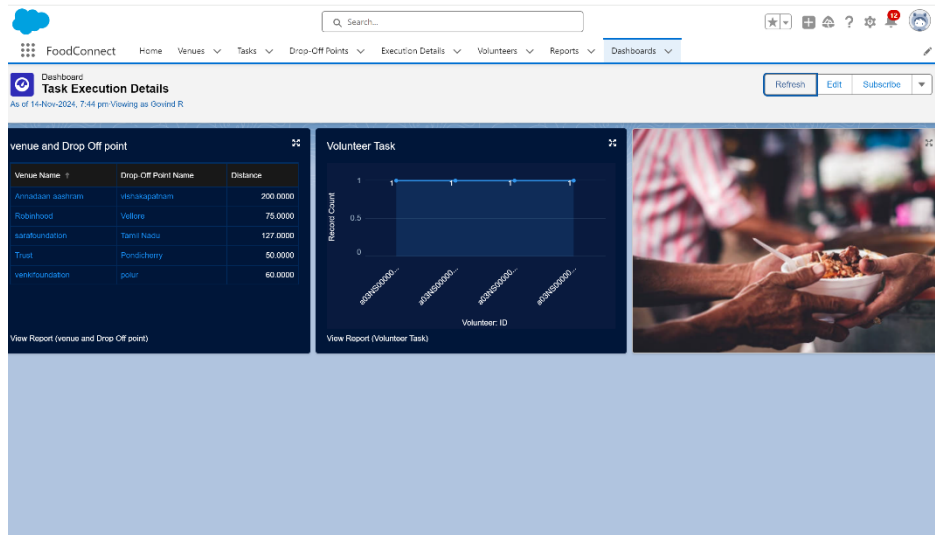
Report: Volunteers with Execution Details and Tasks
Volunteer Task

Total Records: 4

| Volunteer: ID | Volunteer: Volunteer Name | Execution Detail: Execution Detail Name | Task: Task Name | Volunteer: Owner Name | Task: Date | Task: Rating |
|---------------------|---------------------------|---|-----------------|-----------------------|------------|--------------|
| 803N8000009H700 (1) | wilson | Collection | Collection | Govind R | 21/11/2024 | 4 |
| Subtotal | | | | | | |
| 803N8000000H700 (1) | Vijay | Help | Provide | Govind R | 12/12/2024 | 4 |
| Subtotal | | | | | | |
| 803N8000000H700 (1) | Ajay | Serve | serving | Govind R | 28/11/2024 | 4 |
| Subtotal | | | | | | |
| 803N8000000H700 (1) | Arun | support | supply | Govind R | 20/11/2024 | 4 |
| Subtotal | | | | | | |
| Total (4) | | | | | | 16 |

Row Counts: ☒ Detail Rows: ☒ Subtotals: ☒ Grand Total: ☒

c. Dashboard:



5.Key Scenarios Addressed by Salesforce in the Implementation Project:

Food Donation Management:

- ❖ Tracking and managing food donations from various donors (restaurants, supermarkets, etc.).
- ❖ Ensuring timely pickups and deliveries of food items to recipients.

Volunteer Coordination:

- ❖ Managing a database of volunteers, their availability, and skills.
- ❖ Scheduling volunteer shifts and tasks efficiently to maximize coverage.

Logistics and Transportation:

- ❖ Planning and optimizing routes for food collection and distribution.
- ❖ Monitoring the status of deliveries to ensure timely and safe transportation.

Real-time Notifications:

- ❖ Automating alerts for food pickup schedules, distribution events,

and volunteer tasks.

- ❖ Ensuring all stakeholders are informed and coordinated.

Data Analytics and Reporting:

- ❖ Generating reports to measure the impact of the project, including metrics like food waste reduction, number of meals provided, and volunteer hours.
- ❖ Using dashboards to visualize data and make informed decisions.

Compliance and Safety:

- ❖ Ensuring all food handling and distribution processes comply with health and safety regulations.
- ❖ Validating data entries to maintain high standards of food safety.

Community Engagement and Awareness:

- ❖ Managing campaigns to raise awareness about food waste and encourage community participation.
- ❖ Tracking engagement metrics to evaluate the effectiveness of outreach efforts.

6. Conclusion:

The "To Supply Leftover Food to Poor" project has successfully addressed the critical issues of food waste and hunger in our community. Through this initiative, we have:

- Significantly reduced food waste by establishing a robust network of food donors and optimizing collection processes.
- Provided thousands of nutritious meals to underprivileged communities, improving their health and well-being.
- Engaged and managed a dedicated team of volunteers, ensuring efficient food distribution and operational success.
- Leveraged Salesforce's powerful features to automate workflows, enhance data accuracy, and streamline operations.
- Conducted impactful awareness campaigns, fostering community involvement and education on food waste issues.

Project link: <https://arunaiengineeringcolleg-22f-dev-ed.develop.lightning.force.com/lightning/setup/SetupOneHome/home>