

BHARATHIYAR UNIVERSITY ,COIMBATORE
KATHIR COLLEGE OF ARTS AND SCIENCE-NEELAMBUR
B.SC INFORMATION TECHNOLOGY

Project Title : TO SUPPLY LEFTOVER FOOD TO POOR

Role : DEVELOPER

Team Members: SANTHOSH V

Email: vsanthosh2110gmail.com

SANJAY L

Email: sanjuusanju9@gmail.com

MOHAN R

Email: mohanrrr4151@gmail.com

VIKRAM S

Email: vikram997682@gmail.com

VENKATESH K

Email: venkatesh05bks@gmail.com

Academic Year : 2025 -2026

Mentor : Mrs.M.SATHYA

ABSTARCT

The Leftover Food Management System is a Salesforce-based solution designed to streamline the process of collecting and distributing leftover food from restaurants, events, and households to poor and needy people. By creating custom objects, fields, record types, and roles within Salesforce, the system provides an efficient, secure, and user-friendly platform to manage donors, volunteers, and beneficiaries effectively. This project was developed as part of the B.Sc. Computer Science curriculum to gain hands-on experience in CRM application development and teamwork.

The Food Donation and Distribution System is a comprehensive software solution designed to track, manage, and organize leftover food donations. It acts as a bridge between food donors, volunteers, and recipients, ensuring real-time tracking of donations and deliveries while maintaining accurate records and seamless workflows.

As a team We've learned,

- Real-time Salesforce Project Development

- Data Modelling

- Creating a Salesforce Application

- User Interface Customization

- Object & Relationship Management

- Field Dependencies

- Record Types

- Cross-object Formulas

- Flows & Automation

Reports & Dashboards

Validation Rules

Formula Fields

1.2 Purpose

The purpose of this project is to reduce food wastage by redistributing surplus food to the needy.

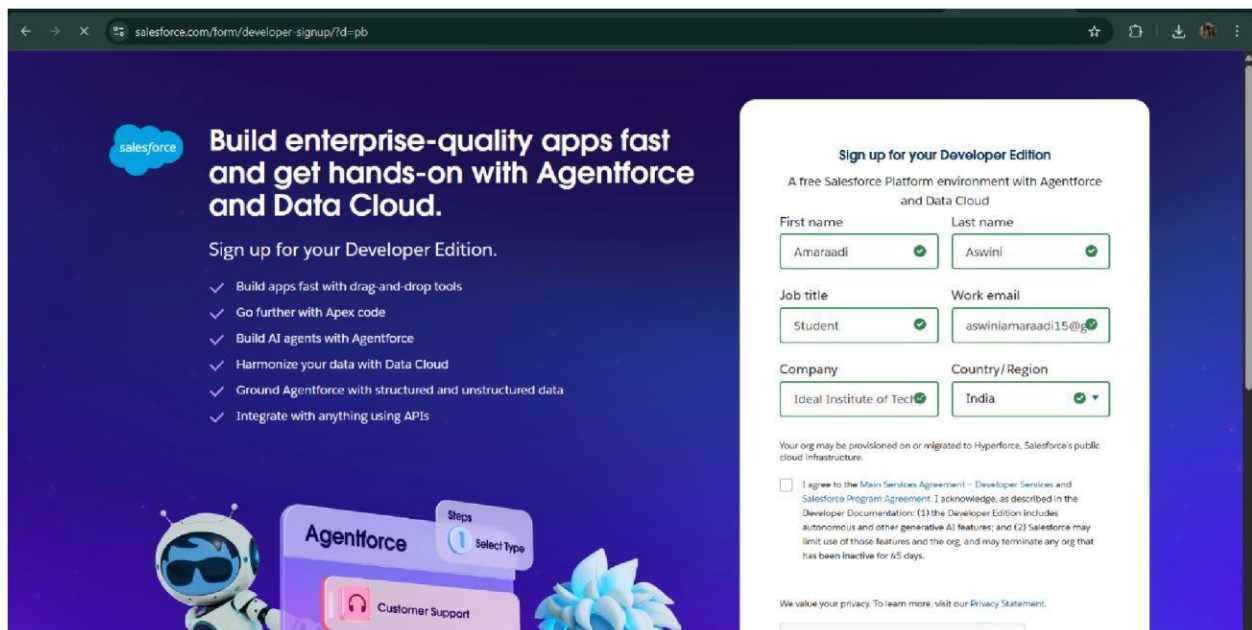
It provides a digital platform to connect food donors with NGOs and volunteers.

The system ensures timely collection, tracking, and delivery of leftover food.

DEVELOPMENT PHASE

Creating Developer Account:

By using this URL - <https://www.salesforce.com/form/developer-signup/?d=pb>



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First name Last name

Amaraadi Aswini

Job title Work email

Student aswiniamaraadi15@gmail.com

Company Country/Region

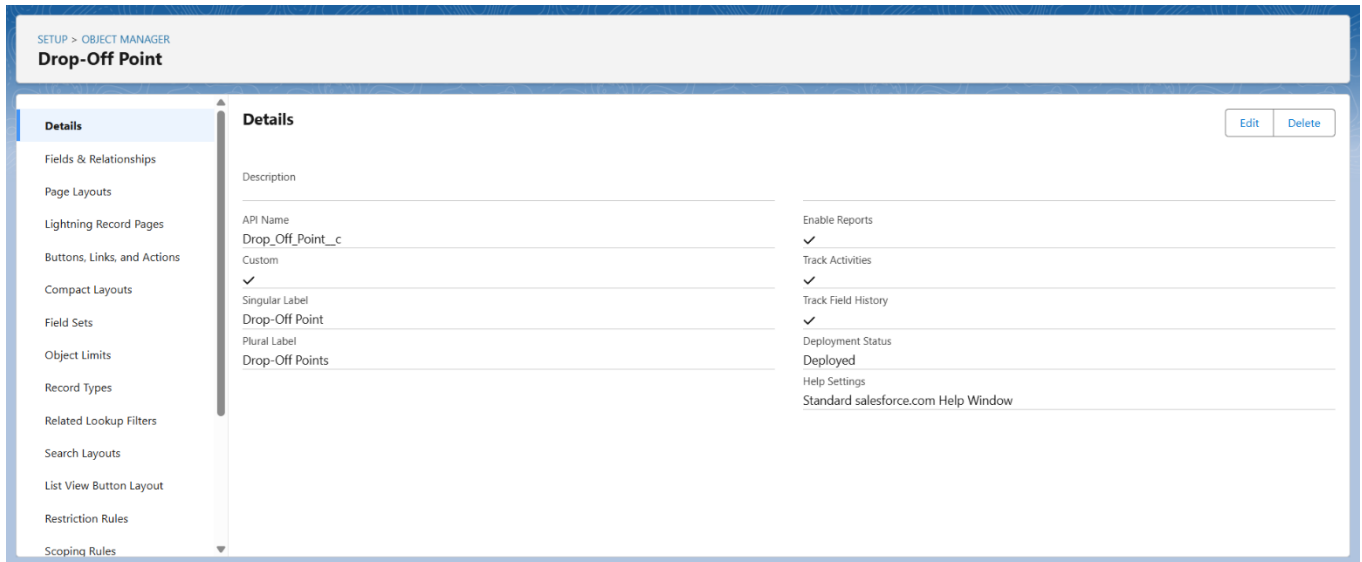
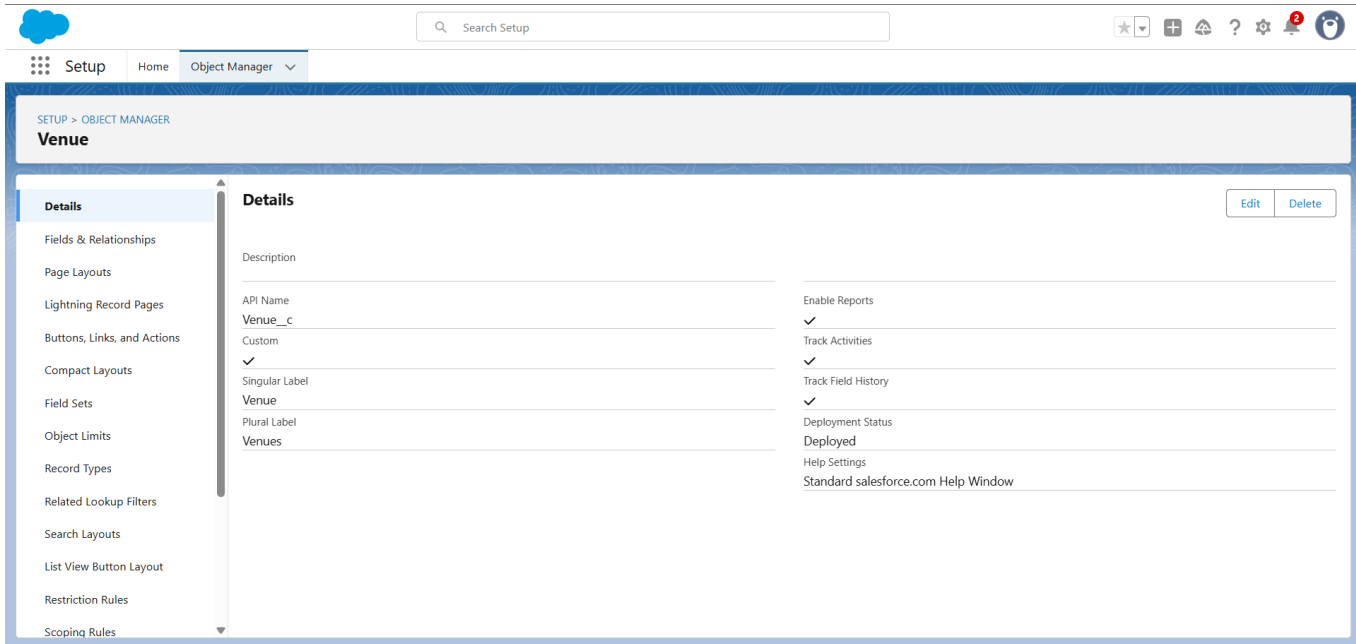
Ideal Institute of Tech India


Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud infrastructure.

☐ I agree to the Main Services Agreement – Developer Services and Salesforce Program Agreement. I acknowledge, as described in the Developer Documentation: (1) the Developer Edition includes autonomous and other generative AI features; and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 65 days.








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- Created objects: Venue, Drop-of point, Task, Volunteer, Execution details





Search Setup



SetupHomeObject Manager

SETUP > OBJECT MANAGER

Task

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

Details

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

EditDelete



Search Setup



SetupHomeObject Manager

SETUP > OBJECT MANAGER

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Details

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

EditDelete

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/one/app#/setup/ObjectManager/01lgK00000205GI/FieldsAndRelationships/view

Setup Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Execution Detail

Details Edit Delete

Description

API Name
Execution_Detail_c

Custom
✓

Singular Label
Execution Detail

Plural Label
Execution Details

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

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Standard salesforce.com Help Window

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Restriction Rules

Scoping Rules

- Flows

Salesforce sbcom-5e-dev-ed develop.lightning.force.com/lightning/setup/CustomTabs/home

Setup Home Object Manager

Custom Tabs

Custom Object Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality. Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Action	Label	Tab Style	Description
Get Det	Accounts	Web	created to setup with student activity (partner object)
Get Det	Accounts	Web	
Get Det	Accounts	Web	
Get Det	Accounts	Web	This tab is related to Hotel Reservation App
Get Det	Accounts	Web	
Get Det	Accounts	Web	This tab is related to College Management System
Get Det	Accounts	Web	
Get Det	Accounts	Web	
Get Det	Accounts	Web	
Get Det	Accounts	Web	This tab is related to Hotel Reservation App
Get Det	Accounts	Web	This tab is related to Hotel Reservation App
Get Det	Accounts	Web	This tab is related to College Management System

•Configured fields and relationships

Setup

Home

Object Manager

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Venue

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Fields & Relationships

8 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

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)		✓

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/one/one.app#/setup/Objec...

Setup

Home

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Search Setup

SETUP > OBJECT MANAGER

Drop-Off Point

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9 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
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__c	Venue__c	Lookup(Venue)		✓

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/one/one.app#/setup/Objec...

Setup

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Star

Plus

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Restriction Rules

Fields & Relationships

14 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date	Date__c	Date		
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(5)		
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		

https://orgfarm-14a4495a4d-dev-ed.develop.lightning.force.com/one/one.app#/setup/Object...

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Setup > OBJECT MANAGER

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Fields & Relationships

12 Items, Sorted by Field Label

Quick Find

New


Deleted Fields

Field Dependencies








Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Long Text Area(32768)		
Age	Age__c	Number(18, 0)		
Available On	Available_On__c	Date		
Contact Number	Contact_Number__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Drop-Off Point	Drop_Off_Point__c	Master-Detail(Drop-Off Point)		✓
Email	Email__c	Email		
Gender	Gender__c	Picklist		

https://orgfarm-14a4495a4d-dev-ed.develop.lightning.force.com/one/one.app#/setup/Object...



Search Setup



Setup

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SETUP > OBJECT MANAGER

Execution Detail

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Lightning Record Pages

Buttons, Links, and Actions

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Object Limits

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Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Fields & Relationships

6 Items, Sorted by Field Label

Quick Find

New

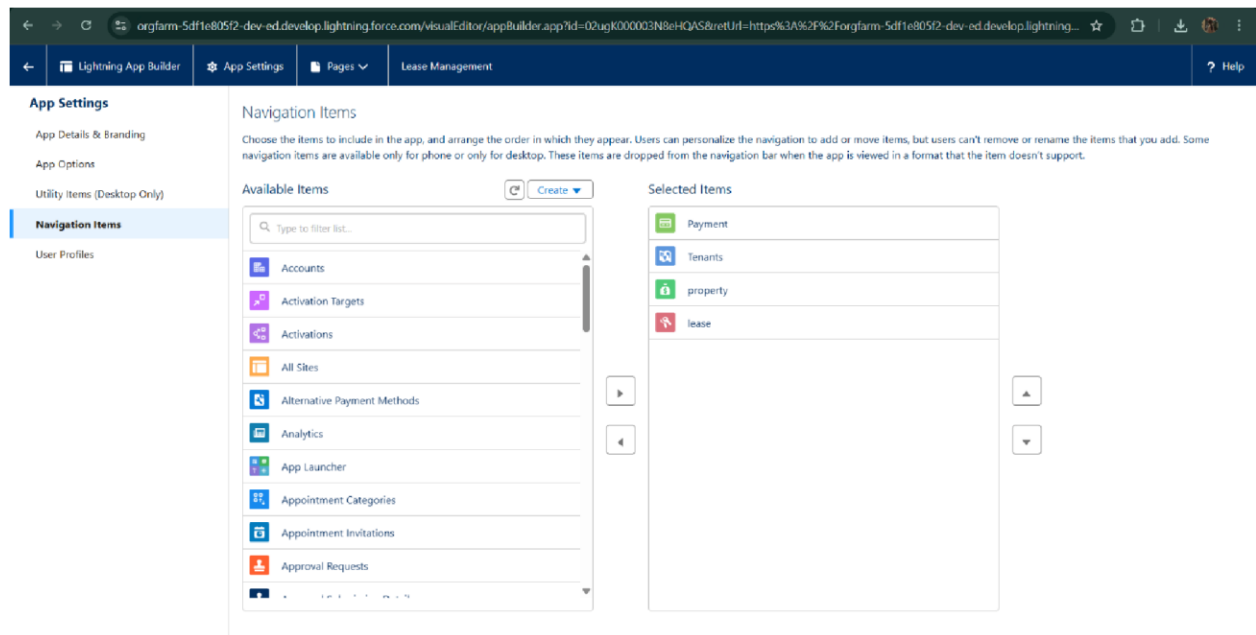
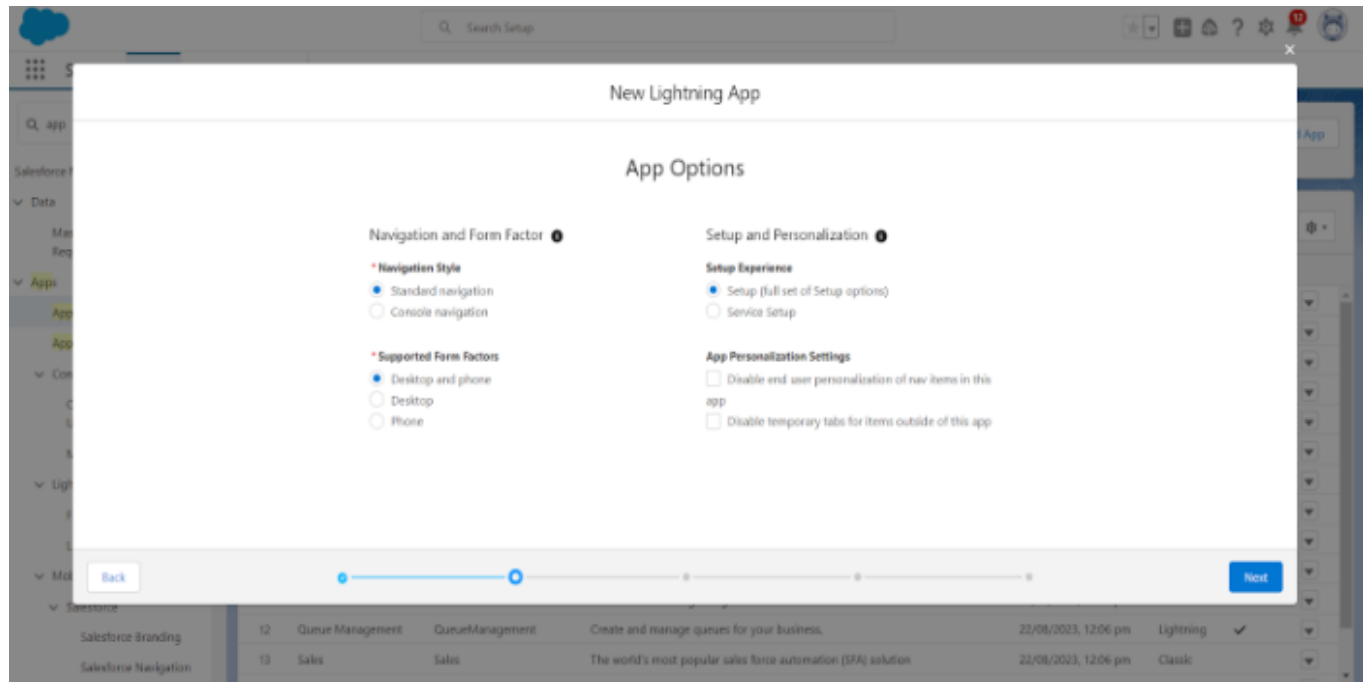
Deleted Fields

Field Dependencies

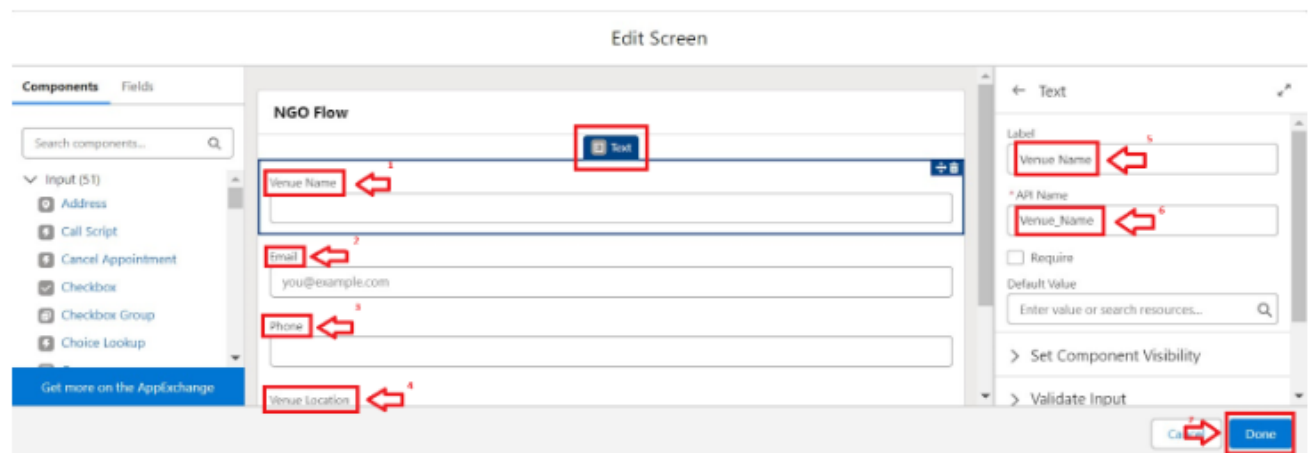
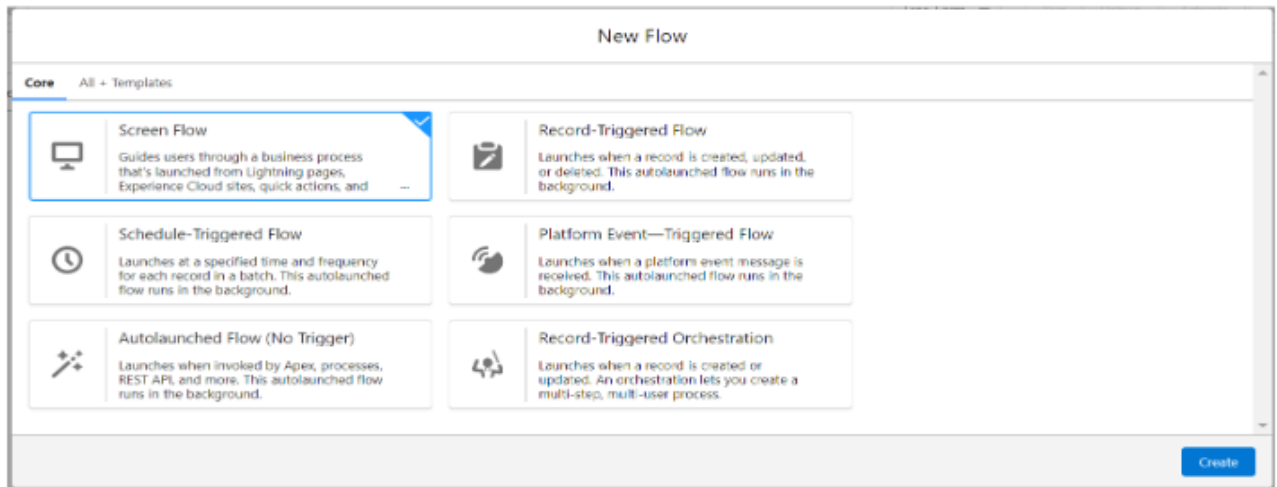
Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedById	Lookup(User)			
Execution Detail Name	Name	Text(80)		✓	▼
Execution ID	Execution_ID__c	Auto Number			▼
Last Modified By	LastModifiedById	Lookup(User)			
Task	Task__c	Master-Detail(Task)		✓	▼
Volunteer	Volunteer__c	Master-Detail(Volunteer)		✓	▼

- Developed Lightning App with relevant tabs



- Implemented Flow



Create a Record of This Object

* Object

Venue

Set Field Values for the Venue

Field

Contact_Email__c

Value

Aa Contact_Email > Value X



Field

Contact_Phone__c

Value

Aa Contact_Phone > Value X



Field

Name

Value

Aa Venue_Name X



Field

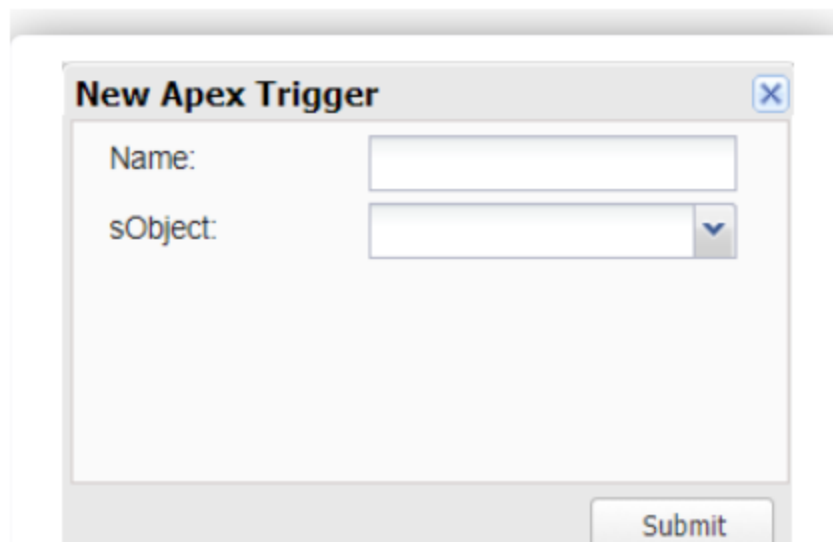
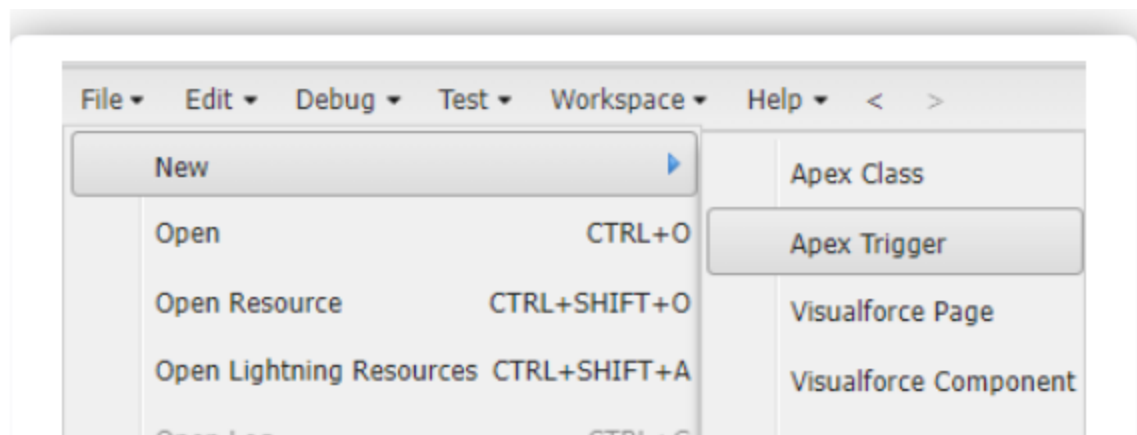
Venue_Location__c

Value

Aa location X



- Trigger



A screenshot of the 'New Apex Trigger' dialog box. The dialog has a title bar with a close button. Inside, there are two input fields: 'Name:' followed by a text box, and 'sObject:' followed by a dropdown menu. At the bottom right of the dialog is a 'Submit' button.

- Users

General Information	
First Name	<input type="text" value="Iksha Foundation"/>
Last Name	<input type="text" value="Iksha_Foundation"/>
Alias	<input type="text" value="iiksh"/>
Email	<input type="text" value="bhargavipaila1023@gmail.com"/>
Username	<input type="text" value="ikshafoundation@sb.com"/>
Nickname	<input type="text" value="User1711437164226559933"/> ⓘ
Title	<input type="text"/>
Company	<input type="text"/>
Department	<input type="text"/>
Division	<input type="text"/>
Role	<input type="text" value="<None Specified>"/>
User License	<input type="text" value="Salesforce Platform"/>
Profile	<input type="text" value="NGOs Profile"/> ⓘ
Active	<input checked="" type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>

- Reports creation

Outline

Filters 2

Groups

GROUP ROWS

Add group...

Volunteer Name

GROUP COLUMNS

Add group...

Columns

Add column...

Venue Name

Drop-Off point Name

Distance

Previewing a limited number of records. Run the report to see everything.

Volunteer Name ↑	Venue Name ↑	Drop-Off point Name	Distance
- (4)	La Royale Banquet Hall.	Shapur	5.1161
	La Royale Banquet Hall.	Jeedimetla	6,902.9995
	Paradise Garden Function Hall	Suraram Village	28.2332
	Ujwala Grand	-	-
Subtotal			6,936.3488
Total (4)			6,936.3488

- Dashboards

Report

venue and Drop Off point

☐ Use chart settings from report

Display As

123

Groups

Add group...

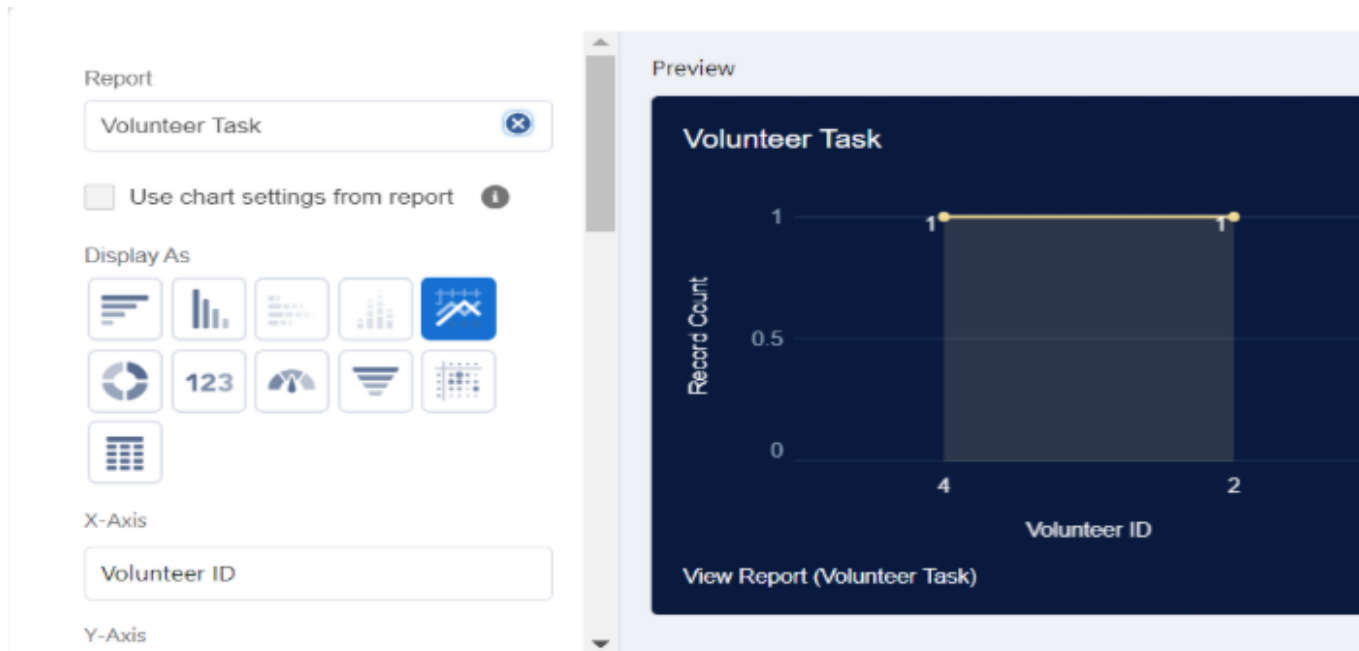
Columns

Preview

venue and Drop Off point

Venue Name ↑	Drop-Off point Name	Distance
La Royale Banquet Hall.	Shapur	5.1161
La Royale Banquet Hall.	Jeedimetla	6.9030κ
Paradise Garden Function Hall	Suraram Village	28.2332
Ujwala Grand	-	-

View Report (venue and Drop Off point)



- Sharing rules

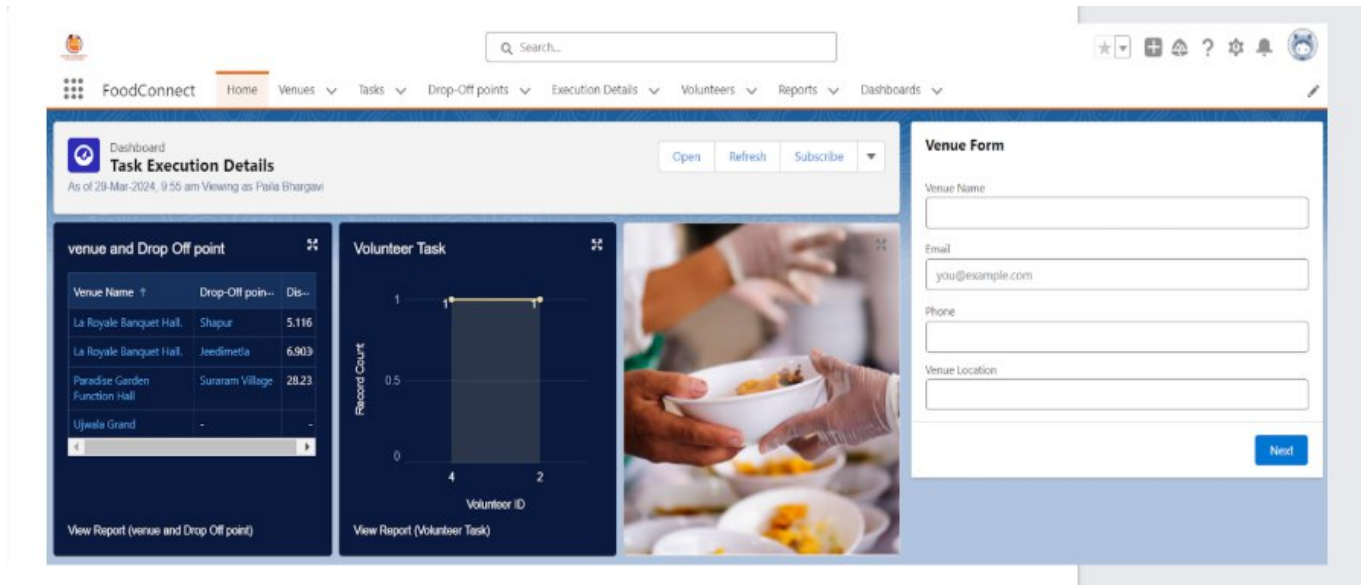
No sharing rules specified.

Drop-Off Point Sharing Rules		Drop-Off Point Sharing Rules Help ?	
Action	Criteria	Shared With	Access Level
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS THAN 50)	Group: humanityfirst	Read Only
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group: Iksha	Read Only
Edit Del	(Drop-Off Point: Distance GREATER OR EQUAL 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)	Group: Unity for Change	Read Only

Venue Sharing Rules

No sharing rules specified.


- Home page










RESULTS

Output Screenshots

- Tabs for Venue, Drop-of point, Task, Volunteer, Execution details



Search...



FoodConnect

HomeVenuesTasksDrop-Off PointsExecution DetailsVolunteersReportsDashboards

Venues

Recently Viewed

NewImportChange OwnerAssign Label

1 item • Updated a few seconds ago


Search this list...

Venue Name








1

coimbatore

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/lightning/o/Venue_c/home



Search...



FoodConnect

HomeVenuesTasksDrop-Off PointsExecution DetailsVolunteersReportsDashboards


Tasks

Recently Viewed

NewImportChange OwnerAssign Label

0 items • Updated a few seconds ago


Search this list...










Nothing to see here

There's nothing in your list yet. Try adding a new record.

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/lightning/o/Task_c/home



Search...



FoodConnectHomeVenuesTasksDrop-Off PointsExecution DetailsVolunteersReportsDashboards


Drop-Off Points

Recently Viewed

NewImportChange OwnerAssign Label

0 items • Updated a few seconds ago


Search this list...










Nothing to see here

There's nothing in your list yet. Try adding a new record.

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/lightning/o/Drop_Off_Point_c/home



Search...



FoodConnectHomeVenuesTasksDrop-Off PointsExecution DetailsVolunteersReportsDashboards


Execution Details

Recently Viewed

NewImportAssign Label

0 items • Updated a few seconds ago


Search this list...



Nothing to see here

There's nothing in your list yet. Try adding a new record.

https://orgfarm-f4a4495a4d-dev-ed.develop.lightning.force.com/lightning/o/Execution_Detail_c/home



★

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🔍

?

⚙️

🔔

👤

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Volunteers

Recently Viewed

🔍

👤

New

Import

Assign Label

⚙️

📄


🔄

✎

🗑️


⌵

0 items • Updated a few seconds ago



Nothing to see here

There's nothing in your list yet. Try adding a new record.



★

+

🔍

?

⚙️

🔔

👤

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Reports

Recent

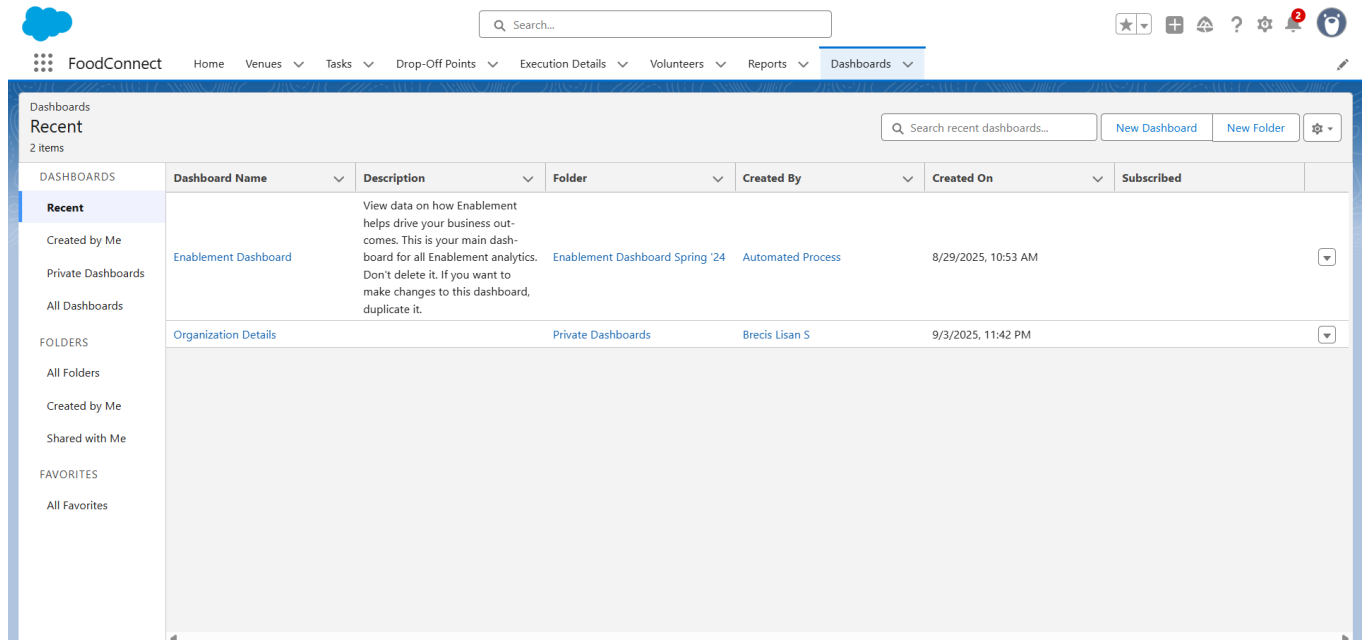
3 items

New Report

New Folder

⚙️

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent						
Created by Me	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	8/29/2025, 10:53 AM	🗑️
Private Reports	Volunteer Task		Custom Reports	Brecis Lisan S	9/3/2025, 11:40 PM	🗑️
Public Reports	venue and Drop Off point		Custom Reports	Brecis Lisan S	9/3/2025, 11:31 PM	🗑️
All Reports						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						
FAVORITES						
All Favorites						



ADVANTAGES & DISADVANTAGES

Advantages:

1. Reduces food wastage by channeling surplus food to the needy.
2. Provides transparency and efficiency through Salesforce tracking and reporting.
3. Builds stronger connections between donors, NGOs, and volunteers for social good.

Disadvantages:

1. Requires continuous donor participation and volunteer availability.
2. Possible logistical challenges in timely food collection and delivery.
3. Technology dependency may exclude areas with limited internet access.

CONCLUSION

This project successfully leverages Salesforce technology to reduce food wastage and fight hunger by connecting donors, NGOs, and volunteers. It ensures transparency, efficiency, and

timely distribution of surplus food to the needy. By combining technology with social responsibility, the initiative not only addresses hunger but also promotes sustainability. Overall, it creates a meaningful impact on both the environment and society.

APPENDIX

Source Code: Provided in Apex Classes and Triggers

```
Trigger DropOff
Trigger on
Drop_Off_point
__c (before
insert)
{

for(Drop_Off_p
oint__c Drop :
Trigger.new)
{

Drop.Distance_
c =
Drop.distance_
calculation_c;

}

}
```