

To Supply Leftover Food to Poor

(Salesforce-Based Food Redistribution and Management System)

Naan Mudhalvan Project



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1. Ideation Phase:

1.1 Objective:

To create a Salesforce application that helps collect leftover food from venues (restaurants, hotels, events) and distribute it to poor people through registered volunteers and drop-off points.

1.2 Problem Statement:

Large amounts of food go to waste at events, hotels, and canteens. Poor people nearby remain hungry because there's no proper system to redistribute surplus food effectively and safely.

1.3 Proposed Solution:

Develop a Salesforce-based solution that:

- Tracks food availability from venues.**
- Uses volunteers to transport food.**
- Uses drop-off points as collection centers.**
- Monitors each task and execution detail to ensure completion and accountability.**
- Tracks the entire journey — Food Donated → Picked → Delivered → Feedback Collected**

Example:

An Event Hall (Venue) reports leftover food



Salesforce assigns a nearby Volunteer



Volunteer delivers it to a Drop-Off Point



Food is distributed to the poor



Execution Detail records the delivery completion

2. Project Planning Phase:

2.1 Goals:

- Automate the redistribution of leftover food.
- Record every step (collection, delivery, distribution).
- Provide dashboards for tracking and reporting.

2.2 Stakeholders:

Role	Description
Venue Manager	Uploads food availability data.
Volunteer	Handles pickup and delivery.
Drop-Off Point Manager	Receives and manages food distribution.
Admin	Oversees operations, users, and system performance.

2.3 Tools in Salesforce:

- **Custom Objects: Venue, Drop-Off Point, Volunteer, Task, Execution Detail.**
- **Automation Tools: Process Builder / Flows for assigning volunteers automatically.**
- **Reports & Dashboards: For monitoring completed deliveries and total food saved.**

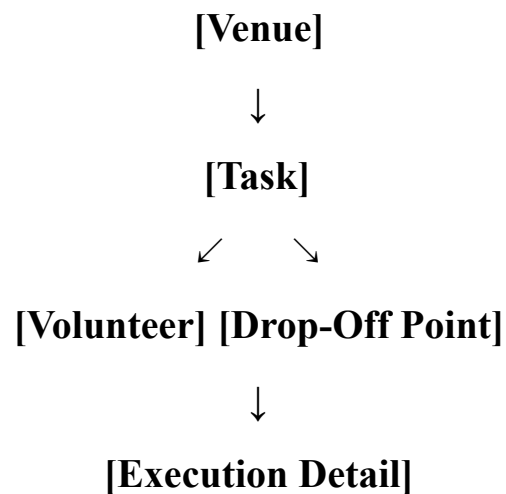
3. Project Design Phase – Data Model and Workflow:

Object	Description	Relationships
Venue	Stores donor info (restaurants, hotels, events).	One Venue → Many Tasks
Drop-Off Point	Locations where food is delivered (NGOs, shelters).	One Drop-Off → Many Execution Details
Volunteer	Registered individuals for pickup/delivery.	One Volunteer → Many Tasks
Task	Represents pickup/delivery work assigned.	Linked to Venue, Volunteer, and Drop-Off Point
Execution Detail	Stores results of the completed delivery.	Linked to Task

3.1 Workflow Automation:

- When Venue adds new leftover food → Salesforce creates a Task automatically.
- Based on location and time, system assigns a Volunteer.
- After completion, Volunteer updates the Execution Detail record.
- Admin can view reports showing all completed deliveries.

3.2 E-R Diagram:



4. Requirement Analysis Phase:

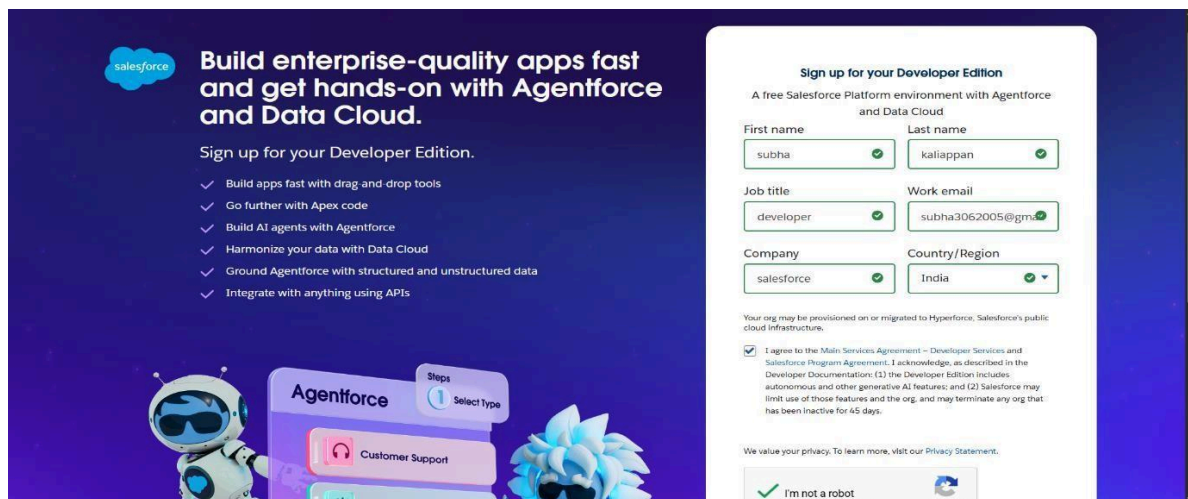
- **Functional Requirements:**

These define what the system must do. For example, it allows venue managers to add leftover food details, automatically creates tasks, assigns volunteers, tracks delivery to drop-off points, and records final execution details with feedback.

- **Non-Functional Requirements:**

These describe how the system should perform. It ensures security through role-based access, maintains data accuracy, supports scalability for many users, automates processes to save time, and provides fast dashboard performance within 3 seconds.

Salesforce developer account creation:



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First name: subha Last name: kaliappan

Job title: developer Work email: subha3062005@gmail.com

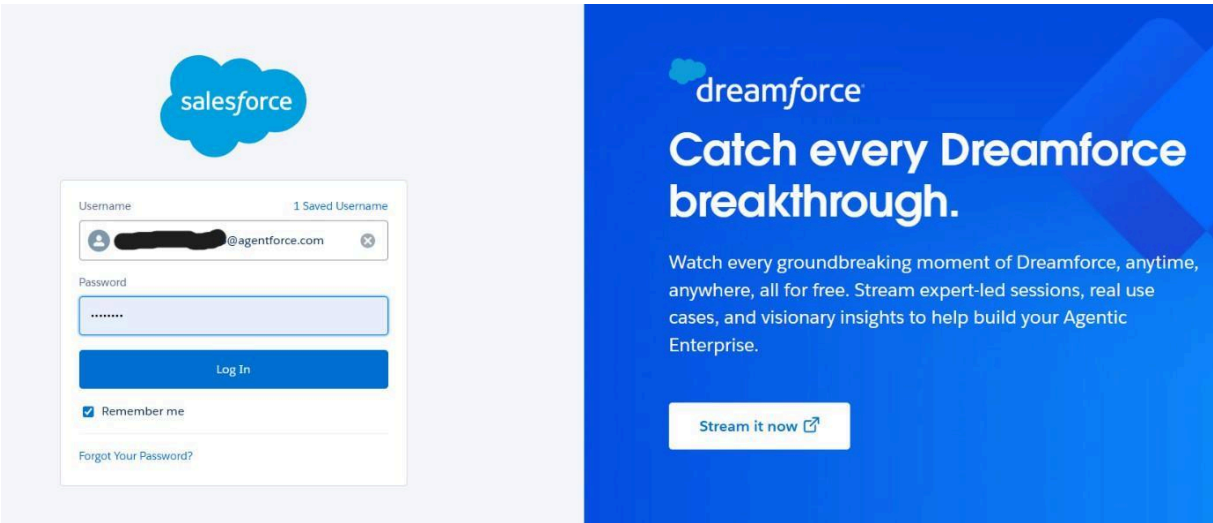
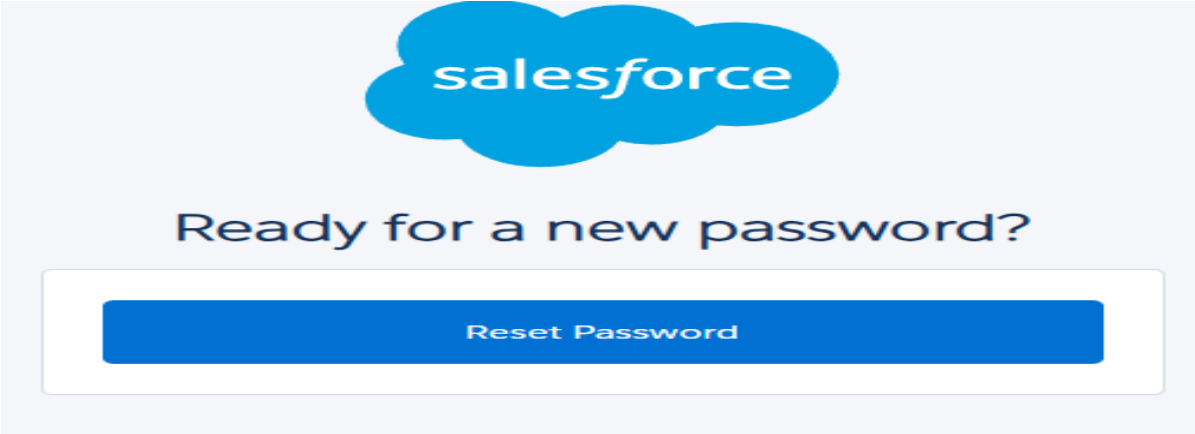
Company: salesforce Country/Region: India

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

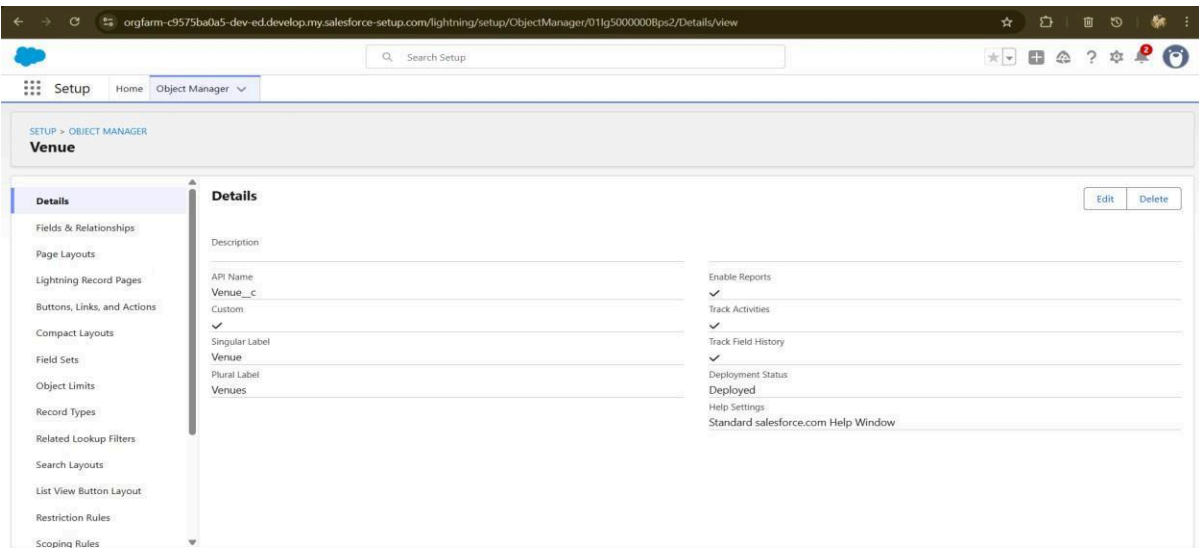
☒ I agree to the Main Services Agreement – Developer Services and Salesforce Program Agreement. I acknowledge, as described in the Developer Documentation: (1) the Developer Edition includes autonomous and other generative AI features; and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 45 days.

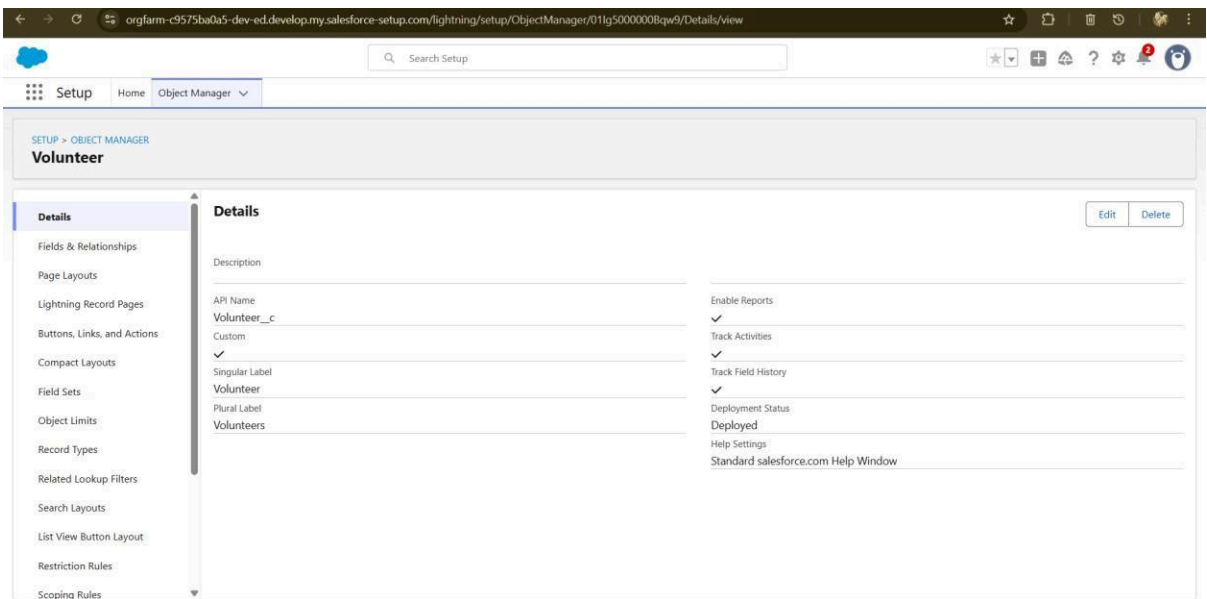
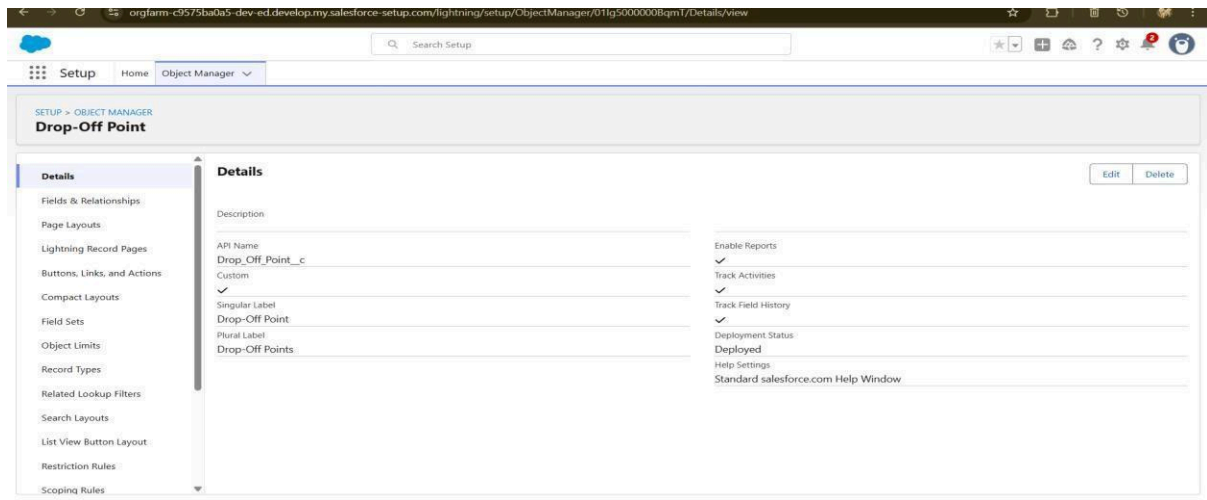
We value your privacy. To learn more, visit our Privacy Statement.

☒ I'm not a robot

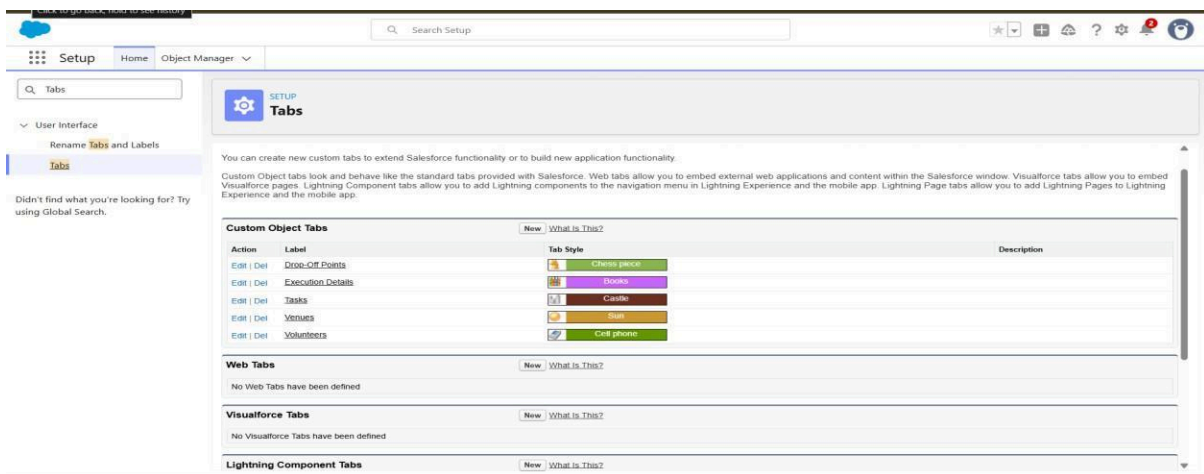


Create a Object:





Creating a Custom Tab:



Create a Lightning App:

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ

FoodConnect

* Developer Name ⓘ

FoodConnect

Description ⓘ

Enter a description...

App Branding

Image ⓘ

Upload

Primary Color Hex Value ⓘ

#0070D2

Org Theme Options

☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview



Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Type to filter list...

Accounts

Action Hub

Activation Targets

Activations

All Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Appointment Invitations

Create

Selected Items

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Creation of Relationship fields in objects:

Setup

Home

Object Manager

Search Setup

Star

Plus

Cloud

Help

Settings

Notifications

User

SETUP > OBJECT MANAGER

Volunteer

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

Fields & Relationships

13 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		
Execution ID	Execution_ID__c	Auto Number		

Setup

Home

Object Manager

Search Setup

Star

Plus

Cloud

Help

Settings

Notifications

User

SETUP > OBJECT MANAGER

Venue

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

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Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

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)		✓

Setup

Home

Object Manager

Search Setup

Star

Grid

Home

Help

Settings

Notifications

User

Setup > OBJECT MANAGER

Drop-Off Point

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

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Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

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)		✓

Setup

Home

Object Manager

Search Setup

Star

Grid

Home

Help

Settings

Notifications

User

Setup > OBJECT MANAGER

Task

Details

Fields & Relationships

Page Layouts

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Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Date

Back to Task

Validation Rules (0)

Custom Field Definition Detail

Edit

Set Field-Level Security

View Field Accessibility

Where is this used?

Field Information

Field Label	Date	Object Name	Task
Field Name	Date	Data Type	Date
API Name	Date__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	subha kallappan, 10/24/2025, 1:38 AM	Modified By	subha kallappan, 10/24/2025, 1:38 AM

General Options

Required

Default Value

Validation Rules

New

Validation Rules Help

No validation rules defined.

Back to Top

Always show me more records per related list

Setup

Home

Object Manager

Search Setup

Star

Grid

Home

Help

Settings

Notifications

User

Setup > OBJECT MANAGER

Execution Detail

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

Execution Detail Field

Execution Detail Name

Back to Execution Detail

Set Field-Level Security

View Field Accessibility

Field Information

Field Label	Execution Detail Name	Field Name	Name
Data Type	Text(80)		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			

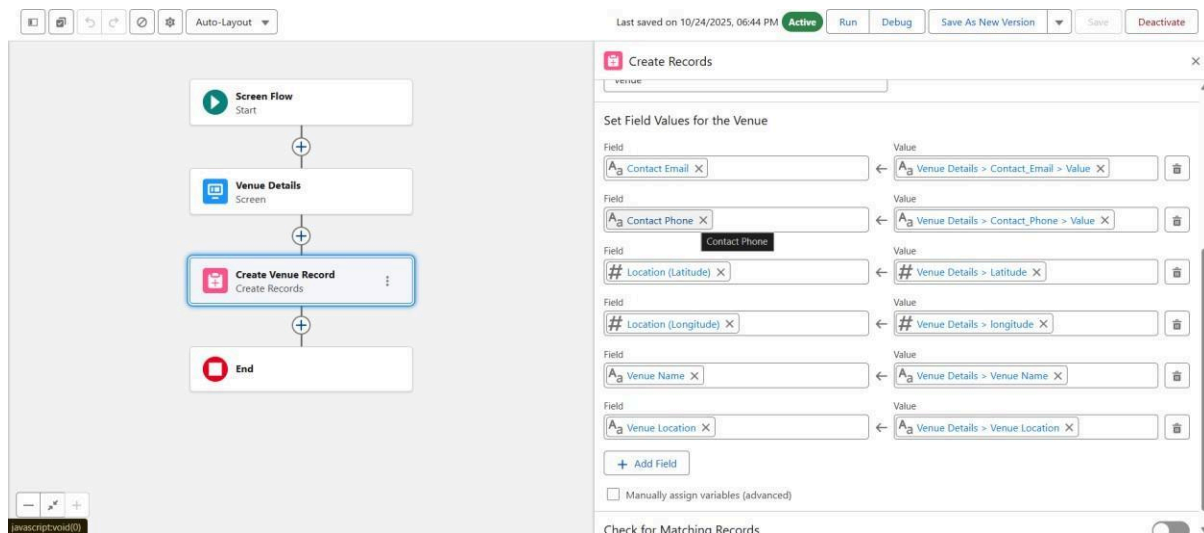
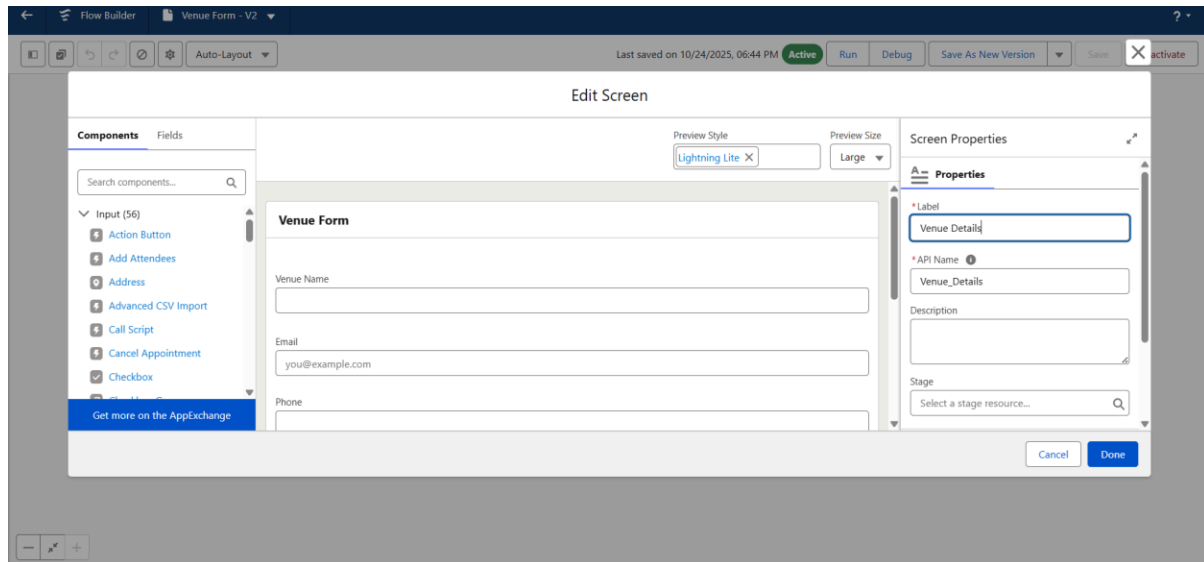
Validation Rules

New

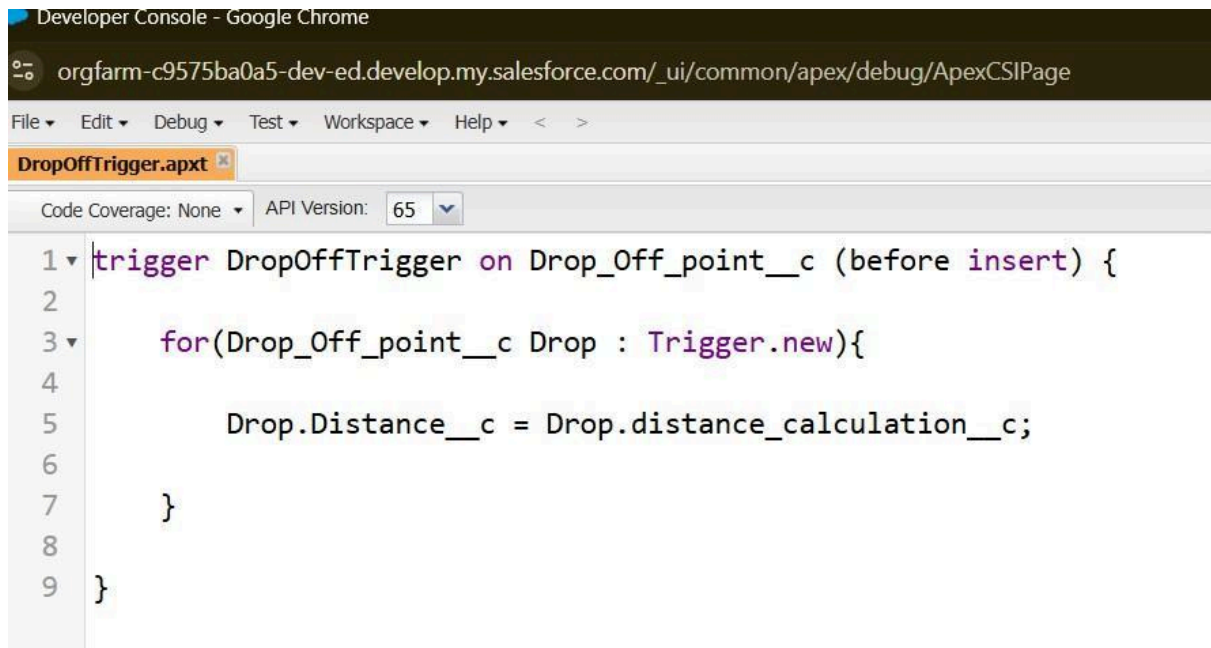
Validation Rules Help

No validation rules defined.

Create Flow to create a record in Venue object:



Create a Trigger:



Developer Console - Google Chrome

orgfarm-c9575ba0a5-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

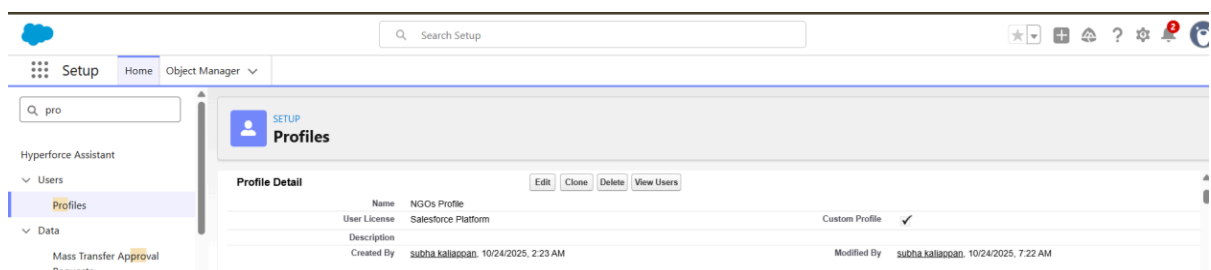
File Edit Debug Test Workspace Help < >

DropOffTrigger.apxt

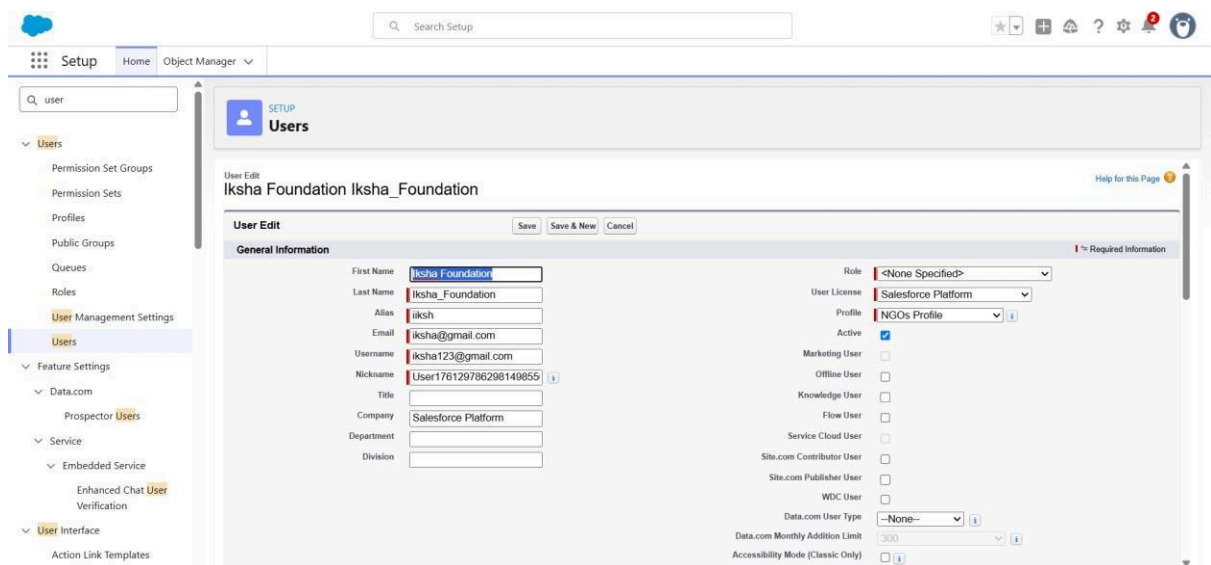
Code Coverage: None API Version: 65

```
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 }
```

Profiles:



Creation of Users :



Setup Home Object Manager

Search Setup

user

Users

Permission Set Groups
Permission Sets
Profiles
Public Groups
Queues
Roles
User Management Settings
Users

Feature Settings
Data.com
Prospector Users
Service
Embedded Service
Enhanced Chat User Verification
User Interface
Action Link Templates

SETUP Users

All Users

On this page you can create, view, and manage users.
To get more licenses, use the Your Account app: Let's Go

View: All Users Edit Create New View

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

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	akash_b_Foundation	akash	jsakash@gmail.com		✓	NGOs Profile
<input type="checkbox"/> Edit	Chatter.Expect	Chatter	chatty.00dy5000000bq1eae.qeuda00aubbz@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	EPIC_OrgFarm	OEPIC	epic.d381aeb9416@orgfarm.salesforce.com		✓	System Administrator
<input type="checkbox"/> Edit	Iksha_Foundation_Iksha Foundation	Iksh	iksha123@gmail.com		✓	NGOs Profile
<input type="checkbox"/> Edit	kala_ks_Foundation	Iksh	kalaika124@gmail.com		✓	NGOs Profile
<input type="checkbox"/> Edit	kallappan_subha	sub	subha3062003326@agentforce.com		✓	System Administrator
<input type="checkbox"/> Edit	User_Integration	Integ	integration800dy5000000bq1eae.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User_Security	sec	insightssecurity@00dy5000000bq1eae.com		✓	Analytics Cloud Security User

New User Reset Password(s) Add Multiple Users

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

Public Groups:

Setup Home Object Manager

Search Setup

publi

Users

Public Groups

Feature Settings
Salesforce Files
Content Deliveries and Public Links
User Interface
Global Actions
Publisher Layouts
Company Settings
Calendar Settings
Public Calendars and Resources

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

SETUP Public Groups

Group: Iksha

Group Information

Edit Public Group

Label: Iksha

Group Name: Iksha

Grant Access Using Hierarchies: ☒

Description:

Search: Public Groups for Find

Available Members

Group: js
Group: ks

Selected Members

Iksha Foundation Iksha_Foundation

Add
Remove

Setup Home Object Manager

Search Setup

publi

Users

Public Groups

Feature Settings
Salesforce Files
Content Deliveries and Public Links
User Interface
Global Actions
Publisher Layouts
Company Settings
Calendar Settings
Public Calendars and Resources

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

SETUP Public Groups

Public Groups

A public group is a set of users. It can contain individual users, other groups, the users in a particular role or territory, or the users in a role or territory plus all of the users below that role or territory in the hierarchy.

View: All Edit Create New View

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

Action	Label	Group Name	Created By	Created Date
<input type="checkbox"/> Edit <input type="checkbox"/> Del	Iksha	Iksha	kallappan_subha	10/24/2025, 2:33 AM
<input type="checkbox"/> Edit <input type="checkbox"/> Del	Is	Is	kallappan_subha	10/24/2025, 2:35 AM
<input type="checkbox"/> Edit <input type="checkbox"/> Del	Is	Is	kallappan_subha	10/24/2025, 2:34 AM

Report Types:

Report Types

Feature Settings

Analytics

Reports & Dashboards

Report Types

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

Search Setup

Custom Report Types

Primary ObjectVenues

Details

* Display Label

Venue with DropOff with Volunteer

* API Name

Venue_with_DropOff_with_Volunteer

* Description

Venue with DropOff with Volunteer

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

* Store in Category

Other Reports

Cancel

Save

Report Types

Feature Settings

Analytics

Reports & Dashboards

Report Types

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

Search Setup

Custom Report Types

2 Define Report Records Set

Select related objects to define which records are included in reports using this report type.

A Venues

Primary Object

B Drop-Off Points

A to B Relationship:

Each "A" record must have at least one related "B" record.

A "A" records may or may not have related "B" records.

C Volunteers

A B C

A B C

Cancel

Save

Reports:

Create Report

Category

Recently Used

All

Accounts & Contacts

Opportunities

Customer Support Reports

Leads

Campaigns

Activities

Contracts and Orders

Price Books, Products and Assets

Administrative Reports

File and Content Reports

Individuals

Select a Report Type

Search Report Types...

Recently Used Report Types

Report Type Name	Category
Venue with DropOff with Volunteer	Custom

Details

Venue with DropOff with Volunteer

Custom Report Type

Start Report

Details

Fields (42)

Description

Venue with DropOff with Volunteer

Created By You

venue and Drop Off point

Created By Others

No Reports Yet

Objects Used in Report Type

Search...

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Reports

All Folders > Custom Reports

3 items

Search all folders...

New Report

New Folder

	Name	Description	Folder	Created By	Created On	Subscribed
Recent	venue and Drop Off point		Custom Reports	subha kaliappan	10/24/2025, 2:47 AM	
Created by Me	Volunteer Task		Custom Reports	subha kaliappan	10/24/2025, 2:53 AM	
Private Reports	Volunteer Task		Custom Reports	subha kaliappan	10/24/2025, 2:57 AM	
Public Reports						
All Reports						

FOLDERS

All Folders

Created by Me

Shared with Me

FAVORITES

All Favorites

Dashboards:

Add Widget

Report

venue and Drop Off point

Use chart settings from report

Display As

123

Groups

Add group...

Columns

Add column...

Preview

venue and Drop Off point

Distance

View Report (venue and Drop Off point)

Cancel

Add

FoodConnect

Home Venues Tasks Drop-Off Points Execution Details Volunteers Reports Dashboards

Task Execution Details

+ Widget

+ Filter

Save

Done

venue and Drop Off point

Venue Name	Drop-Off Point Name	Distance
js	js	
ks	ks	

View Report (venue and Drop Off point)

Volunteer Task

Record Count

1

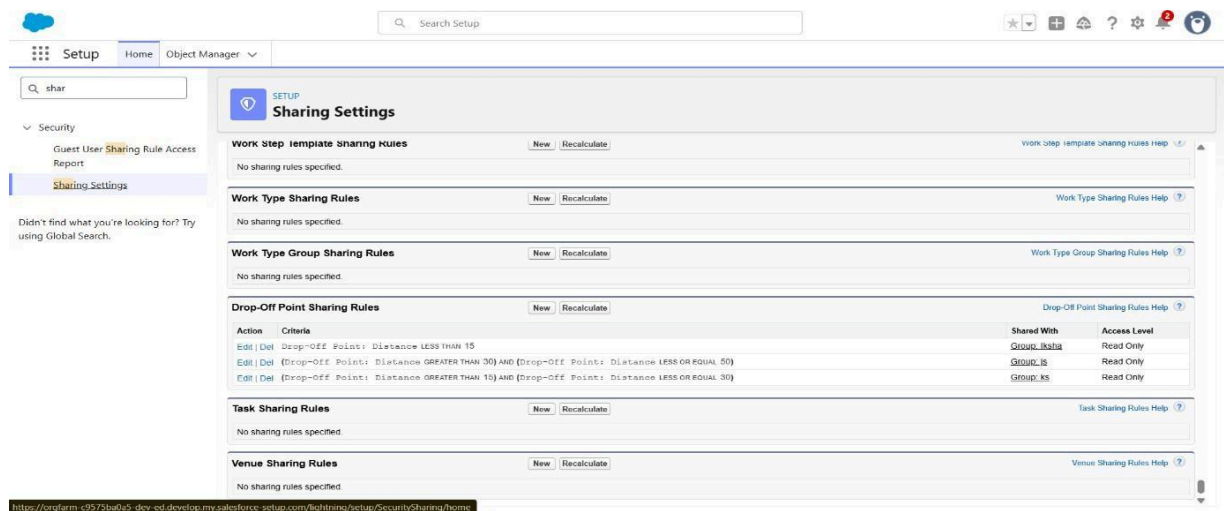
2

Volunteer: Volunteer ID

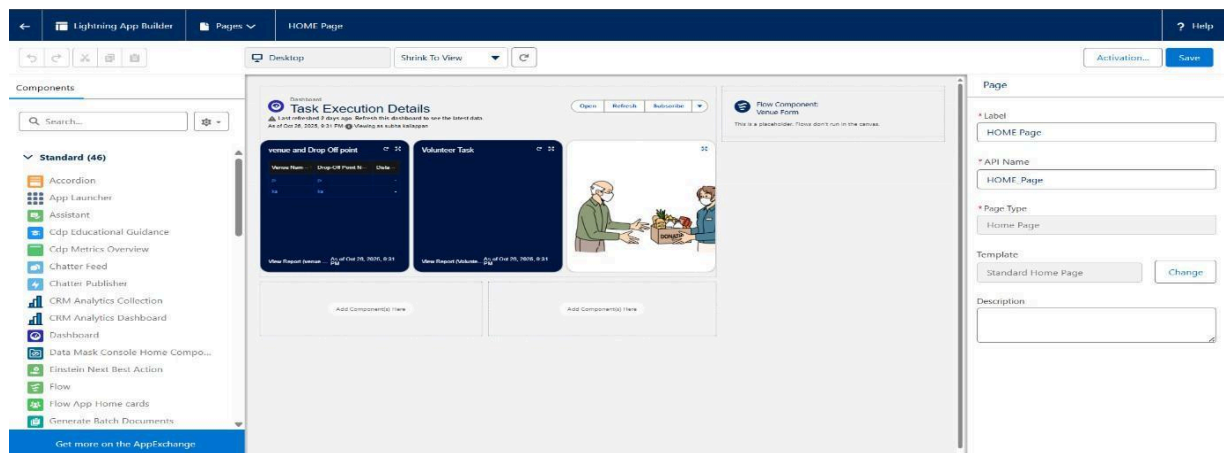
View Report (Volunteer Task)

View Report (Volunteer Task)


Sharing Rules:





Home Page:



Activation: HOME Page

 **The org default** home page is displayed unless more specific assignments are made.

 **The app default** home page is displayed for specified apps, and overrides the org default.

 **Any app and profile** assignments are displayed for specified app and profile combinations, and they override all other assignments.

[Learn more about forecast page assignment in Salesforce Help.](#)

Org Default App Default App and Profile

Set this home page as the default for specific Lightning apps. This page displays for all users using the app unless specific profile-related assignments apply.

Assignments (1)		Add Assignments	Remove Assignments
App Name	Description		
FoodConnect			

5. Performance Testing Phase

In this phase, the complete food supply process is tested to check how well the Salesforce system performs under real-time conditions.

1. Venue Adds Food Data:

When a venue (like a hotel or event hall) adds leftover food details, for example *10 plates of rice*, the system automatically creates a new Task and assigns a nearby Volunteer.

2. Volunteer Updates Status:

Once the volunteer finishes the food pickup and delivery, they update the task status to “Completed.” At this point, an Execution Detail record is automatically generated to confirm the action.

3. Drop-Off Point Confirmation:

When the drop-off location (such as an NGO or shelter) receives the food, the system updates the task status to “Delivered.” This confirms successful delivery.

4. Report Generation:

The system’s performance is checked by generating a weekly summary report, which should display all completed deliveries quickly — ensuring dashboards refresh within 3 seconds.

Conclusion:

