

Supply Left Over Food To Poor

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1. INTRODUCTION

1.1 Project Overview

This Salesforce Guided Project titled FoodConnect aims to streamline the process of managing surplus food donations, coordinating NGOs, venues, volunteers, and drop-off points using the Salesforce platform.

1.2 Purpose

To build a transparent and efficient donation coordination system by leveraging Salesforce's no-code and low-code capabilities including custom objects, dashboards, flows, sharing rules, and reporting.

2. IDEATION PHASE

2.1 Problem Statement

Foodwastageandinefficient distribution often occur due to a lack of coordinated systems between donors, NGOs, and volunteers.

2.2 Empathy Map Canvas

- Says: "We want to ensure food reaches the needy before it spoils."
- Thinks: "How can I track drop-off locations and NGO tasks easily?"
- Feels: Concerned about logistics and time constraints
- Does: Manages volunteers, coordinates drop-offs manually

2.3 Brainstorming

- Use custom objects to manage stakeholders
- Visualize task completion and volunteer efforts
- Assign drop-off points based on distance
- Automate venue registration and task updates
-

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

- Venue registers → Drop-off created → Volunteer assigned → Task executed → Report and feedback recorded

3.2 Solution Requirement

- Objects: Venue, Drop-Off Point, Volunteer, Task, Execution Details
- Flow for Venue entry
-

- Sharing rules based on location
- distance Dashboards to visualize

- execution

3.3 Data Flow

DVieanguraem → Drop-Off Point → Volunteer → Task → Execution Detail → Report/Dashboard

3.4 Technology

Stack

- Platform: Salesforce Tools: Flow Builder, App Manager, Reports & Dashboards, Apex Trigger Customization: Object Manager, Field Creation
-

4. PROJECT DESIGN

4.1 Problem Solution

FTithe design addresses NGO coordination issues and food delivery tracking by waourtkofmloawtisngin Salesforce.

4.2 Proposed

SUosluetiLoinghtning App (FoodConnect) with multiple objects and flows to handle goepneerraaatitoenrse, ports, and control access via public groups.

4.3 Solution Architecture

- Frontend : Lightning App with Dashboards &
- Backend: FClouwstsom Fields, Lookup/Master-Detail
- AutomatiRonel:aTtiroigngsheirpss, Sharing Rules, Flows

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

- Week 1: Developer account setup, Object creation
- Week 2: Relationships and fields
- Week 3: Flows, Reports, Dashboards
- Week 4: Trigger development, Sharing rules, Testing
-

Development Phase – Salesforce Guided

6. Project

The Development Phase of the given Salesforce project involves building the complete data structure, user interface, business logic, and reporting mechanisms within Salesforce. Here's a structured summary extracted from the document:

Developer Environment

Org via

1.

●etCupreate Salesforce

developer.salesforce.com/signup

Developer

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First name: Sana Kaur ✓ Last name: Shuk ✓

Job title: Student ✓ Work email: shankarshuk@gmail.com ✓

Company: G. Pulkash College of ✓ Country/Region: India ✓

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

☐ I agree to the Terms of Service Agreement - Developer Services and Customization Program Agreement. I acknowledge as described in the Developer Documentation (1) the Developer Edition includes Salesforce and other generative AI features, and (2) Salesforce may limit use of these features and the org, and may terminate any org that has been inactive for 60 days.

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- Fill in required information, verify email, set password, and access Salesforce Setup.


||

Your paragraph text

salesforce

Ready for a new password?

Reset Password



Change Your Password

Enter a new password for **streetcause178@sb.com**.
Make sure to include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password

.....
Good

* Confirm New Password

* Security Question

▼ In what city were you born?

* Answer

*=required

Change Password

Password was last changed on 6/20/2025, 3:59 AM.

2. Custom Object Creation

Created several key custom objects to model real-world

entities: Venue

SETUP > OBJECT MANAGER

Venue

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

Edit Custom Object: Venue

Custom Object Definition Edit Save Save & New Cancel

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.
Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label

Example: Account

Plural Label

Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API

Object Name Example: Account

Description

Context-Sensitive Help Setting

☒ Open the standard Salesforce.com Help & Training window

☐ Open a window using a Visualforce page

Content Name

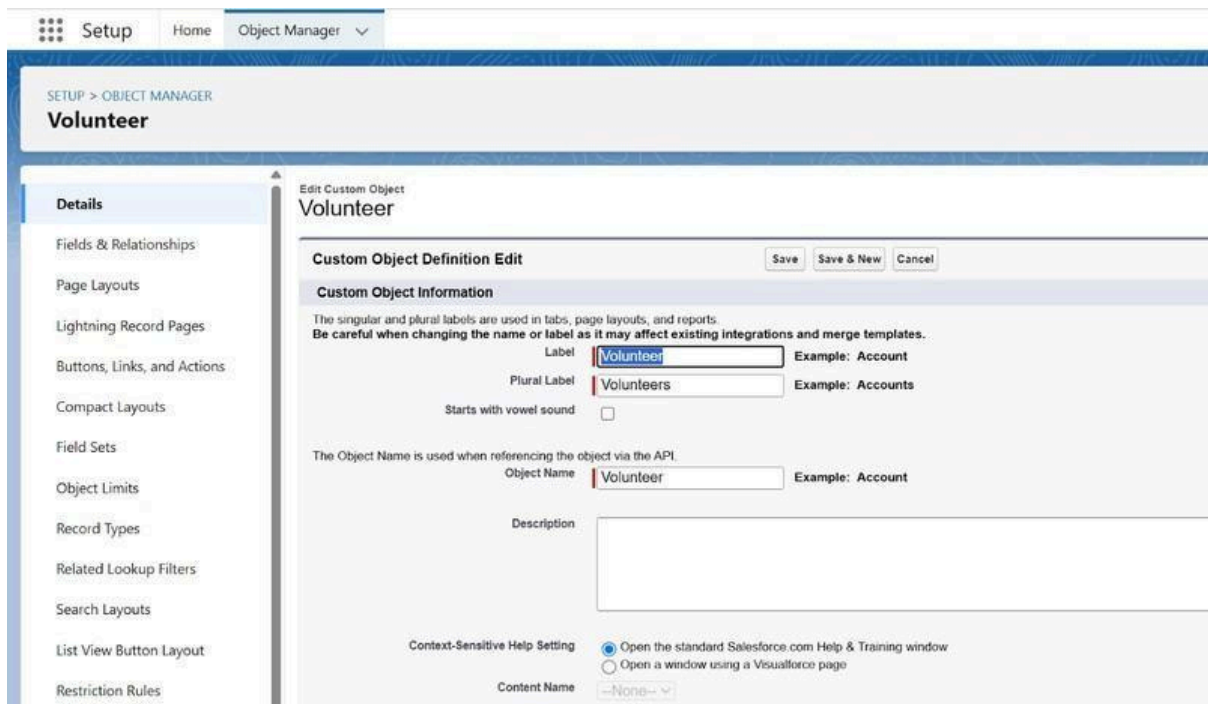
- Drop-Off Point

The screenshot shows the Salesforce Setup interface for a custom object named 'Drop-Off Point'. The left sidebar contains a 'Details' menu with options like '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', and 'Restriction Rules'. The main content area is titled 'Edit Custom Object Drop-Off Point' and includes a 'Custom Object Definition Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'Custom Object Information' section, which contains a warning about labels and plural labels, a 'Label' field with the value 'Drop-Off Point' (Example: Account), a 'Plural Label' field with the value 'Drop-Off Points' (Example: Accounts), a 'Starts with vowel sound' checkbox, an 'Object Name' field with the value 'Drop_Off_Point' (Example: Account), a 'Description' text area, 'Context-Sensitive Help Setting' radio buttons (selected: 'Open the standard Salesforce.com Help & Training window'), and a 'Content Name' dropdown menu set to 'None'.

- Task

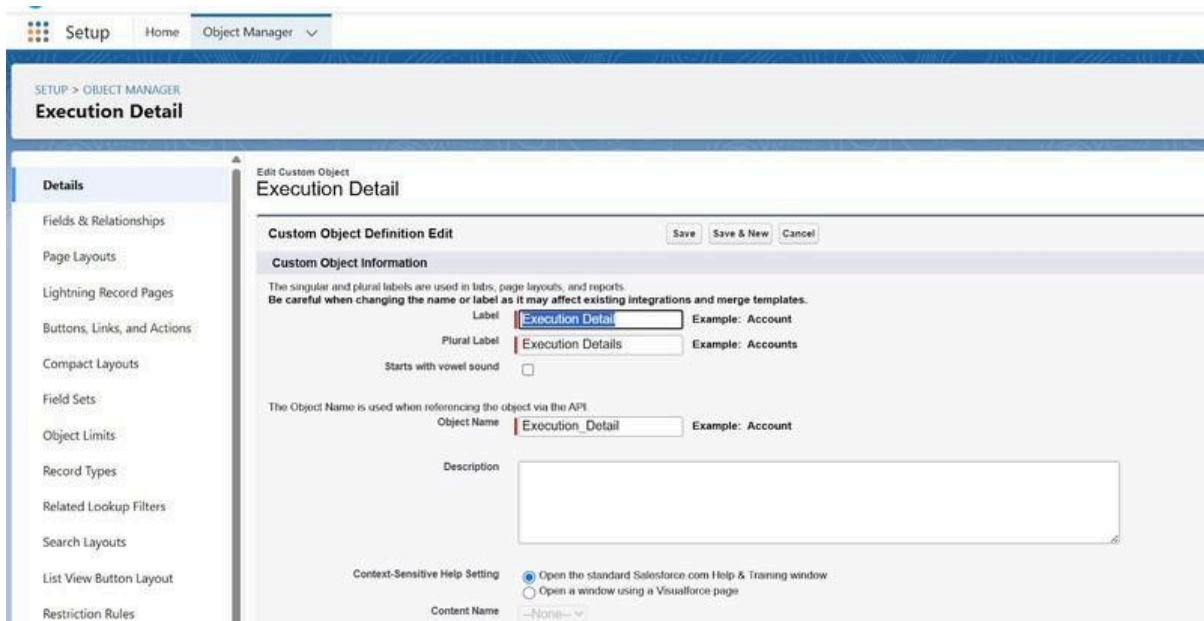
The screenshot shows the Salesforce Setup interface for a custom object named 'Task'. The left sidebar contains a 'Details' menu with options like 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', 'Search Layouts', 'List View Button Layout', and 'Restriction Rules'. The main content area is titled 'Edit Custom Object Task' and includes a 'Custom Object Definition Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'Custom Object Information' section, which contains a warning about labels and plural labels, a 'Label' field with the value 'Task' (Example: Account), a 'Plural Label' field with the value 'Tasks' (Example: Accounts), a 'Starts with vowel sound' checkbox, an 'Object Name' field with the value 'Task' (Example: Account), a 'Description' text area, 'Context-Sensitive Help Setting' radio buttons (selected: 'Open the standard Salesforce.com Help & Training window'), and a 'Content Name' dropdown menu set to 'None'.

- Volunteer



The screenshot shows the Salesforce Setup interface for the 'Volunteer' custom object. The left sidebar contains a 'Details' menu with options: 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, and Restriction Rules. The main content area is titled 'Edit Custom Object Volunteer' and includes a 'Custom Object Definition Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'Custom Object Information' section, which includes a warning: 'The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.' The form contains the following fields: 'Label' (Volunteer, Example: Account), 'Plural Label' (Volunteers, Example: Accounts), 'Starts with vowel sound' (checkbox), 'Object Name' (Volunteer, Example: Account), 'Description' (text area), 'Context-Sensitive Help Setting' (radio buttons: 'Open the standard Salesforce.com Help & Training window' is selected, 'Open a window using a Visualforce page'), and 'Content Name' (dropdown menu showing '--None--').

- Execution Details



The screenshot shows the Salesforce Setup interface for the 'Execution Detail' custom object. The left sidebar contains a 'Details' menu with options: 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, and Restriction Rules. The main content area is titled 'Edit Custom Object Execution Detail' and includes a 'Custom Object Definition Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'Custom Object Information' section, which includes a warning: 'The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.' The form contains the following fields: 'Label' (Execution Detail, Example: Account), 'Plural Label' (Execution Details, Example: Accounts), 'Starts with vowel sound' (checkbox), 'Object Name' (Execution_Detail, Example: Account), 'Description' (text area), 'Context-Sensitive Help Setting' (radio buttons: 'Open the standard Salesforce.com Help & Training window' is selected, 'Open a window using a Visualforce page'), and 'Content Name' (dropdown menu showing '--None--').

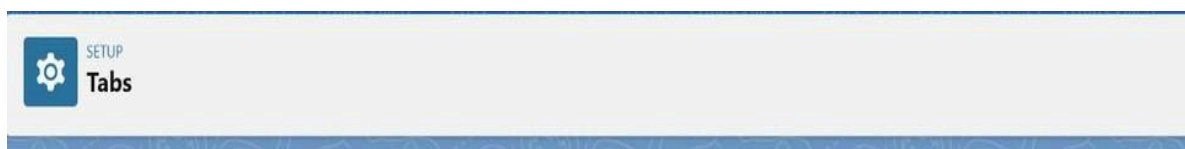
Each object

include: Label, Record Name, Data Type (mostly Text)

- Enabled options: Allow Reports, Track Field History, Allow Activities, Search

3. Tab Creation

Custom tabs created for:



Custom 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 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.


Custom Object Tabs			New	What Is This?
Action	Label	Tab Style		
Edit Del	Drop-Off Points	Bell		
Edit Del	Execution Details	Books		
Edit Del	Tasks	Bridge		
Edit Del	Venues	Building Block		
Edit Del	Volunteers	Heart		

-

Venue

The image shows the 'Edit Custom Object Tab' page for 'Venues'. The page title is 'Venues'. Below the title is a message: 'Fill in the fields below to define the custom tab.' The main section is 'Custom Tab Definition Edit'. Under 'Custom Object Tab Information', there are fields for 'Tab Label' (Venues), 'Object' (Venues), and 'Tab Style' (Building Block). Below these is an optional section: '(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.' It has a 'Splash Page Custom Link' dropdown menu set to '--None--'. At the bottom, there is a 'Description' field and 'Save' and 'Cancel' buttons.

- Drop-Off Point



 **SETUP
Tabs**


Edit Custom Object Tab
Drop-Off Points

Fill in the fields below to define the custom tab.

Custom Tab Definition Edit

Custom Object Tab Information

Tab Label	Drop-Off Points
Object	Drop-Off Point
Tab Style	 Pill 


(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link **--None--** 

Enter a short description.
Description

Save

Cancel

- Task



 **SETUP
Tabs**


Edit Custom Object Tab
Tasks

Fill in the fields below to define the custom tab.

Custom Tab Definition Edit

Custom Object Tab Information

Tab Label	Tasks
Object	Task
Tab Style	 Pill 

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link **--None--** 

Enter a short description.
Description

Save

Cancel

- Execution Details



SETUP Tabs

Edit Custom Object Tab
Execution Details

Fill in the fields below to define the custom tab.

Custom Tab Definition Edit

Custom Object Tab Information

Tab Label	Execution Details
Object	Execution Detail
Tab Style	 Books 

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Splash Page Custom Link --None--

Enter a short description.

Description

Save Cancel

4. Lightning App Creation

- App Name: FoodConnect

← Lightning App Builder App Settings Pages FoodConnect

Settings

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

* Developer Name

Description


App Branding

Image

Primary Color Hex Value

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

App Launcher Preview



- Navigation Style:
Standard

Navigation and Form Factor

* Navigation Style

- ☒ Standard navigation
- ☐ Console navigation

- Navigation Items: Home, Venue, Drop-Off Point, Task, Volunteer, Execution Details, Reports

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 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

Activation Targets

Activations

All Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Appointment Invitations

Approval Requests

Approval Submission Details

Approval Submissions

Approval Work Items

➡

⬅

Create ▼

Selected Items

🏠 Home

📍 Venues

🛠 Tasks

📍 Drop-Off Points

📊 Execution Details

❤ Volunteers

📅 Reports

📄 Dashboards

⬅

➡

⬆

⬆

- Assigned to: System Administrator profile

User Profiles

Choose the user profiles that can access this app.

Available Profiles

Analytics Cloud Integration User
Analytics Cloud Security User
Anypoint Integration
Authenticated Website
Authenticated Website
B2B Reordering Portal Buyer Profile
Contract Manager
Custom: Marketing Profile
Custom: Sales Profile

Selected Profiles

System Administrator

5. Relationship

Field ● Master-Detail and Lookup Relationships established:

- Volunteer ↔ Drop-Off Point
- Execution Details ↔ Volunteer,
- Task ↔ Venue, Drop-Off Point

6. Field Creation in Objects

Each object is enriched with relevant fields:

- Venue: Contact Email, Phone, Location (Geo), Venue Location (Text Area)

SETUP > OBJECT MANAGER

Venue

Details	Fields & Relationships 8 Items, Sorted by Field Label
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	

FIELD LABEL	FIELD NAME	DATA TYPE
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)

- Drop-Off Point: Geolocation, Distance Calculation (Formula), State (Picklist)

SETUP > OBJECT MANAGER

Drop-Off Point

Details	Fields & Relationships 9 Items, Sorted by Field Label
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	

FIELD LABEL	FIELD NAME	DATA TYPE
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)

- Task: Distance, Task ID (Auto Number), Date, Food Category (Picklist), Number of People Served, Rating, Feedback, Contact Info

[illegible]

- Volunteer: Volunteer ID, Gender, Available On, Age, Email, Contact Number, Address, DOB

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
- Object Access
- Triggers

Fields & Relationships

14 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
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)

- Execution Details: Execution ID (Auto Number)

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

Fields & Relationships

5 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
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)

7. Flow Implementation

records

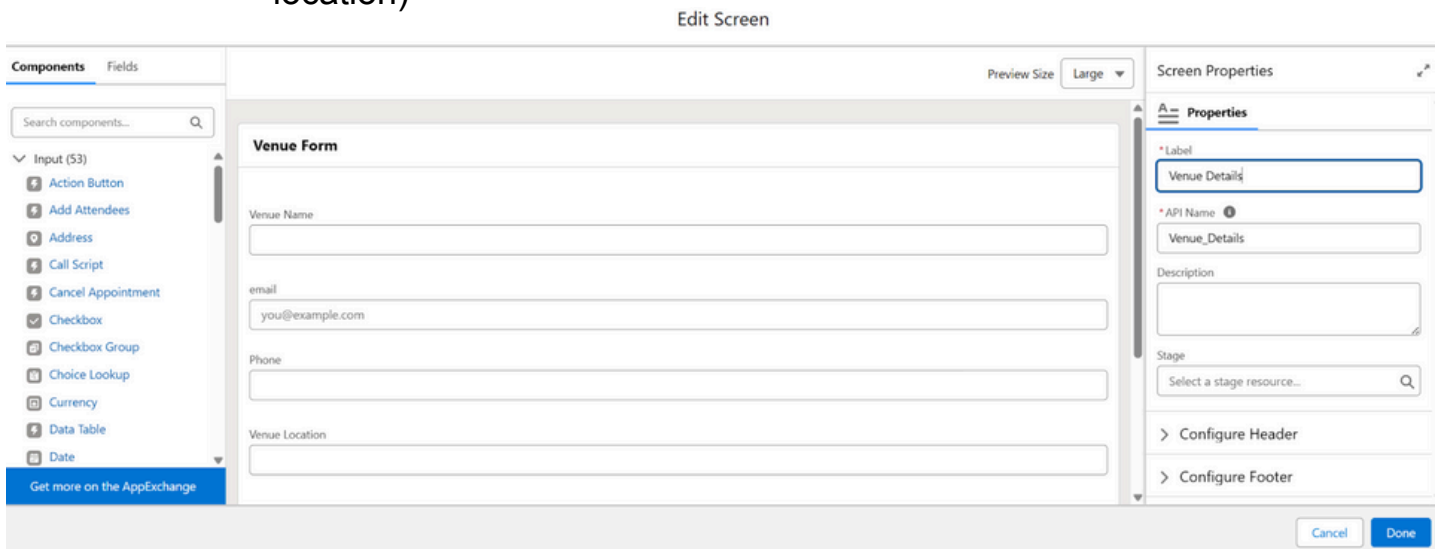
- Screen Flow to createVenu
e

Frequently Used

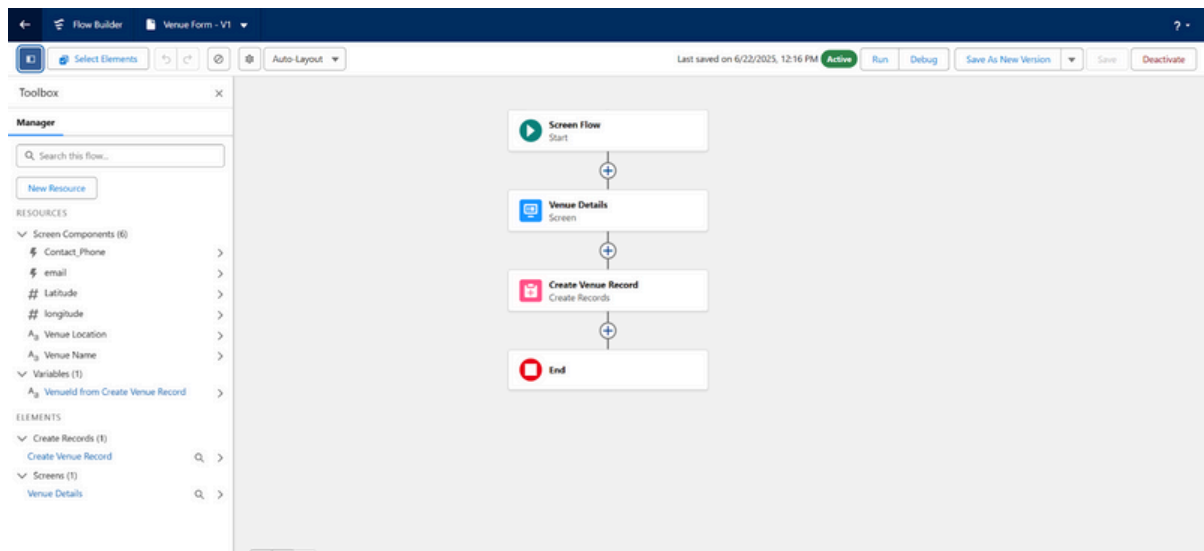
 **Screen Flow**

Guides users through a business process that's launched from Lightning pages, Experience Cloud sites, quick actions, an...

- Captures Venue details (name, contact, location)

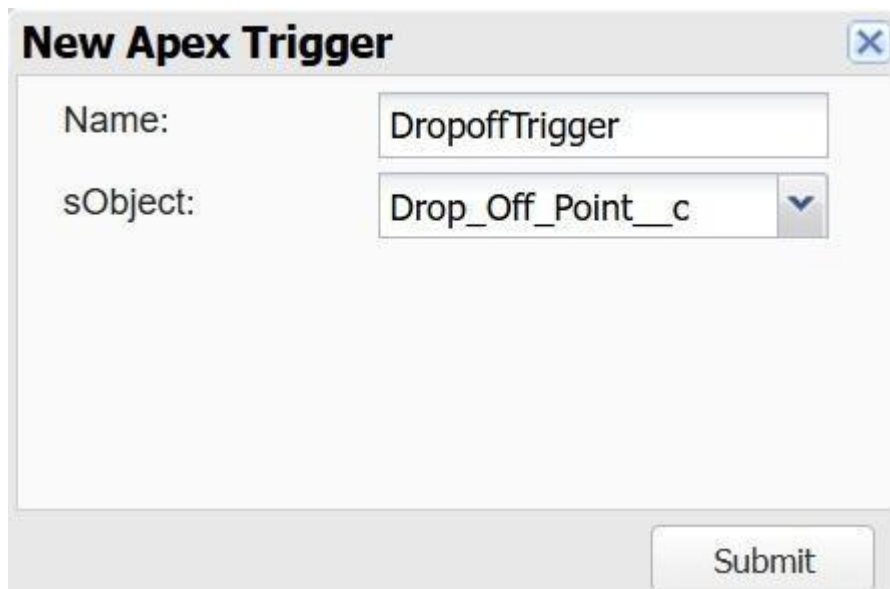


- Saves data to Venue object



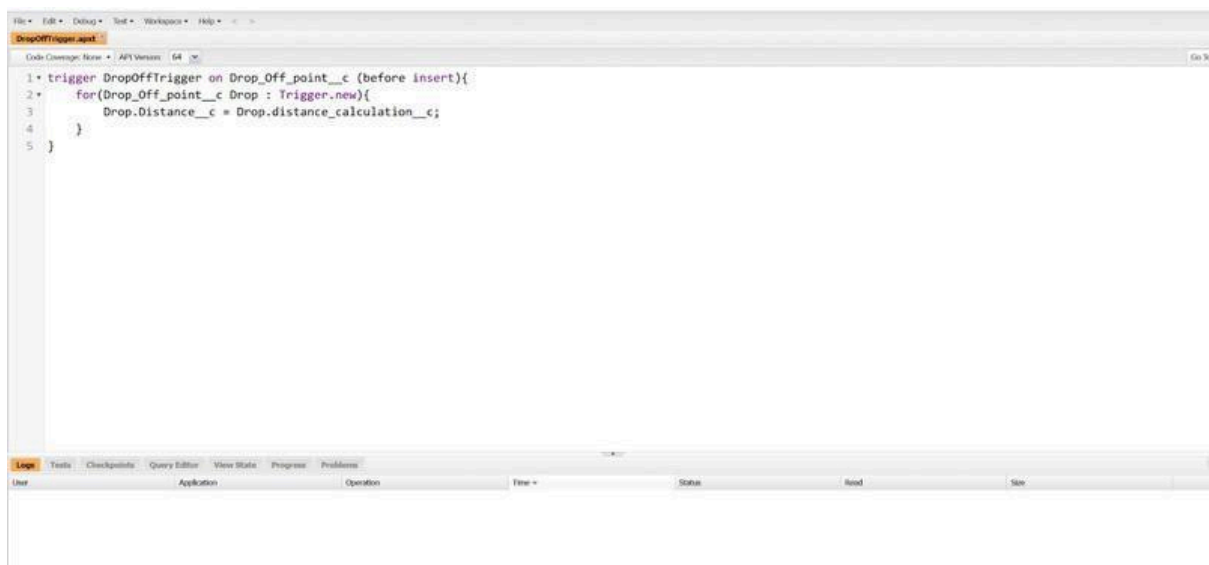
8. Trigger Implementation

- Trigger Name: DropOffTrigger
- Object: Drop-Off Point



The image shows a 'New Apex Trigger' dialog box. It has a title bar with a close button. Inside, there are two fields: 'Name:' with the text 'DropoffTrigger' and 'sObject:' with a dropdown menu showing 'Drop_Off_Point__c'. A 'Submit' button is at the bottom right.

- Logic: `distance_calculation__c` to `Distance__c`
Copies before insert.



```
1 trigger DropOffTrigger on Drop_Off_point__c (before insert){
2   for(Drop_Off_point__c Drop : Trigger.new){
3     Drop.Distance__c = Drop.distance_calculation__c;
4   }
5 }
```

The image shows a code editor window with the title 'DropOffTrigger.apex'. It contains the following Apex trigger code:

apex CopyEdit

Drop_Off_point__c (before

```
trigger DropOffTrigger on  
insert) {
```

```
    for(Drop_Off_point__c Drop : Trigger.new){  
        Drop.Distance__c =  
Drop.distance_calculation__c;  
  
    }  
  
}
```

9. User and Profile Management

- Created custom
Profile:

NGOs Profile

The screenshot shows the 'Profiles' setup page in Salesforce. The page title is 'Profiles' with a 'SETUP' icon. Below the title, it says 'Profile Edit' and 'NGOs Profile'. A subtitle reads 'Set the permissions and page layouts for this profile.' There are three buttons: 'Save', 'Save & New', and 'Cancel'. The 'Name' field is 'NGOs Profile'. The 'User License' is 'Salesforce Platform'. The 'Description' field is empty. The 'Custom Profile' checkbox is checked. Below this is the 'Custom App Settings' section with two columns of settings. The first column lists 'Analytics Studio (standard__Insights)', 'App Launcher (standard__AppLauncher)', and 'FoodConnect (FoodConnect)'. The second column lists 'Platform (standard__Platform)' and 'WDC (standard__Work)'. Each item has 'Visible' and 'Default' checkboxes. The 'Platform (standard__Platform)' checkbox is checked, and its 'Default' radio button is selected. At the bottom, there are sections for 'Service Provider Access' and 'Tab Settings'.

App	Visible	Default
Analytics Studio (standard__Insights)	<input type="checkbox"/>	<input type="radio"/>
App Launcher (standard__AppLauncher)	<input type="checkbox"/>	<input type="radio"/>
FoodConnect (FoodConnect)	<input type="checkbox"/>	<input type="radio"/>
Platform (standard__Platform)	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>
WDC (standard__Work)	<input type="checkbox"/>	<input type="radio"/>

- Created multiple Users (NGO representatives)

SETUP Users

User Edit
Iksha Foundation Iksha_Foundation

User Edit Save Save & New Cancel

General Information

First Name	Iksha Foundation	Role	<None Specified>
Last Name	Iksha_Foundation	User License	Salesforce Platform
Alias	iksh	Profile	NGOs Profile
Email	mummidipraveen178@gmc	Active	<input checked="" type="checkbox"/>
Username	ikshafoundation178@sb.co	Marketing User	<input type="checkbox"/>
Nickname	User175040659182532044	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

SETUP Users

User Edit
NSS NSS

User Edit Save Save & New Cancel

General Information

First Name	NSS	Role	<None Specified>
Last Name	NSS	User License	Salesforce Platform
Alias	nnss	Profile	NGOs Profile
Email	mummidipraveen178@gmc	Active	<input checked="" type="checkbox"/>
Username	nss178@sb.com	Marketing User	<input type="checkbox"/>
Nickname	User175041641535847070	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

SETUP Users

User Edit
Street Cause Street_Cause

User Edit Save Save & New Cancel

General Information

First Name	Street Cause	Role	<None Specified>
Last Name	Street_Cause	User License	Salesforce Platform
Alias	gstre	Profile	NGOs Profile
Email	mummidipraveen178@gmc	Active	<input checked="" type="checkbox"/>
Username	streetcause178@sb.com	Marketing User	<input type="checkbox"/>
Nickname	User175041682998526099	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

- Created corresponding Public Groups (e.g., Iksha, NSS, Street Cause)

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

View: All Edit Create New View

Action	Label ↑	Group Name	Created By
Edit Del	Iksha	Iksha	Team ,Praveen Kumar
Edit Del	NSS	NSS	Team ,Praveen Kumar
Edit Del	Street Cause	Street_Cause	Team ,Praveen Kumar

10. Reports and

Das●hboCaurdsstom ReportTypes created:

- Venue with Drop-Off and Volunteer
- Volunteers with Execution Details and

SETUP

Custom Report Types

Tasks

Drop-Off Points with Volunteers with Execution Details

[Preview Layout](#) [Edit Layout](#) [Clone](#) [Delete](#) [Close](#)

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

Details

Display Label

Drop-Off Points with Volunteers with Execution Details

API Name

Drop_Off_Points_with_Volunteers_with_Execution_Details

Description

Drop-Off Points with Volunteers with Execution Details

Created By

Praveen Kumar Team, 6/18/25, 11:01 PM

Store in Category

other

Deployment Status

Deployed

Modified By

Praveen Kumar Team, 6/18/25, 11:01 PM

Fields

Source Object

Included Fields

Object Relationships

Drop-Off Points (A)

with at least one related record from Volunteers (B)

with at least one related record from Execution Details (C)

Custom Report Types

Venue with DropOff with Volunteer

Preview Layout

Edit Layout

Clone

Delete

Close

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

Details

Display Label

Venue with DropOff with Volunteer

API Name

Venue_with_DropOff_with_Volunteer

Description

Venue with DropOff with Volunteer

Created By

Praveen Kumar Team, 6/20/25, 4:50 PM

Store in Category

other

Deployment Status

Deployed

Modified By

Praveen Kumar Team, 6/20/25, 4:50 PM

Object Relationships

Venues (A)

with or without related records from Drop-Off Points (B)

with or without related records from Volunteers (C)

Fields

Source Object	Included Fields
Venues	13

- Reports grouped by relevant fields (e.g., Volunteer ID,
- $N_{Dashboard}$ Dashboards: Created using custom reports with

charts and tables

Task Execution Details

As of Jun 26, 2025, 7:30 AM

Viewing as Praveen Kumar Team

venue and Drop Off point

Venue Name ↑	Drop-Off Point Name	Distance
Aditya Degree College	Ooty	5.6602k
Aditya Degree College	YSR Bridge	6.0237k
Gandhi Nagar Park	-	-
GRT Hotel	-	-
Ideal Institute of Technology	JNTUK	5.2358k
Rathna Recidency	Jaganadhapuram	6.0237k
Royal Park	RMC Ground	6.9072k

View Report (venue and Drop Off point)

As of Jun 26, 2025, 7:30 AM

11. Sharing

Rules

Based on Distance

criteria:

Drop-Off Point Sharing Rules			New	Recalculate
Action	Criteria	Shared With		
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group: Iksha		
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)	Group: NSS		
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group: Street Cause		

- <15 km → Group Iksha
- 15–30 km →
- 30–50 km →

Street Cause

12. Home Page

Customization

- Created a Lightning Home Page via Lightning App Builder

* Label

HOME Page

* API Name

HOME_Page

* Page Type

Home Page

Template

Standard Home Page

Change

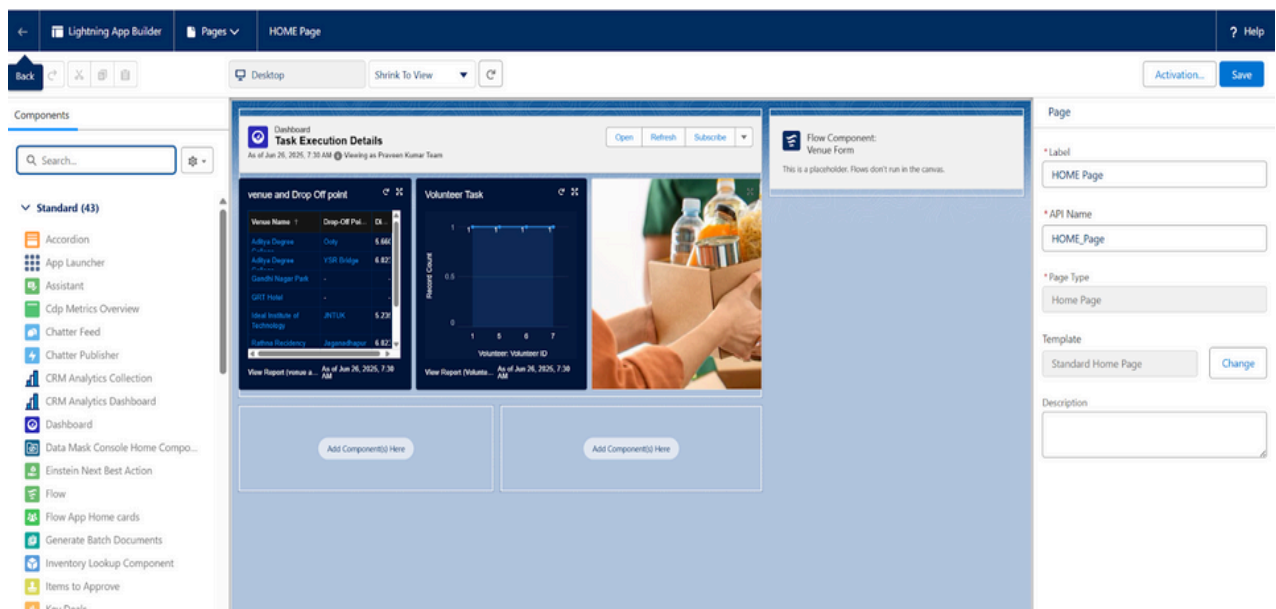
Description

- Components

includEemd:bedded Flow (Venue Form)



- Dashboard view



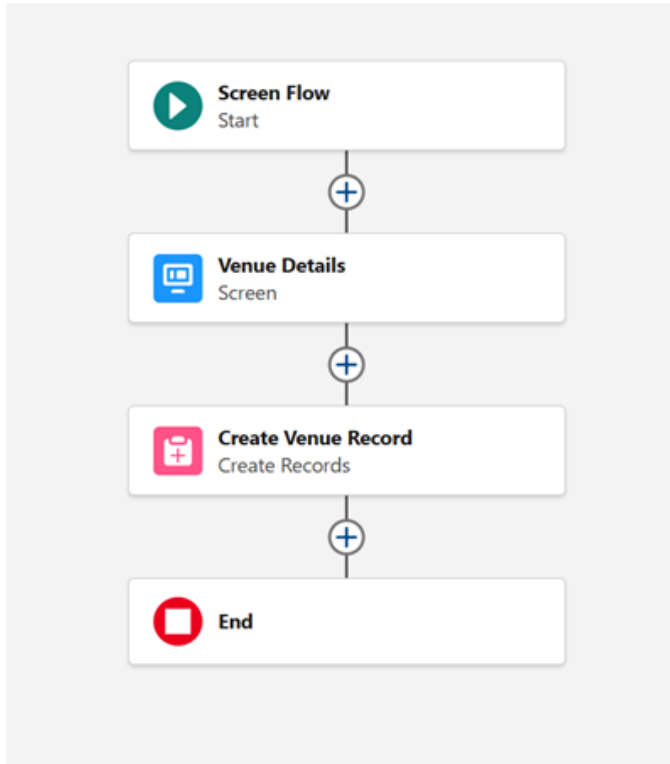
7. FUNCTIONAL AND PERFORMANCE TESTING

Testing
Performance

Flow Load Time

The objective is to measure how long it takes to load and submit the Venue Flow form using various data inputs.

The goal is to ensure that the response time stays under 2 seconds.



Data Load in Reports

Complex reports such as those involving Volunteers with Execution Details and Tasks are tested for performance.

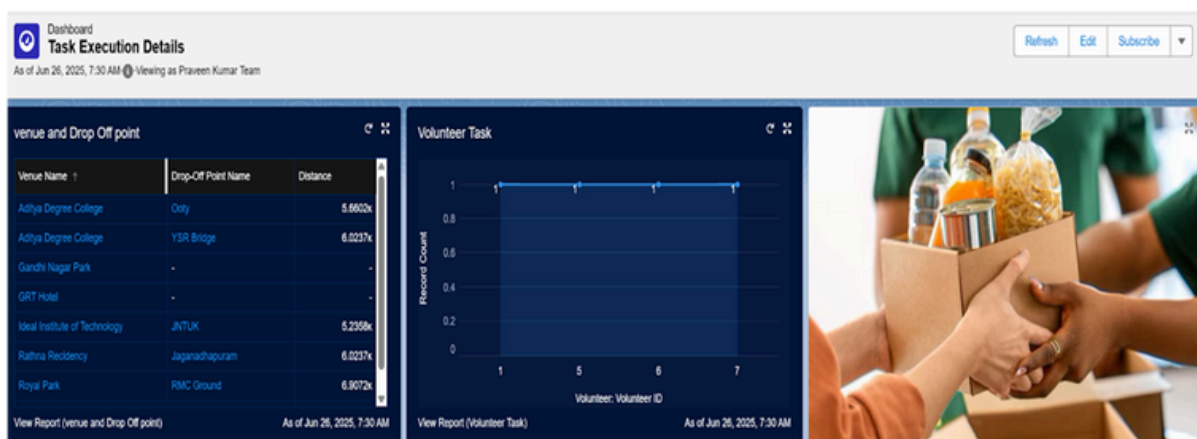
These reports should load in under 5 seconds.

Report: Venue with DropOff with Volunteer venue and Drop Off point			
Total Records	Total Distance		
8	37,736.3335		
<input type="checkbox"/> Volunteer Name ↑	Venue Name	Drop-Off Point Name	Distance
<input type="checkbox"/> - (4)	Yati Restaurant	Mysore	7,885.6251
	Aditya Degree College	YSR Bridge	6,023.7478
	GRT Hotel	-	-
	Gandhi Nagar Park	-	-
Subtotal			13,909.3729
<input type="checkbox"/> Abhinav (1)	Ideal Institute of Technology	JNTUK	5,235.8486
Subtotal			5,235.8486
<input type="checkbox"/> Praveen Kumar (1)	Royal Park	RMC Ground	6,907.1915
Subtotal			6,907.1915
<input type="checkbox"/> Renuka (1)	Aditya Degree College	Ooty	5,660.1727
Subtotal			5,660.1727
<input type="checkbox"/> Subramanyam (1)	Rathna Recidency	Jaganadhapuram	6,023.7478
Subtotal			6,023.7478
Total (8)			37,736.3335

Dashboard Rendering

The performance test involves opening the 'Task Execution Details' dashboard which contains multiple components.

The system should fully render the dashboard within 3 to 4 seconds.



Sharing Rule Processing

This is tested by evaluating any delay in access propagation following rule updates.

The goal is to ensure that rule enforcement occurs within a few seconds.

Drop-Off Point Sharing Rules		New	Recalculate
Action	Criteria		
Edit Del	Drop-Off Point: Distance LESS THAN 15		
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)		
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)		

Concurrent Access

This testing simulates multiple NGOs accessing Drop-Off records at the same time.

The system should demonstrate stability by maintaining record visibility without any slowdowns or crashes.

Trigger Execution Time

The trigger DropOffTrigger, which assigns Distance values during record insertion, is measured.

This trigger should execute instantly, completing within milliseconds before the record is saved.

```
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
DropOffTrigger.apxt
Code Coverage: None ▾ API Version: 64 ▾
1 ▾ trigger DropOffTrigger on Drop_Off_point__c (before insert){
2 ▾     for(Drop_Off_point__c Drop : Trigger.new){
3         Drop.Distance__c = Drop.distance_calculation__c;
4     }
5 }
```

8. RESULTS

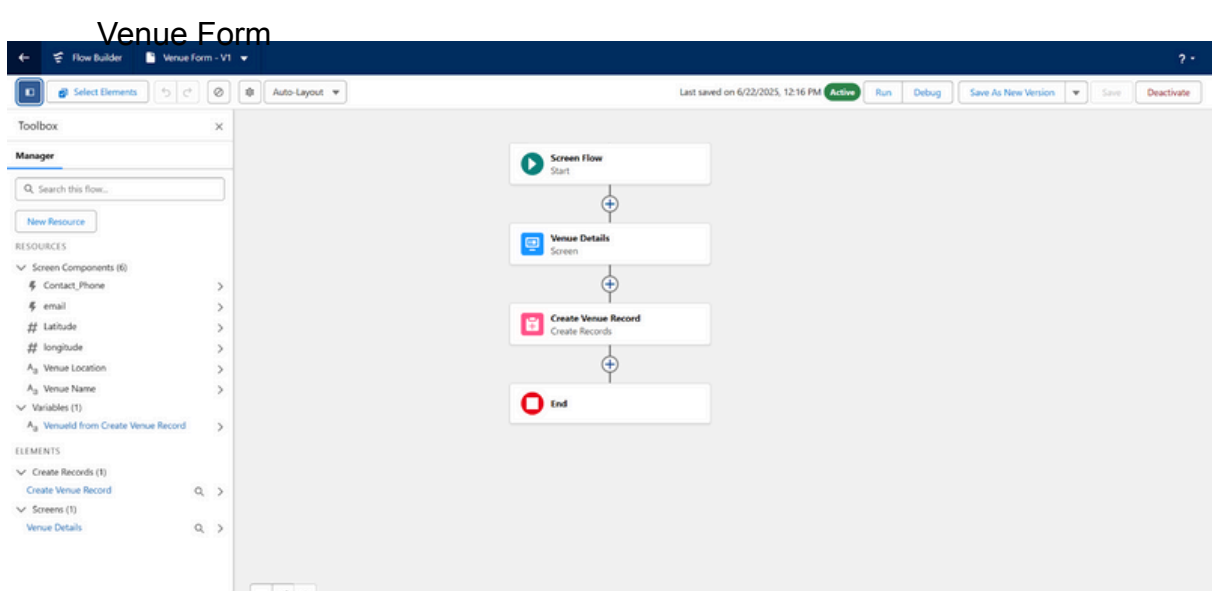
8.1 Output

Screenshots

(Suggested

screenshots)

- Flow Designer screen for



Venue Form

Venue Name

email

Phone

Venue Location

Latitude

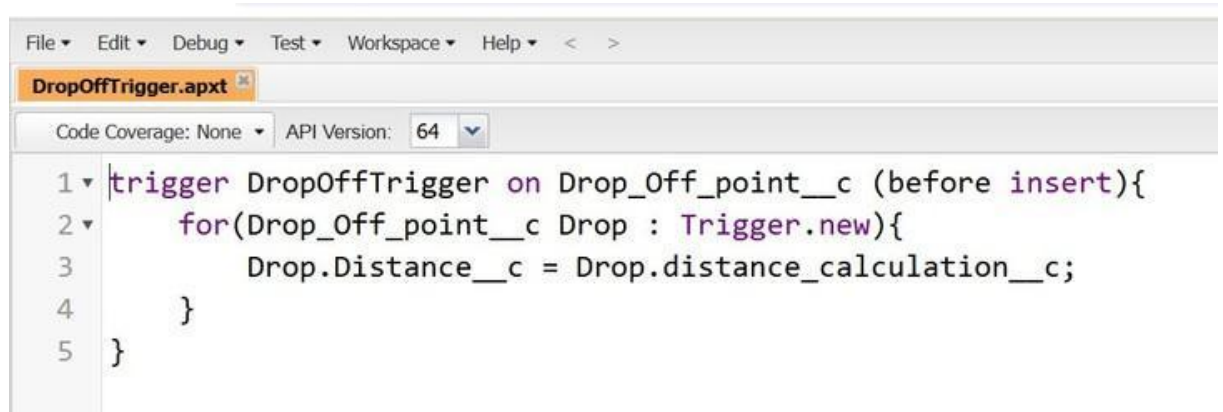
longitude

Next

- Trigger test output

Automatically filled

Distance__c field during Drop-Off Point record creation

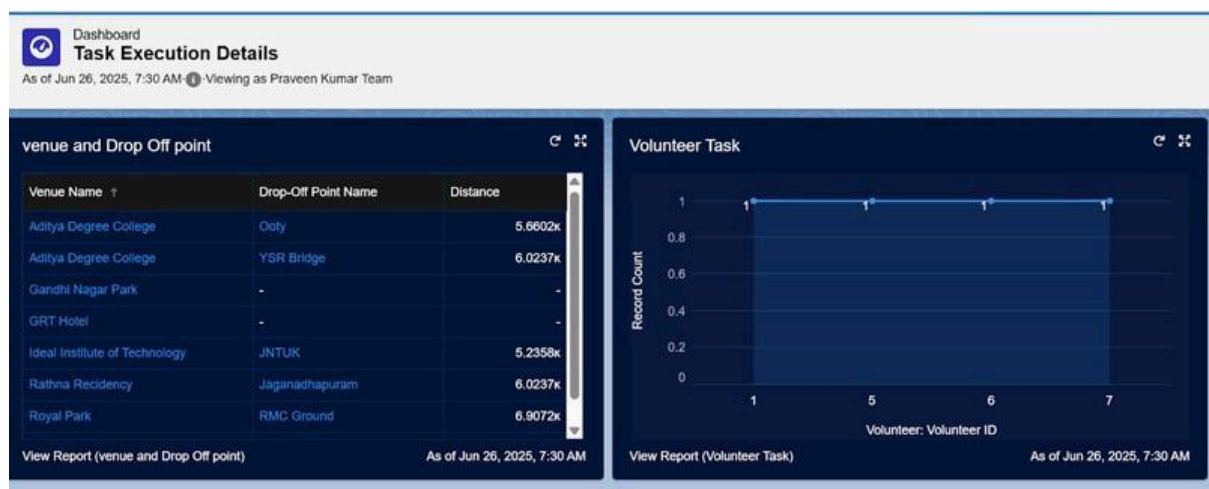


```


1 trigger DropOffTrigger on Drop_Off_point__c (before insert){
2     for(Drop_Off_point__c Drop : Trigger.new){
3         Drop.Distance__c = Drop.distance_calculation__c;
4     }
5 }

```

- Dashboards with line charts and tables



- Public Group and Sharing Settings



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.

View:

All

Edit

Create New View

Action	Label ↑	Group Name	Created By
Edit Del	Iksha	Iksha	Team, Praveen Kumar
Edit Del	NSS	NSS	Team, Praveen Kumar
Edit Del	Street Cause	Street_Cause	Team, Praveen Kumar

New


Drop-Off Point Sharing Rules

New

Recalculate

Action	Criteria	Shared With
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group, Iksha
Edit Del	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)	Group, NSS
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group, Street Cause

- Home page preview



FoodConnect

Home

Venues

Tasks

Drop-Off Points







Execution Details

Volunteers

Reports

Dashboards

Q Search...



Dashboard

Task Execution Details

Open

Refresh

Subscribe

As of Jun 26, 2025, 7:30 AM

Viewing as Praveen Kumar Team


venue and Drop Off point

Venue Name	Drop-Off Point N...	Dist...
Aditya Degree College	Only	5.6602h
Aditya Degree College	YSR Bridge	6.0237h
Gandhi Nagar Park	-	-
GRT Hotel	-	-
Ideal Institute of Technology	JNTUK	5.2356h
Radhika Residency	Jaganachapuram	6.0237h
Royal Park	RMC Ground	6.9072h

View Report (venue and Dro...


As of Jun 26, 2025, 7:30 AM

Volunteer Task



View Report (Volunteer Task)

As of Jun 26, 2025, 7:30 AM



Venue Form

Venue Name

email

you@example.com

Phone

Venue Location

Latitude

Longitude

New

9. ADVANTAGES & DISADVANTAGES

Advantages

1. Centralized and Scalable System

- All entities (Venue, Volunteer, Drop-Off Points, etc.) are integrated into one system.
- sEyasstyemto. scale by adding new custom objects or fields.

2. Efficient

Data

Management

- Use of custom objects and relationship fields ensures structured and relational data storage.
- Supports advanced reporting, data linking, and analytics.

3. Automated Workflows

- Flows and Triggers automate data input and background operations (e.g., distance calculations).
- Reduces manual errors and saves time.

4. Role-Based Access

& Sharing

- Profiles and ensure controlled access to data.
- PSuhbalircinGgroups provide locatdioanta-b. ased access, improving data security and collaboration.

5. Visual Dashboards &

Reports

- Real-time, dynamic reports and dashboards provide stakeholders with actionable insights.
- Enhances monitoring, transparency, and decision-making.

6. Volunteer and NGO Coordination

- Tracks execution details, volunteers, tasks, and beneficiaries—crucial for impact measurement.
- Allows multiple NGOs to operate under a shared system.

7. Custom

Home Page

- Personalized dashboards and forms improve
- uVsisaubailiteyl.ements enhance user experience and engagement.

Disadvantage

1. Complex

S_{Setup}

- Requires technical knowledge of Salesforce (Objects, Triggers, Flows, App
- IBnuitiladlecr)o.nfiguration is time-consuming and detail-oriented.

2. Limited

Offline Access

- Salesforce is cloud-based—reliable internet is
- rNeoqtuiidreda.l for rural or remote areas with poor connectivity.

3. Learning Curve

- Non-technical users (NGO staff/volunteers) may struggle with custom UI, dashboards, or flow screens.
- Requires training and support.

4. Cost Consideration (for

Production Use)

- Though development is on a free Developer Org , actual deployment may require Salesforce licenses , which can be expensive for NGOs.

5. Dependence on Customization

- Heavy reliance on custom fields, tabs, and
- Integrations to business logic require ongoing Salesforce admin or developer support.

6. Limited Mobile Optimization

- Unless specifically optimized, flows and dashboards may not work well on mobile devices.
- Reduces field usability (for mobile-based task updates, feedback, etc.).

10. CONCLUSION

The FoodConnect Salesforce project effectively demonstrates how cloud-based CRM tools like Salesforce can be adapted to solve real-world social issues—specifically, the challenge of managing surplus food and ensuring its timely delivery to the underprivileged.

By leveraging custom objects, flows, triggers, dashboards, and role-based access, the

system enables NGOs to coordinate volunteers, track logistics, monitor performance, share responsibilities transparently and efficiently.

Despite the initial complexity and technical learning curve, the system provides a robust,

scalable, and centralized solution for managing food donations, ensuring no food goes waste and that it reaches those who need it the most.

With further enhancements—like mobile accessibility, automation, and integration

with the FUTURE

ServiceNow services —this solution has strong potential to become a sustainable digital platform for mobile application integration

- Develop a mobile app for volunteers and NGOs to:
 - Log tasks

- Update delivery
- sStuabtumsit
- Increase feasibility in remote or low-connectivity areas.

2. Integration with External Platforms

- Integrate with food providers surplus, restaurants, and supermarket data. chains for real-time
- Google Maps or GPS APIs for accurate geolocation and optimized
- rPoauytimnge.nt gateways (if logistics costs need recovery).

3. Automation & AI Recommendations

- Einstein AI Use(Salesforce) to:
 - Recommend nearest drop-off
 - pOopintimsize volunteer-task
 - aPsresidginctmfoeondtsspoilage risks or demand surges

4. Multi-Language and Regional

Support

- Add support for regional languages and locale-specific
- dHaetlaps. reach NGOs and beneficiaries in various states across India or globally.

5. Advanced Analytics & Impact Reports

- Deeper analytics

on: ○ Number of people

○ Wsaesrv

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r○eduRcetigoio

nn-wise

- Generaptearufotorm-fiallneceimpact reports for donors and stakeholders.

e

6. Enhanced Security and

for

• Compliance

audit trails, encryption, and GDPR compliance

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and enable

activity logging.

donor/volunteer

- Assigndataac

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levels

7. Gamification for Volunteer

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- IEenacdoeurbraogaerdcso tmopetition and recognition across

NGOs.

8. Expansion to Other

Cause s

- Ext e nd the same

Salesforce model to:

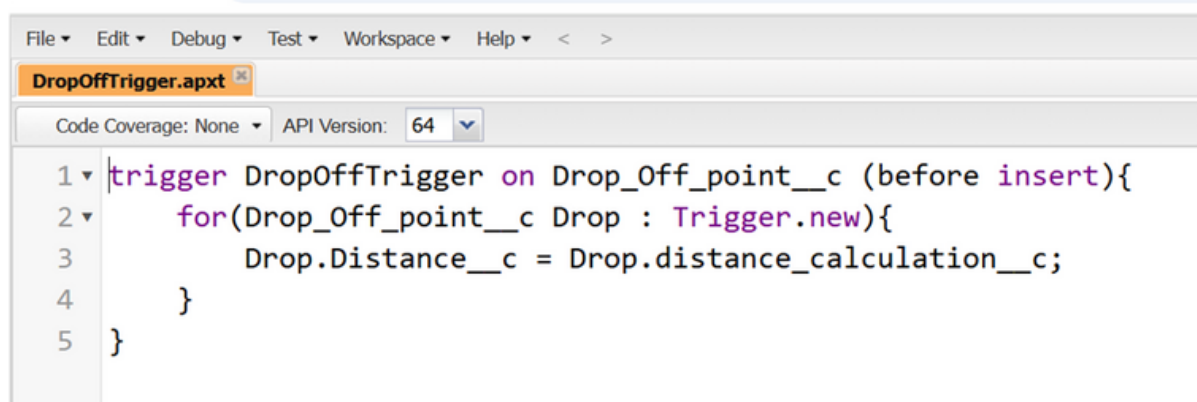
- Clothing drives
- Blood donation
- Dmiasnaastgeermreelnietf logistics

12. APPENDIX

: Apex Trigger `DropOffTrigger`

- Source Code

—



```
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
DropOffTrigger.apxt
Code Coverage: None ▾ API Version: 64 ▾
1 ▾ trigger DropOffTrigger on Drop_Off_point__c (before insert){
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3         Drop.Distance__c = Drop.distance_calculation__c;
4     }
5 }
```