

# **Project Title: To Supply Leftover Food to Poor**

**Category:** Salesforce

**Skills Required:** Salesforce Developer

## **1. Project Overview**

This section summarizes the purpose and scope of your project. It explains what your project aims to achieve:

- a. **Goal:** To streamline the process of leftover food distribution using Salesforce.
- b. **Impact:** Reducing food waste and addressing hunger by efficiently managing food drop-off points, tasks, and volunteers.
- c. **Technology:** Salesforce provides the tools to manage records, workflows, and data visualization, making the process seamless.

## **2. Objectives**

Defines measurable and actionable goals for the project.

**Business Goals:**

- d. What organizational or societal issue the project addresses (e.g., food waste, hunger).

- e. How the project will improve operations, transparency, or accountability.

### Specific Outcomes:

- f. These are tangible deliverables (e.g., custom objects, reports, flows) created during the project.

## Objects created :

### 1. Drop-Off Point:

- a. **Purpose:** The Drop-Off Point object captures essential details about locations where food is dropped off. This helps in tracking and managing food distribution points effectively.

b. **Fields:**

- **Drop-Off Point Name:** A text field representing the name of the drop-off point.
- **Location Details:** A text field for additional details about the drop-off point location.
- **Distance:** A number field that records the distance from the drop-off point to the delivery area.
- **Venue:** A lookup relationship field linking to the Venue object to provide a connection between drop-off points and venues.

The screenshot shows the Salesforce Object Manager interface for the 'Drop-Off Point' object. The left sidebar contains navigation options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Drop-Off Point' and shows 'Fields & Relationships' with 9 items, sorted by Field Label. The fields are listed in a table:

Field Name	Field Label	Field Type	Required
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)	✓

## 2. Task:

- a. Purpose: The Task object is used to manage and track various tasks related to food distribution, including assigning tasks to volunteers and recording task details.
- b. Fields:
  - Task Name: A text field representing the name of the task.
  - Date: A date field indicating when the task is scheduled or completed.
  - Rating: A numeric field used to rate the task performance.
  - Drop-Off Point: A lookup relationship field linking to the Drop-Off Point object to associate tasks with specific drop-off points.
  - Sponsored By: A lookup relationship field linking to the Drop-Off Point object to indicate the sponsor of the task.

The screenshot shows the Salesforce Setup interface for the Task object. The breadcrumb trail is SETUP > OBJECT MANAGER > Task. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Fields & Relationships' and shows 15 items, sorted by Field Label. A table lists the fields with columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date	Date__c	Date		
Distance	Distance__c	Number(14, 4)		
Drop-Off Point	Drop_Off_point__c	Lookup(Drop-Off Point)		✓
Feedback	Feedback__c	Long Text Area(32768)		
Food Category	Food_Category__c	Picklist (Multi-Select)		

### 3. Volunteer:

a. **Purpose:** The Volunteer object keeps track of individuals who are involved in the food distribution process, including their contact information and assigned tasks.

b. **Fields:**

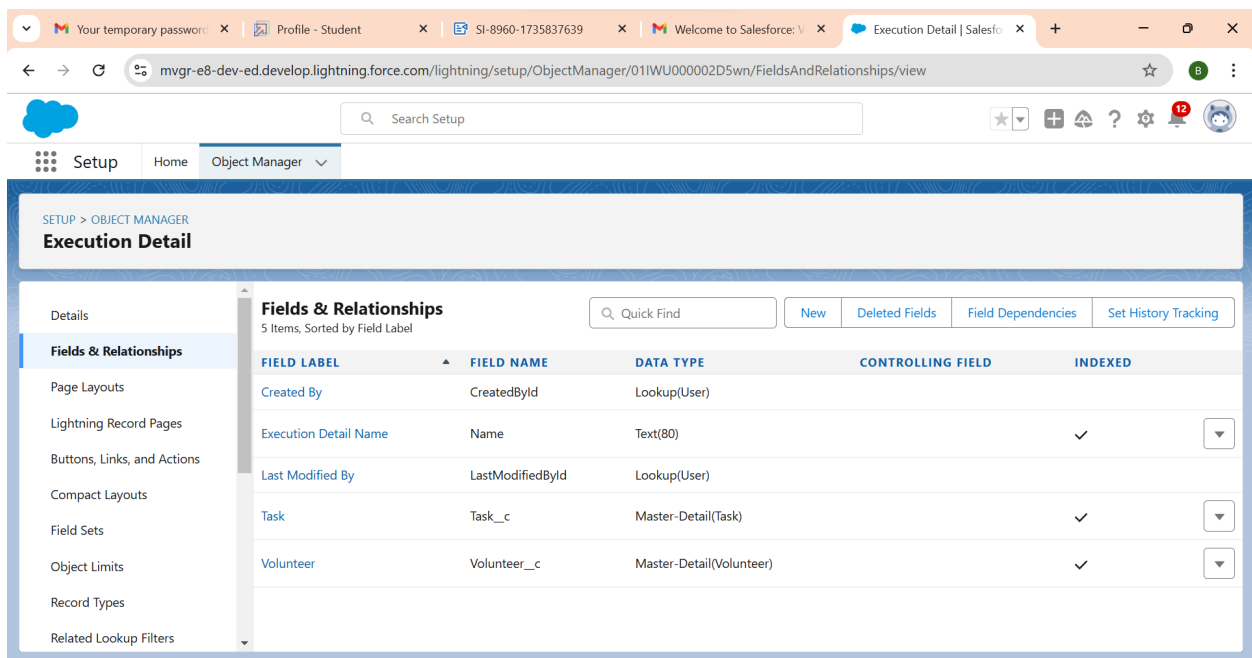
- Volunteer Name: A text field for the name of the volunteer.
- Contact Email: An email field for the volunteer's contact email.
- Contact Phone: A phone field for the volunteer's contact number.
- Assigned Tasks: A related list showing tasks assigned to the volunteer.

The screenshot shows the Salesforce Setup interface for the 'Volunteer' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Fields & Relationships' and shows 13 items, sorted by Field Label. A table lists the fields with columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are Address, Age, Available On, Contact Number, Created By, and Date of Birth.

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		

### 4. Execution Detail:

- a. Purpose: The Execution Detail object captures detailed information about food distribution activities, including which volunteers and task are associated with each distribution.
- b. Fields:
  - Execution DetailName: A text field for naming the execution detail record.
  - Volunteer: A master-detail relationship field linking to the Volunteer object to associate execution details with a specific volunteer.
  - Task: A master-detail relationship field linking to the Task object to associate execution details with a specific task.
  - Details: A text field for additional information about the execution.



The screenshot shows the Salesforce Setup interface for the 'Execution Detail' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Execution Detail' and shows the 'Fields & Relationships' section. It displays a table with 5 items, sorted by Field Label. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By (Lookup(User)), Execution Detail Name (Text(80)), Last Modified By (Lookup(User)), Task (Master-Detail(Task)), and Volunteer (Master-Detail(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)		✓

### 3. Salesforce Key Features and Concepts Utilized

#### Custom Objects:

These are specific data structures you create in Salesforce to store information.

For your project:

- g. **Drop-OffPoints:** Records detailsof food collection locations.
- h. **Tasks:** Tracks what needs to be done and who is responsible.
- i. **Volunteers:** Manages contact information and task assignments.
- j. **ExecutionDetails:** Links volunteers and tasks for each food distribution.

### **Relationships:**

Defines how these objects interactwith each other:

- k. **Master-Detail Relationship:** A strict relationship where a child object (e.g., Execution Detail) depends on its parent (Volunteer or Task).
- l. **Lookup Relationship:** A more flexibleconnection, such as Drop-Off Points being associated with Venues.

### **Sharing Rules:**

These controlwho can view or edit records. Your project uses criteria-based sharing (e.g., by distance).

mvgr-e8-dev-ed.develop.lightning.force.com/lightning/setup/SecuritySharing/home

Setup Home Object Manager

sharing

Security

Guest User Sharing Rule Access Report

Sharing Settings

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

### Sharing Settings

Work Type Group Sharing Rules New Recalculate Work Type Group Sharing Rules Help

No sharing rules specified.

Drop-Off Point Sharing Rules New Recalculate Drop-Off Point Sharing Rules Help

Action	Criteria	Shared With	Access Level
<a href="#">Edit</a>   <a href="#">Del</a>	Drop-Off Point: Distance LESS THAN 15	Group_iksha	Read/Write
<a href="#">Edit</a>   <a href="#">Del</a>	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)	Group_nss	Read/Write
<a href="#">Edit</a>   <a href="#">Del</a>	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group_street cause	Read/Write

Task Sharing Rules New Recalculate Task Sharing Rules Help

No sharing rules specified.

Venue Sharing Rules New Recalculate Venue Sharing Rules Help

No sharing rules specified.

## Custom Tabs

Setup Home Object Manager

tabs

User Interface

Rename Tabs and Labels

Tabs

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






### Custom Tabs

Help for this Page

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.

Custom Object Tabs New What Is This?

Action	Label	Tab Style	Description
<a href="#">Edit</a>   <a href="#">Del</a>	Drop-Off Points	 Apple	
<a href="#">Edit</a>   <a href="#">Del</a>	Execution Details	 Computer	
<a href="#">Edit</a>   <a href="#">Del</a>	Tasks	 Ticket	
<a href="#">Edit</a>   <a href="#">Del</a>	Venues	 Box	
<a href="#">Edit</a>   <a href="#">Del</a>	Volunteers	 Star	

### **Flows and Dashboards:**

- m. **Flow:** Automates data entry and processes, like recording venue details.
- n. **Dashboards:** Summarize and visualize key metrics, such as the number of drop-offs or task completion rates.

A tab is like a user interface that is used to build records for objects and to view the records in the objects.

### **4. Detailed Steps to Solution Design**

Describes how the solution was built, step-by-step:

#### **Custom Object Creation:**

- o. Each object (like Drop-Off Point or Volunteer) was created in Salesforce's Object Manager, with specific fields and relationships defined.

#### **Sharing Rules:**

- p. Configured in Sharing Settings to ensure the right people (Iksha, NSS, etc.) have access based on distance.

#### **Lightning App Builder Configuration:**

- q. Created a "Home Page" that includes flows and dashboards for easier navigation.

#### **Report Types and Dashboards:**

- r. Custom reports link different objects for analysis, and

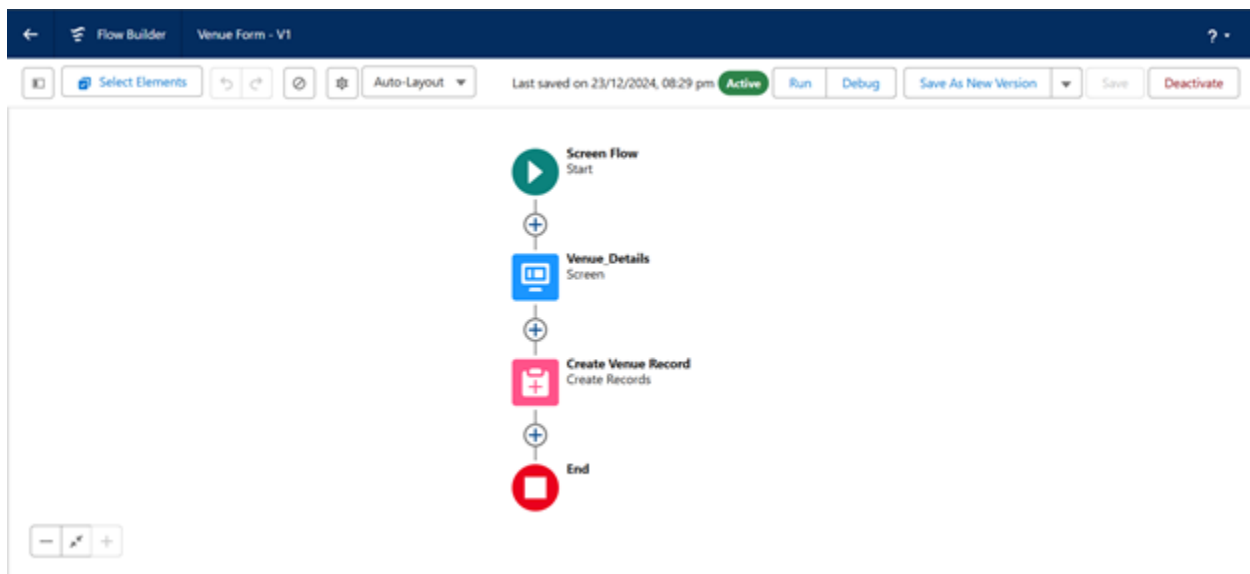


dashboards present this data in an easy-to-understand format.

## Flows Diagram

### 1. Flow: Venue Flow

- a. Purpose: To manage and capture detailed information related to food drop-off points.
- b. Components:
  1. Text Component: For entering the venue name.
  2. Email Component: For entering the contact email of the venue.
  3. Phone Component: For entering the contact phone number of the venue.
  4. Text Component: For entering the venue location.
  5. Number Components: For entering latitude and longitude values of the venue.



### 1. Dashboard:

- a. **Name:** Task Execution Details

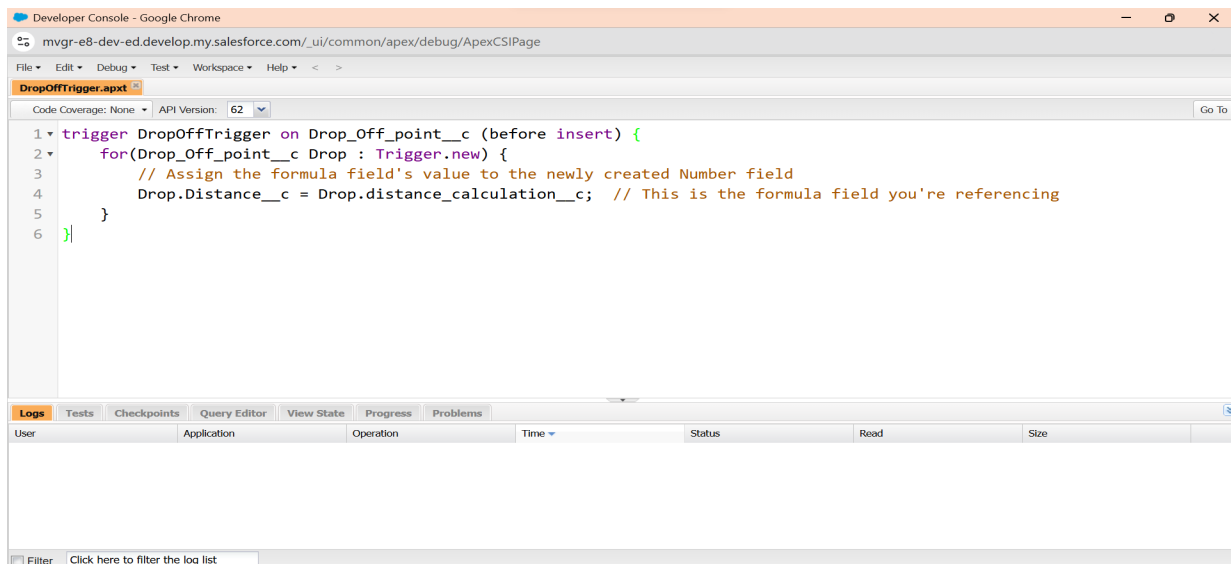
- b. **Components:**

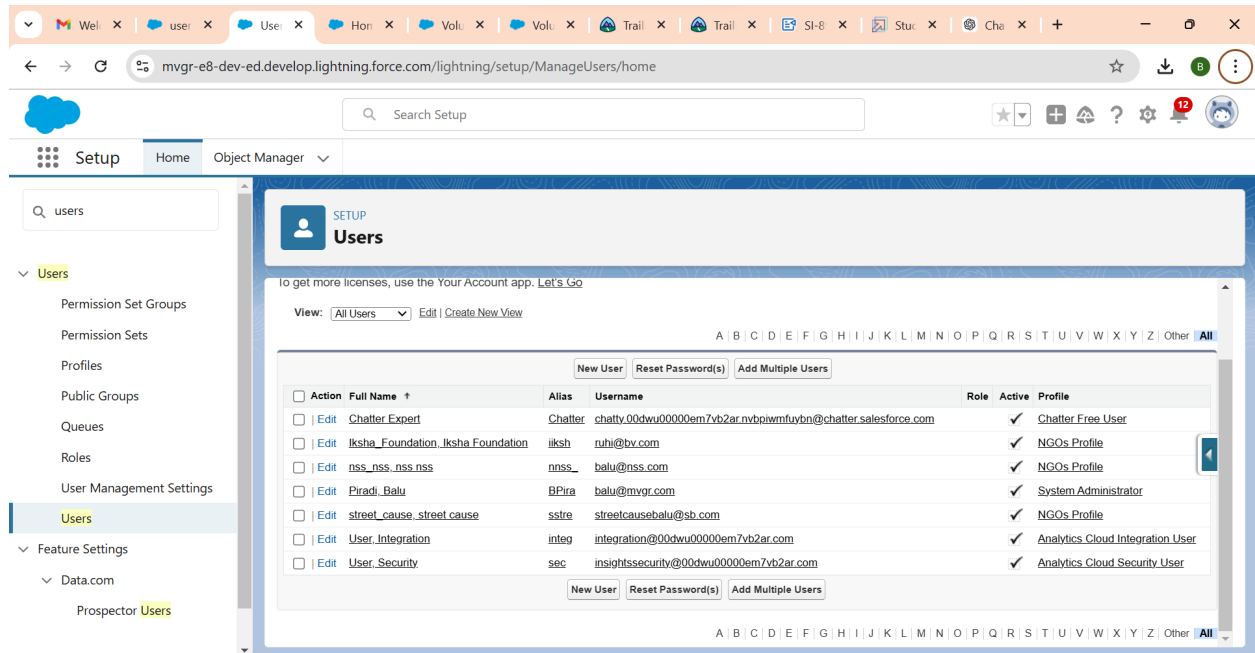
LightningTable: Displays detailed information about venues and drop-off points, facilitating a comprehensive view of the data.

## 5. Testing and Validation

Ensures that the system works as intended:

- a. Unit Testing: Verifies that each component (e.g., Apex triggers, workflows) operates correctly.
- b. UI Testing: Checks the user interface for errors or usability issues.





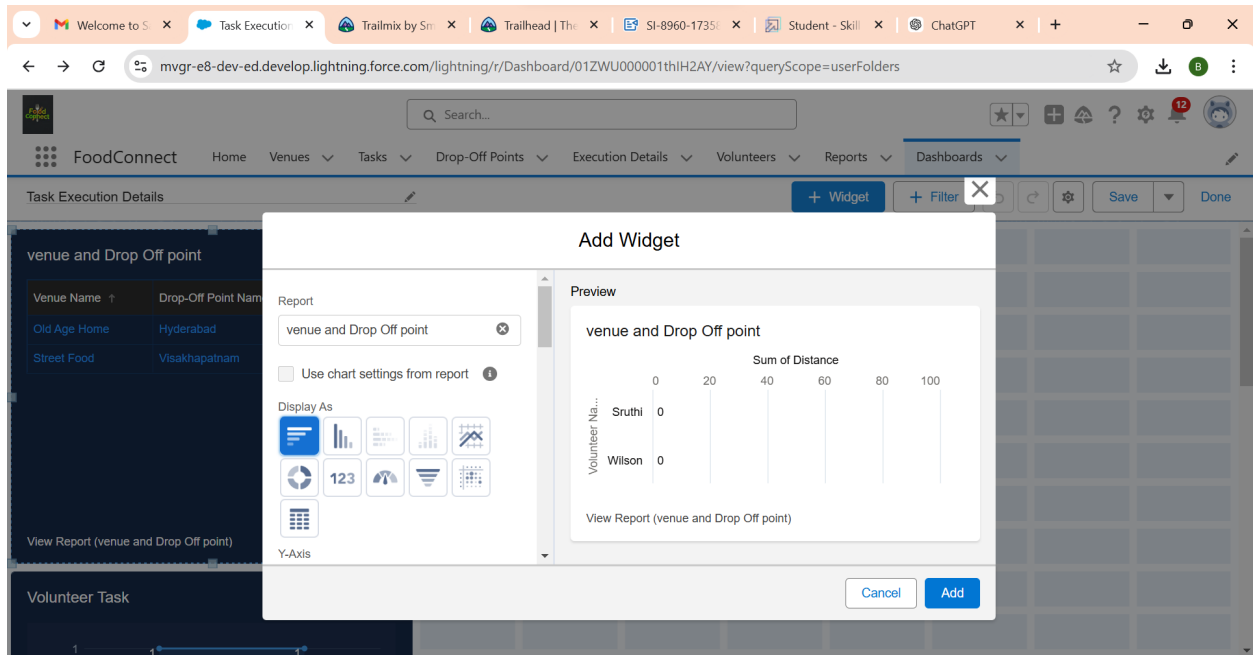
## 6.Key Scenarios Addressed by Salesforce

This is a use-case analysis showing how the project addresses real-world

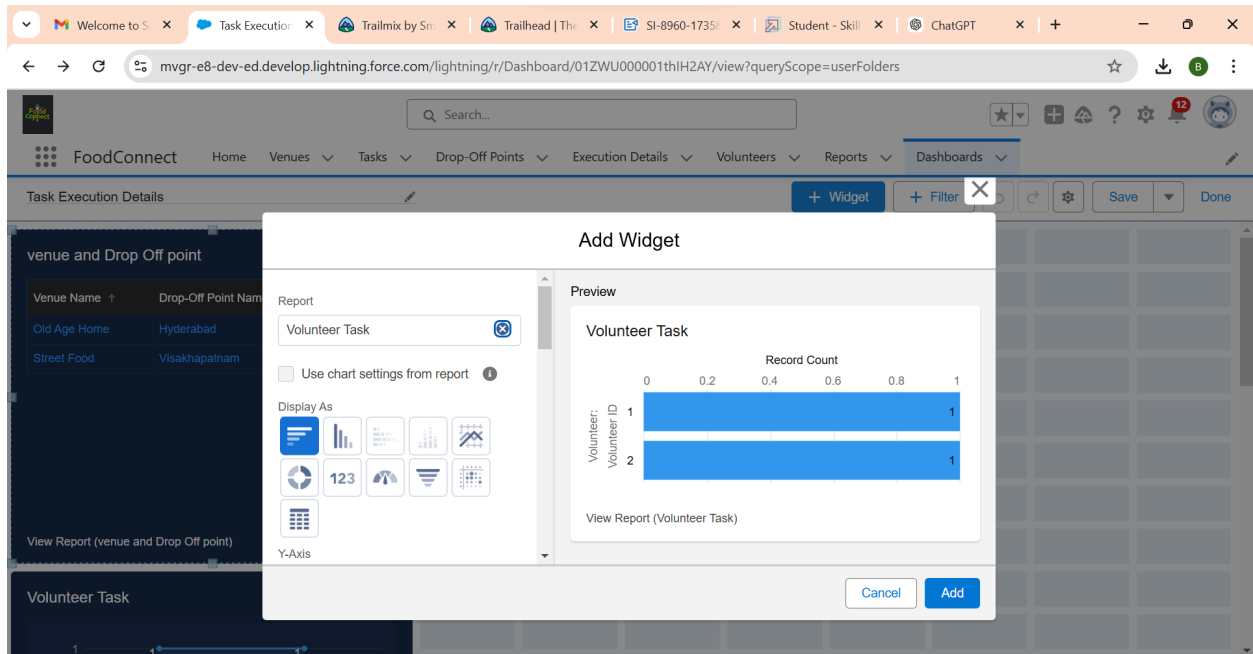
### challenges:

- Food Distribution Coordination: Tracks where food is dropped off and which tasks are related.
- VolunteerManagement: Links tasks to specific volunteers for accountability.
- Data Visibility: Dashboards and reports provide insights into operations, helping improve decision-making

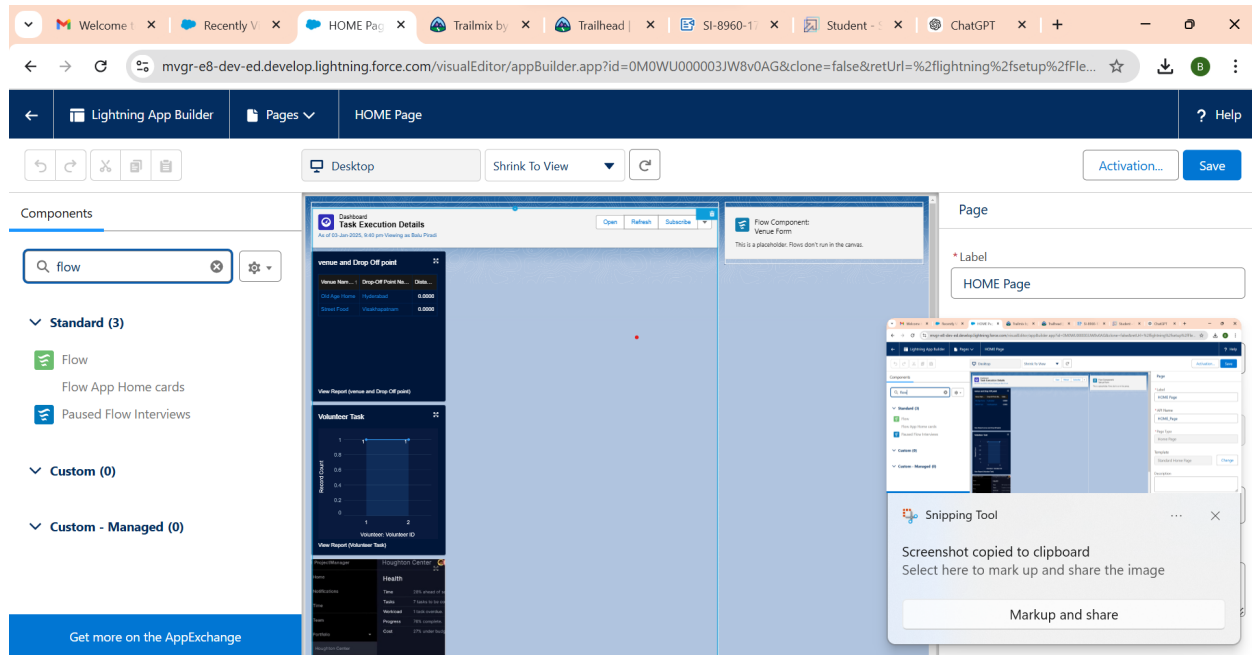
Adding Venue and Drop Off PointReport to The Dashboard



## Adding Volunteer Task Graph to the Dashboard



## Adding Flow to Home page using Lightning app Builder



## 7.Conclusion

A brief summary of what the project achieved:

- Outcome: A functional Salesforce application that enhances food distribution efficiency.
- Impact: Improved coordination and transparency in food donation efforts.

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

Dashboard Task Execution Details  
Last refreshed 1 day ago. Refresh this dashboard to see the latest data.  
As of 03-Jan-2025, 9:40 pm-Viewing as Balu Piradi

venue and Drop Off point

Venue Na...	Drop-Off Point ...	Dis...
Old Age Home	Hyderabad	0.0001
Street Food	Visakhapatnam	0.0001

View Report (venue and Drop Off point)

Volunteer Task

Record Count

1 0.8 0.6 0.4 0.2 0

1 2

Volunteer: Volunteer ID

View Report (Volunteer Task)

ProjectManager Houghton Center

Home

Notifications

Time

Team

Portfolio

Houghton Center

Health

Time 28% ahead

Tasks 7 tasks

Workload 1 task

Progress 76% complete

Cost 27% under

Time

Ahead Behind

Planned Com...

Venue Form

Venue Name

Email you@example.com

Phone

Venue Location

Latitude

longitude

Next

Home Page(Long ScreenShot)

mvgr-e8-dev-ed.develop.lightning.force.com/lightning/page/home

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

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venue and Drop Off point

Venue Na...	Drop-Off Point ...	Dis...
Old Age Home	Hyderabad	0.0001
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View Report (venue and Drop Off point)

Volunteer Task

Record Count

1 0.8 0.6 0.4 0.2 0

1 2

Volunteer: Volunteer ID

View Report (Volunteer Task)

ProjectManager Houghton Center

Home

Notifications

Time

Team

Portfolio

Houghton Center

Health

Time 28% ahead

Tasks 7 tasks

Workload 1 task

Progress 76% complete

Cost 27% under

Time

Ahead Behind

Planned Com...

Venue Form

Venue Name

Email you@example.com

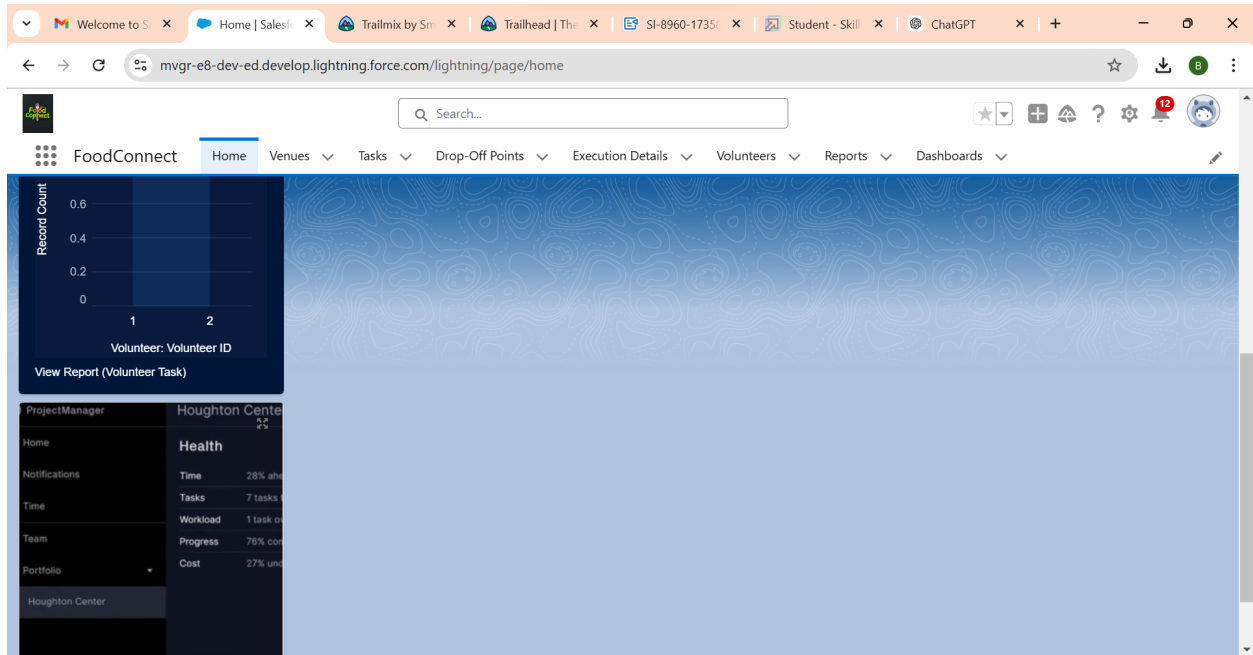
Phone

Venue Location

Latitude

longitude

Next



By leveraging the Salesforce platform, the project successfully established a streamlined and transparent system for managing surplus food donations. Through efficient coordination with volunteers and timely delivery to beneficiaries, the project effectively addressed food insecurity while maximizing the utilization of available resources.