

# To Supply Leftover Food To Poor

## 1. Project Overview

The "To Supply Leftover Food to the Poor" project is focused on addressing food wastage by redistributing surplus food to underprivileged individuals in various locations. Using Salesforce, the platform connects food donors—such as restaurants and individuals—with volunteers who pick up and deliver the food to those in need.

The project leverages Salesforce automation tools, including Flow and Process Builder, to streamline the donation and distribution process. Custom objects manage entities like food donations, volunteers, and distribution locations. Automated workflows notify volunteers about available food pickups and track successful deliveries. Real-time reporting and dashboards offer visibility into donation trends and help optimize distribution.

This initiative addresses two key challenges:

1. Reducing food waste by channeling surplus food from donors to recipients.
2. Fighting hunger through efficient and timely food distribution.

By combining Salesforce technology with a community-driven approach, the project creates a scalable solution to reduce food wastage and hunger.

## 2. Objectives

### **Business Goals:**

**Reduce Food Wastage:** Facilitate the collection and redistribution of at least 80% of surplus food from participating donors to underprivileged communities.

**Increase Volunteer Engagement:** Achieve a 50% increase in the number of volunteers actively participating in food distribution through the platform.

**Improve Distribution Efficiency:** Reduce the time between food donation and delivery by 30% through optimized volunteer assignments and automated notifications.

**Expand Donor Network:** Grow the number of regular food donors (e.g., restaurants, caterers) by 25% within the first six months of launch.

### **Specific Outcomes:**

**Centralized Donation Platform:** A fully functional Salesforce system where food donors can log donations, and volunteers can track and accept tasks.

**Automated Workflow:** Automation of key processes like notifying volunteers of available donations and

assigning them based on location.

**Real-Time Reporting:** Dashboards and reports that track donation volumes, volunteer participation, and distribution success rates.

**Increased Food Redistribution:** Deliver at least 500 meals per month to people in need using the automated platform.

**User-Friendly Interface:** A Lightning-based interface that allows easy access for donors, volunteers, and administrators to manage and monitor operations.

### 3. Salesforce Key Features and Concepts Utilized

**Salesforce Flows:** Used to automate key processes like food donation submissions, volunteer assignments, and notifications. Flows ensure that donations are automatically logged, volunteers are assigned based on proximity, and notifications are sent to both donors and volunteers.

**Lightning App Builder:** Designed user-friendly pages for donors, volunteers, and administrators, providing a streamlined interface for logging donations, managing tasks, and tracking distribution progress.

**Triggers:** Implemented custom Apex triggers to automate business logic, such as sending alerts when donations are received and ensuring volunteers are notified promptly when food is ready for pickup.

**Public Groups:** Created public groups to manage permissions and assign roles, enabling smooth coordination between donors, volunteers, and administrators. This also ensures secure data access and visibility based on user roles.

**Users:** Managed different types of users, such as donors, volunteers, and admins, each with customized access and permissions to perform specific tasks within the system.

**Report Types and Reports:** Custom report types were created to track donation volumes, volunteer participation, and food distribution. These reports provide actionable insights to optimize operations and measure success.

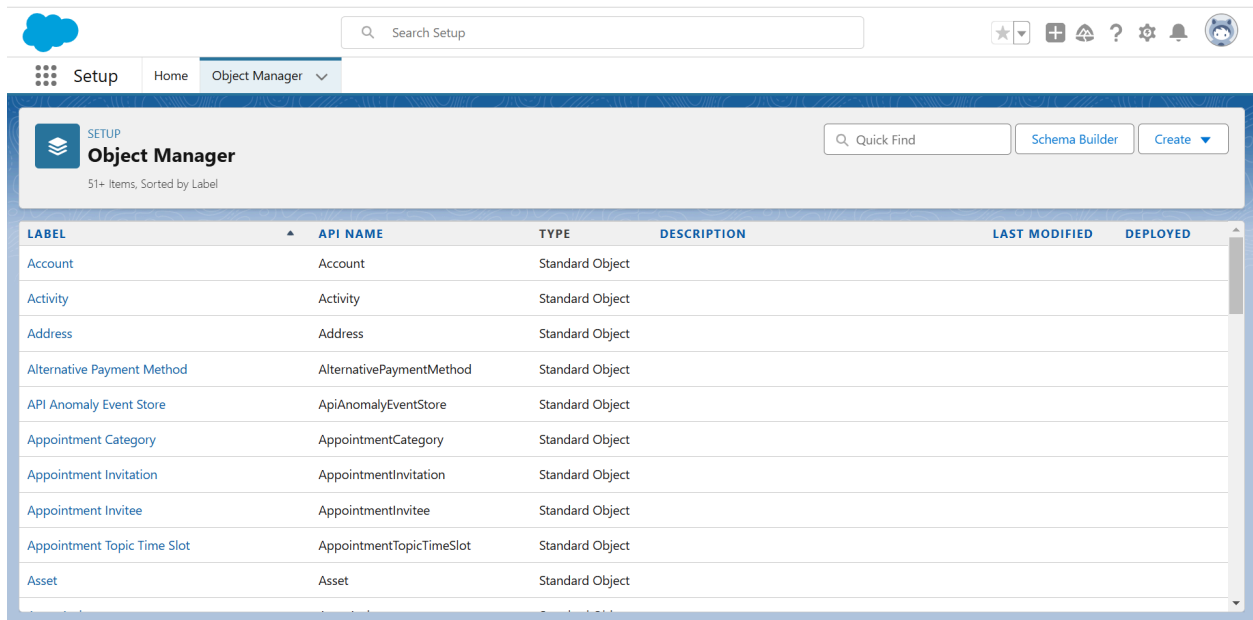
**Dashboards:** Built dashboards to visually represent key metrics, such as the number of meals distributed, donor activity, and volunteer engagement. Dashboards allow administrators to quickly assess performance and make informed decisions.

### 4. Detailed Steps to Solution Design

#### Objects:

1. **Venue Object:** Created to manage the locations where leftover food will be collected or stored before distribution.
2. **Drop-Off Point Object:** Represents the locations where food will be dropped off for recipients.
3. **Task Object:** Used to assign specific tasks to volunteers, such as food collection or delivery.

4. **Volunteer Object:** Tracks information about the volunteers participating in food collection and distribution.
5. **Execution Details Object:** Holds detailed information about the execution of food delivery tasks, including time, location, and completion status.

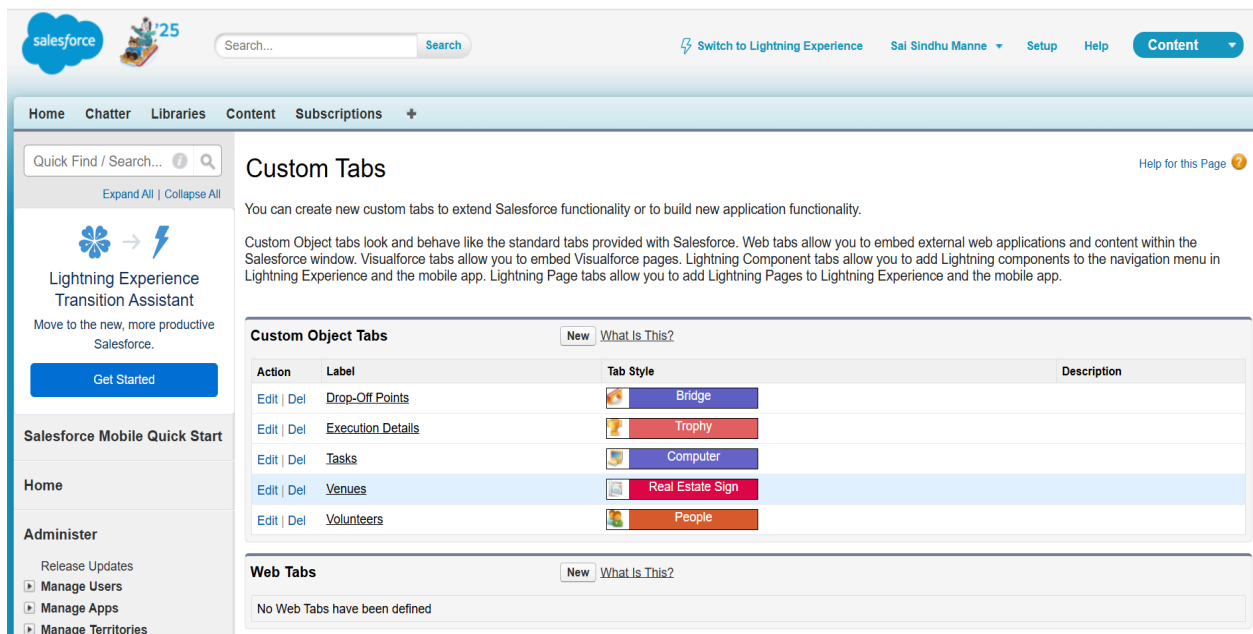


The screenshot shows the Salesforce Setup interface, specifically the Object Manager section. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main header area displays 'Object Manager' with a 'Quick Find' search bar and a 'Create' button. Below the header is a table listing various objects.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Address	Address	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			
Asset	Asset	Standard Object			

## Tabs:

**Creating Custom Tabs:** Custom tabs were created to give users easy access to the objects, such as Venue, Drop-Off Point, Tasks, Volunteers, and Execution Details.



The screenshot shows the Salesforce 'Custom Tabs' configuration page. The page title is 'Custom Tabs' and it includes a 'Help for this Page' link. The main content area explains that custom tabs can be created to extend Salesforce functionality. Below the text is a table titled 'Custom Object Tabs' showing the configuration for several custom tabs.

Action	Label	Tab Style	Description
<a href="#">Edit</a>   <a href="#">Del</a>	Drop-Off Points	Bridge	
<a href="#">Edit</a>   <a href="#">Del</a>	Execution Details	Trophy	
<a href="#">Edit</a>   <a href="#">Del</a>	Tasks	Computer	
<a href="#">Edit</a>   <a href="#">Del</a>	Venues	Real Estate Sign	
<a href="#">Edit</a>   <a href="#">Del</a>	Volunteers	People	

Below the 'Custom Object Tabs' table is a section for 'Web Tabs'. It indicates that no web tabs have been defined.

**Remaining Tabs:** Additional tabs were created to display other relevant information and streamline the navigation for users.

## The Lightning App:

**Create a Lightning App:** A custom Lightning app was developed to provide a streamlined interface for all users, including donors, volunteers, and admins, making the process of logging and tracking food distribution seamless.

The screenshot displays the Lightning App Builder interface. The top navigation bar includes a back arrow, 'Lightning App Builder', 'App Settings' (selected), 'Pages', 'FoodConnect', and a 'Help' icon. The left sidebar under 'App Settings' lists 'App Details & Branding' (selected), 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items', and 'User Profiles'. The main content area is titled 'App Details & Branding' with the instruction: 'Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.' It is divided into two sections: 'App Details' and 'App Branding'. The 'App Details' section contains three fields: 'App Name' (value: FoodConnect), 'Developer Name' (value: FoodConnect), and 'Description' (placeholder: Enter a description...). The 'App Branding' section includes an 'Image' field with a 'Food Connect' logo, a 'Primary Color Hex Value' field (value: #0070D2), and a 'Clear' link. Below these is the 'Org Theme Options' section with a checkbox 'Use the app's image and color instead of the org's custom theme' which is currently unchecked. At the bottom is the 'App Launcher Preview' section showing a small version of the 'Food Connect' logo and the text 'FoodConnect' on a light gray background.

## Food Connect Logo:



## Fields:

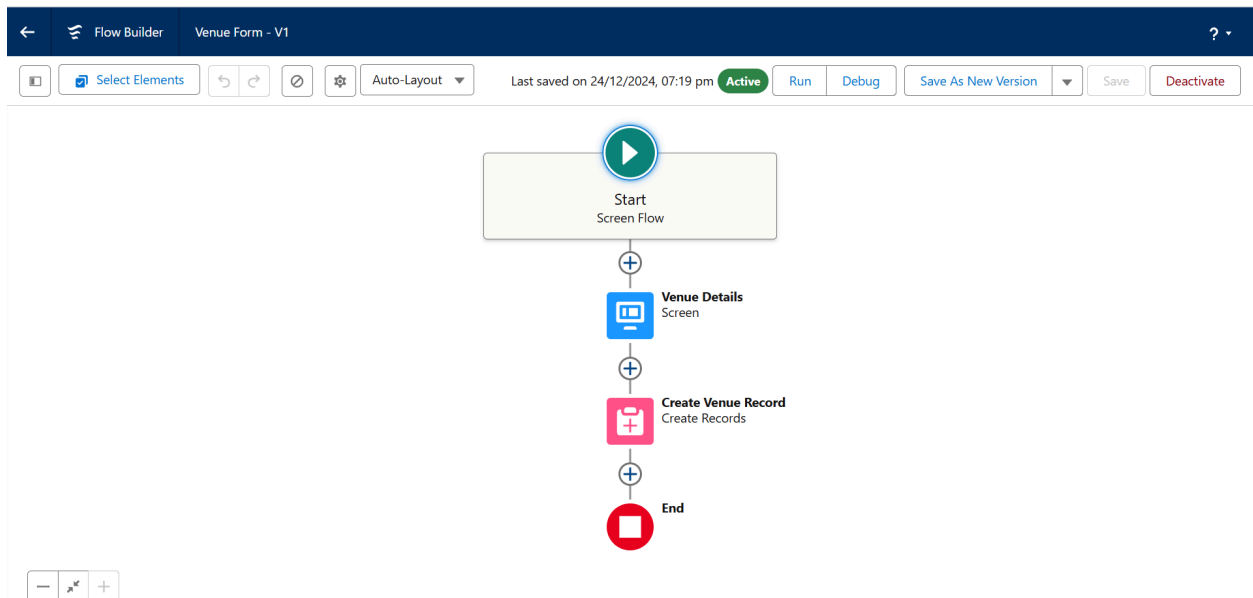
**Creation of Relationships:** Defined relationships between the Venue, Drop-Off Point, Task, and Volunteer objects to establish logical connections in the system.

**Fields in Objects:**

- a. **Venue Object:** Created fields such as Venue Name, Location, Capacity, and Contact Details.
- b. **Drop-Off Point Object:** Created fields like Drop-Off Point Name, Address, and Contact Person.
- c. **Task Object:** Created fields for Task Name, Task Description, Assigned Volunteer, and Due Date.
- d. **Volunteer Object:** Created fields for Volunteer Name, Contact Information, Availability, and Assigned Tasks.
- e. **Execution Details Object:** Created fields to track Completion Time, Delivery Status, and Feedback.

### Flows:

**Create Flow for Venue Object:** Developed a flow to automatically create a record in the Venue object when a donor logs a new location.



### Triggers:

**Create a Trigger:** A trigger was implemented to automatically notify volunteers when a new task is created for food collection or delivery.

- a. **Trigger Code:** Apex code was written to ensure real-time notifications and task updates for volunteers.

salesforce 25 Search... Switch to Lightning Experience Sai Sindhu Manne Setup Help Content

Home Chatter Libraries Content Subscriptions

Quick Find / Search... Expand All | Collapse All

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Home

Administer  
Release Updates  
Manage Users  
Manage Apps  
Manage Territories  
Company Profile

Apex Trigger  
DropOffTrigger

« Back to List

Apex Trigger Detail Edit Delete Download Show Dependencies

Name	DropOffTrigger	sObject Type	Drop-Off Point
Code Coverage	0% (0/2)	Status	Active
Created By	Sai Sindhu Manne, 24/12/2024, 7:14 pm	Last Modified By	Sai Sindhu Manne, 24/12/2024, 7:15 pm
Namespace Prefix			

Apex Trigger Version Settings Trace Flags

```

1 trigger DropOffTrigger on Drop_Off_Point__c (before insert) {
2   for(Drop_Off_Point__c Drop : Trigger.new){
3
4     Drop.Distance__c = Drop.distance_calculation__c;
5   }
6 }
7

```

Edit Delete Download Show Dependencies

## Profiles:

**Creation of Users:** Different user profiles were created for donors, volunteers, and admins to control access and permissions.

- User1, User2, User3:** Custom profiles were set up for different roles with specific access rights.

## Public Groups:

**Creation of Public Group 1 and 2:** Public groups were created to manage user permissions and ensure proper collaboration between volunteers and admins.

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Manage Users  
Manage Apps  
Manage Territories  
Company Profile  
Data Classification

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

New

Action	Label ↑	Group Name	Created By	Created Date
Edit   Del	Iksha	Iksha	Manne, Sai Sindhu	24/12/2024, 8:00 pm
Edit   Del	NSS	NSS	Manne, Sai Sindhu	24/12/2024, 8:02 pm
Edit   Del	Street Cause	Street_Cause	Manne, Sai Sindhu	24/12/2024, 8:03 pm

## Report Types:

**Creation of Report Types:** Custom report types were developed to track various aspects of the project, such as Venue and Drop-Off Points, and Volunteers with Tasks and Execution Details.

HomeChatterLibrariesContentSubscriptions+

Quick Find / Search...

Expand All | Collapse All

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Home

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Manage Users

Manage Apps

Manage Territories

Company Profile

Data Classification

Privacy Center

Security Controls

Custom Report Type

Venue with DropOff with Volunteer

< Back to List: Custom Report Types

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

Custom Report Type Definition

EditDeleteClone

Report Type Label	Venue with DropOff with Volunteer	Report Type Category	Other Reports
Report Type Name	Venue_with_DropOff_with_Volunteer	Deployment Status	Deployed
Description	Venue with DropOff with Volunteer		
Created By	Sai Sindhu Manne, 24/12/2024, 8:10 pm	Modified By	Sai Sindhu Manne, 24/12/2024, 8:10 pm

Object Relationships

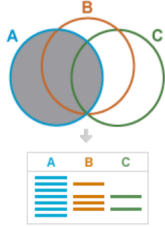
Edit

Object Relationships Help ?

Venues (A)

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

with or without related records from Volunteers (C)



HomeChatterLibrariesContentSubscriptions+

Quick Find / Search...

Expand All | Collapse All

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Home

Administer

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Manage Users

Manage Apps

Manage Territories

Company Profile

Data Classification

Privacy Center

Security Controls

Domain Management

Communication Templates

Edit Custom Report Type

Venue with DropOff with Volunteer

Help for this Page ?

Changes you make to this report type will affect existing reports created from it. We recommend that you clone any report type you wish to edit, rather than change a working report type.

Object Relationships

SaveCancel

This report type will generate reports about Venues. You may define which related records from other objects are returned in report results by choosing a relationship to another object.

A Venues

Primary Object

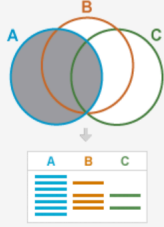
B Drop-Off Points

A to B Relationship:  
☐ Each "A" record must have at least one related "B" record.  
☒ "A" records may or may not have related "B" records.

C Volunteers

B to C Relationship:  
"B" records may or may not have related "C" records.

(Click to relate another object)



## Reports:

1. **Creation of Venue and Drop-Off Report:** A report was created to monitor the relationship between venues and their corresponding drop-off points.
2. **Creation of Volunteer and Execution Report:** Another report was designed to track volunteer activity, tasks completed, and execution details.

Food Connect

Search...

★

+

🔍

?

⚙️

🔔

👤

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

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

Enable Field Editing

Q

Add Chart

▼

↺

Edit

▼

Total Records  
1

Total Distance  
111.2000

<input type="checkbox"/> Volunteer Name	<input type="checkbox"/> Drop-Off Point Name	<input type="checkbox"/> Venue Name	<input type="checkbox"/> Distance
<input type="checkbox"/> Rahul (1)	Paddington Street	Sara Foundation	111.2000
Subtotal			111.2000
Total (1)			111.2000

Row Counts

Detail Rows

Subtotals

Grand Total

Food Connect

Search...

★

+

🔍

?

⚙️

🔔

👤

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Report: Volunteers with Execution Details and Tasks  
Volunteer Task

Enable Field Editing

Q

Add Chart

▼

↺

Edit

▼

Total Records  
1

<input type="checkbox"/> Volunteer ID	<input type="checkbox"/> Volunteer: Volunteer Name	<input type="checkbox"/> Task Name	<input type="checkbox"/> Execution Detail Name	<input type="checkbox"/> Date	<input type="checkbox"/> Rating	<input type="checkbox"/> Owner: Full Name
<input type="checkbox"/> a03NS0000NnF8j (1)	Rahul	Collection	Pick up and Drop	25/12/2024	4	Sai Sindhu Manne
Subtotal						
Total (1)						

Row Counts

Detail Rows

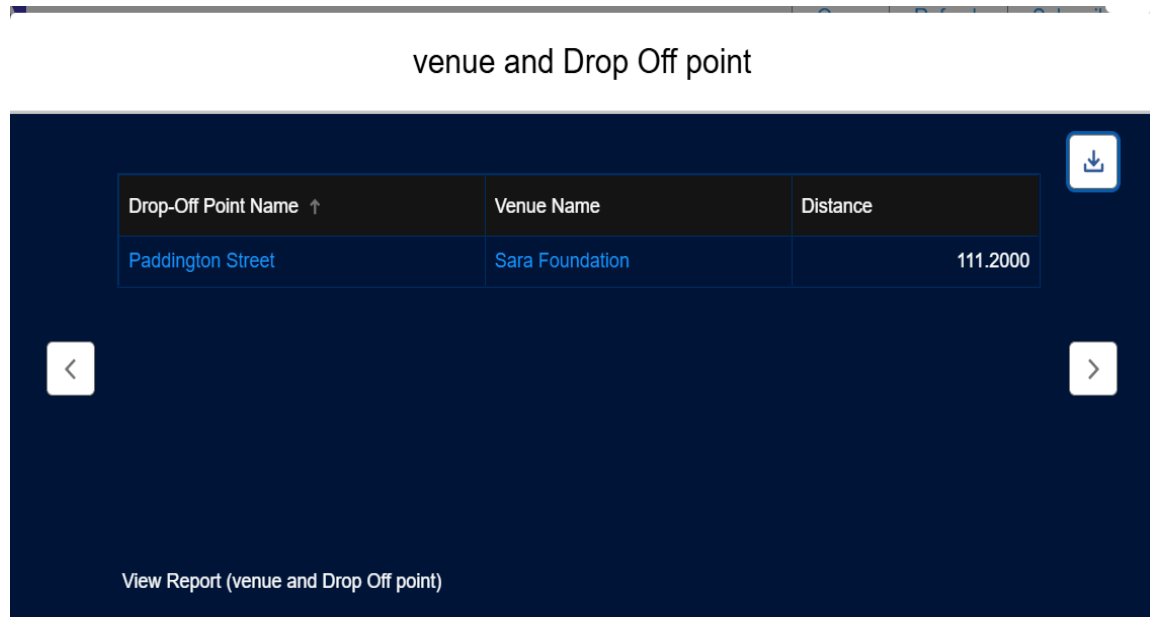
Subtotals

Grand Total



## Dashboards:

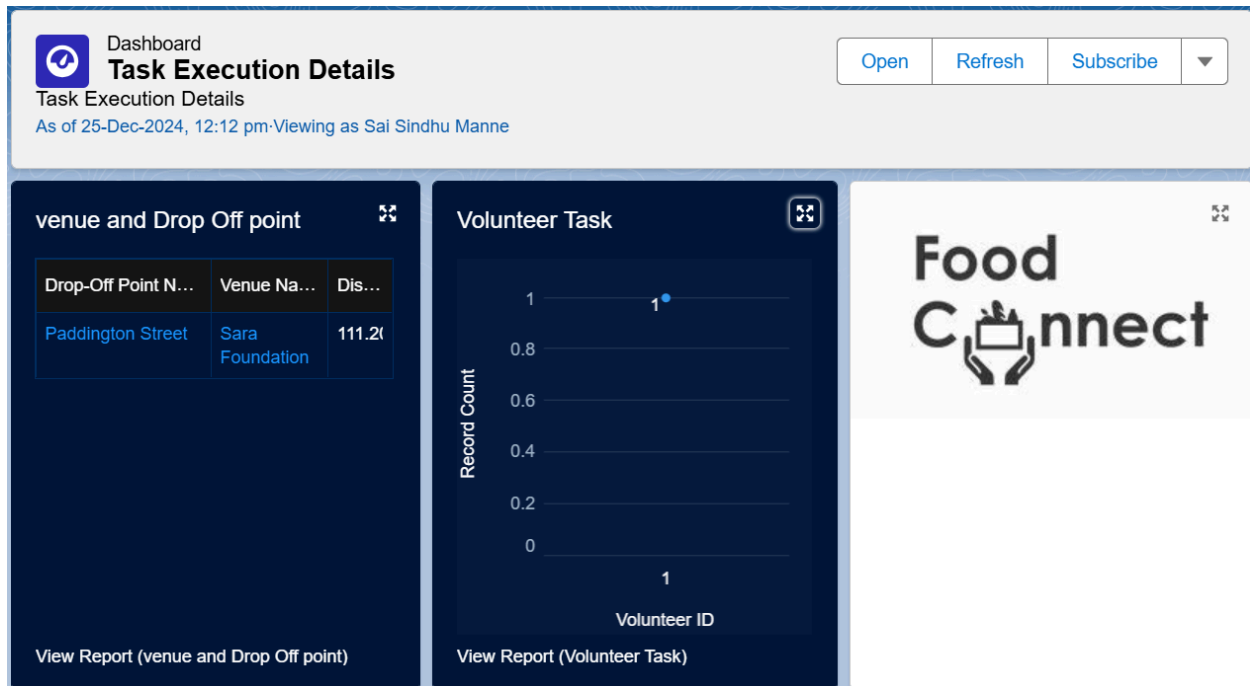
- **Adding Venue and Drop-Off Report:** The Venue and Drop-Off Point report was added to the dashboard for real-time monitoring.



- **Adding Volunteer Task Report:** The Volunteer Task report was added to the dashboard to visualize task completion and volunteer engagement.



- **Adding a Picture (Optional):** An optional picture was added to the dashboard for a personalized touch.



### Sharing Rules:

**Creation of Sharing Rules:** Sharing rules were implemented to ensure secure data access and sharing based on user roles and public groups.

### Home Page:

**Creation of Home Page:** A custom home page was designed for users to easily access key reports, dashboards, and objects related to the project.

Lightning App Builder

Pages

Home Page

Help

Desktop

Shrink To View

Activation... Save

Components

Search...

Standard (40)

Accordion

App Launcher

Assistant

Chatter Feed

Chatter Publisher

CRM Analytics Collection

CRM Analytics Dashboard

Dashboard

Data Mask Console Home Compo...

Einstein Next Best Action

Flow

Flow App Home cards

Get more on the AppExchange

Dashboard Task Execution Details

Open Refresh Subscribe

As of 25-Dec-2024, 12:12 pm Viewing as Sai Sindhu Manne

venue and Drop Off point

Drop-Off Point Name Venue Name Dist...

Paddington Street Sara Foundation 111.20

View Report (venue and Drop Off point)

Volunteer Task

Record Count

1

0.8

0.6

0.4

0.2

0

1

Volunteer ID

View Report (Volunteer Task)

Food Connect

Flow Components: Venue Form

This is a placeholder. Flows don't run in the canvas.

Page

\* Label

Home Page

\* API Name

Home\_Page

\* Page Type

Home Page

Template

Standard Home Page

Change

Description

Food Connect

Search...

Star

+

?

Settings

Notifications

Avatar

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Dashboard Task Execution Details

Open Refresh Subscribe

As of 25-Dec-2024, 12:12 pm Viewing as Sai Sindhu Manne

venue and Drop Off point

Drop-Off Point Name Venue Name Dist...

Paddington Street Sara Foundation 111.20

View Report (venue and Drop Off point)

Volunteer Task

Record Count

1

0.8

0.6

0.4

0.2

0

1

Volunteer ID

View Report (Volunteer Task)

Food Connect

Venue Form

Venue Name

Email

you@example.com

Phone

Venue Location

Latitude

longitude

Next

## Venue Form:

**Venue Form**  
  
Venue Name  
  
  
Email  
  
  
Phone  
  
  
Venue Location  
  
  
Latitude  
  
  
Longitude

## 5. Testing and Validation

Testing and validation ensure the functionality and reliability of the **Drop-Off Point** feature. Unit testing will be conducted on the **Drop-Off Trigger** to verify record creation, mandatory field validation, and error handling. Additionally, user interface testing will assess the display of **Drop-Off Point** records, form functionality, and user interactions. This comprehensive approach will confirm that the application meets user requirements and operates smoothly before deployment.

## 6. Key Scenarios Addressed by Salesforce in the Implementation Project

The implementation project addresses several key scenarios to ensure efficient management and operation of the volunteer and drop-off logistics system. These scenarios include:

1. **Creation and Management of Venue and Drop-Off Points:**
  - a. Users can create, update, and manage records for venues and drop-off points,

ensuring accurate tracking of locations for food distribution.

**2. Task Assignment and Volunteer Management:**

- a. Tasks can be created and assigned to volunteers, allowing for effective coordination and management of activities related to food distribution efforts.

**3. Automated Workflow and Record Creation:**

- a. Flows have been established to automate the creation of records in various objects, streamlining processes and reducing manual effort.

**4. User Roles and Access Management:**

- a. Different user profiles have been created to manage permissions and access levels for users and volunteers, ensuring data security and appropriate information sharing.

**5. Reporting and Analytics:**

- a. Custom reports provide insights into the operations of venues, drop-off points, and volunteer activities, facilitating data-driven decision-making and operational improvements.

**6. Dashboard Integration for Real-Time Monitoring:**

- a. Key reports are displayed on dashboards, allowing stakeholders to monitor the status of venues, volunteer tasks, and overall project performance in real-time.

**7. Collaboration Through Public Groups:**

- a. Public groups facilitate collaboration among volunteers, enabling effective communication and coordination of food distribution efforts.

**8. Data Integrity and Relationship Management:**

- a. The creation of relationships between different objects ensures data integrity and enables comprehensive reporting across related entities.

**9. Custom Tabs for Enhanced Navigation:**

- a. Custom tabs have been developed for quick access to critical functionalities and records, improving user experience and workflow efficiency.

**10. Home Page Customization:**

- a. A tailored home page provides users with a centralized overview of important metrics and access to frequently used features, enhancing overall usability.

These scenarios highlight how the project leverages Salesforce capabilities to address various use cases, ultimately supporting the mission of efficiently supplying leftover food to those in need.

## **7. Conclusion**

The implementation of the Salesforce project for managing food distribution through venues and drop-off points has been a significant success. This project has effectively streamlined operations by developing essential custom objects, automating workflows, and ensuring secure user access.

With the creation of comprehensive reports and dashboards, stakeholders can easily monitor activities and make informed decisions based on real-time data. The user-friendly interface enhances collaboration among volunteers and improves overall efficiency in the food distribution process.

Ultimately, this project not only demonstrates the power of Salesforce in addressing community needs but also lays a strong foundation for ongoing efforts to supply leftover food to those in need. Through these achievements, the initiative is better positioned to make a meaningful impact in the community.