

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.

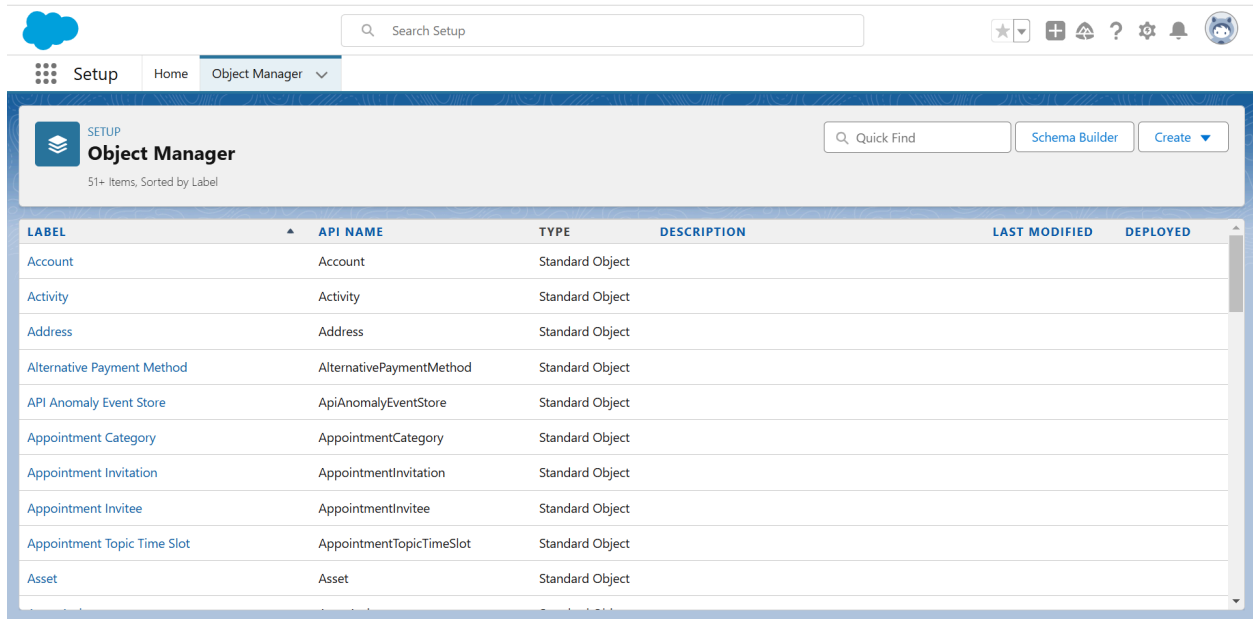
Dashboards: Built dashboards to visually represent key metrics, such as the number of meals distributed, donor activity, and volunteer engagement. Dashboards allow administrators to quickly assess performance and make informed decisions.

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.

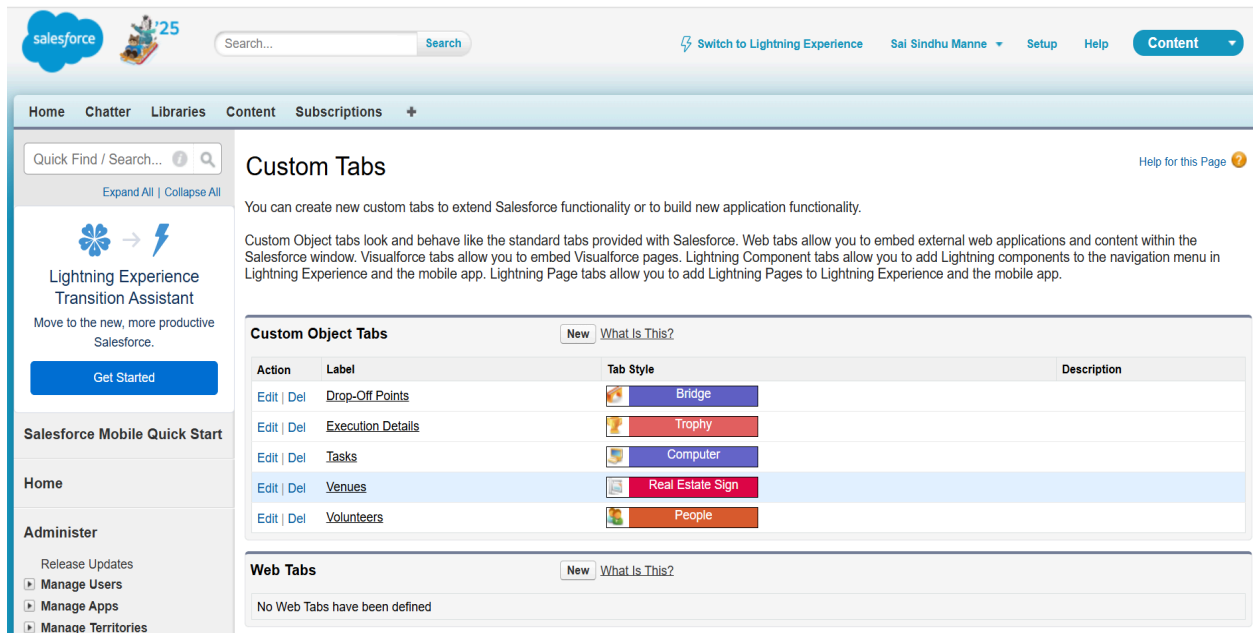


The screenshot shows the Salesforce Setup interface. At the top, there's a search bar labeled 'Search Setup'. Below it, the navigation menu includes 'Setup', 'Home', and 'Object Manager'. The 'Object Manager' section is active, showing a list of 51+ items sorted by label. The table below lists various standard 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' page. It includes a sidebar with navigation links like 'Home', 'Chatter', 'Libraries', 'Content', and 'Subscriptions'. The main content area is titled 'Custom Tabs' and explains how to create new custom tabs. Below the text, there are two sections: 'Custom Object Tabs' and 'Web Tabs'. The 'Custom Object Tabs' section shows a table of existing tabs.

Action	Label	Tab Style	Description
Edit Del	Drop-Off Points	Bridge	
Edit Del	Execution Details	Trophy	
Edit Del	Tasks	Computer	
Edit Del	Venues	Real Estate Sign	
Edit Del	Volunteers	People	

The 'Web Tabs' section shows a message: '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', 'Pages', 'FoodConnect', and a 'Help' icon. The left sidebar shows 'App Settings' with sub-items: 'App Details & Branding' (selected), 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items', and 'User Profiles'. The main content area is titled 'App Details & Branding' and includes 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 columns: 'App Details' and 'App Branding'. Under 'App Details', there are input fields for 'App Name' (containing 'FoodConnect'), 'Developer Name' (containing 'FoodConnect'), and a 'Description' field with the placeholder 'Enter a description...'. Under 'App Branding', there is an 'Image' field showing a 'Food Connect' logo, a 'Primary Color Hex Value' field with a color picker set to blue and the value '#0070D2', and an '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, an 'App Launcher Preview' shows the app's icon and name 'FoodConnect'.

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.

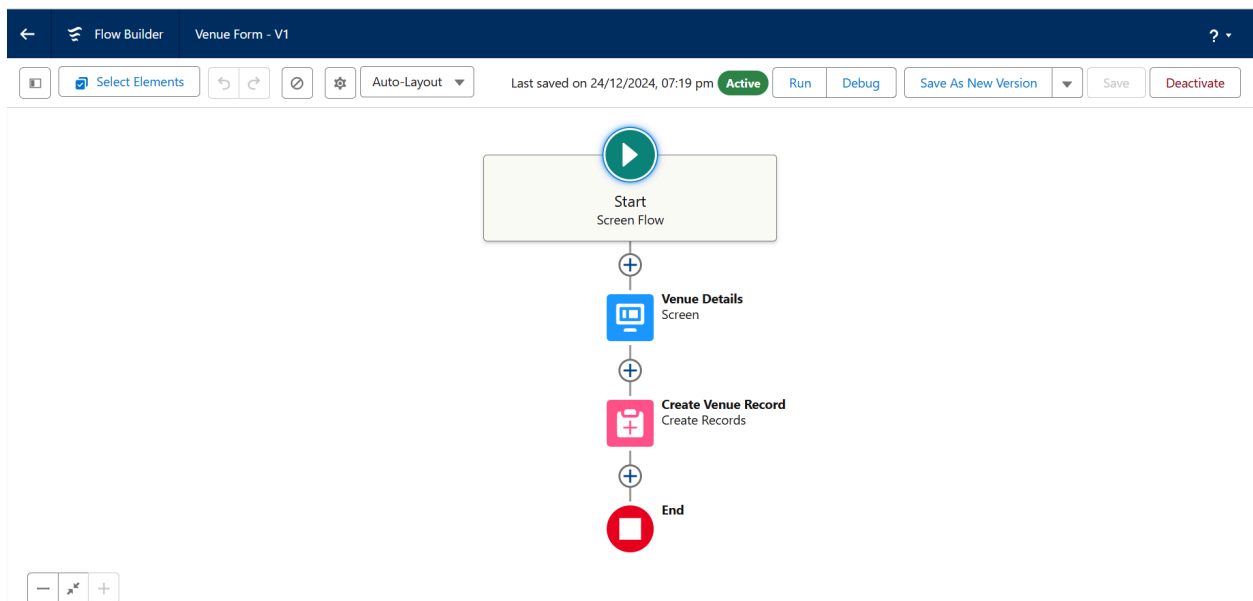
Fields in Objects:

- Venue Object:** Created fields such as Venue Name, Location, Capacity, and Contact Details.
- 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.

The screenshot displays the Salesforce Lightning Experience interface. The top navigation bar includes the Salesforce logo, a search bar, and links to 'Switch to Lightning Experience', 'Sai Sindhu Manne', 'Setup', 'Help', and 'Content'. The left sidebar contains navigation links for 'Home', 'Chatter', 'Libraries', 'Content', and 'Subscriptions'. The main content area shows the 'DropOffTrigger' details, including its name, code coverage (0%), status (Active), and creation/modification dates. The trigger code is displayed in a text area, and there are buttons for 'Edit', 'Delete', 'Download', and 'Show Dependencies'.

Apex Trigger Detail

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

```

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

```

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.

The screenshot displays the Salesforce Lightning Experience interface showing the 'Public Groups' list. The top navigation bar and left sidebar are consistent with the previous screenshot. The main content area shows a list of public groups with columns for 'Action', 'Label', 'Group Name', 'Created By', and 'Created Date'. The groups listed are 'Iksha', 'NSS', and 'Street_Cause', all created by 'Manne, Sai Sindhu' on 24/12/2024.

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](#)

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

Lightning Experience Transition Assistant

Move to the new, more productive Salesforce.

Get Started

Salesforce Mobile Quick Start

Home

Administer

Release Updates

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

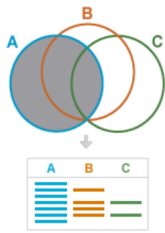
Edit

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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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.

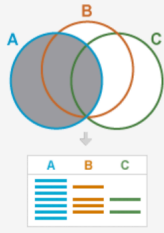
☒ "A" records may or may not have related "B" records.

C Volunteers

B to C Relationship:

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

(Click to relate another object)



SaveCancel

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...

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 Add Chart Edit

Total Records: 1 Total Distance: 111.2000

Volunteer Name	Drop-Off Point Name	Venue Name	Distance
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...

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

Report: Volunteers with Execution Details and Tasks
Volunteer Task

Enable Field Editing Add Chart Edit

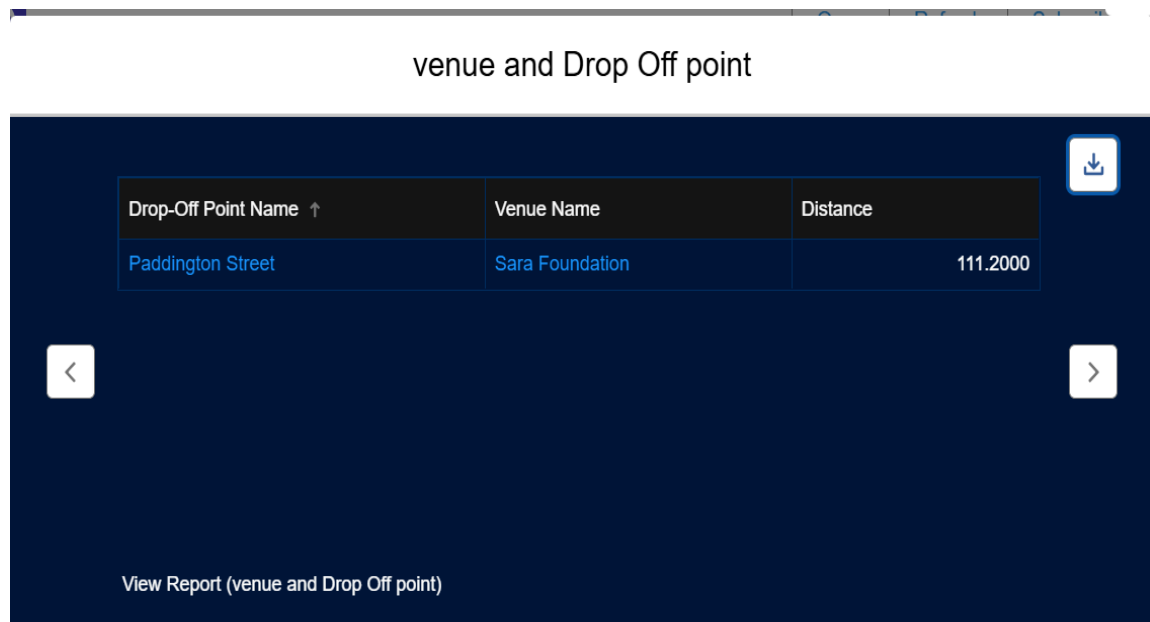
Total Records: 1

Volunteer ID	Volunteer: Volunteer Name	Task Name	Execution Detail Name	Date	Rating	Owner: Full Name
1 (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:

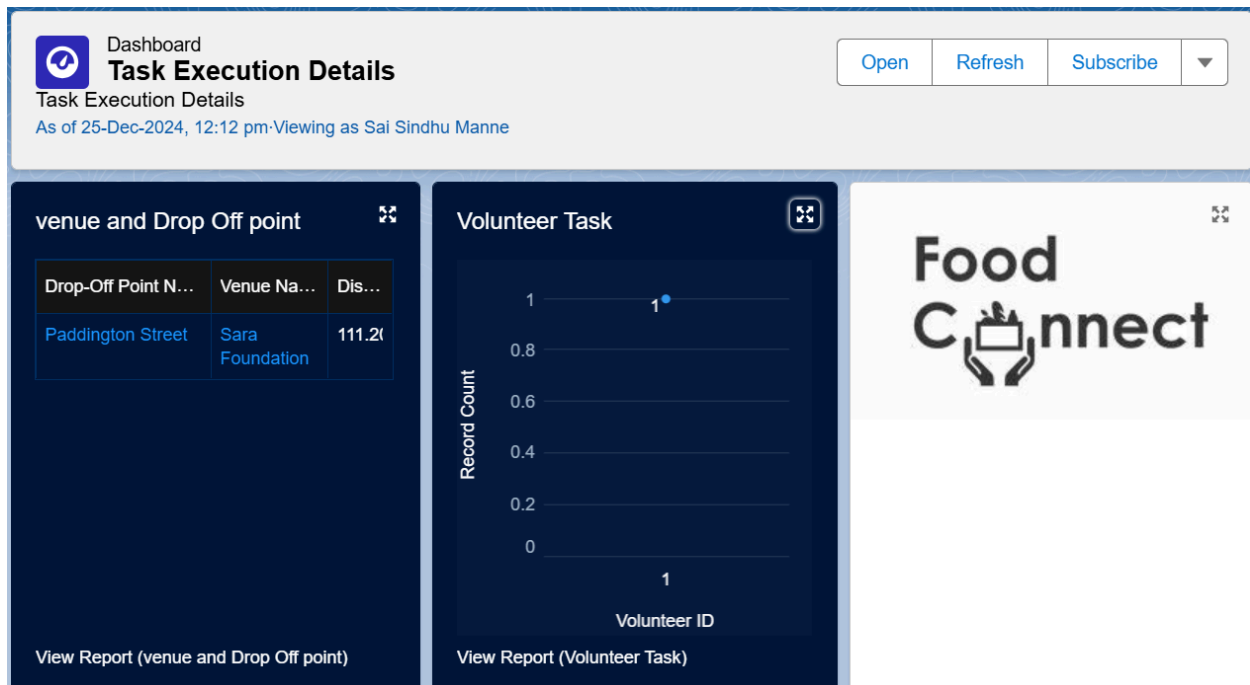
- **Adding Venue and Drop-Off Report:** The Venue and Drop-Off Point report was added to the dashboard for real-time monitoring.



- **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.



Food Connect

Q Search...

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👤

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Dashboard

Task Execution Details

Task Execution Details

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

Open

Refresh

Subscribe

▼

venue and Drop Off point

Drop-Off Point N...	Venue Na...	Dis...
Paddington Street	Sara Foundation	111.2

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

Next

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.