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:

- **Goal:** To streamline the process of leftover food distribution using Salesforce.

- **Impact:** Reducing food waste and addressing hunger by efficiently managing food drop-off points, tasks, and volunteers.

- **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:

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

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

Specific Outcomes:

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

Objects created :

1. Drop-Off Point:

■ **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.

■ **Fields**:

○ **Drop-Off Point Name:** A text eld representing the name of the drop-off point.

○ **Location Details**: A text eld for additional details about the drop-off point location.

○ **Distance**: A number eld that records the distance from the drop-off point to the delivery area.

○ **Venue**: A lookup relationship eld linking to the Venue object to provide a connection between drop-off points and venues.

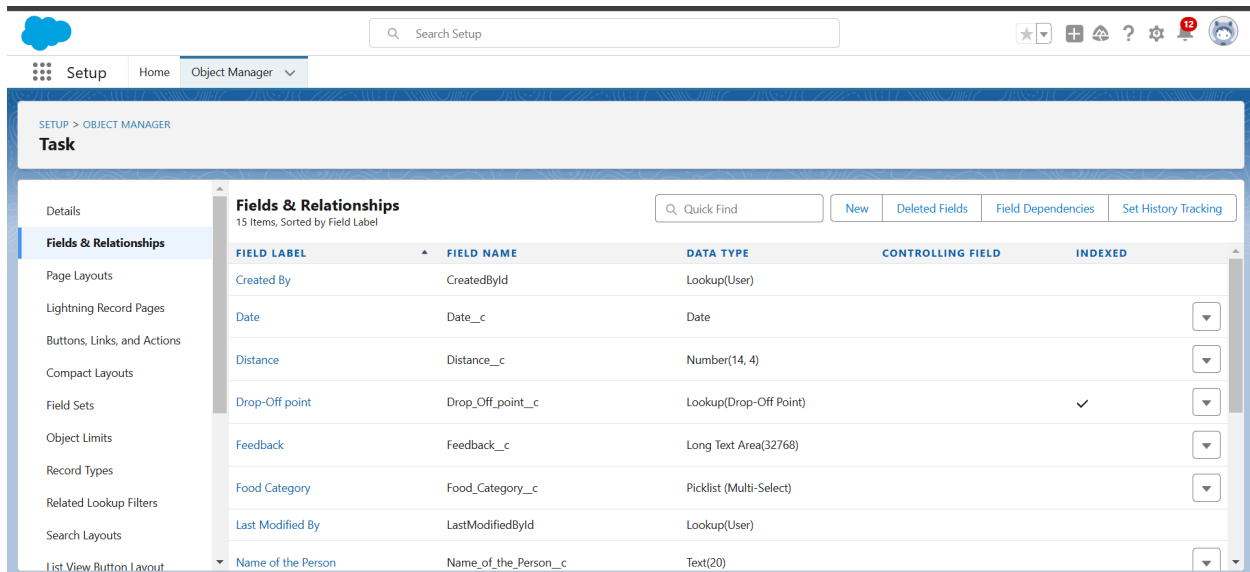## 2. Task:

■ 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.

■ Fields:

○ Task Name: A text eld representing the name of the task.

○ Date: A date eld indicating when the task is scheduled or completed.

○ Rating: A numeric eld used to rate the task performance.

○ Drop-Off Point: A lookup relationship eld linking to the Drop-Off Point object to associate tasks with specic drop-off points.

○ Sponsored By: A lookup relationship eld linking to the Drop-Off Point object to indicate the sponsor of the task.

3. Volunteer:

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

■ **Fields:**

○ Volunteer Name: A text eld for the name of the volunteer.

○ Contact Email: An email eld for the volunteer's contact email.

○ Contact Phone: A phone eld for the volunteer's contact number.

○ Assigned Tasks: A related list showing tasks assigned to the volunteer.

4. Execution Detail:

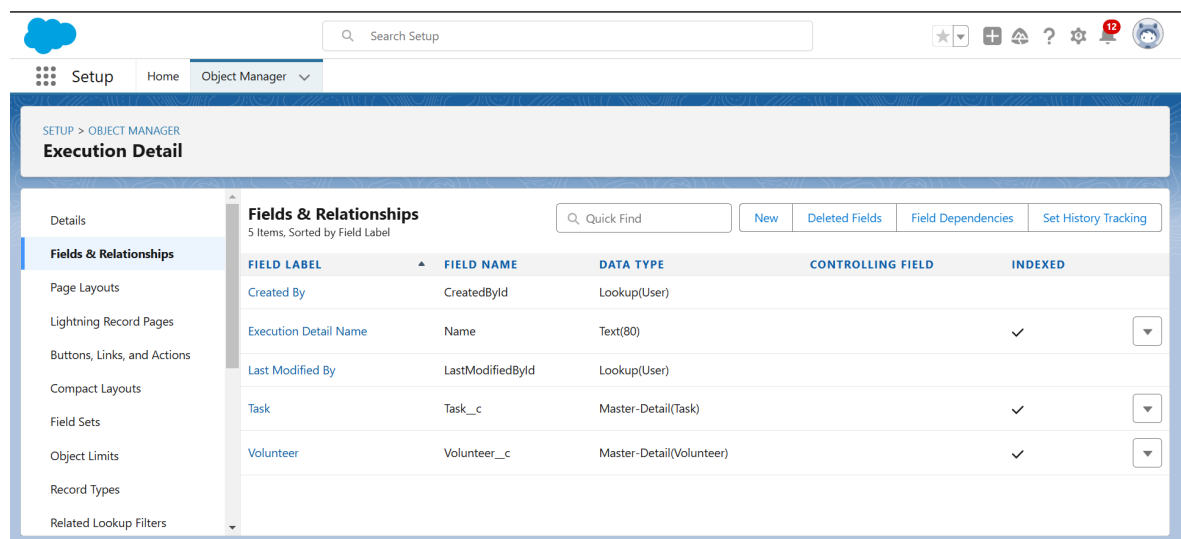■ Purpose: The Execution Detail object captures detailed information about food distribution activities, including which volunteers and task are associated with each distribution.

■ Fields:

○ Execution Detail Name: A text eld for naming the execution detail record.

○ Volunteer: A master-detail relationship eld linking to the Volunteer object to associate execution details with a specic volunteer.

○ Task: A master-detail relationship eld linking to the Task object to associate execution details with a specic task.

○ Details: A text eld for additional information about the execution.

3.Salesforce Key Features and Concepts Utilized

Custom Objects:

These are specific data structures you create in Salesforce to store information. For your project:

- **Drop-Off Points:** Records details of food collection locations.

- **Tasks:** Tracks what needs to be done and who is responsible.

- **Volunteers:** Manages contact information and task assignments.

- **Execution Details:** Links volunteers and tasks for each food distribution.

Relationships:

Defines how these objects interact with each other:

- **Master-Detail Relationship:** A strict relationship where a child object (e.g., Execution Detail) depends on its parent (Volunteer or Task).

- **Lookup Relationship**: A more flexible connection, such as Drop-Off Points being associated with Venues.

Sharing Rules:

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

Custom Tabs

Flows and Dashboards:

- **Flow:** Automates data entry and processes, like recording venue details.

- **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 recordsin the objects.

4. Detailed Steps to Solution Design

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

Custom Object Creation:

● Each object (like Drop-Off Point or Volunteer) was created in Salesforce's

Object Manager, with specific fields and relationships defined.

Sharing Rules:

● Configured in Sharing Settings to ensure the right people (Iksha, GS, etc.)

have access based on distance.

Lightning App Builder Configuration:

● Created a "Home Page" that includes flows and dashboards for easier

navigation.

Report Types and Dashboards:

● Custom reports link different objects for analysis, and dashboards present

this data in an easy-to-understand format.

Flows Diagram

● Flow: Venue Flow
  ■ Purpose: To manage and capture detailed information related to food drop-off points.
  ■ Components:
  ○ Text Component: For entering the venue name.
  ○ Email Component: For entering the contact email of the venue.
  ○ Phone Component: For entering the contact phone number of the venue.
  ○ Text Component: For entering the venue location.
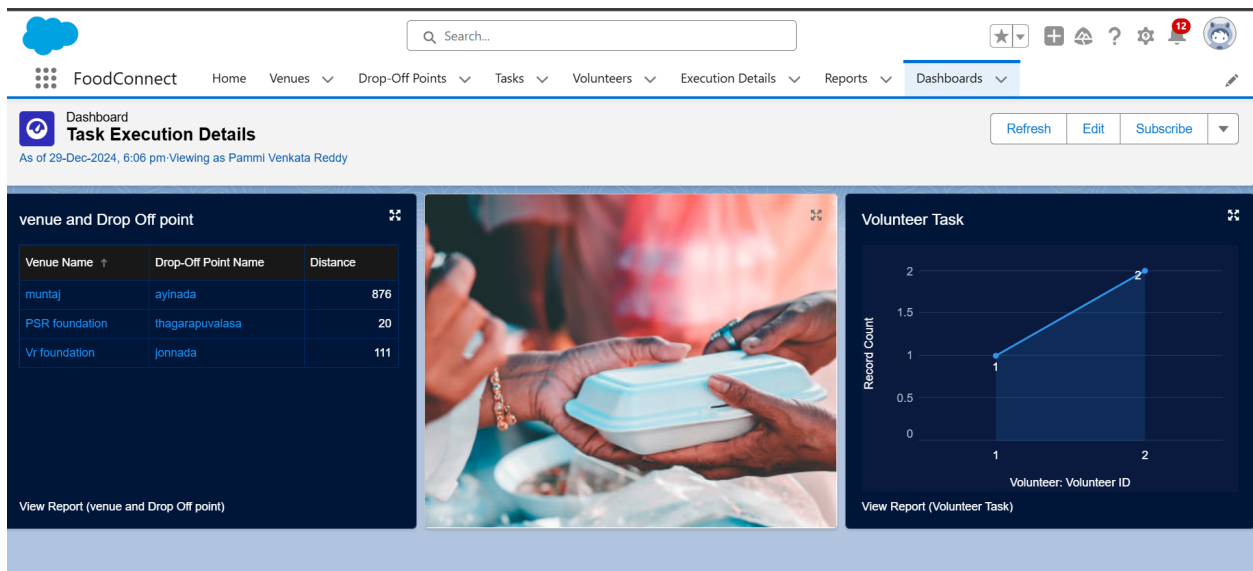 ○ Number Components: For entering latitude and longitude values of the venue.
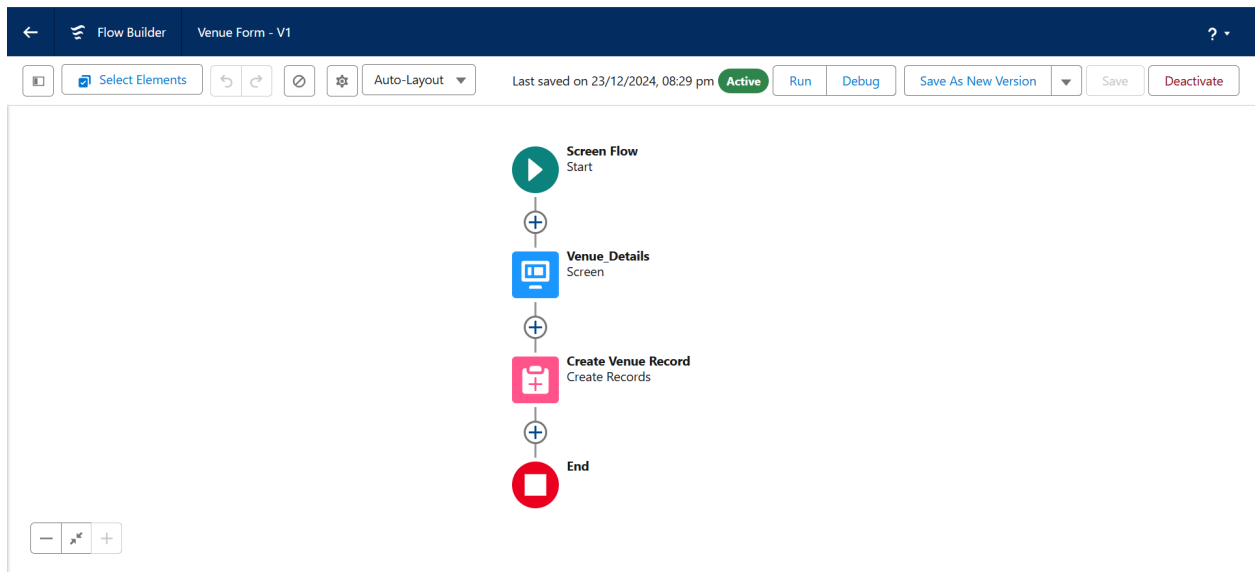
● **Dashboard:**

   ■ **Name:** Task Execution Details
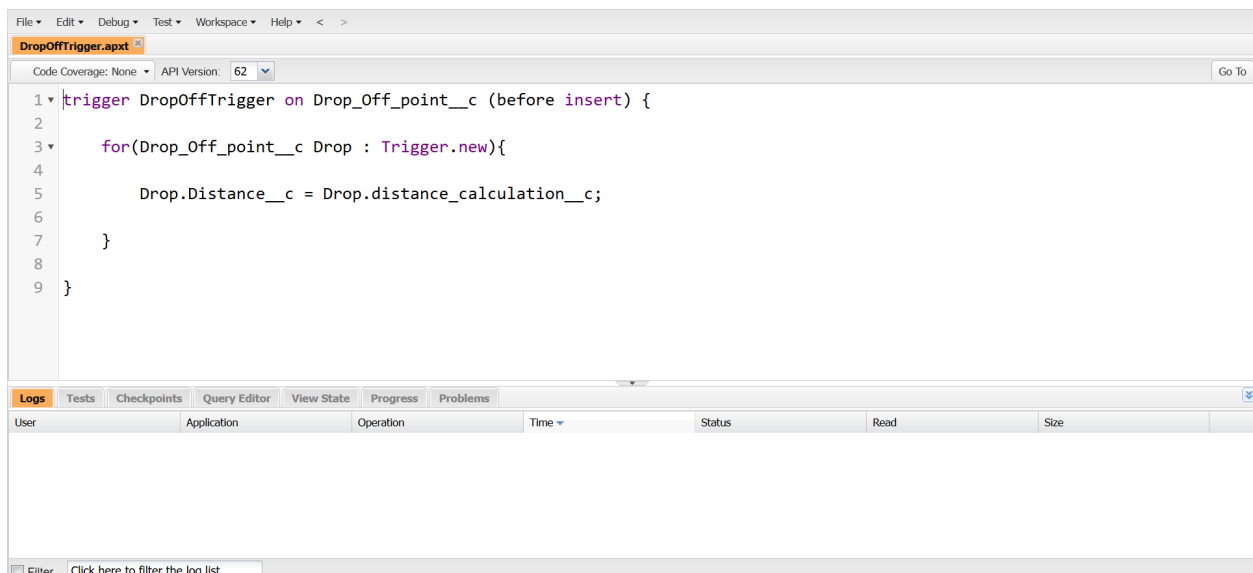
   ■ **Components:**

      ○ Lightning Table: Displays detailed information about venues and drop-off
        points, facilitating a comprehensive view of the data.
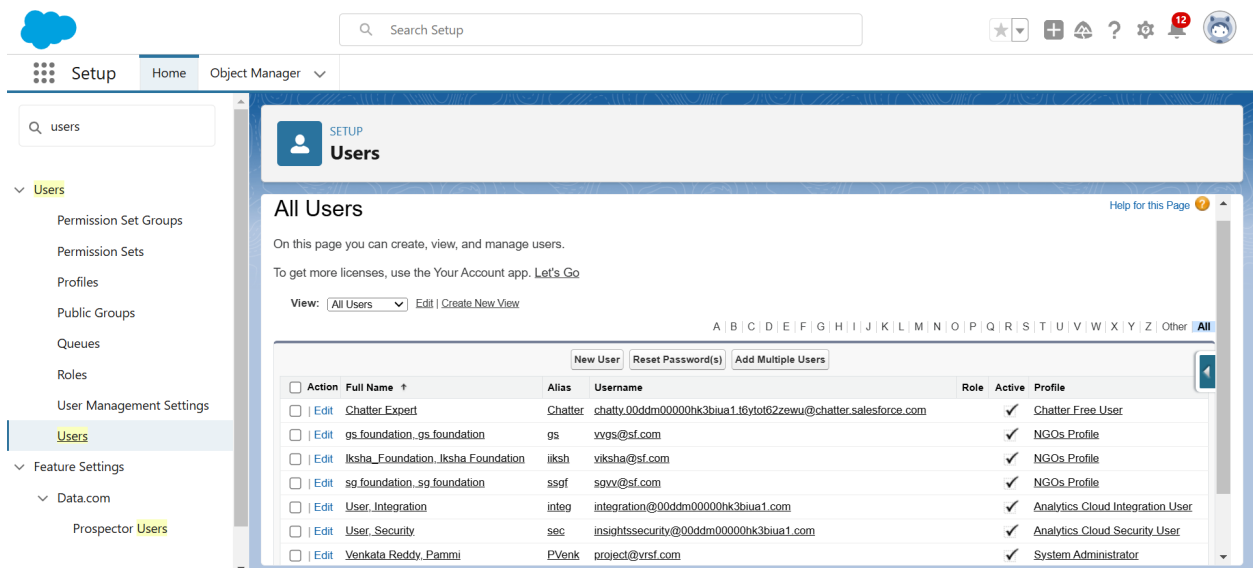
5. Testing and Validation

Ensures that the system works as intended:

       ● Unit Testing: Verifies that each component (e.g., Apex triggers, workflows)

operates correctly.

       ● UI Testing: Checks the user interface for errors or usability issues.


```
trigger DropOffTrigger on Drop_Off_point__c (before insert) {

    for(Drop_Off_point__c Drop : Trigger.new){

        Drop.Distance__c = Drop.distance_calculation__c;

    }

}
```

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.

● Volunteer Management: Links tasks to specific volunteers for

accountability.

● Data Visibility: Dashboards and reports provide insights into operations,
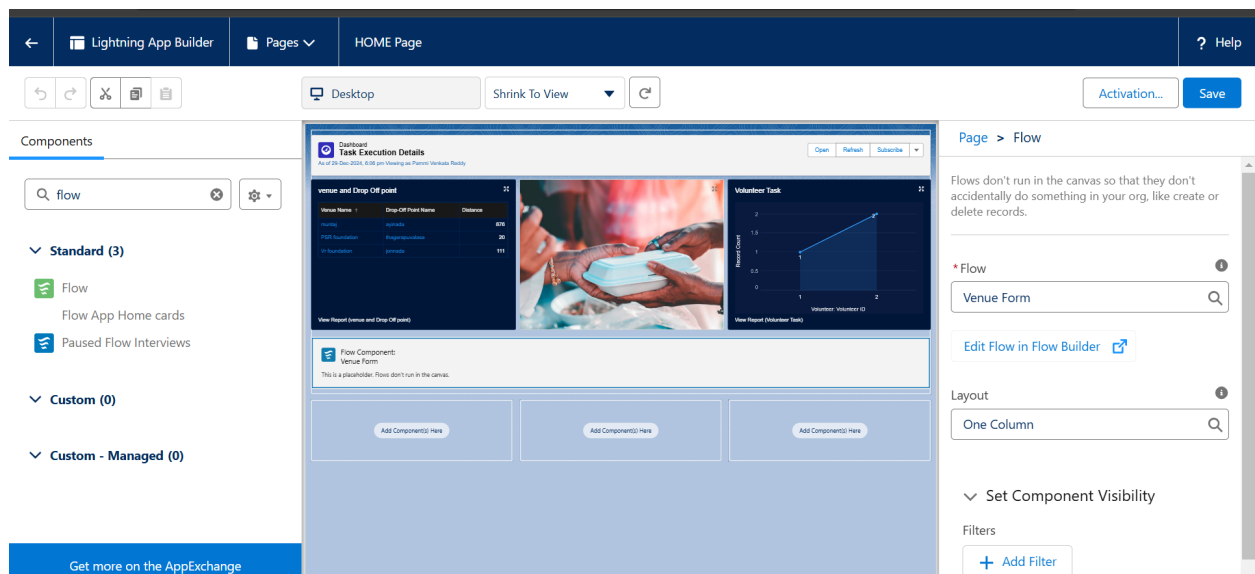
helping improve decision-making

Adding Venue and Drop Off Point Report to The Dashboard
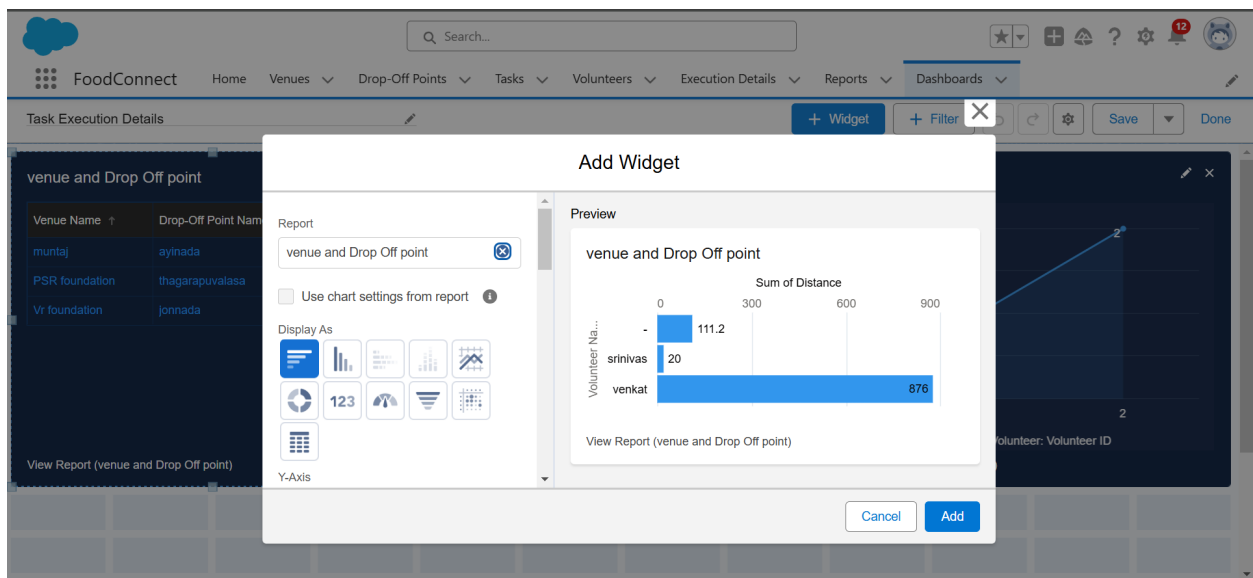
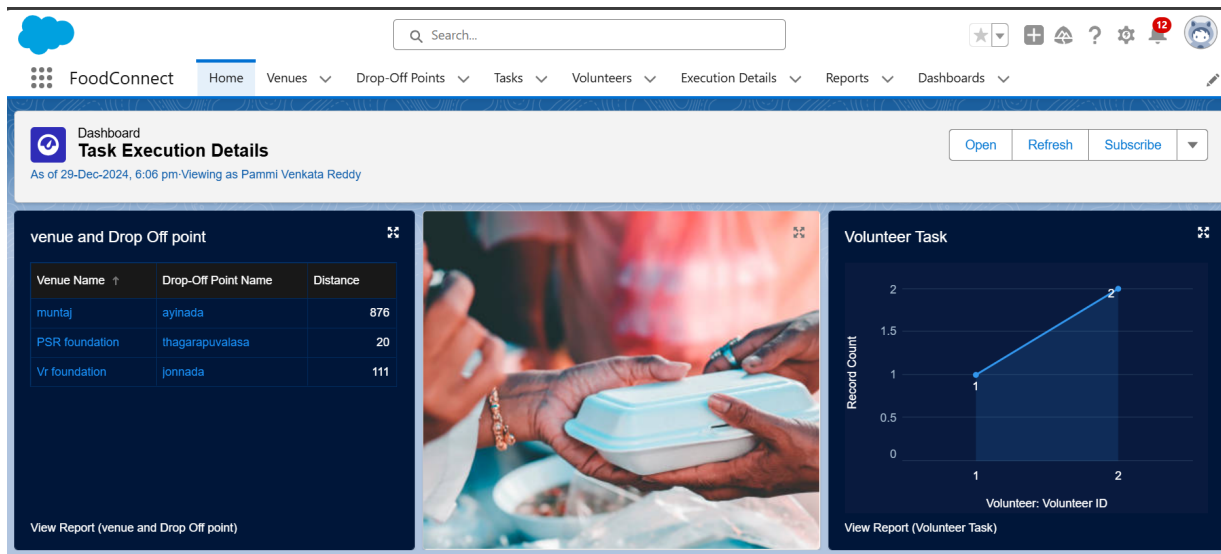## Adiding Volunteer Task Graph to the Dashboard
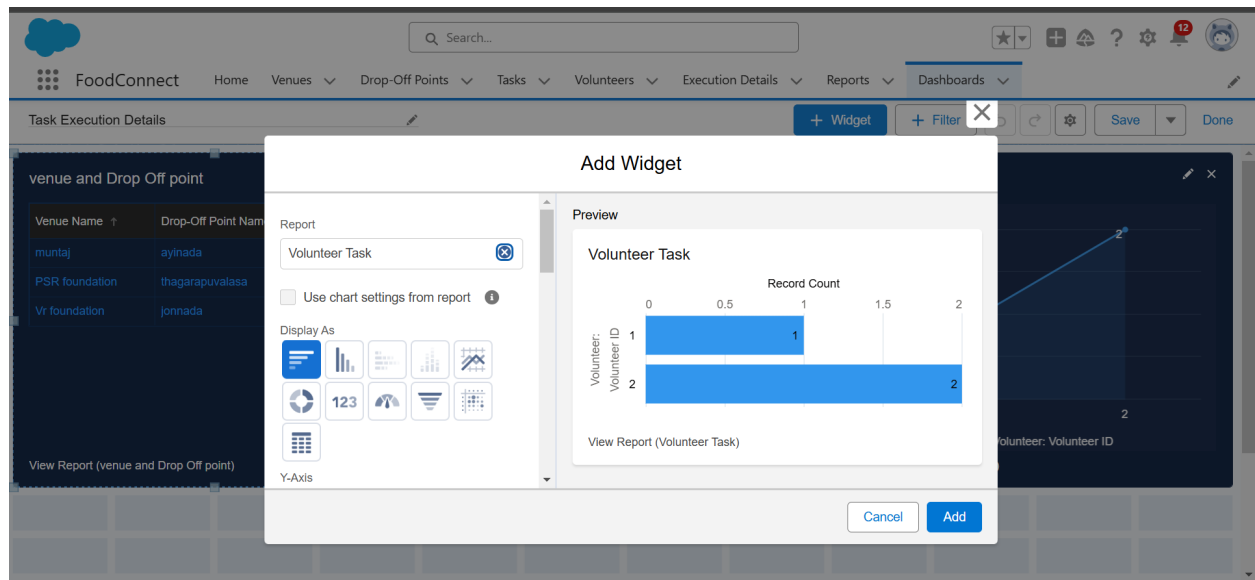
Adding Flow to Home page using Lighting app Builder

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.

Home Page(Long ScreenShot)

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.