

To Supply Leftover Food To Poor

Category: Salesforce

Skills Required: Salesforce Developer

1. Project Overview

1.1 Project Objectives and Goals

Objective:

This project aims to develop a Salesforce-based application designed to manage and streamline the distribution of leftover food to underserved communities. The primary goal is to enhance the efficiency of food drop-offs, coordinate tasks, manage volunteers, and generate insightful reports.

2. Detailed Description of Implemented Features

2.1 Custom Objects

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 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 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 Setup interface for the 'Drop-Off Point' 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, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, Validation Rules, and Conditional Field Formatting. The main content area is titled 'Fields & Relationships' and shows a list of 9 fields. The fields are 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)), Distance (Number(14, 4)), distance calculation (Formula (Number)), Drop-Off Point Name (Text(80)), Last Modified By (Lookup(User)), Location 2 (Geolocation), Owner (Lookup(User,Group)), State (Picklist), and Venue_c (Lookup(Venue)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
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)		✓

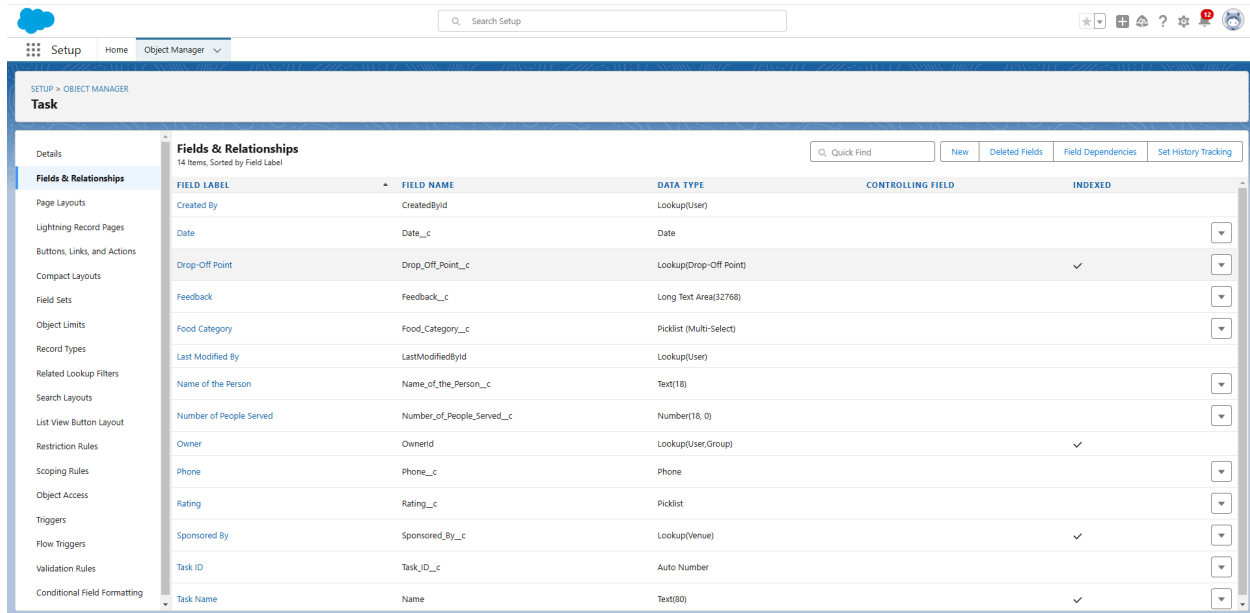
Task :

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 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, specifically the Object Manager for the 'Task' object. The 'Fields & Relationships' tab is selected, displaying a table of 14 fields. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By, Date, Drop-Off Point, Feedback, Food Category, Last Modified By, Name of the Person, Number of People Served, Owner, Phone, Rating, Sponsored By, Task ID, and Task Name. Each field has a corresponding data type and some have a controlling field or are indexed. The table is sorted by Field Label.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date	Date__c	Date		
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)		
Last Modified By	LastModifiedById	Lookup(User)		
Name of the Person	Name_of_the_Person__c	Text(18)		
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Rating	Rating__c	Picklist		
Sponsored By	Sponsored_By__c	Lookup(Venue)		✓
Task ID	Task_ID__c	Auto Number		
Task Name	Name	Text(80)		✓

Volunteer :

Purpose :

The volunteer object tracks of individuals who are involved in the food distribution process, including their contact information and assigned tasks.

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.

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		
Drop-Off Point	Drop_Off_Point__c	Master-Detail(Drop-Off Point)		✓
Email	Email__c	Email		
Gender	Gender__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Volunteer ID	Volunteer_ID__c	Auto Number		
Volunteer Name	Name	Text(80)		✓

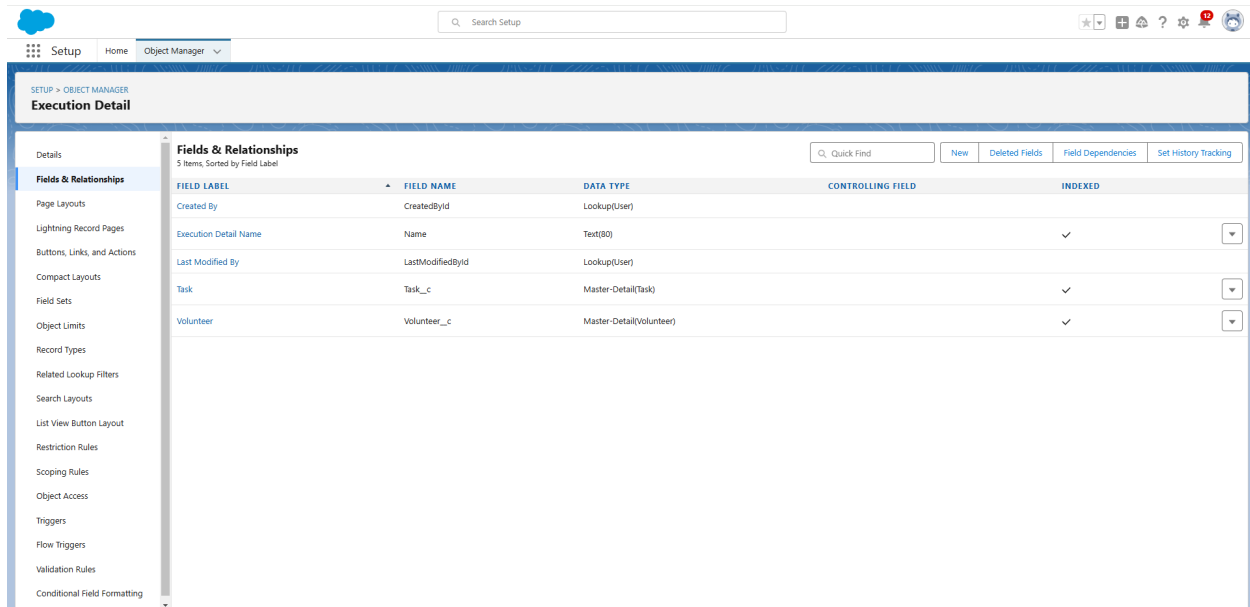
Execution Detail :

Purpose :

The execution detail object captures detailed information about food distribution activities, including which volunteers and tasks are associated with each distribution.

Fields :

- Execution detail name : 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.



2.2 Object Relationships

Master-Detail Relationships:

à Execution detail to volunteer : Ensures that each execution detail record is linked to a volunteer, making volunteer information essential for each distribution record.

→ Execution detail to task : Ensures that each execution detail record is linked to a task, making task information essential for each distribution record.

→ Task to Volunteer : Connects tasks to volunteers, enabling tracking of which volunteer is responsible for each task.

→ Task to Drop-off point : Connects tasks to drop-off points, providing context on where each task is executed.

→ Drop-off point to venue : Links drop-off points to venues, facilitating a detailed understanding of where food is being dropped off.

2.3 Sharing Rules

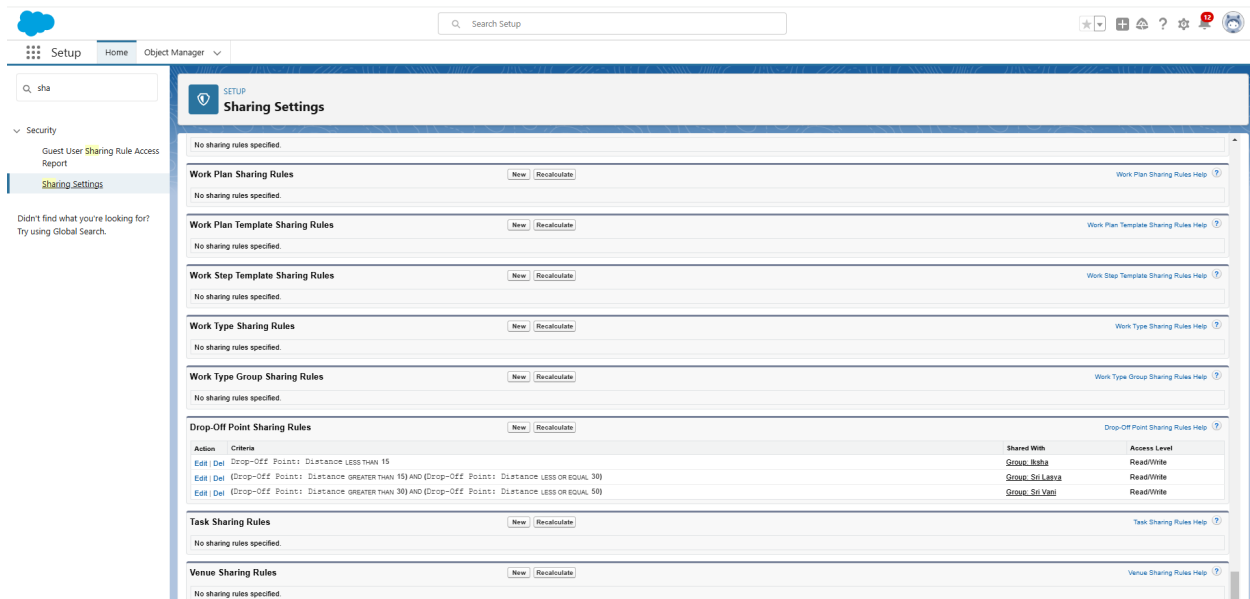
To ensure that records are shared appropriately based on distance criteria, the following sharing rules were set up :

1. Rule 1 :

- Label : Rule 1
- Criteria : Records where the distance is less than 15 kms.
- Access : Shared with the public group – iksha

2. Rule 2 :

- Label : Rule 2
- Criteria : Records where the distance is between 15 km and 30 km.
- Access : Shared with the public group – NSS



The screenshot shows the Salesforce 'Sharing Settings' page. The left sidebar contains navigation links for Setup, Home, and Object Manager. The main content area is titled 'Sharing Settings' and lists various sharing rule categories. The 'Drop-Off Point Sharing Rules' section is expanded, showing a table of rules. The table has columns for 'Action', 'Criteria', 'Shared With', and 'Access Level'. The rules are defined by distance criteria and are shared with the 'Group: Iksha', 'Group: Sri Lanka', and 'Group: Sri Lanka' groups.

Action	Criteria	Shared With	Access Level
Edit Del	Drop-Off Point: Distance LESS THAN 15	Group: Iksha	Read/Write
Edit Del	Drop-Off Point: Distance GREATER THAN 15 AND (Drop-Off Point: Distance LESS OR EQUAL 30)	Group: Sri Lanka	Read/Write
Edit Del	Drop-Off Point: Distance GREATER THAN 30 AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group: Sri Lanka	Read/Write

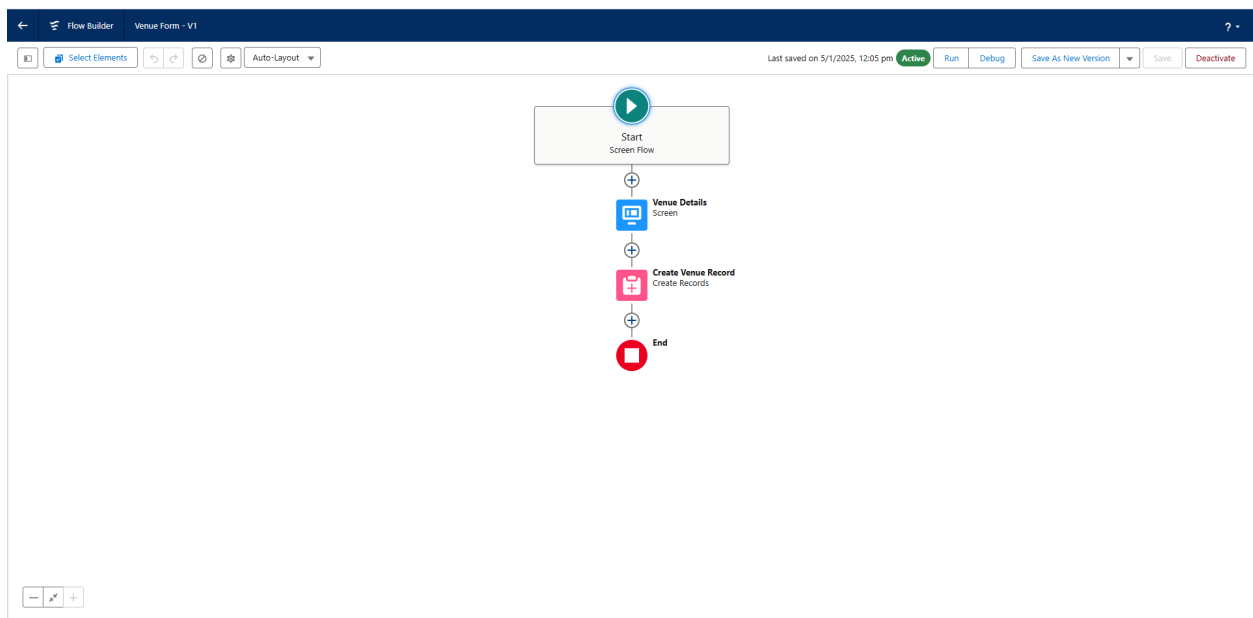
2.4 Flow and Dashboard

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.

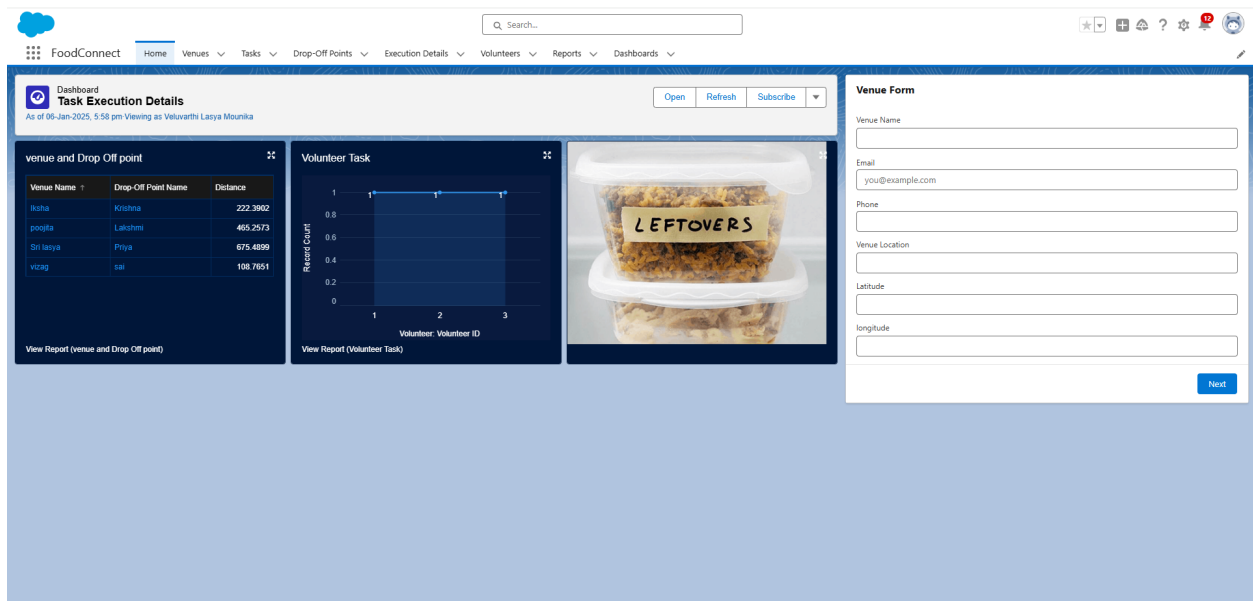


Dashboard :

➤ Name : Task Execution details

➤ Components :

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



3. Configuration and Setup Instructions

3.1 Creating Custom Objects

1. Drop-off point :

- Navigate to Object manager > Create > Custom object .
- Enter details such as the label name, record name and other settings for drop off point.

2. Task :

- Navigate to Object Manager > Create > Custom Object.
- Enter details such as the label name, record name and other settings for Task.

3. Volunteer :

- Navigate to Object manager > Create > Custom object .
- Enter details such as the label name, record name and other settings for Volunteer.

4. Execution Detail :

- Navigate to Object manager > Create > Custom object .
- Enter details such as the label name,record name and other settings for

Execution Detail.

3.2 Sharing Rules Setup

- Go to sharing settings.
- Define new sharing rules for drop-off point based on distance criteria,ensuring appropriate access for different public groups.

3.3 Sharing Rules Set up

- Go to Sharing settings
- Define new sharing rules for drop-off point based on distance criteria ensuring appropriate access for different public groups.

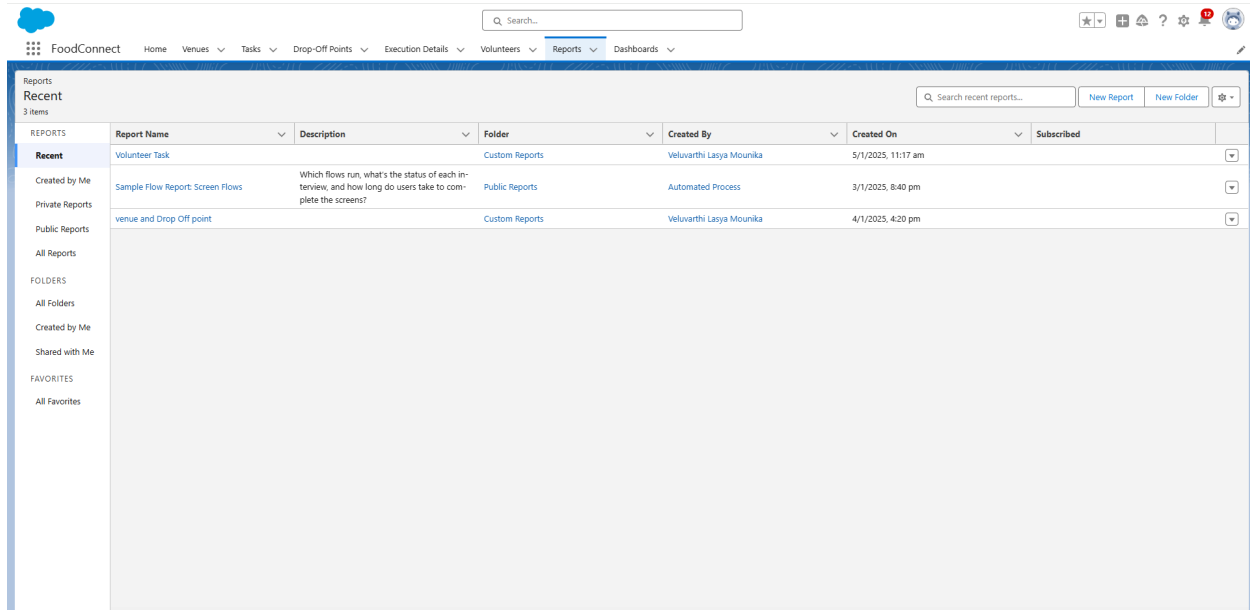
3.3 Lightning App Builder

1. Create Home Page :

- Go to Lightning App Builder > New
- Select Home Page and name it “HOME Page”
- Add flow component to the page.

2. Save and Activate :

- Click on Save and Activation.
- Set the page as the default for the FoodConnect app.



3.4 Report Types and Dashboards

1. Custom Report Types :

- Create report types for venue with Drop-off with Volunteer and Volunteers with Execution Details and Tasks.

2. Reports :

- Generate and configure reports using the custom report types to track and analyse relevant data.

3. Dashboards :

- Configure dashboards to visualise data from reports and other components, providing insights into the overall distribution process.

4. Deliverables :

- Code Files : Include Apex triggers and any other code implemented.
- Output Screenshots : Provide Screenshots of custom objects, flows, dashboards and reports to illustrate the setup.
- Project Documentation : Detailed descriptions of implemented features and set up

instructions.

- Project Demonstration Video : A video showcasing the functionality of the application including key features and processes.