

TO SUPPLY LEFTOVER FOOD TO POOR

A PROJECT REPORT

Submitted by

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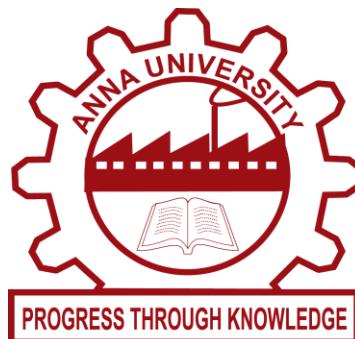
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ABSTRACT

The Leftover Food Distribution System is a Salesforce-based cloud application developed to collect and distribute excess food from restaurants, households, and events to the poor and needy. This system automates the entire process — from donor registration to food pickup, volunteer assignment, and delivery confirmation — using Salesforce tools like Flows, Apex Triggers, Reports, and Dashboards.

The primary objective is to minimize food wastage while addressing hunger in society through a structured and transparent platform. Donors can easily log food availability, and volunteers are notified and guided for collection and delivery tasks in real time.

Key tools used include:

- Salesforce CRM Platform
- Flows and Automation
- Apex Triggers and Email Alerts
- Reports and Dashboards

This project promotes social welfare by enabling efficient coordination, improving traceability, and ensuring timely food delivery, ultimately contributing to a hunger-free society.

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CHAPTER 1 – INTRODUCTION

1.1 Overview

The Leftover Food Distribution System is developed to reduce food wastage and fight hunger by redistributing excess edible food to needy people. It provides a digital platform where food donors (restaurants, households, event organizers) can notify the availability of surplus food, and NGOs or volunteers can collect and deliver it to the underprivileged.

The system aims to bridge the gap between food donors and beneficiaries using modern tools like mobile apps or web portals to ensure timely and safe distribution.

1.2 Objectives

- To reduce food waste by collecting surplus food from reliable sources.
- To provide an efficient system to connect donors with NGOs/volunteers.
- To ensure timely distribution of food to the needy in safe and hygienic condition.
- To promote social responsibility through community involvement and awareness.

1.3 Scope

The project covers:

- Real-time food donation alerts and pickups
- Donor and volunteer registration and tracking
- Food quality and safety confirmation
- Feedback collection from both donors and recipients

CHAPTER 2 – PROJECT IDEATION (Phase 1)

2.1 Problem Identification

Large amounts of edible food are wasted daily by restaurants, events, and households, while many people still go to bed hungry. There is no efficient system to collect and redistribute leftover food in a timely and safe manner to those in need.

2.2 Idea Description

The idea aims to develop a digital platform (web or mobile-based) to connect food donors (restaurants, homes, events) with NGOs or volunteers who can pick up and distribute the leftover food to poor and homeless individuals. The system ensures food is not wasted and reaches the right people safely.

2.3 Feasibility

The platform can be built using existing low-cost technologies and cloud-based tools. It requires minimal infrastructure and can be scaled easily across regions with community involvement. GPS, real-time notifications, and simple UI can make the system accessible to all users.

2.4 Innovation

- Real-time alerts to volunteers when food is available nearby.
- Food freshness and quality timestamp tracking.
- Donor and distribution feedback system for transparency.

CHAPTER 3 – REQUIREMENT ANALYSIS (Phase 2)

3.1 Functional Requirements

- Allow food donors to register and post details of leftover food.

- Enable NGOs/volunteers to view, accept, and collect available food items.
- Track pickup and delivery status in real-time.
- Maintain records of food donations, pickups, and beneficiaries.
- Generate reports on food saved and people served.

3.2 Non-Functional Requirements

- Ensure data privacy and secure access for donors and volunteers.
- Simple and intuitive user interface for ease of use.
- Mobile compatibility for real-time usage.
- Scalable backend to support increasing users and locations.

3.3 User Roles

- Admin: Manages the overall system, user access, and monitors food requests and deliveries.
- Donor: Registers food availability (restaurants, homes, events).
- Volunteer/NGO: Accepts food requests and delivers them to the needy.
- Beneficiary (optional): Can request food or provide feedback (via NGO).

3.4 Data Flow & ER Diagram

- Objects:

Donor → Food Listing → Pickup Request → Delivery → Feedback

- Relationships:

- Donor - Food Listing: One-to-many (a donor can post multiple food listings).

CHAPTER 4 – PROJECT DESIGN (Phase 3)

4.1 Schema Builder

Visualizes relationships between key objects like Donor, Food Listing, Pickup Request, Delivery, and Feedback. Shows how data flows from donors to beneficiaries.

4.2 Process Flow

1. Donor registers leftover food.
2. Volunteer/NGO accepts the pickup request.
3. Food is picked up and delivered to the needy.
4. Confirmation and feedback are recorded.
5. Reports generated for tracking donations and impact.

4.3 UI/UX Design

Clean and intuitive interface using Salesforce custom tabs for Donors, Volunteers, and Admin. Easy forms for food entry, tracking, and status updates.

CHAPTER 5 – PROJECT DEVELOPMENT (Phase 4)

5.1 Implementation Details

Object Created: Customer Detail, Appointment, Service Records, Billing & Feedback.

Fields:

- Food Type, Quantity, Expiry Time (in Food Listing)
- Status, Assigned Volunteer (in Pickup Request)

- Delivery Time, Location (in Delivery)
- Rating, Comments (in Feedback)

5.2 Trigger

```
trigger DropOffTrigger on Drop_Off_point__c (before insert) {  
    for(Drop_Off_point__c Drop : Trigger.new){  
        Drop.Distance__c = Drop.distance_calculation__c;  
    }  
}
```

5.4 Flows

- **Flow 1:** Updates pickup status to “Delivered” when delivery is confirmed.
- **Flow 2:** Sends alert to volunteer when new food is listed by a donor.

5.5 Reports & Dashboards

- **Report:** “Food Donation Report” grouped by Food Type and Delivery Status.
- **Dashboard:** “Donation Impact Dashboard” showing number of donations, volunteers involved, and beneficiaries served weekly.

CHAPTER 6 – PROJECT DOCUMENTATION (Phase 5)

6.1 Execution Steps

- Created custom objects: Donor, Food Listing, Pickup Request, Delivery, Feedback.
- Set up relationships and custom fields.
- Built and tested automation flows.
- Designed reports and dashboards to monitor donations and delivery efficiency.

6.2 GitHub & SmartInternz Links

- **GitHub Repository:** [jeyadurga-2904/To-Supply-Leftover-Food-to-Poor](https://github.com/jeyadurga-2904/To-Supply-Leftover-Food-to-Poor)
- **SmartInternz Workspace:**
https://nme.smartinternz.com/Student/guided_project_workspace/3739

6.3 Challenges & Solutions

Challenge	Solution
• “Submit” button not visible in Flow → Adjusted screen size & saved	
• Error while updating delivery status → Fixed picklist values and field	
• Missing custom fields in object → Verified API names and re-added	

CHAPTER 7 – PROJECT DEMONSTRATION & RESULTS

7.1 Demo Flow

When donor adds food details, a volunteer is notified via email. Upon delivery, status is updated and feedback is collected.

7.2 Outputs

- Delivery status auto-updated.
- Notification sent to volunteers and admin.

CHAPTER 8 – CONCLUSION & FUTURE ENHANCEMENT

8.1 Conclusion

The project successfully provides a structured way to collect and distribute leftover food using Salesforce automation tools. It ensures transparency, quick delivery, and real-time updates.

8.2 Limitations

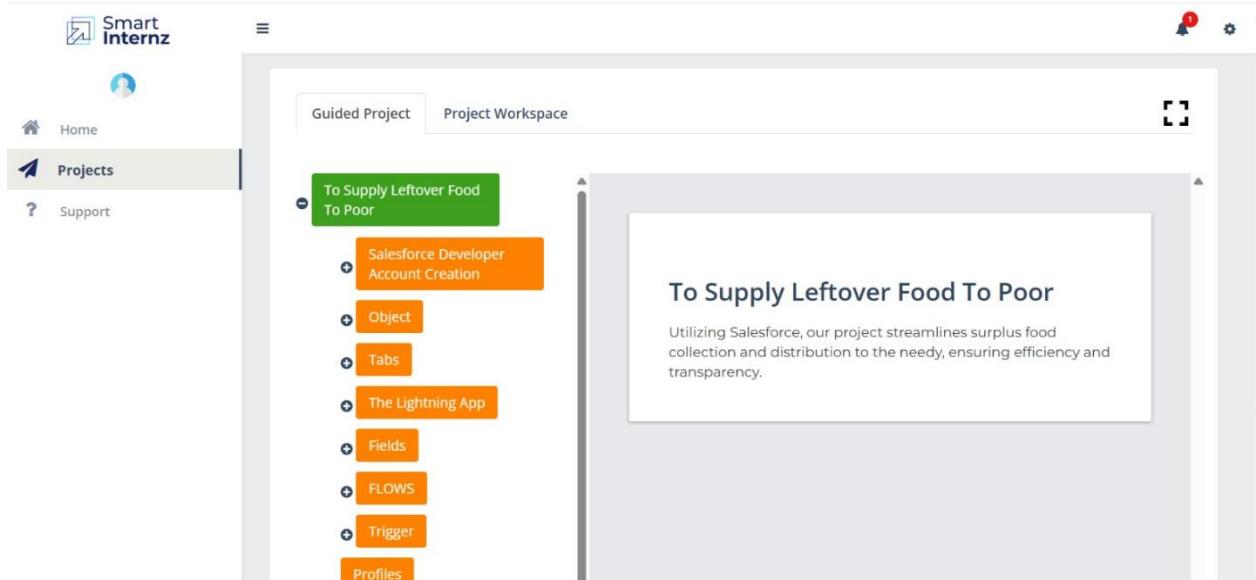
- Requires internet access and Salesforce platform.
- Dependent on availability of volunteers for delivery.

8.3 Future Enhancements

- Add donor and volunteer login portal.
- Integrate with local NGOs.
- Launch mobile app version for quick updates and tracking.

APPENDIX – SCREENSHOTS

To Supply Leftover Food to Poor

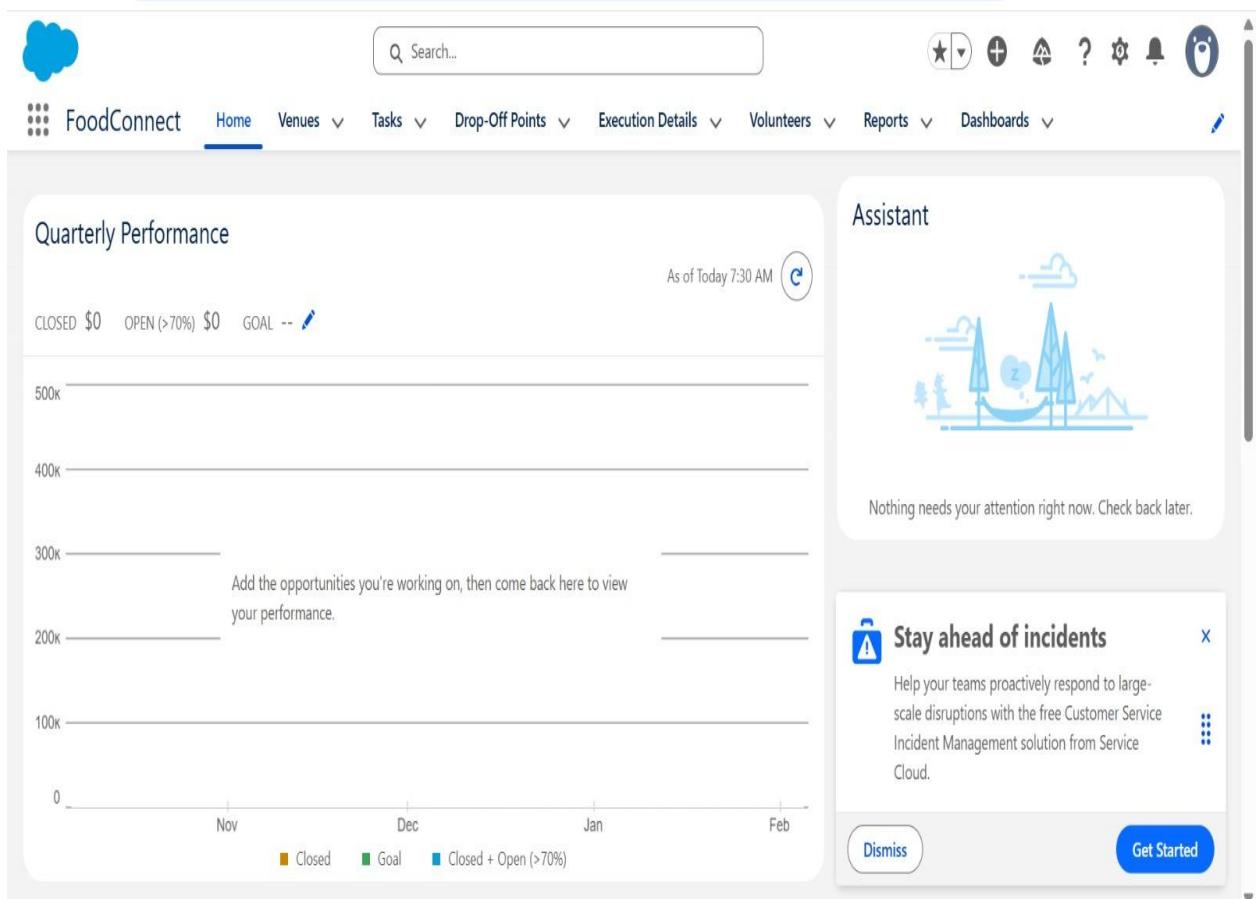


The screenshot shows a Salesforce project workspace titled "To Supply Leftover Food To Poor". On the left, there's a sidebar with navigation links: Home, Projects (which is selected), and Support. The main area displays a list of components used in the project, each with a plus sign icon:

- To Supply Leftover Food To Poor
- Salesforce Developer Account Creation
- Object
- Tabs
- The Lightning App
- Fields
- FLows
- Trigger
- Profiles

A large callout box highlights the project title and its purpose: "Utilizing Salesforce, our project streamlines surplus food collection and distribution to the needy, ensuring efficiency and transparency."

Foodconnect App home



The screenshot shows the FoodConnect app home page. At the top, there's a search bar and a navigation menu with links: Home, Venues, Tasks, Drop-Off Points, Execution Details, Volunteers, Reports, and Dashboards.

The main section features a chart titled "Quarterly Performance" with the following data:

Status	Value
CLOSED	\$0
OPEN (>70%)	\$0
GOAL	--

The chart has a Y-axis from 0 to 500K and an X-axis from Nov to Feb. A note says: "Add the opportunities you're working on, then come back here to view your performance."

To the right, there's an "Assistant" section with a cartoon illustration of a character in a landscape. It says: "Nothing needs your attention right now. Check back later."

At the bottom right, there's a callout box for "Stay ahead of incidents" with the text: "Help your teams proactively respond to large-scale disruptions with the free Customer Service Incident Management solution from Service Cloud." It includes "Dismiss" and "Get Started" buttons.

* = Required Information

Information

*Venue Name

Owner



Jeya Durga R

*Contact Email

*Contact Phone

Location

Latitude

Longitude

Venue Location

Cancel

Save & New

Save

New Task

* = Required Information

Task Information

* Assigned To

 Search People...
 Jeya Durga R X

* Status

Not Started ▾

1 Total Task

* Subject

Search

Name

 Search Contacts...
Search

[Save & New](#)

[Cancel](#)

[Save](#)

New Drop-Off Point

* = Required Information

Information

* Drop-Off Point Name

Search

Owner

 Jeya Durga R

Venue

Search Venues...
Search

Location 2

Latitude

Search

Longitude

Search

* State

-None-

[Cancel](#)

[Save & New](#)

[Save](#)

Fields & Relationship for an object

Setup Home Object Manager

SETUP > OBJECT MANAGER

Execution Detail

Fields & Relationships		Fields & Relationships			
5 Items, Sorted by Field Label		Quick Find New Deleted Fields Field Dependencies Set History Tracking			
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedBy	Field Name	Lookup(User)		
Execution Detail Name	Name	Text(80)		✓	▼
Execution ID	Execution_ID_c	Auto Number		▼	▼
Last Modified By	LastModifiedBy	Lookup(User)		▼	▼
Volunteer	Volunteer__c	Master-Detail(Volunteer)		✓	▼

Related Lookup Filters

Setup Home Object Manager

SETUP > OBJECT MANAGER

Report

Fields & Relationships		Fields & Relationships			
4 Items, Sorted by Field Label		Quick Find New Deleted Fields Field Dependencies Set History Tracking			
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Created By	CreatedBy	Lookup(User)			
Last Modified By	LastModifiedBy	Lookup(User)		▼	▼
Owner	OwnerId	Lookup(User,Group)		✓	▼
Report Name	Name	Text(80)		✓	▼

Related Lookup Filters

Cloud icon

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Volunteer

Details		Fields & Relationships				
		11 Items, Sorted by Field Label				
		FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts		Age	Age_c	Number(18, 0)		
Lightning Record Pages		Available On	Available_On_c	Date		
Buttons, Links, and Actions		Contact Number	Contact_Number_c	Number(18, 0)		
Compact Layouts		Created By	CreatedBy	Lookup(User)		
Field Sets		Date of Birth	Date_of_Birth_c	Date		
Object Limits		Drop-Off Point	Drop_Off_Point_c	Master-Detail(Drop-Off Point)	✓	
Record Types						
Related Lookup Filters						

Cloud icon

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Drop-Off Point

Details		Details	
		Edit Delete	
Fields & Relationships		Description	
Page Layouts		API Name	
Lightning Record Pages		Drop_Off_Point_c	
Buttons, Links, and Actions		Custom	
Compact Layouts		✓	
Field Sets		Singular Label	
Object Limits		Drop-Off Point	
Record Types		Plural Label	
Related Lookup Filters		Drop-Off Points	

Cloud icon

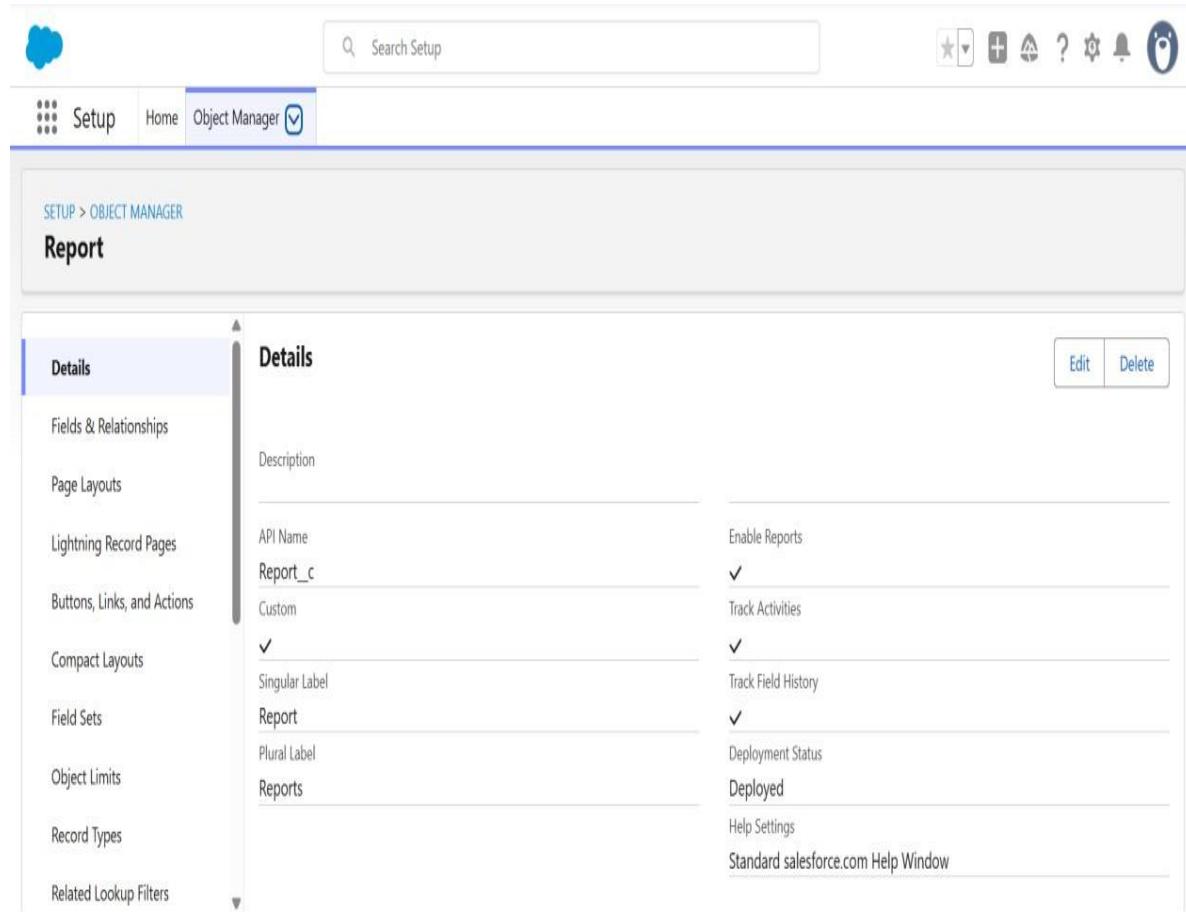
Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Task

Details		Fields & Relationships				
		14 Items, Sorted by Field Label				
		FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts		Created By	CreatedBy	Lookup(User)		
Lightning Record Pages		Date	Date_c	Date		
Buttons, Links, and Actions		Distance	Distance_c	Number(14, 4)		
Compact Layouts		Drop-Off Point	Drop_Off_Point_c	Lookup(Drop-Off Point)	✓	
Field Sets		Food Category	Food_Category_c	Picklist (Multi-Select)		
Object Limits		Last Modified By	LastModifiedBy	Lookup(User)		
Record Types						
Related Lookup Filters						

Validation Rule



The screenshot shows the Salesforce Setup interface with the following details:

Header: Search Setup, various icons for navigation and settings.

Breadcrumbs: SETUP > OBJECT MANAGER

Section: Report

Left Sidebar (Details):

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters

Right Panel (Details):

Field	Value
Description	
API Name	Report_c
Custom	✓
Singular Label	Report
Plural Label	Reports
Enable Reports	✓
Track Activities	✓
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Buttons: Edit, Delete

Schema Builder

Cloud icon Search Setup

Setup Home Object Manager ▾

Schema Builder

Close Auto-Layout View Options ▾

Elements Objects

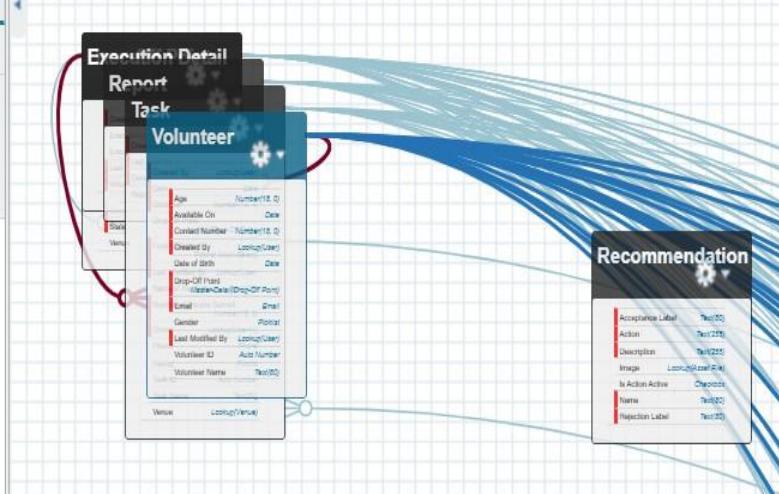
Select objects to display on the builder.

Select from Custom Objects ▾

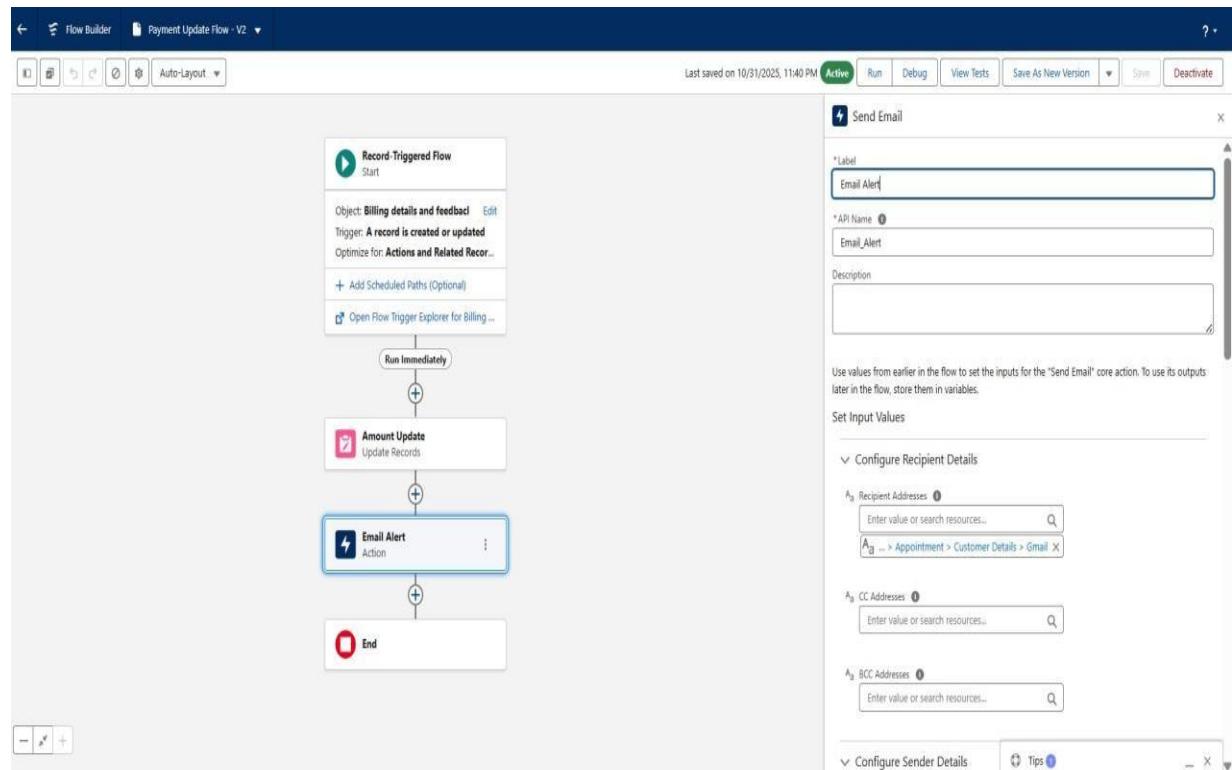
Quick Find...

[Select All](#) | [Clear All](#)

- Drop-Off Point
- Execution Detail
- Report
- Task
- Venue



Automation Flow (Flow Builder)



Record Creation (Show working flow)

New Drop-Off Point

* = Required Information

Information

*** Drop-Off Point Name**

Venue

🔍

Location 2

Latitude	Longitude
<input style="width: 100%; height: 30px; border: 1px solid #ccc; border-radius: 5px;" type="text"/>	<input style="width: 100%; height: 30px; border: 1px solid #ccc; border-radius: 5px;" type="text"/>

*** State**

Owner

 Jeya Durga R

Cancel
Save & New
Save

New Execution Detail

* = Required Information

Information

*** Execution Detail Name**

*** Volunteer**

 no1

Execution ID

Cancel
Save & New
Save

Get started by sending an email, scheduling a task, and more.
 All activities • All types 
 fresh • Expand All • View All

No past activity. Past meetings and tasks marked as done show up here.

Final UI & outputs



REFERENCES

1. Salesforce Trailhead Documentation — <https://trailhead.salesforce.com>
2. SmartInternz Naan Mudhalvan Portal — <https://nme.smartinternz.com>
3. Salesforce Developer Guide — <https://developer.salesforce.com>
4. GitHub Repository — [jeyadurga-2904/To-Supply-Leftover-Food-to-Poor](https://github.com/jeyadurga-2904/To-Supply-Leftover-Food-to-Poor)