



Food Connect CRM

Subtitle: Supplying Leftover Food to the Poor through Salesforce CRM

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1.Project Overview

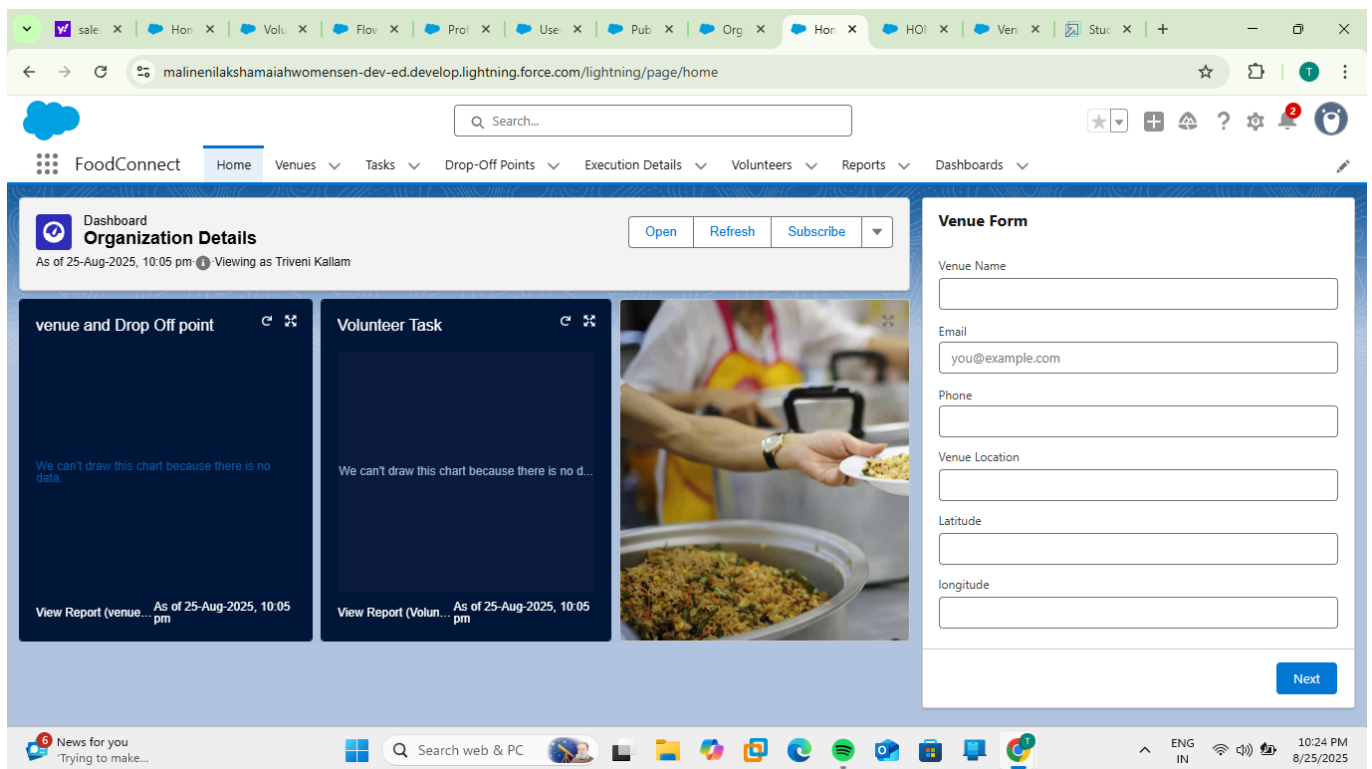
FoodConnect CRM is a cloud-based Customer Relationship Management (CRM) solution built on Salesforce, designed specifically for managing food donation and distribution. The system acts as a bridge between NGOs, volunteers, donors, and distribution venues, ensuring that surplus food is collected, stored, and delivered to those in need in a systematic and transparent way.

Traditionally, managing food donations has been a manual and disorganized process. Donors may not know where to send surplus food, NGOs may struggle to allocate volunteers, and there is often little to no visibility on how much food has been distributed. FoodConnect CRM eliminates these inefficiencies by providing a **centralized, automated, and transparent platform.**

Key business needs addressed by FoodConnect CRM:

- Surplus food donation tracking from different venues.
- Drop-off point management where donated food is stored temporarily.
- Volunteer coordination and task assignment.
- Capturing execution details such as date, time, and location of food delivery.
- Monitoring NGO participation and impact.

The core functionality is powered by Salesforce features such as **Custom Objects (Venue, Drop-Off Point, Task, Volunteer, Execution Details), Automation (Flows, Validation Rules, Triggers), and Reporting Tools (Reports and Dashboards).**



2.Objectives

The primary objective of FoodConnect CRM is to create a **digitized platform for food donation management** that enhances efficiency, transparency, and collaboration among all stakeholders.

Detailed objectives include:

1. **Automate food donation management**
 - Reduce manual record-keeping.
 - Automatically assign tasks and calculate logistics (like distance between venues and drop-off points).
2. **Enable effective collaboration between NGOs and volunteers**
 - NGOs can create drop-off points and tasks.
 - Volunteers can view their assigned responsibilities and update execution

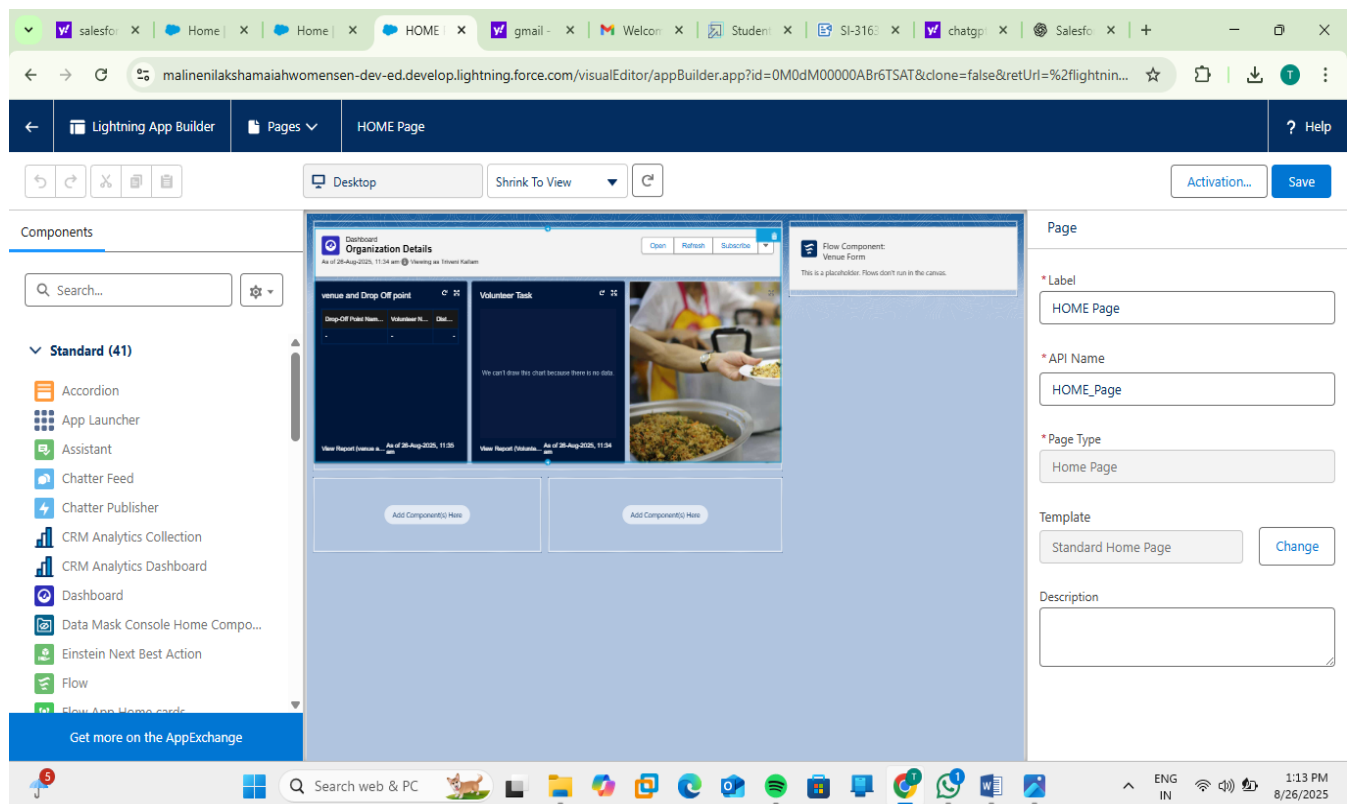
details.

3. Provide transparency with reports and dashboards

- Custom reports for tracking donations, volunteer contributions, and NGO performance.
- Dashboards offering real-time insights into ongoing activities.

4. Improve decision-making through data analytics

- Identify areas with recurring food shortages.
- Optimize volunteer distribution.
- Plan for future donation drives with predictive insights.



3.Requirement Analysis & Planning

3.1 Business Requirements

- Capture details of food surplus from various **venues** (restaurants, event halls, etc.).
- Create **drop-off points** where food can be collected and stored.
- Allocate **volunteers** for pickup, storage, and delivery tasks.

- Record **execution details** like completion time, delivery address, and associated NGO.

3.2 Project Scope

The FoodConnect CRM project includes the full lifecycle of food donation management, from donation request creation to volunteer assignment, tracking execution, and generating reports for performance analysis.

3.3 Data Model

The data model was designed with five major objects:

- **Venue** – Source of food donations.
- **Drop-Off Point** – Intermediate collection point.
- **Task** – Activity assigned to volunteers.
- **Volunteer** – Individual handling logistics.
- **Execution Details** – Record of completed activities.

These objects are linked using **lookup and master-detail relationships**, ensuring data consistency.

3.4 Security Model

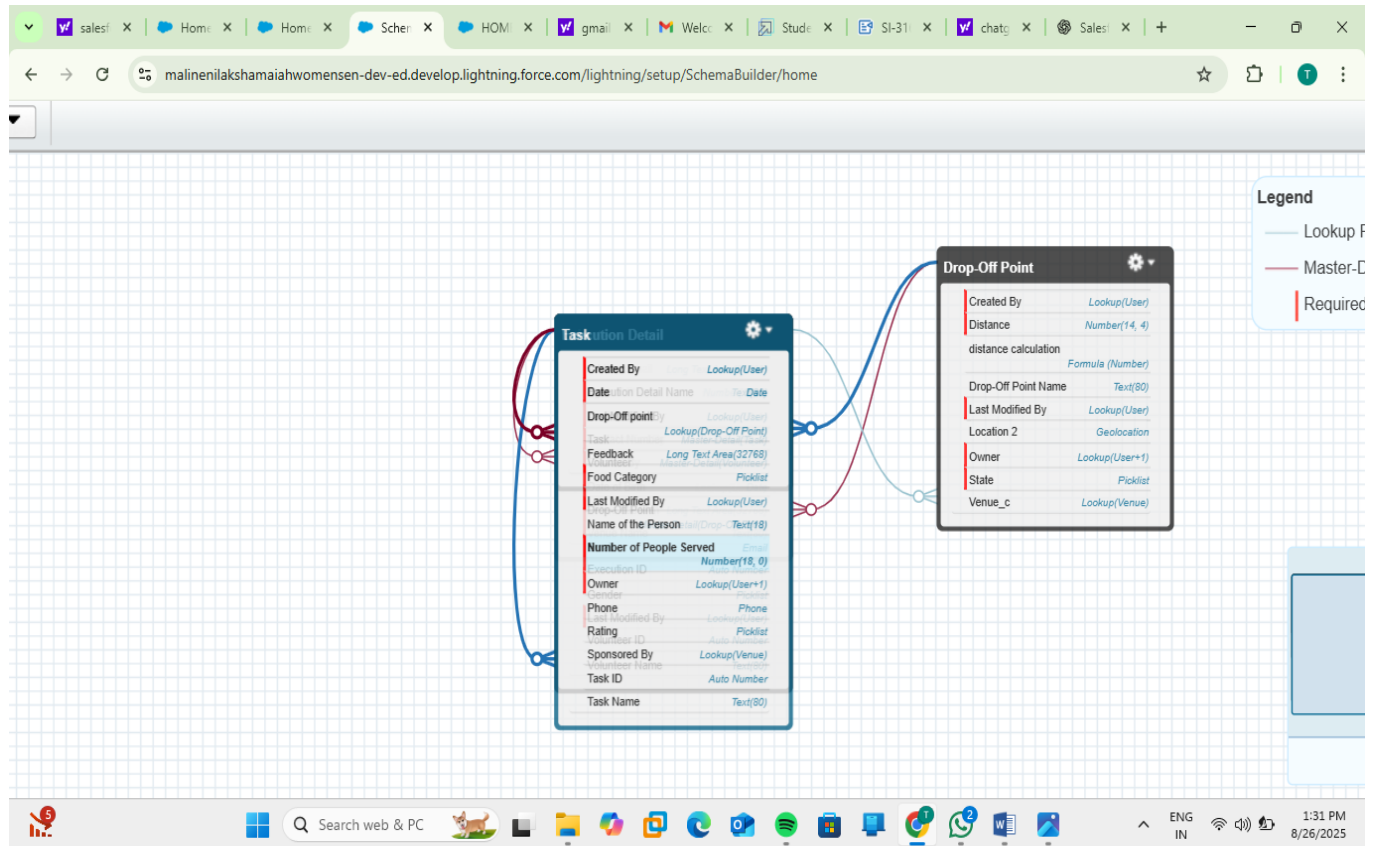
- **Profiles & Roles** – Admin, NGO, Volunteer.
- **Sharing Rules** – Access controlled based on NGO and location.
- **Public Groups** – To allow collaboration between NGOs.

3.5 Stakeholders

- NGOs (Iksha Foundation, NSS, Street Cause).
- Volunteers.
- Administrators overseeing the process.

3.6 Roadmap

Requirement Gathering → Development → Testing → Deployment → Maintenance.



4. Salesforce Development – Backend & Configurations

In this phase, the core system was developed in Salesforce.

4.1 Environment Setup

- Salesforce Developer Org was provisioned.
- FoodConnect CRM app was created as a Lightning App.

4.2 Custom Objects

1. Venue
2. Drop-Off Point
3. Task
4. Volunteer
5. Execution Details

4.3 Fields & Relationships

- **Lookup Relationships** (Volunteer ↔ Task).
- **Master-Detail Relationships** (Drop-Off ↔ Venue).
- **Formula Fields** (auto-calculate status).
- **Auto Number Fields** (unique IDs for tasks).

4.4 Automation

- **Flow:** To create Venue records automatically.
- **Trigger:** `DropOffTrigger` to calculate the distance between venues and drop-off points.
- **Validation Rules:** Example – Ensuring Contact Email/Phone is mandatory for Venue.

Venue Custom Object Fields.

sale x | Home x | Home x | Sch x | Ven x | HOI x | gme x | Wel x | Stuc x | SI-3 x | cha x | Sale x | +

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Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Venue

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Fields & Relationships

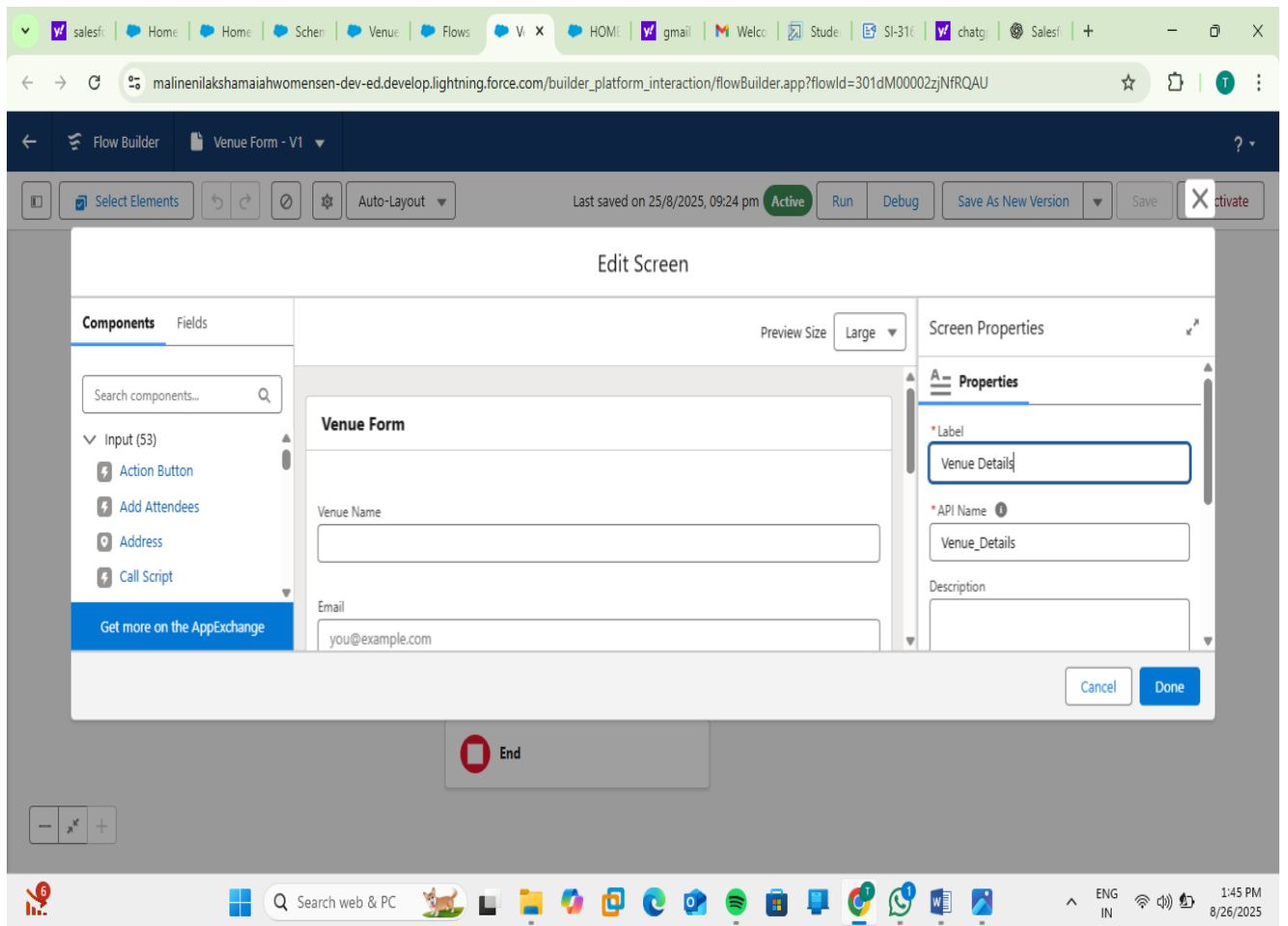
8 Items, Sorted by Field Label

New Deleted Fields Field Dependencies Set History Tracking

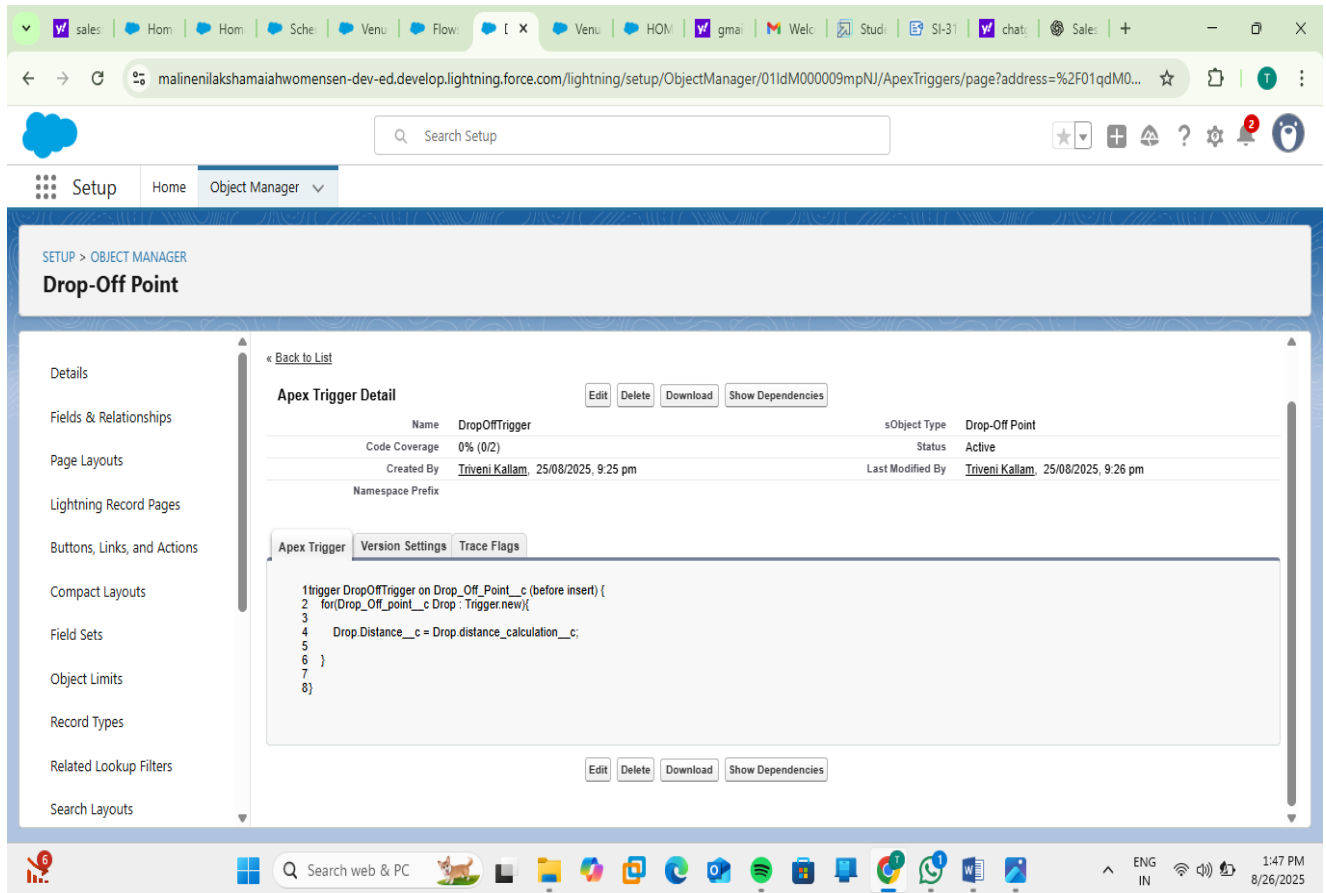
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact Email	Contact_Email__c	Email		
Contact Phone	Contact_Phone__c	Phone		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location__c	Geolocation		
Owner	OwnerId	Lookup(User,Group)		✓
Venue Location	Venue_Location__c	Long Text Area(32768)		
Venue Name	Name	Text(80)		✓

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Flow – Venue Creation



Trigger Code in Developer Console (DropOffTrigger).



5. UI/UX Development & Customization

In this phase, the user interface was designed for better usability.

Lightning App: FoodConnect

- Navigation items: Venue, Drop-Off Point, Volunteer, Task, Execution Details.

Tabs & Page Layouts

- Custom layouts for each object.
- Volunteers can see only their assigned tasks.
- NGOs can track execution details for their food distribution.

6. Reports & Dashboards

6.1 Reports

1. Venue with Drop-Off & Volunteers.
2. Volunteers with Execution Details & Tasks.

6.2 Dashboards

- Organization-level dashboards showing food donations over time.
- Task Execution dashboard displaying completed vs pending tasks.

The screenshot shows the Salesforce Lightning Experience App Manager setup page. The browser address bar indicates the URL: `malinenilakshamaiahwomensen-dev-ed.develop.lightning.force.com/lightning/setup/NavigationMenus/home`. The page features a search bar labeled "Search Setup" and a navigation menu on the left with options like "Setup", "Home", and "Object Manager". The main content area displays a table of 27 items, sorted by App Type and filtered by All appmenuitems - TabSet Type, App Type. The table lists various apps such as Service Console, Sales Console, Sales, Lightning Usage App, Sales Cloud Mobile, Approvals, My Service Journey, Bolt Solutions, Automation, Workforce Administrator, and FoodConnect, along with their developer names, descriptions, last modified dates, and app types.

App Name	Developer N...	Description	Last Modified ...	A...	Vi...
17 Service Console	LightningService	(Lightning Experience) Lets support agents work with multiple r...	21/08/2025, 12:48 pm	Lightning	✓
18 Sales Console	LightningSalesCo...	(Lightning Experience) Lets sales reps work with multiple record...	21/08/2025, 12:48 pm	Lightning	✓
19 Sales	LightningSales	Manage your sales process with accounts, leads, opportunities, ...	21/08/2025, 12:48 pm	Lightning	✓
20 Lightning Usage App	LightningInstrum...	View Adoption and Usage Metrics for Lightning Experience	21/08/2025, 12:48 pm	Lightning	✓
21 Sales Cloud Mobile	SalesCloudMobile	New seller focused mobile first experience	21/08/2025, 12:48 pm	Lightning	✓
22 Approvals	Approvals	Manage approvals and approval flows	21/08/2025, 12:48 pm	Lightning	✓
23 My Service Journey	MSJApp	Discover new customer service capabilities.	21/08/2025, 12:48 pm	Lightning	✓
24 Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your indu...	21/08/2025, 12:48 pm	Lightning	✓
25 Automation	FlowsApp	Automate business processes and repetitive tasks.	21/08/2025, 12:55 pm	Lightning	✓
26 Workforce Administrator ...	Workforce_Admi...	this application is designed for maintaining the organisation's w...	21/08/2025, 6:59 pm	Lightning	✓
27 FoodConnect	FoodConnect		25/08/2025, 7:25 pm	Lightning	✓

Reports

W sale | H | X | Sch | Ven | Hon | App | Dro | Ven | Ligh | gma | Wel | Stu | SI-3 | chat | Sale | +

malinenilakshamaiahwomensen-dev-ed.develop.lightning.force.com/lightning/o/Report/home?queryScope=mr...

FoodConnect

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

Reports

Recent

3 items

Search recent reports...

New Report

New Folder

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	21/8/2025, 12:48 pm	
Created by Me						
Private Reports	Volunteer Task		Custom Report	Triveni Kallam	25/8/2025, 9:59 pm	
Public Reports	venue and Drop Off point		Custom Reports	Triveni Kallam	25/8/2025, 9:51 pm	
All Reports						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						
FAVORITES						
All Favorites						

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Dashboards

The screenshot shows a Salesforce Lightning Dashboard for 'FoodConnect'. The dashboard is titled 'Organization Details' and is viewed as 'Triveni Kallam' on '26-Aug-2025, 11:34 am'. The dashboard contains three main components:

- venue and Drop Off point:** A chart area with a table header showing 'Drop-Off Point Name', 'Volunteer Name', and 'Distance'. Below the header, there is a message: 'We can't draw this chart because there is no data.'
- Volunteer Task:** A chart area with a message: 'We can't draw this chart because there is no data.'
- Image:** A photograph showing a person in a yellow apron serving food from a large pot into a white bowl.

The dashboard is viewed as 'Triveni Kallam' on '26-Aug-2025, 11:34 am'.

7. Data Migration, Testing & Security

7.1 Data Migration

- Used Salesforce **Data Import Wizard** and **Data Loader** to migrate NGO and Volunteer records

7.2 Security Implementation

- **Profiles** – NGO Profile,
- **Users** – Iksha Foundation, NSS, Street Cause.
- **Public Groups** – Grouped NGOs for collaboration.
- **Sharing Rules** – Distance-based access for drop-off points.

7.3 Testing

- Verified Flows for Venue creation.
- Verified Triggers for distance calculation
- Verified Reports & Dashboards with sample data.
- Test Classes executed to achieve coverage >75%

8.Sharing Rules in FoodConnect CRM

In your project, sharing rules help NGOs, Volunteers, and Admins **collaborate effectively** while maintaining **data security**:

1. Venue Sharing Rule

- OWD for Venue = Private (so that NGOs don't see each other's donation sources).
- Sharing Rule: Share **Venue records** owned by *Iksha Foundation* with users in the *NSS NGO group* if both work in the same city.

2. Drop-Off Point Sharing Rule

- Criteria-Based: If **Drop-Off Location = "Hyderabad"**, then share with **all Hyderabad Volunteers Group**.

3. Task Sharing Rule

- Owner-Based: All **Tasks created by Admin** are shared with the **assigned Volunteer's role**.
- Ensures volunteers see only their assigned work.

4. Execution Details Sharing Rule

- Criteria-Based: If `Status = Completed`, then share record with **NGO Admins group** for reporting.

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Search Setup

Setup Home Object Manager

Q shar

Security

Guest User Sharing Rule Access Report

Sharing Settings

Didn't find what you're looking for? Try using Global Search.

SETUP

Sharing Settings

Asset Service Sharing Rules

No sharing rules specified.

Drop-Off Point Sharing Rules

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: NSS	Read/Write
Edit Del	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	Group: Street Cause	Read/Write

Employee Sharing Rules

No sharing rules specified.

Project Sharing Rules

No sharing rules specified.

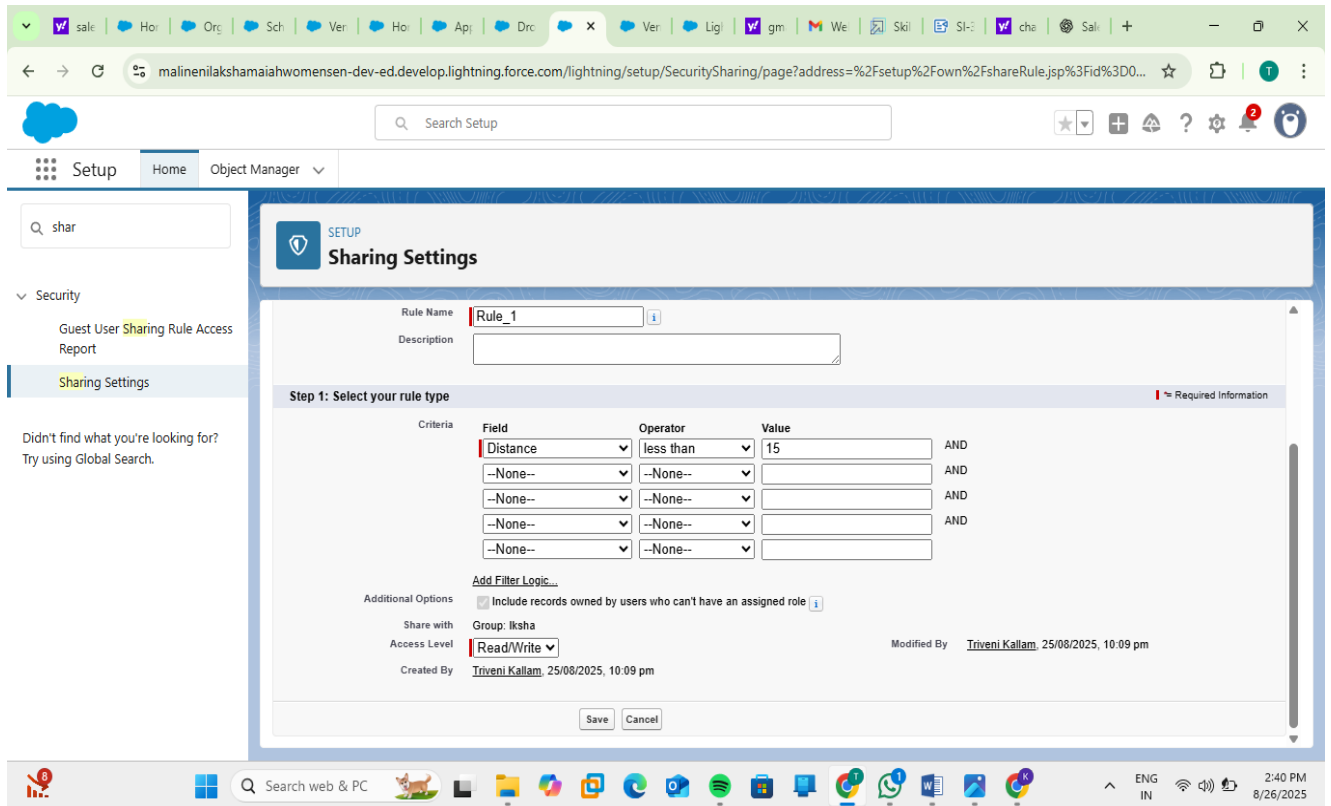
Task Sharing Rules

https://malinenilakshamaiahwomensen-dev-ed.develop.lightning.force.com/lightning/setup/SecuritySharing/home

Search web & PC

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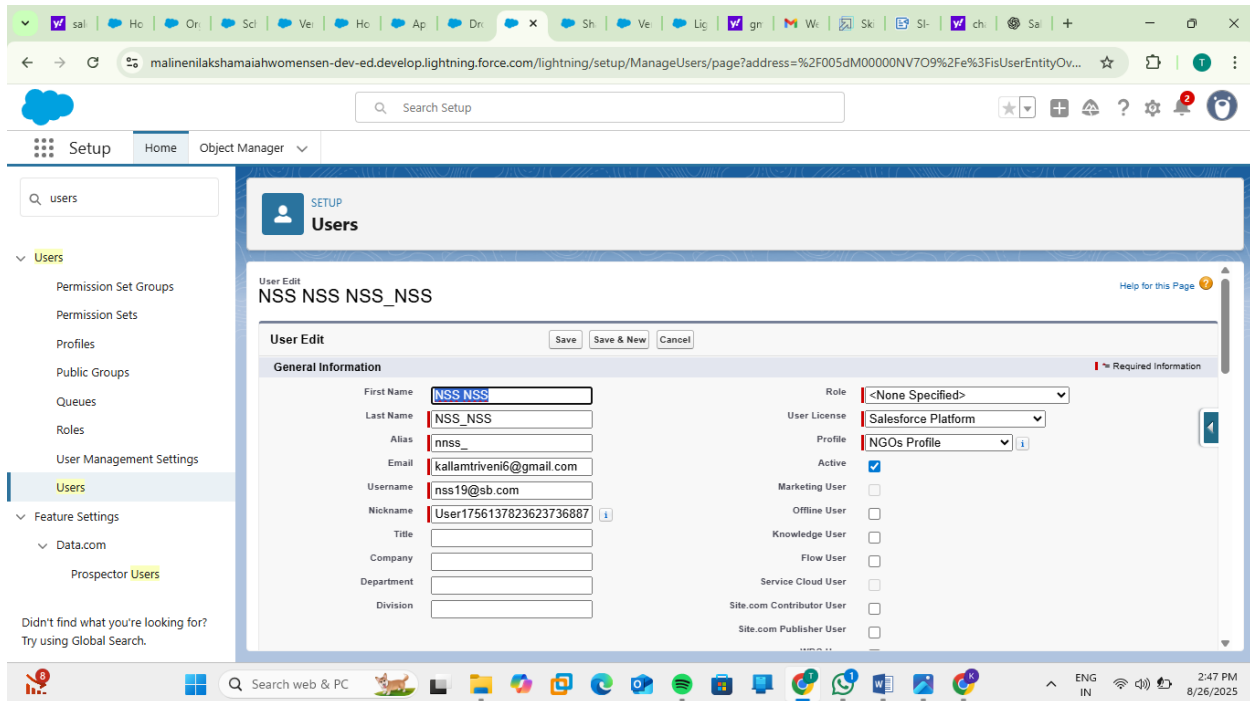
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9. Users & Profiles

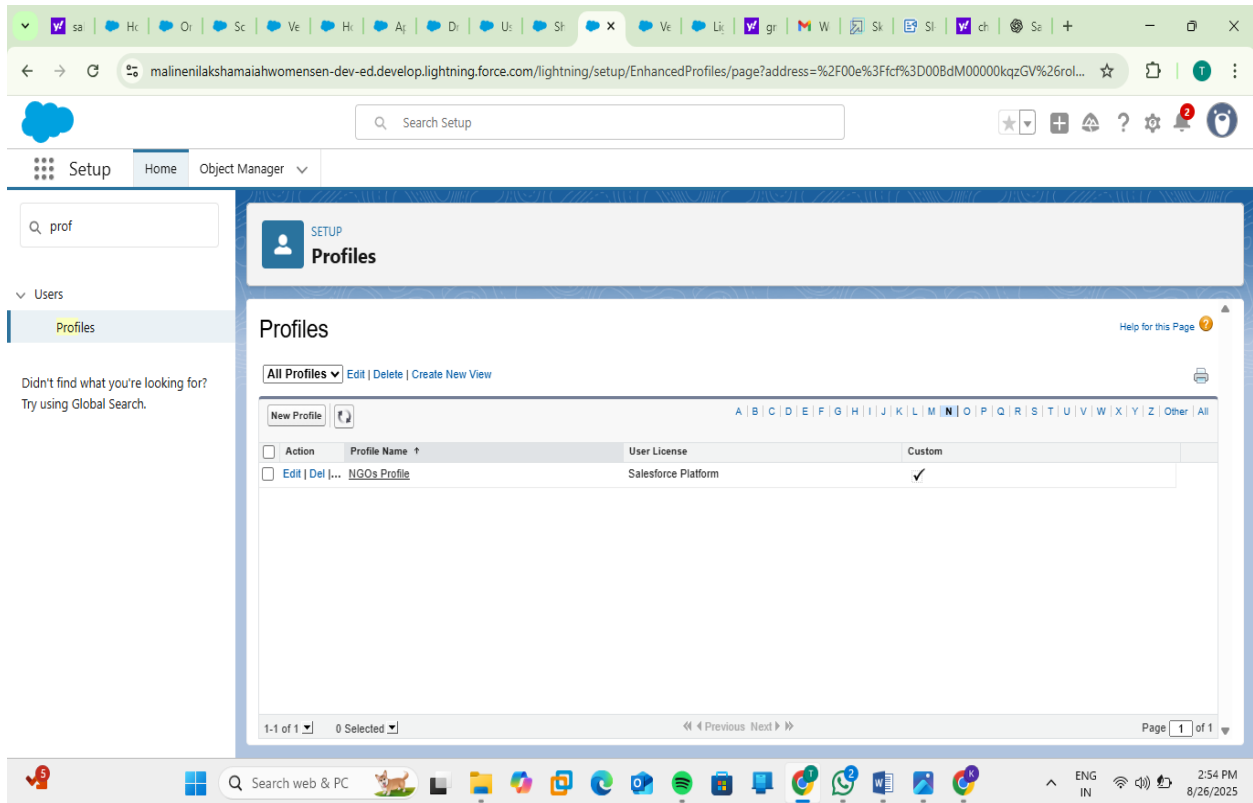
9.1 Users

“Users were created for NGOs Iksha Foundation, NSS, and Street Cause. Each user was assigned the *NGO Profile*.”



9.2 Profiles

Created custom profile “NGO Profile” to define access levels.



10. Deployment & Maintenance

Deployment

- Used **Change Sets** to deploy configurations and customizations from Developer Org to Production.

Maintenance

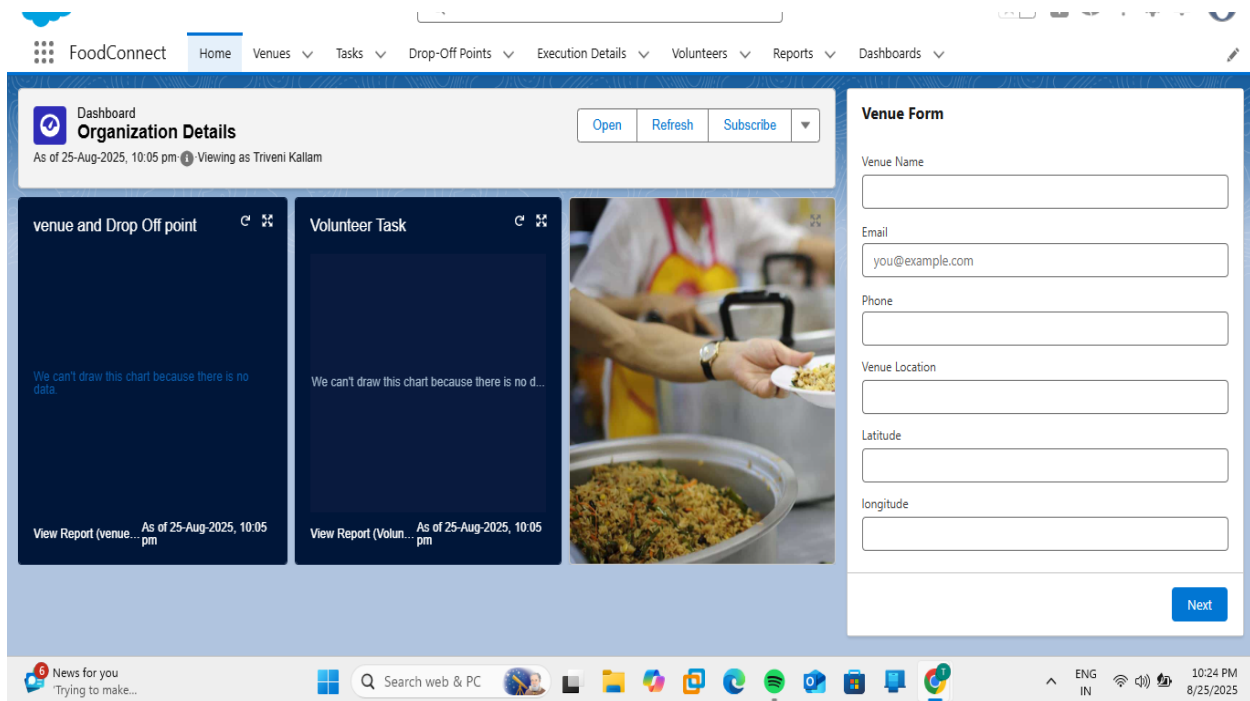
- Regular system health checks.
- Error log monitoring.
- User feedback collected periodically.

Troubleshooting

- Capturing Flow errors and providing debug logs.
- Resolving sharing rule conflicts.

11.Future Enhancements

- AI chatbot to respond to NGO and Volunteer queries.
- WhatsApp integration for real-time volunteer coordination.
- Predictive reports on food demand patterns.



12.Conclusion

- FoodConnect CRM provides an automated and transparent solution for food donation management.
- It integrates venues, drop-off points, NGOs, and volunteers into a single Salesforce ecosystem.
- The system improves coordination, reduces food wastage, and ensures accountability.
- Reports and dashboards enable data-driven insights for better decision-making.
- With future enhancements, FoodConnect CRM can evolve into a

scalable platform to fight food insecurity.

