

Supply Leftover Food to Poor – Salesforce CRM Implementation

Project Overview

This project implements a Salesforce-based CRM to efficiently manage the collection and distribution of leftover food from restaurants, events, and households to needy people. The system provides seamless coordination between donors, volunteers, and beneficiaries, reducing food wastage and supporting hunger relief initiatives.

Key Features:

- Donor, Volunteer, and Beneficiary management
 - Task and Execution tracking
 - Real-time dashboards and reports
 - Automated flows and triggers for process automation
 - Secure access with profiles, roles, and public groups
-

1. Salesforce Developer Account Creation

A **Salesforce Developer Account** is a free, personal Salesforce environment for practice, learning, and building applications.

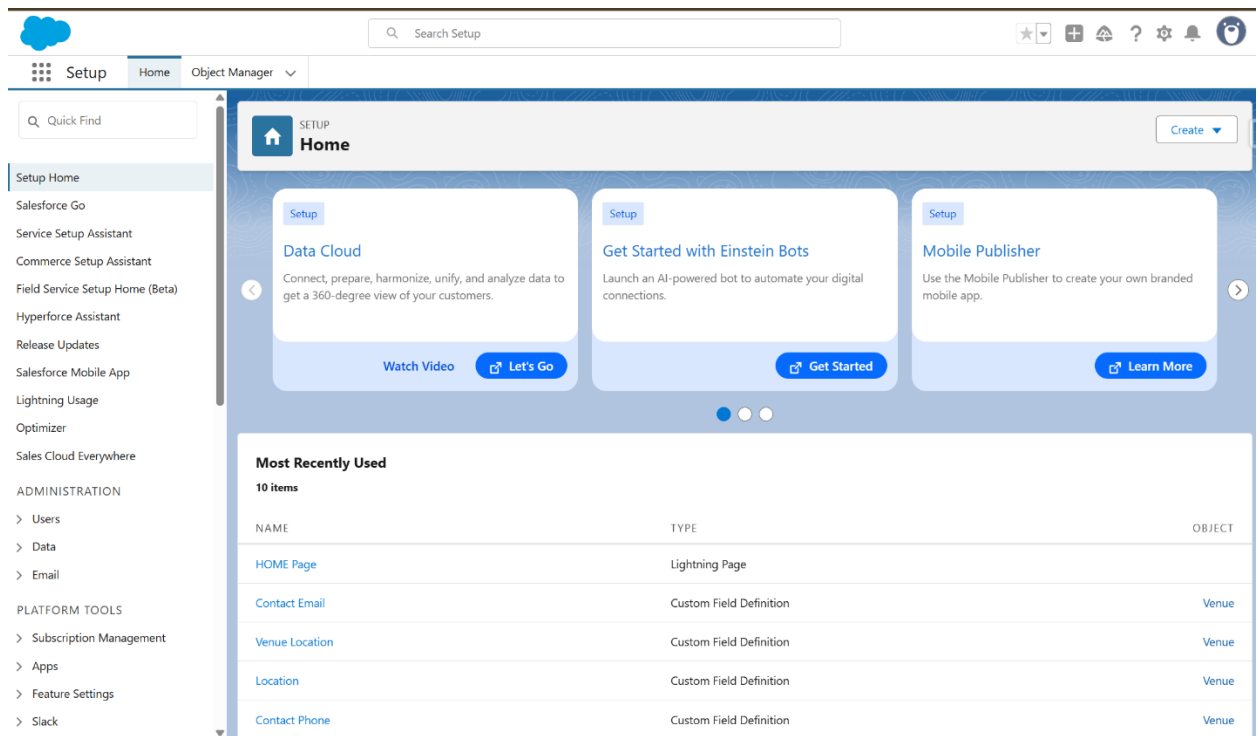
Steps to Create an Account

1. Go to [Salesforce Developer Signup](#).
2. Fill in the form: First Name, Last Name, Email, Role (Student), Company/College.
3. Username must be in email format (e.g., yourname@project.com).
4. Tick **“I agree to Terms & Conditions”** and click **Sign Me Up**.

Account Activation

1. Open your email inbox.
2. Click the **Verify Account / Activate** link in Salesforce’s activation email.
3. Set a password and security question.
4. Login at [Salesforce Login](#).

5. You'll be redirected to your Salesforce Setup page.



2. Salesforce Objects

Objects are tables that store and organize data in Salesforce.

- **Standard Objects:** Predefined by Salesforce (e.g., Account, Contact).
- **Custom Objects:** Created to meet specific business requirements.

Custom Objects Created

Object Name	Record Name	Data Type	Purpose
Venue	Venue Name	Text	Store venue info
Drop-Off Point	Drop-Off Point Name	Text	Store drop-off locations
Task	Subject	Text	Manage food delivery tasks
Volunteer	Volunteer Name	Text	Track volunteer info
Execution Details	Execution ID	Auto Number	Track execution of deliveries

The screenshot shows the 'New Custom Object' setup page in Salesforce. The page is titled 'New Custom Object' and contains various configuration fields and sections.

Labels and Plurals:

- Label:** Example: Account
- Plural Label:** Example: Accounts
- Starts with vowel sound:** ☐

Object Name: Example: Account

Description: (Text area)

Context Name: (Dropdown menu, currently showing 'None')

Enter Record Name Label and Format:

- Record Name:** Example: Account Name
- Date Type:** Text (Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.)

Optional Features:

- ☐ Allow Reports
- ☐ Allow Activities
- ☐ Track Field History
- ☐ Allow in Chatter Groups
- ☐ Enable Lightning

Object Classification:

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more](#)

- ☒ Allow Sharing
- ☒ Allow Bulk API Access
- ☒ Allow Streaming API Access

Deployment Status:

- ☐ In Development
- ☒ Deployed

Search Status:

When this setting is enabled, your users can find records of this object type when they search. [Learn more](#)

- ☐ Allow Search

Object Creation Options (Available only when custom object is first created)

- ☐ Add Notes and Attachments related list to default page layout
- ☐ Launch New Custom Tab Wizard after saving this custom object

Buttons at the bottom: Save, Save & New, Cancel.

3. Tabs

Tabs provide UI access to objects and their records.

Steps to Create a Custom Tab

1. Go to Setup → Quick Find → **Tabs** → Custom Object Tabs → **New**.
2. Select Object (e.g., Venue), choose **Tab Style**, optionally add a description.
3. Assign to Profiles (keep default).
4. Add to Custom Apps → Uncheck **Include Tab**, ensure **Append tab to users' personal customizations** checked.
5. Save.

Repeat for: Drop-Off Point, Task, Volunteer, Execution Details.

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with 'Tabs' entered. Below it, the 'User Interface' section is expanded, showing 'Rename Tabs and Labels' and 'Tabs' (which is selected). The main content area is titled 'Custom Tabs' and includes a 'Help for this Page' link. It contains a descriptive paragraph about custom tabs and four sections: 'Custom Object Tabs', 'Web Tabs', 'Visualforce Tabs', and 'Lightning Component Tabs'. Each section has a 'New' button and a 'What is This?' link. The 'Custom Object Tabs' section contains a table with five rows of existing tabs.

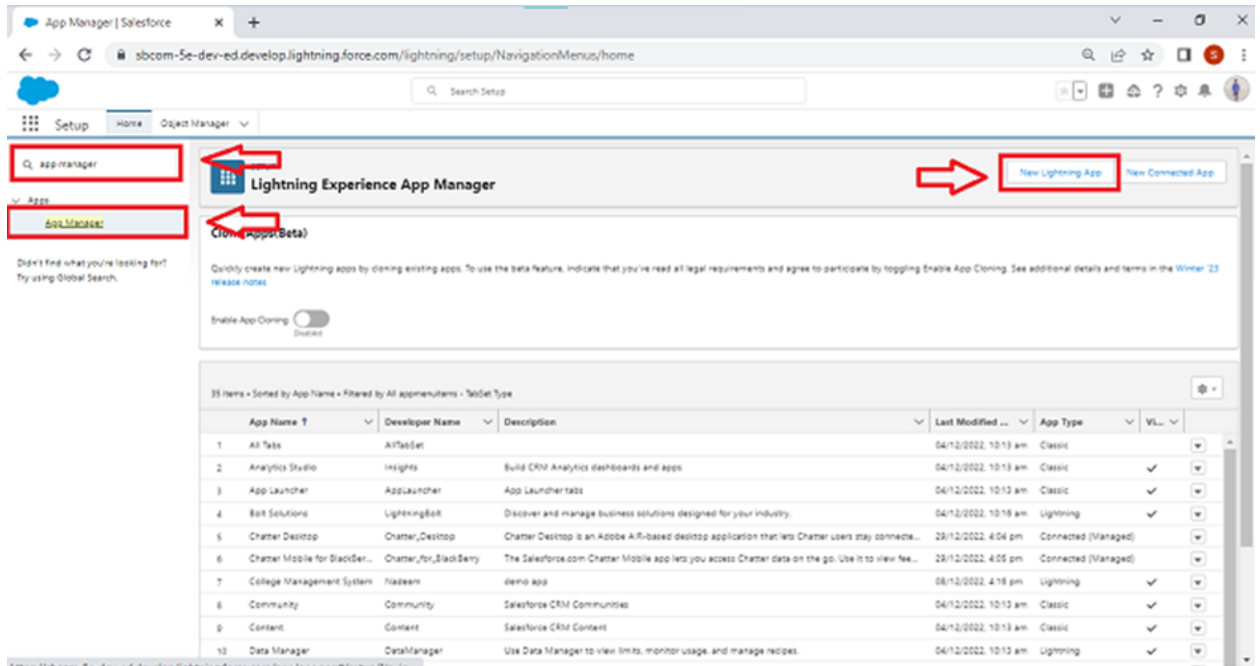
Action	Label	Tab Style	Description
Edit Del	Drop-Off Points	Hot Air Balloon	
Edit Del	Execution Details	Laptop	
Edit Del	Tasks	Boat	
Edit Del	Venues	Alarm clock	
Edit Del	Volunteers	Cup	

4. Lightning App

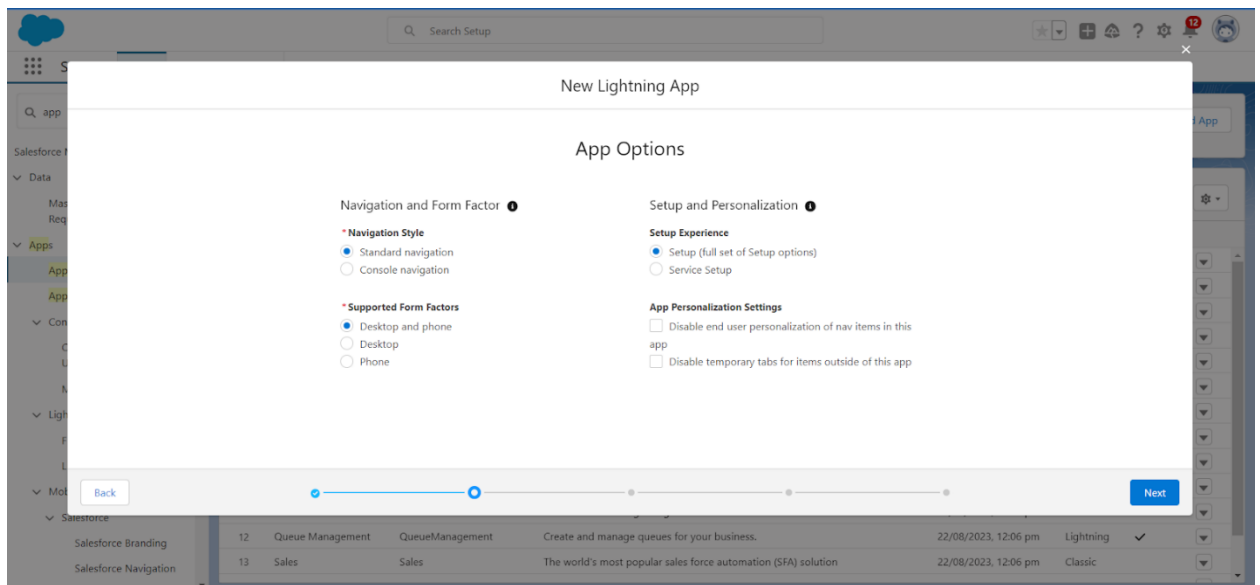
The Lightning App provides navigation for your objects and features.

Steps to Create

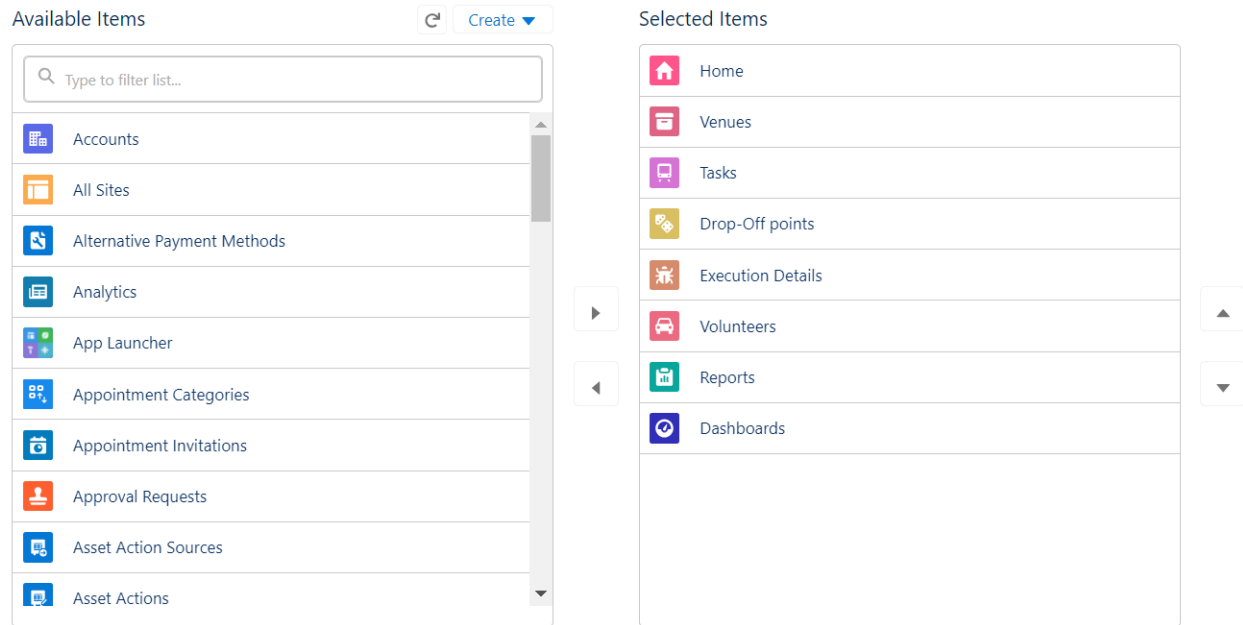
1. Setup → Quick Find → **App Manager** → **New Lightning App**.
2. Set App Name (e.g., FoodConnect), logo, color, navigation style (Standard Navigation).



3. Add Utility Bar items (optional).
4. Add Navigation Items: Home, Reports, and custom object tabs.



5. Assign User Profiles → Save & Finish.



5. Fields & Relationships

Fields store specific data for each object.

Relationships link objects together.

Relationship Examples

Object	Field Type	Related Object	Purpose
Volunteer	Master-Detail	Drop-Off Point	Assign volunteer to drop-off point
Execution Details	Master-Detail	Volunteer	Track execution per volunteer
Execution Details	Master-Detail	Task	Track execution per task
Drop-Off Point	Lookup	Venue	Link drop-off to venue
Task	Lookup	Venue	Link task to venue
Task	Lookup	Drop-Off Point	Link task to drop-off point

Field Examples

- **Venue Object:** Contact Email, Contact Phone, Location (Geolocation), Venue Location (Long Text)

- **Drop-Off Point Object:** Location 2 (Geolocation), Distance Calculation (Formula), State (Picklist)
- **Task Object:** Task ID, Date, Food Category (Multi-Select), Number of People Served, Name of Person, Phone, Rating, Feedback
- **Volunteer Object:** Volunteer ID, Gender, Available On, Age, Email, Contact Number, Address, Date of Birth
- **Execution Details Object:** Execution ID

[Optional Image Placeholder for Fields Screenshot]

6. Flow

A **Flow** automates record creation and updates in Salesforce.

Example: Create a Venue Record

1. Setup → Quick Find → **Flows** → New Flow → Screen Flow → Create.
2. Add Screen Components:
 - Venue Name (Text)
 - Contact Email (Email)
 - Contact Phone (Phone)
 - Venue Location (Text)
 - Latitude & Longitude (Number)
3. Add **Create Records** element → Map fields to Venue object.
4. Connect Start → Screen → Create → End.
5. Save & Activate → Test → Add to Lightning Page.

[Optional Image Placeholder for Flow Screenshot]

7. Trigger

Triggers automatically execute Apex code on record changes.

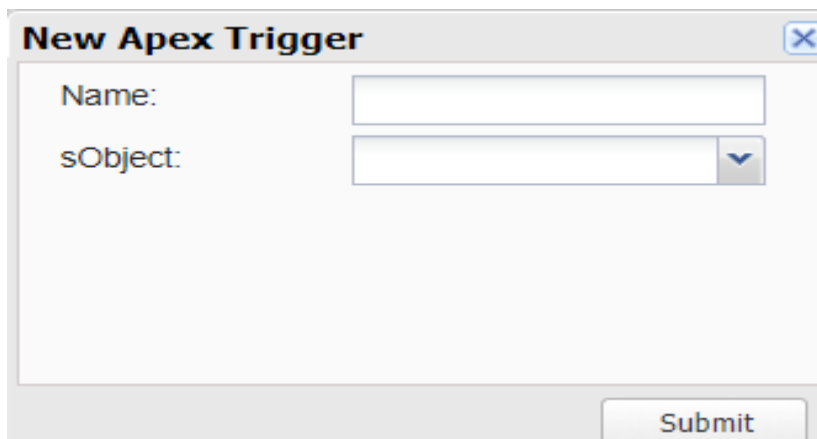
Example: Drop-Off Point Trigger

```

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

```

- Trigger runs **before insert**.
- Automatically calculates Distance field based on geolocation.



8. Profiles & Users

Profiles

- Clone **Standard Platform User** → Name: **NGOs Profile**.
- Used to assign access and permissions for NGO users.

User Creation Example

Name	Username	Profile	Email
Iksha Foundation	ikshafoundation@sb.com	NGOs Profile	example@gmail.com
Helping Hands	helpinghands@sb.com	NGOs Profile	example@gmail.com
GreenEarth	greeneearth@sb.com	NGOs Profile	example@gmail.com

General Information	
First Name	Iksha Foundation
Last Name	Iksha_Foundation
Alias	iksh
Email	bhargavipaila1023@gmail.c
Username	ikshafoundation@sb.com
Nickname	User1711437164226559933 ⓘ
Title	
Company	
Department	
Division	
Role	<None Specified> ▼
User License	Salesforce Platform ▼
Profile	NGOs Profile ⓘ
Active	<input checked="" type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>

9. Public Groups

Public Groups enable easier sharing and access control.

Example

- Group: **Iksha** → Add users: Iksha Foundation, System Administrator.
- Group: **NSS** → Add relevant users.

New				
Action	Label ↑	Group Name	Created By	Created Date
Edit Del	Iksha	Iksha	Bhargavi_Paila	26/03/2024, 2:27 pm
Edit Del	NSS	NSS	Bhargavi_Paila	26/03/2024, 2:27 pm
Edit Del	Street_Cause	Street_Cause	Bhargavi_Paila	26/03/2024, 2:26 pm

10. Dashboards & Reports

Dashboards in Salesforce provide a visual representation of key metrics and help NGOs, volunteers, and administrators monitor food donations, deliveries, and beneficiaries served in real-time.

FoodConnect Dashboard

The FoodConnect dashboard tracks and displays the following information:

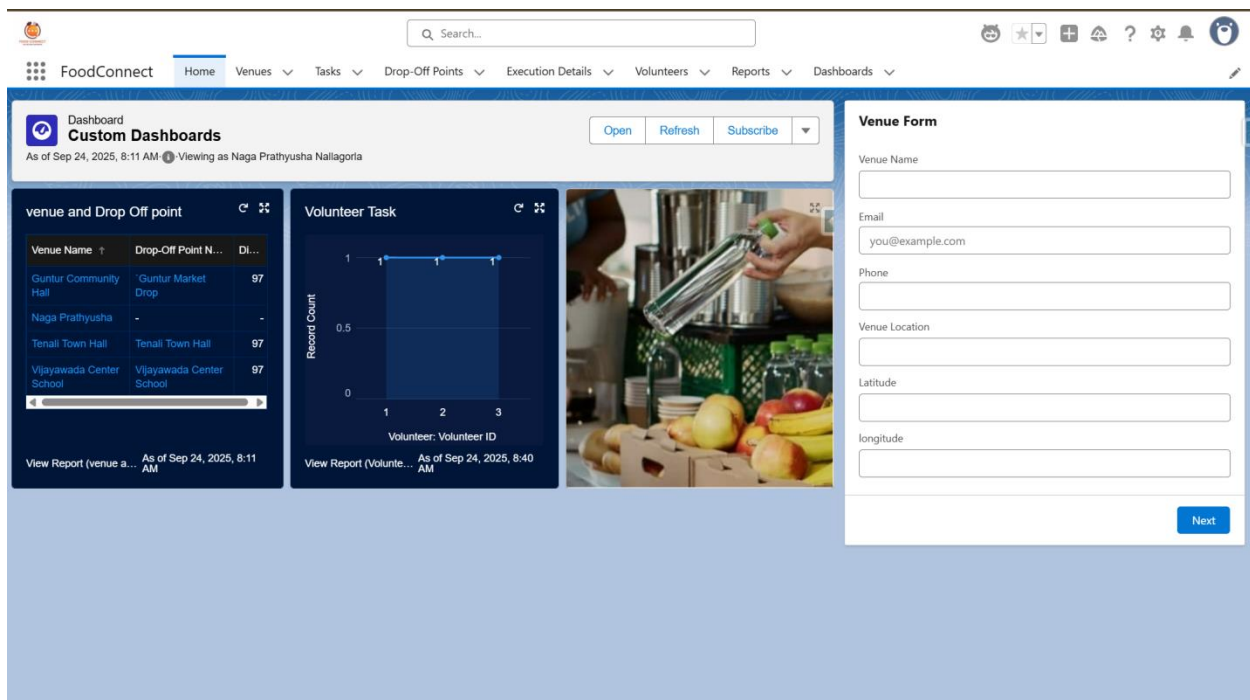
Key Metrics & Components:

- Total Meals Donated: Displays the total number of meals received from donors.
- Total Meals Delivered: Shows the number of meals successfully delivered to beneficiaries.
- Active Volunteers: Count of volunteers currently available for assignments.
- Pending Tasks: Number of delivery tasks yet to be completed.

- Beneficiaries Served: Total number of people who have received meals.
- Distance Analytics: Visualizes average distance between venues and drop-off points for efficient delivery planning.
- Food Category Breakdown: Pie chart showing distribution of Veg, Non-Veg, Salad, and Snacks donations.

Benefits

- Real-Time Monitoring: NGOs can track food supply and delivery status instantly.
- Improved Decision-Making: Helps allocate volunteers and resources efficiently.
- Performance Tracking: Evaluate volunteer participation and task completion.
- Reduced Food Wastage: Identifies unutilized surplus food quickly.



11. Conclusion

The Salesforce CRM system for **supplying leftover food to the poor** ensures:

- Efficient food collection and distribution
- Reduced food wastage
- Streamlined volunteer and NGO coordination
- Real-time dashboards and reporting for better decision-making

This documentation serves as a **step-by-step guide** for Salesforce setup, automation, and deployment.