



**FoodConnect -
To Supply Left Over Food To Poor**

Project Overview :

Food Connect is a platform built on Salesforce that helps collect and distribute leftover food from donors like restaurants, events, and households to communities in need. By using Salesforce's powerful CRM tools, Food Connect manages donors, tracks food availability, and coordinates logistics for food delivery. The platform automates various workflows to ensure timely communication and efficient supply chain management.

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1. Introduction :

Food Connect tackles food waste and helps those in need. It uses Salesforce to manage donors, track food inventory, and coordinate deliveries. By harnessing Salesforce's CRM, automation, and analytics, Food Connect makes it easy for food donors, volunteers, and distribution networks to work together seamlessly.

2. Project Objectives :

- Efficiently distribute leftover food to charities and shelters.
- Automate notifications, pickups, and deliveries to streamline the process.
- Track inventory and supply chain in real-time for better management.
- Enhance community outreach and reporting efforts.

3. Key Features :

- **Food Pickup and Distribution Tracking:** Automatically request food pickups and make sure it gets delivered to shelters.
- **Inventory Management:** Keep an eye on food availability in real-time to ensure it's efficiently allocated based on demand.
- **Reporting and Analytics:** Generate reports and dashboards on food distribution, donor contributions, and recipients.
- **Mobile Access:** Enable volunteers and coordinators to access the platform on their mobile devices using Salesforce Mobile.

4. Salesforce Developer Setup And WorkFlow :

Creating Developer Account Creating a developer org in salesforce

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the following details :

Build enterprise-quality apps fast to bring your ideas to life

- Build apps fast with drag and drop tools
- Customize your data model with clicks
- Go further with Apex code
- Integrate with anything using powerful APIs
- Stay protected with enterprise-grade security
- Customize UI with clicks or any leading-edge web framework

Sign up for your Salesforce Developer Edition
A full-featured copy of the Platform, for free

Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.

First Name* Last Name*

Email*

Role*

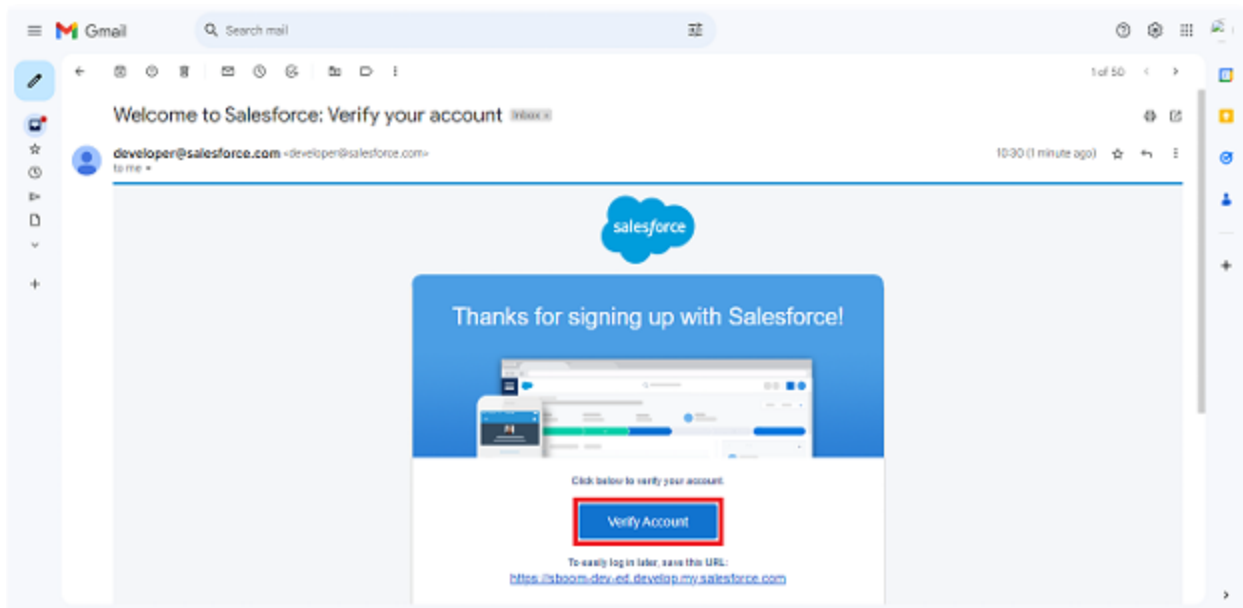
Company*

1. First name & Last name
2. Email
3. Role : Developer
4. Company : College or Company Name
5. County : India
6. Postal Code : pin code
7. Username: should be a combination of your name and company

5. System Architecture:

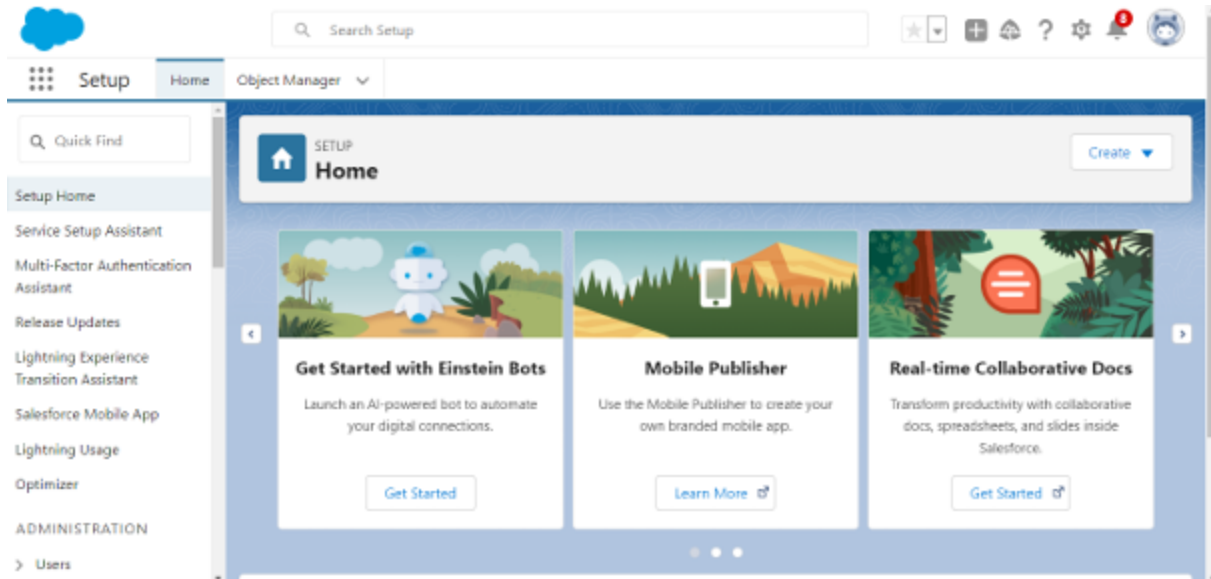
a)Account Activation

1. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.



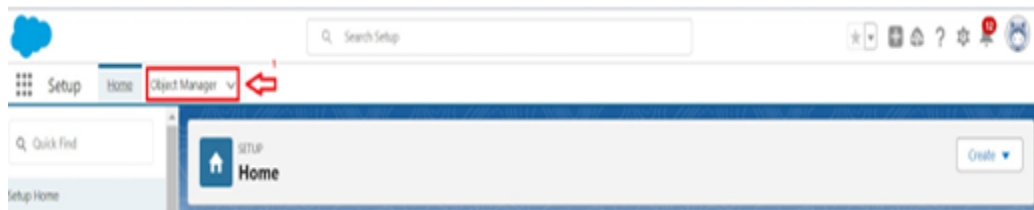
This screenshot displays the 'Change Your Password' form. At the top, it says 'Change Your Password'. Below this, it prompts the user to 'Enter a new password for lead@sb.oom.' and lists requirements: 'Make sure to include at least: 8 characters, 1 letter, 1 number'. These requirements are each preceded by a green checkmark. The form contains several input fields: 'New Password' (with a 'Good' status indicator), 'Confirm New Password' (with a 'Match' status indicator), 'Security Question' (a dropdown menu currently showing 'In what city were you born?'), and 'Answer' (containing the text 'asdfghjkl'). A blue 'Change Password' button is at the bottom of the form, and the entire form area is enclosed in a red rectangular border.

2. Click on Verify Account
3. Give a password and answer a security question and click on change password.
4. Then you will redirect to your salesforce setup page



Creating Objects

To Navigate to Setup page:



To create an object:

1. From the setup page > Click on Object Manager > Click on Create > Click on Custom Object



2. On Custom object defining page : Enter the label name, plural label name, click on Allow reports, Allow search.

Custom Object Definition Edit [Save] [Save & New] [Cancel]

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label: Example: Account

Plural Label: Example: Accounts

Starts with vowel sound: ☐

The Object Name is used when referencing the object via the API.

Object Name: Example: Account

Description:

Context-Sensitive Help Setting: ☒ Open the standard Salesforce.com Help & Training window
☐ Open a window using a Visualforce page

Content Name:

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name: Example: Account Name

Data Type:

Optional Features

☐ Allow Reports 4
☐ Allow Activities
☐ Track Field History

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 1

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

[Save] [Save & New] [Cancel] 2

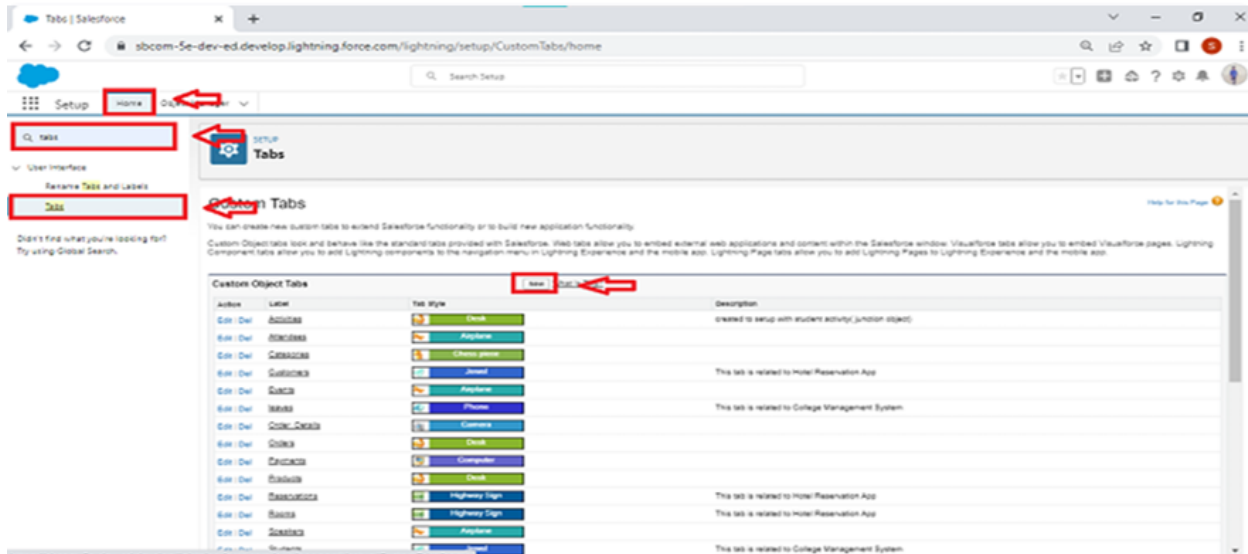
3. Click on Save

Here we create 4 objects in the projects that venue object, drop-off point object, task object, volunteer object, execution details object. As the same way as above mention in the screenshots you have to follow the same process for every object that you made.

b)Creating a Custom Tab

To create a Tab: (Venue)

1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)

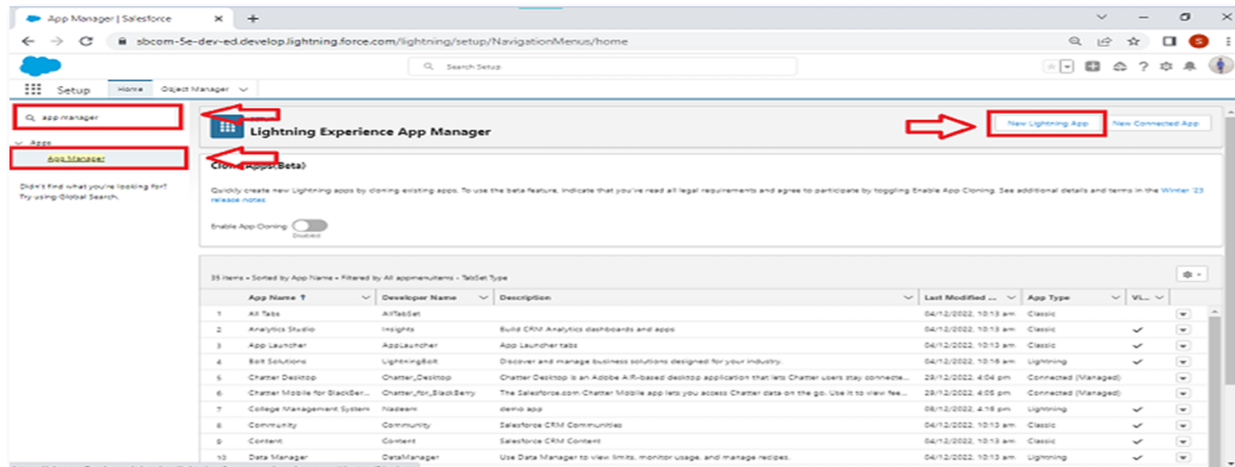


2. Select Object(Venue) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
3. Make sure that the Append tab to users' existing personal customizations is checked.
4. Click Save.

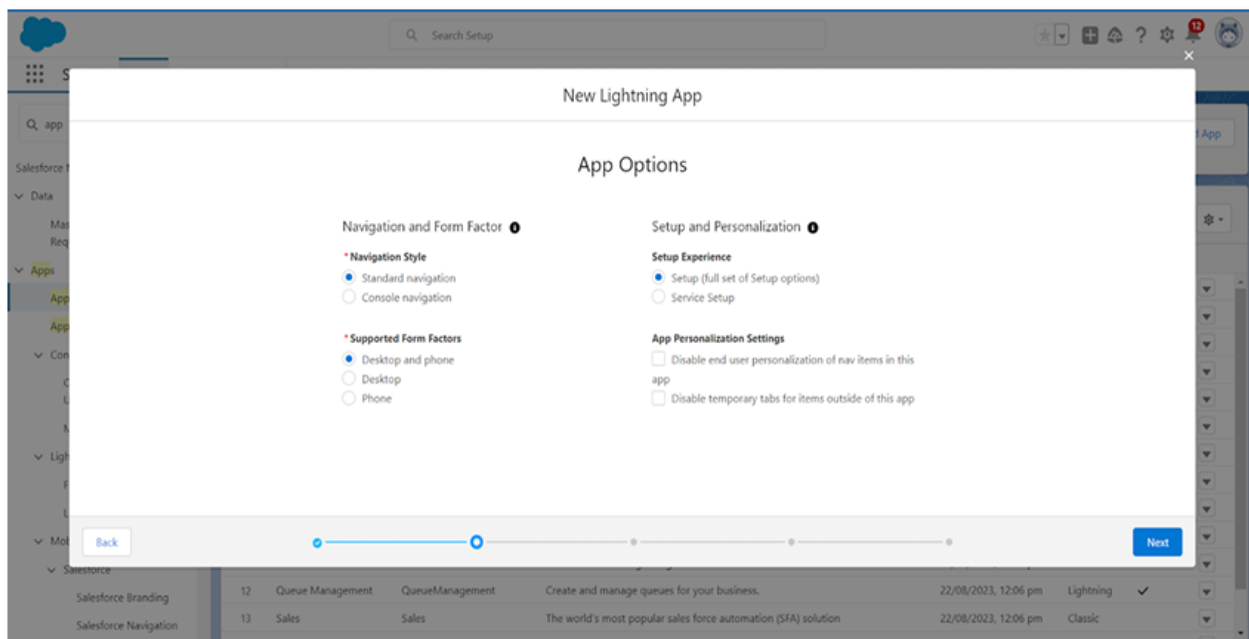
c)Create a Lightning App

To create a lightning app page:

1. Go to setup page >> search "app manager" in quick find >> select "app manager" >> click on New lightning App



2. Fill the app name in app details and branding as follow
 App Name : FoodConnect
 Developer Name : This will auto populated
 Image : optional (if you want to give any image you can otherwise not mandatory)
 Primary color hex value : keep this default.
3. Then click Next >> (App option page) Set Navigation Style as Standard Navigation >> Next.



4. (Utility Items) keep it as default >> Next.

5. To Add Navigation Items: Search for the item in the (Home, Venue, Drop-Off Point, Task, Volunteer, Execution Details, Reports) from the search bar and move it using the arrow button >> Next >> Next.

6. To Add User Profiles

Search profiles (System administrator) in the search bar >> click on the arrow button >> save & finish.

Output of the Lightning app:

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

* App Name ⓘ

FoodConnect

* Developer Name ⓘ


FoodConnect

Description ⓘ

Enter a description...

App Branding

Image ⓘ



Clear

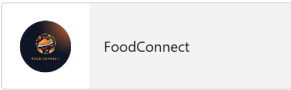
Primary Color Hex Value ⓘ

#0070D2

Org Theme Options

☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview



App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Q Type to filter list...

Accounts

All Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Appointment Invitations

Approval Requests

Asset Action Sources

Asset Actions

Asset State Periods

Assets

Selected Items

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

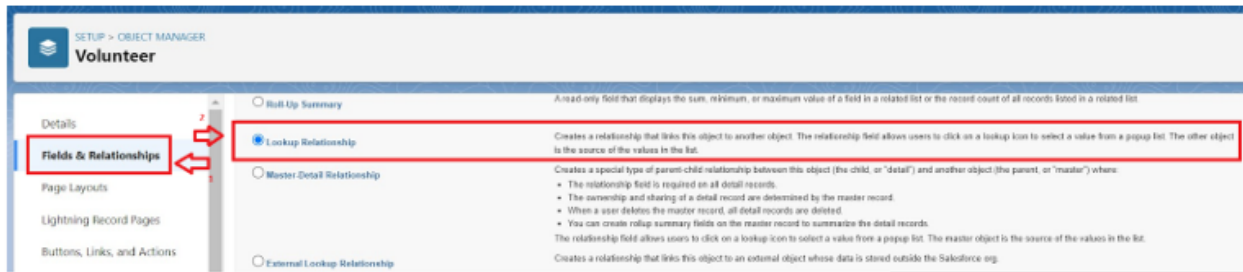
Reports

Dashboards

d)Creation of Relationship fields in objects:-

Creation of Lookup Relationship Field on Volunteer Object

1. Go to setup >> click on Object Manager >> type object name(Volunteer) in the search bar >> click on the object



2. Now click on "Fields & Relationships" >> New
3. Select Master Detail relationship
4. Select the related object "Drop-Off point" and click next.



5. Field Name : Drop_Off_point
6. Field label : Auto generated
7. Next >> Next >> Save

Similarly create the other fields and relationship as well:

These include:-

1. Venue
2. Sponsored By
3. Drop-Off point

Creation of fields for the Venue object

1. Go to setup>> click on Object Manager >> type object name(Venue) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Data type as a "Email" and Click on Next
4. Fill the Above as following:
Field Label : Contact Email
Field Name : Contact Email
Click on required check box
5. Click on Next >> Next >> Save and new.

Similarly create the other fields and relationship as well:

These include:-

1. Contact Phone
2. Location
3. Venue Location

Creation of fields for the Drop-Off point object

1. Go to setup >> click on Object Manager >> type object name(Drop-Off point) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Data type as a "Geolocation" and Click on Next
4. Fill the Above as following:
Field Label : Location 2
Field Name : gets auto generated
Description : Enter the Geolocation of the Drop off Point
Geolocation Options : select Decimal
Decimal Places : 4
5. Click on Next >> Next >> Save and new.

Similarly create the other fields and relationship as well:

These include:-

1. distance calculation
2. State
3. Distance

Creation of fields for the Task object

1. Go to setup>> click on Object Manager >> type object name(Task) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Data type as a "Auto Number" and Click on Next
4. Fill the Above as following:
Field Label : Task ID
Display Format : TASK-{0}
Starting Number : 1
Field Name : gets auto generated
Click on required check box
5. Click on Next >> Next >> Save and new.

Similarly create the other fields and relationship as well:

These include:-

1. Date
2. Food Category
3. Number of People Served
4. Name of the Person
5. Phone
6. Rating
7. Feedback

Creation of fields for the Volunteer object

1. Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Data type as a "Auto Number" and Click on Next
4. Fill the Above as following:
Field Label : Volunteer ID
Field Name : gets auto generated
Click on required check box
5. Click on Next >> Next >> Save and new.

Similarly create the other fields and relationship as well:

These include:-

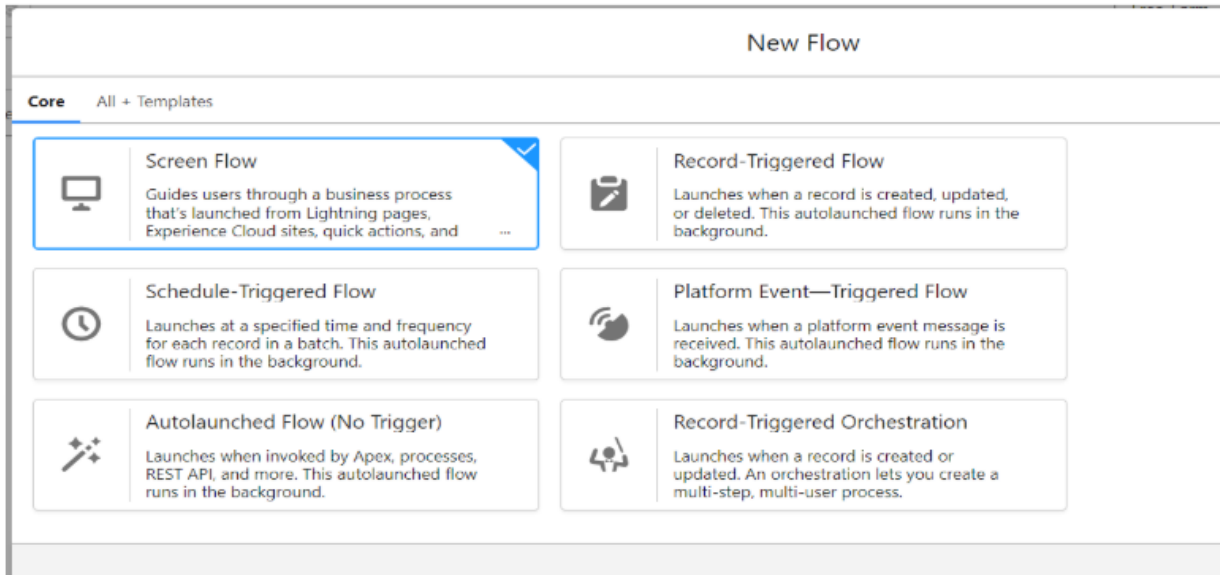
1. Gender
2. Available On
3. Age
4. Email
5. Contact Number
6. Address
7. Date of Birth

Creation of fields for the Execution Details object

1. .Go to setup >> click on Object Manager >> type object name(Volunteer) in search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Data type as a "Auto Number" and Click on Next
4. Fill the Above as following:
 - Field Label : Execution ID
 - Field Name : gets auto generated
 - Click on required check box
5. Click on Next >> Next >> Save and new.

e)Create Flow

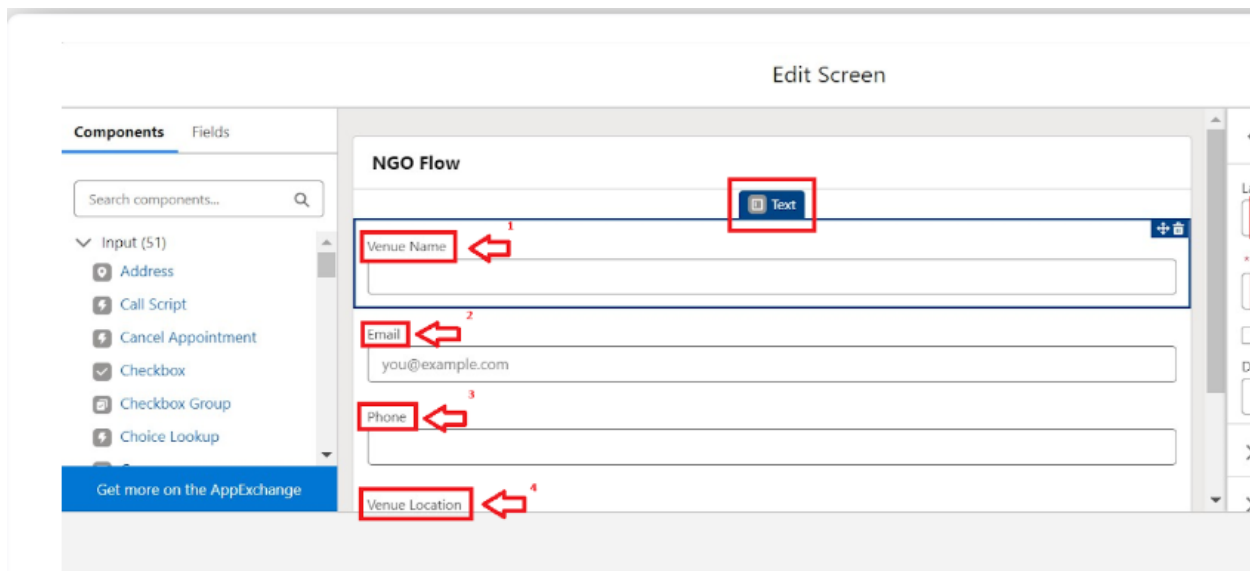
1. Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.
2. Select the Screen flow. Click on create.



3. Click on the '+' icon in between start and end, and click on screen element.
4. Under the Screen Properties:
Label : Venue Details
API Name : Venue_Details
5. Now lets add components in this flow. Click on Text Component and name it as:
Label : Venue Name
API Name : Venue_Name
6. Click on Email Component and name it as:
Label : Email
API Name : Contact_Email
7. Click on Phone Component and name it as:
Label : Phone
API Name : Contact_Phone
8. Click on Text Component and name it as:
Label : Venue Location
API Name : Venue_Location
9. Click on Number Component and name it as:
Label : Latitude
API Name : Latitude
10. Click on Number Component and name it as:

Label : longitude
API Name : longitude
Label : longitude
API Name : longitude

11. Next click on Done. This would like below



12. Click on the '+' icon in between Venue details and end, and click on create record element.

13. Now label it as:

Label : Create Venue Record
API Name : Create_Venue_Record
How Many Records to Create : One
How to Set the Record Fields : Use separate resources, and literal values
Object : Venue
Set Field Values for the Venue : Click on 'Add Field' 5 times
Field : Value = Contact_Email__c : {!Contact_Email.value}
Field : Value = Contact_Phone__c : {!Contact_Phone.value}
Field : Value = Name : {!Venue_Name}
Field : Value = Venue_Location__c : {!location}
Field : Value = Location__Latitude__s : {!latitude}
Field : Value = Location__Longitude__s : {!longitude}

This would look like:

Create a Record of This Object

* Object
Venue

Set Field Values for the Venue

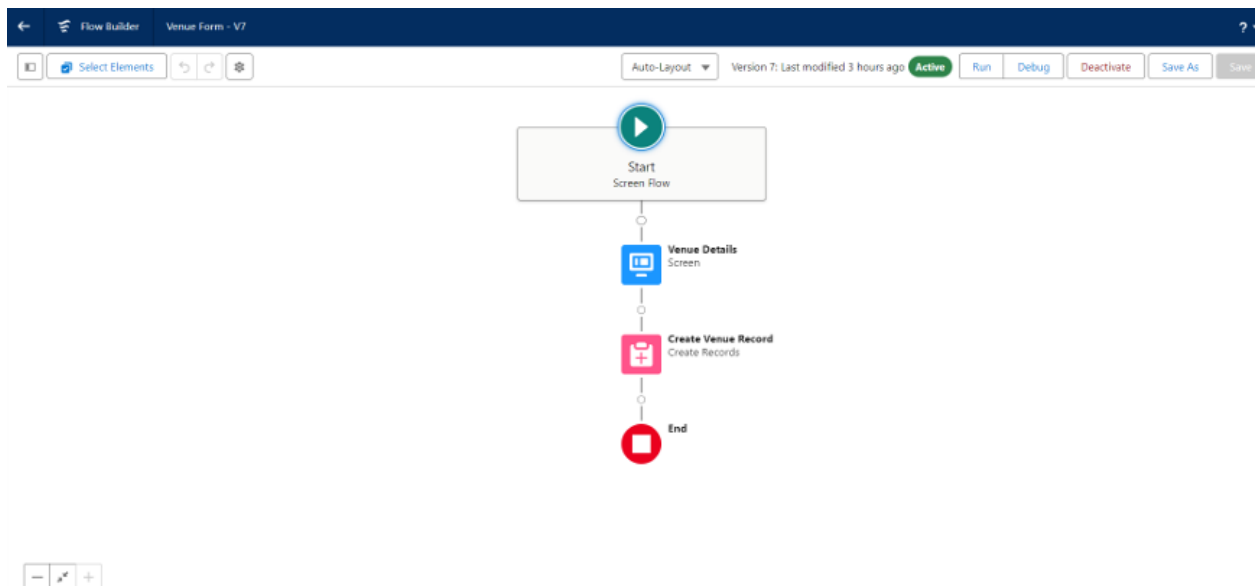
Field Contact_Email__c	←	Value A Contact_Email > Value X	🗑️
Field Contact_Phone__c	←	Value A Contact_Phone > Value X	🗑️
Field Name	←	Value A Venue_Name X	🗑️
Field Venue_Location__c	←	Value A location X	🗑️

15. Click on Save as:

Flow Label : Venue Form

Flow API Name : Venue_Form

Final result:-



Flow Builder

Venue Form - V7

?

Select Elements

Auto-Layout

Version 7: Last modified 3 hours ago

Active

Run

Debug

Deactivate

Save As

Save

Components

Fields

Search components...

Input (53)

Action Button (Beta)

Add Attendees

Address

Call Script

Cancel Appointment

Checkbox

Checkbox Group

Get more on the AppExchange

Venue Form

Venue Name

Email

you@example.com

Phone

Venue Location

Screen Properties

*Label

Venue Details

*API Name

Venue_Details

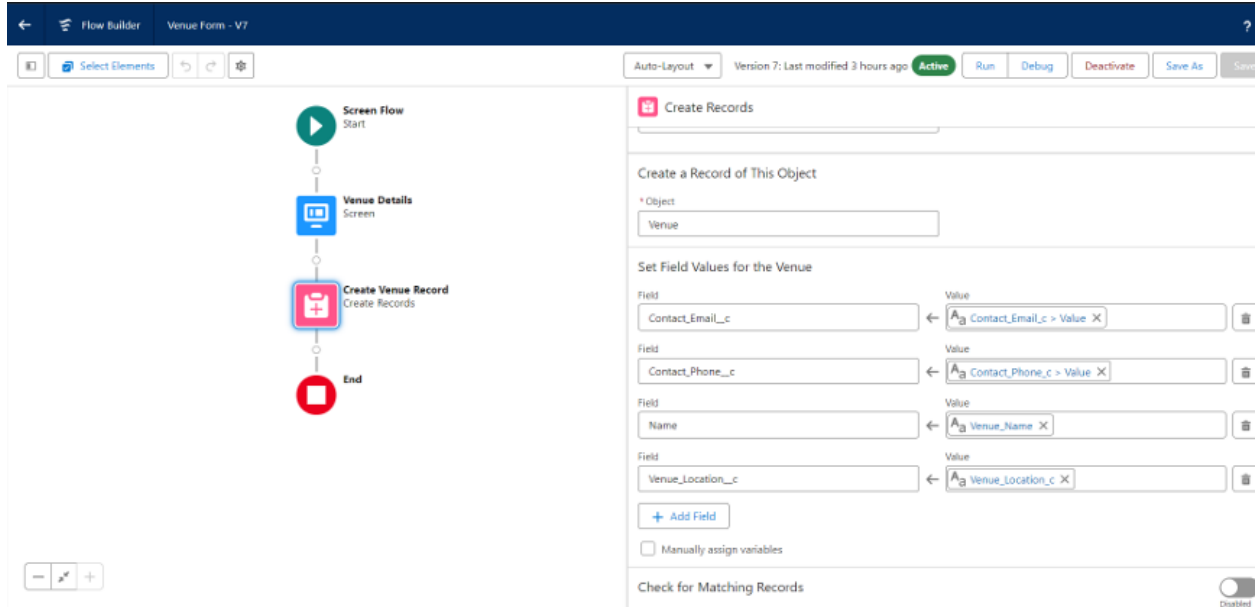
Description

> Configure Header

> Configure Footer

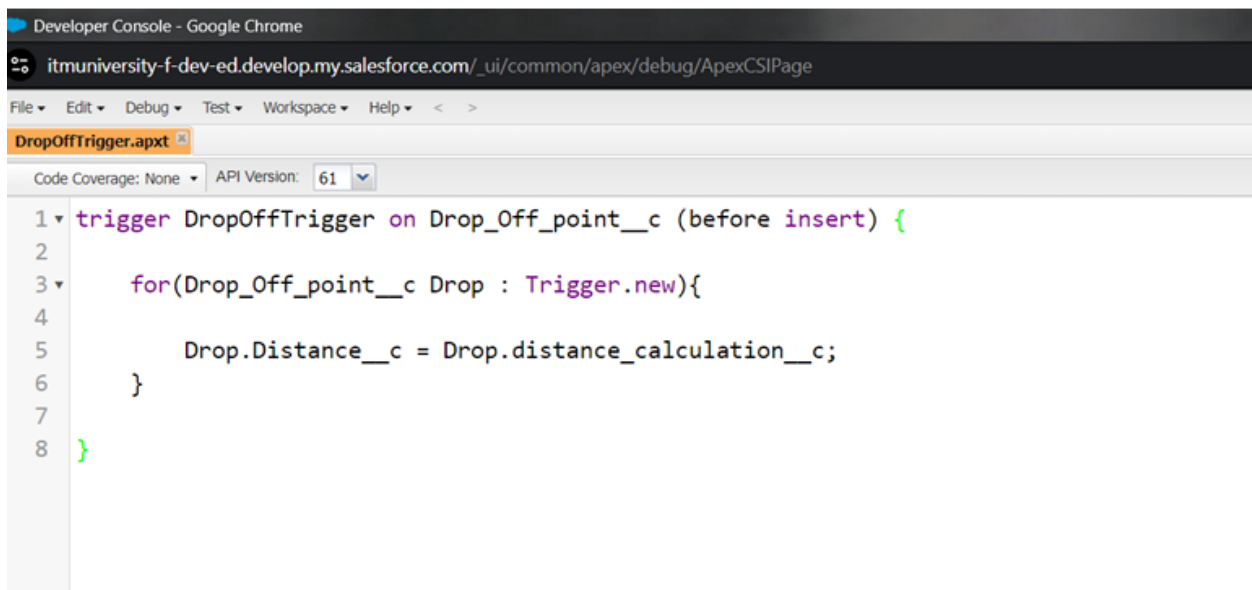
Cancel

Done



f)Create a Trigger

1. Click on developer console and you will be navigated to a new console window.
2. Click on the File menu in the toolbar, and click on new >> Trigger.
3. Enter the trigger name and the object to be triggered.
4. Enter Name : DropOffTrigger
Object: Drop-Off Point
5. Click on Submit.

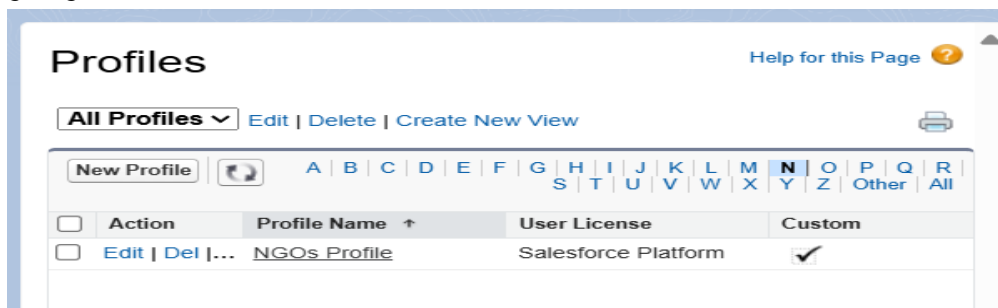


The screenshot shows the Salesforce Developer Console with the Apex code for the DropOffTrigger. The code is as follows:

```
1 trigger DropOffTrigger on Drop_Off_point__c (before insert) {  
2  
3     for(Drop_Off_point__c Drop : Trigger.new){  
4  
5         Drop.Distance__c = Drop.distance_calculation__c;  
6     }  
7  
8 }
```

g)Creation of Users and profile


Here we have to create a NGOs profile and under this profile we have to create users that are going to be the NGOs foundations



<input type="checkbox"/>	Edit Login	Iksha_Foundation Iksha Foundation	iksh	ikshafoundation@sb.com	✓	NGOs Profile
<input type="checkbox"/>	Edit Login	NSS NSS	nss	nss@sb.com	✓	NGOs Profile
<input type="checkbox"/>	Edit Login	Street_Cause Street Cause	sstre	streetcause@sb.com	✓	NGOs Profile

After creating 3 foundations it should look like this.

h)Creation of Public Group 1,2,3



SETUP
Public Groups

Public Groups

[Help for this Page](#)

A public group is a set of users. It can contain individual users, other groups, the users in a particular role or territory, or the users in a role or territory plus all of the users below that role or territory in the hierarchy.

View: All [Edit](#) | [Create New View](#)

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y
Z | Other **All**

New

Action	Label ↑	Group Name	Created By	Created Date
Edit Del	Iksha	Iksha	Jha, Aditya	13/12/2024, 12:48 pm
Edit Del	NSS	NSS	Jha, Aditya	13/12/2024, 12:48 pm
Edit Del	Street Cause	Street_Cause	Jha, Aditya	13/12/2024, 12:49 pm

i)Creation of Report

Creation of Report on Venue with DropOff with Volunteer

The screenshot shows the FoodConnect Reports interface. The top navigation bar includes Home, Venues, Tasks, Drop-Off Points, Execution Details, Volunteers, Reports, and Dashboards. The 'Reports' tab is active, and the report title is 'venue and Drop Off point' with a sub-title 'Venue with DropOff with Volunteer'. The interface is divided into three main sections: Outline, Filters, and the main report area. The Outline section on the left shows 'Groups' with 'GROUP ROWS' and 'Add group...' button, and 'Columns' with 'Add column...' button and a list of columns: 'Volunteer Name', 'Drop-Off Point Name', and '# Distance'. The main report area shows a message: 'Previewing a limited number of records. Run the report to see everything.' Below this, there are three columns: 'Volunteer Name', 'Drop-Off Point Name', and 'Distance'. A message states: 'No records returned in preview. Try running the report or editing report filters.' Below this message are three bullet points: '• Show All venues.', '• Set the Created Date filter to All Time.', and '• Edit other filters in the filter panel.'

Creation of Report on Volunteers with Execution Details and Tasks

The screenshot shows the FoodConnect Reports interface for a different report. The top navigation bar is the same. The 'Reports' tab is active, and the report title is 'Volunteer Task' with a sub-title 'Tasks with Execution Details and Volunteers'. The interface is divided into three main sections: Outline, Filters, and the main report area. The Outline section on the left shows 'Groups' with 'GROUP ROWS' and 'Add group...' button, and 'Columns' with 'Add column...' button and a list of columns: 'Volunteer: Volunteer ID', 'Volunteer: Volunteer Name', 'Task: Task Name', 'Execution Detail: Execution Detail Name', 'Task: Owner Name', 'Task: Created Date', and 'Rating'. The main report area shows a message: 'Previewing a limited number of records. Run the report to see everything.' Below this, there are seven columns: 'Volunteer: Volunteer ID', 'Volunteer: Volunteer Name', 'Task: Task Name', 'Execution Detail: Execution Detail Name', 'Task: Owner Name', 'Task: Created Date', and 'Rating'. A message states: 'No records returned in preview. Try running the report or editing report filters.' Below this message are two bullet points: '• Show All tasks.' and '• Edit other filters in the filter panel.'

j) Dashboards

FoodConnect

Home

Venues

Tasks

Drop-Off Points

Execution Details

Volunteers

Reports

Dashboards

Search...

★

+

🔒

?

⚙️

🔔

👤

Dashboard

Organization Details

Open

Refresh

Subscribe

As of 07-Jan-2025, 9:07 pm Viewing as Aditya Jha

Venue and Drop Off point

Venue Name	Drop-Off Point Name	Distance
Arya Foundations	Delhi	55.0000
Swaran Foundation	Goa	135.0000

View Report (Venue and Drop Off point)

Volunteer Task

Record Count

1

Volunteer: Volunteer ID

View Report (Volunteer Task)

1

Venue Form

Venue Name

Email

you@example.com

Phone

Venue Location

Latitude


Longitude

Next

k) Creation of sharing rules

Drop-Off Point Sharing Rules			
		<div>New Recalculate</div>	<div>Drop-Off Point Sharing Rules Help ?</div>
Action	Criteria	Shared With	Access Level
<div>Edit Del</div>	Drop-Off Point: Distance LESS THAN 15	<div>Group: Iksha</div>	Read Only
<div>Edit Del</div>	(Drop-Off Point: Distance GREATER THAN 15) AND (Drop-Off Point: Distance LESS OR EQUAL 30)	<div>Group: NSS</div>	Read Only
<div>Edit Del</div>	(Drop-Off Point: Distance GREATER THAN 30) AND (Drop-Off Point: Distance LESS OR EQUAL 50)	<div>Group: Street Cause</div>	Read Only

I)Creation of Home Page

 **SETUP**
Lightning App Builder

The Lightning App Builder provides an easy to use graphical interface for creating custom Lightning pages for Salesforce Lightning Experience and mobile app. Lightning pages are built using Lightning components—compact, configurable, and reusable elements that you can drag and drop into regions of the page in the Lightning App Builder.

View: All [Create New View](#)

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other **All**

Lightning Pages New

Action	Label ↑	Name	Namespace Prefix	Description	Type	Created
Edit Clone Del	HOME Page	HOME_Page			Home Page	AJL 14/ 12:

← Lightning App Builder Pages ▼ HOME Page ? Help

🔄 📄 🗑️

Desktop Shrink To View

Activation... Save

Components

▼ Standard (40)

Accordion

App Launcher

Assistant

Chatter Feed

Chatter Publisher

CRM Analytics Collection

CRM Analytics Dashboard

Dashboard

Data Mask Console Home Compo...

Einstein Next Best Action

Flow

Flow App Home cards

Generate Batch Documents

Inventory Lookup Component

Items to Approve

Key Deals

Dashboard Organization Details

Open Refresh Subscribe

Flow Components: Venue Form

This is a placeholder. Flows don't run in the canvas.

Venue and Drop Off point

Volunteer Task

Add Component(s) Here

Add Component(s) Here

Page

*Label

HOME Page

*API Name

HOME_Page

*Page Type

Home Page

Template

Standard Home Page Change

Description

6. OUTPUT SCREENSHOTS :

The screenshot displays the FoodConnect dashboard. At the top, there's a navigation bar with a search bar and various icons. Below it, the 'Organization Details' section shows the user's role as 'Aditya Jha' and the date '07-Jan-2025, 9:07 pm'. The main content area is divided into three panels: 'Venue and Drop Off point' with a table, 'Volunteer Task' with a chart, and a 'Venue Form' on the right.

Venue Name	Drop-Off Point Na...	Distance
Aryafoundations	Delhi	55.0000
Swaran Foundation	Goa	135.0000

The 'Volunteer Task' panel shows a line chart with a single data point at 1.0. The 'Venue Form' on the right includes fields for Venue Name, Email (you@example.com), Phone, Venue Location, Latitude, and Longitude, with a 'Next' button at the bottom.




//THE FINAL OUTPUT OF THE APP SHOULD LOOK LIKE THIS AFTER FOLLOWING ALL THE STEPS CORECTLY//




This screenshot shows the 'Tasks' section of the app. It features a 'Recently Viewed' header with a dropdown menu and a pin icon. Below the header, it indicates '2 items • Updated a few seconds ago'. The tasks are listed in a table with checkboxes and task names.

	<input type="checkbox"/> Task Name
1	<input type="checkbox"/> Supply leftover food
2	<input type="checkbox"/> FOOD Supply

This screenshot shows the 'Drop-Off Points' section of the app. It features a 'Recently Viewed' header with a dropdown menu and a pin icon. Below the header, it indicates '3 items • Updated a few seconds ago'. The points are listed in a table with checkboxes and point names.

	<input type="checkbox"/> Drop-Off Point Name
1	<input type="checkbox"/> Goa
2	<input type="checkbox"/> Delhi
3	<input type="checkbox"/> Hyderabad

<div>  Execution Details </div> <div> Recently Viewed <div>   </div> </div>	
1 item • Updated a few seconds ago	
	<input type="checkbox"/> Execution Detail Name
1	<input type="checkbox"/> Supply leftover food

<div>  Volunteers </div> <div> Recently Viewed <div>   </div> </div>	
1 item • Updated a few seconds ago	
	<input type="checkbox"/> Volunteer Name
1	<input type="checkbox"/> Rama

7. Video Demonstration :

Here is the GitHub link where all the documents related to the project will be available.

[AdityaJha2901/FoodConnect-to-supply-leftover-food-to-poor](https://github.com/AdityaJha2901/FoodConnect-to-supply-leftover-food-to-poor)

8. Conclusion:

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.

Food Connect aims to bridge the gap between surplus food and those in need by utilizing Salesforce to streamline and automate the process. The project showcases the flexibility of Salesforce's platform in handling non-profit workflows and creating real world impact through technology.