

Salesforce CRM Project Documentation:

FoodConnect

1. Project Overview

FoodConnect is a Salesforce-based CRM application designed for non-governmental organizations (NGOs) involved in food donation logistics. Its primary goal is to enhance the efficiency of food donation processes by providing a unified platform that connects donors (venues), receivers (drop-off points), volunteers, and tasks. The application integrates all aspects of food donation logistics into a single system, allowing NGOs to manage operations seamlessly and reduce communication gaps.

FoodConnect automates workflows, such as scheduling pickups and assigning volunteers, minimizing manual intervention and reducing errors. Utilizing geolocation fields, FoodConnect calculates distances between donors, drop-off points, and volunteers, optimizing routes for food pickups and deliveries. This ensures that food reaches its destination quickly and efficiently. The platform offers real-time tracking of donations, allowing NGOs to monitor each donation's status from pickup to delivery.

With robust record management capabilities, FoodConnect enables NGOs to maintain accurate records of donations, volunteers, and logistics, which is crucial for reporting and compliance. The application includes powerful reporting tools for analyzing operations and generating insights, facilitating informed decision-making. FoodConnect simplifies volunteer management by allowing NGOs to create and assign tasks, track volunteer hours, and communicate effectively. The platform prioritizes data security, protecting sensitive information with access controls based on user roles.

FoodConnect is a powerful tool that streamlines food donation logistics, enhances operational efficiency, and contributes to reducing food waste and alleviating hunger in communities. By leveraging technology, NGOs can better serve their communities and make a significant impact.

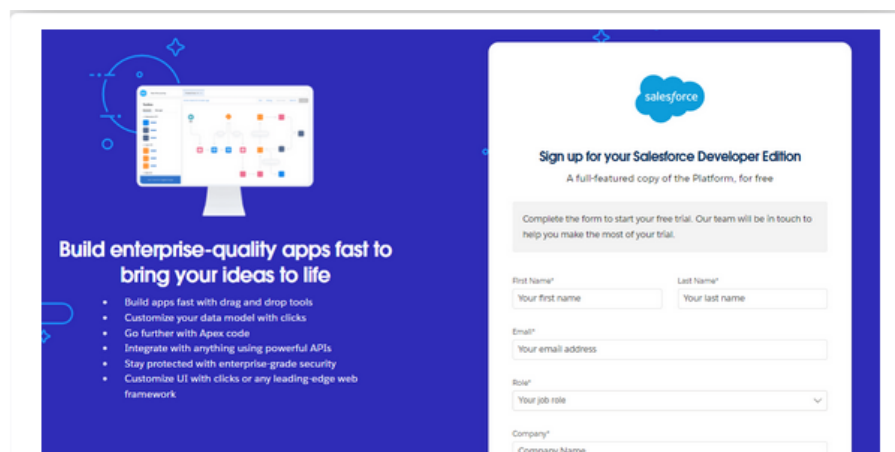
2. Project Objectives

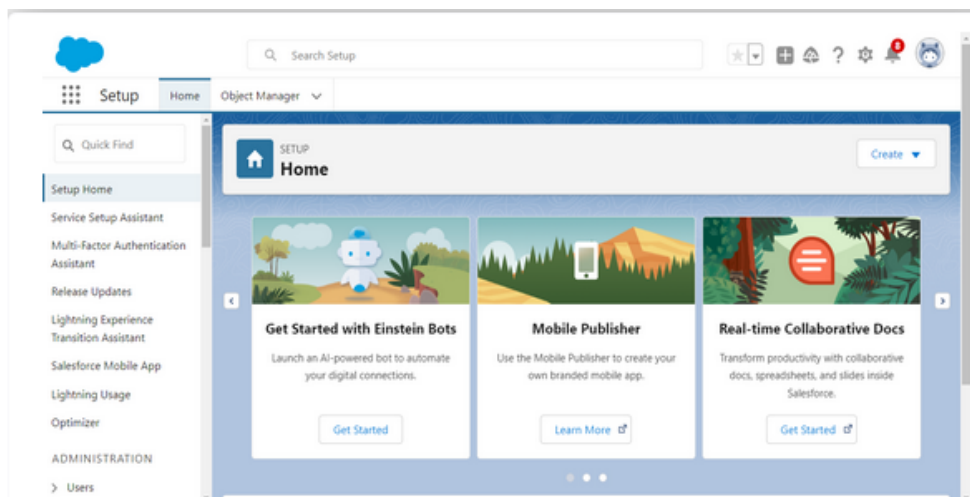
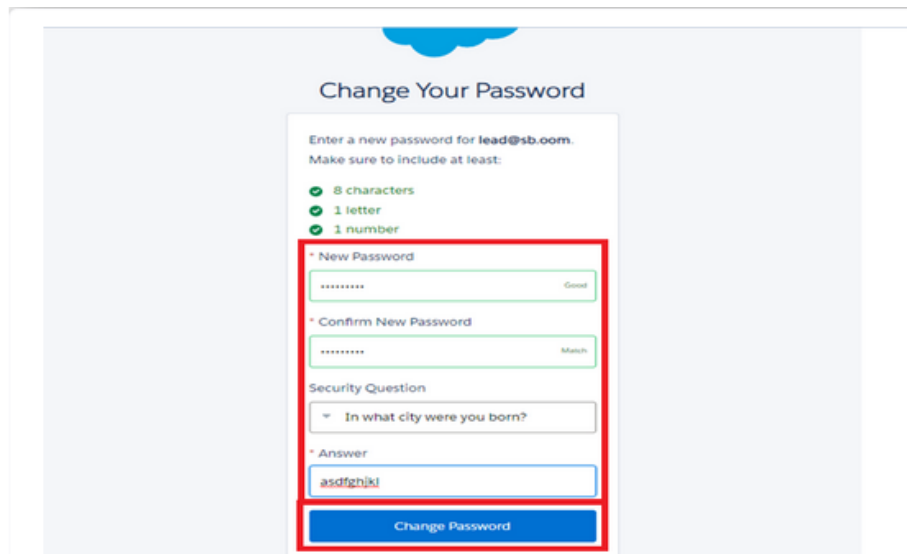
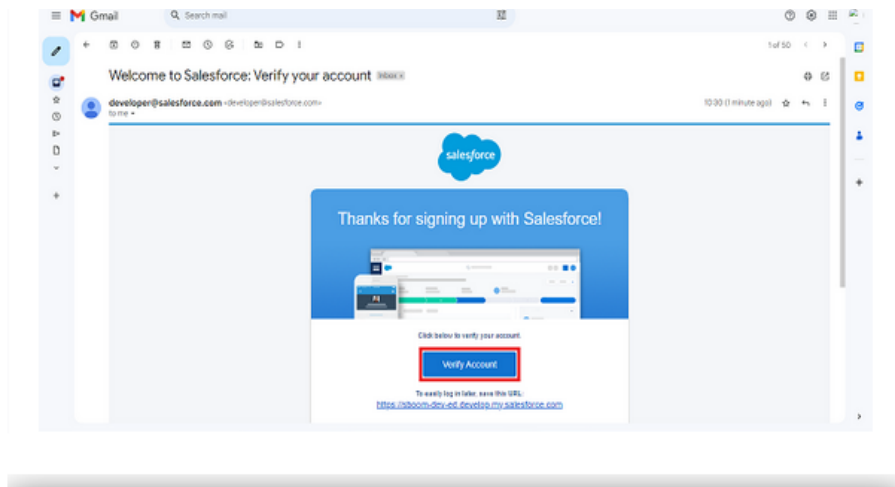
- Enable structured data management for food donation operations.
- Automate workflows like task creation, record updates, and reporting.
- Calculate and store distances between venue and drop-off point locations.
- Provide real-time dashboards and reports for NGO oversight.
- Secure data sharing among multiple user roles and NGO profiles using profiles and sharing rules.
- Build scalability for future integration of maps, chatbots, and AI modules.
- Enhance visibility and transparency across the NGO food distribution network.
- Make the platform easy to navigate for all users.
- Allow users to access the platform on their phones for real-time updates.
- Include training materials to help new volunteers get started.
- Enable users to share their experiences to improve services.
- Monitor food stock at drop-off points to reduce waste.
- Set up reminders for tasks and important updates.

3. Requirement Analysis & Planning

3.1 Understanding Business Requirements

- NGOs needed an application to track food donor locations and available volunteers.
- Record logistics data, calculate travel distance, assign tasks efficiently.
- Automate the approval process for managing venue-drop assignments.





3.2 Defining Project Scope and Objectives

- Build 5 custom objects for venue, task, volunteers, drop-off point, and execution.
- Implement automation using Flow and Apex triggers.
- Create dashboards to visualize performance metrics.
- Secure object-level access based on user profile.

3.3 Data Model Design

- One-to-many relationships between Venues and Drop-Off Points, Tasks, and Volunteers.
- Master-detail relationship in Execution Details object with Task and Volunteer.
- Formula fields used for calculated values such as Distance.

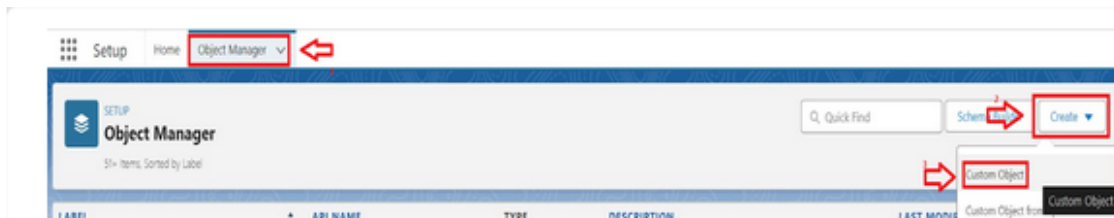
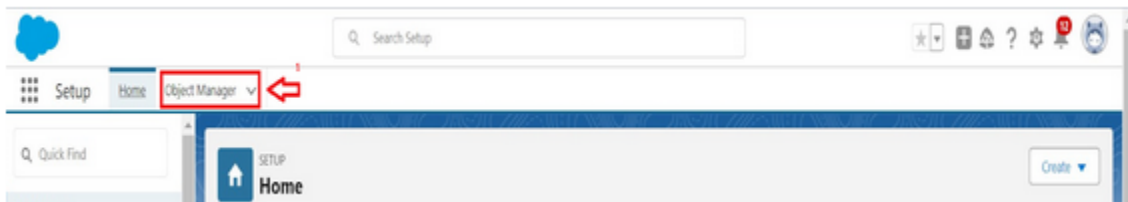
3.4 Security Model

- NGOs Profile cloned from Standard Platform User.
- Users assigned to public groups based on NGO affiliation.
- Role hierarchy not applied (sharing rules used for data visibility).
- Sharing rules define who can view Drop-Off Points based on distance.

4. Salesforce Development - Backend & Configurations

4.1 Environment Setup

- Developer account created from Salesforce developer portal.
- Custom app "FoodConnect" created using App Manager.



4.2 Custom Objects

- **Venue:** Holds location and contact info of food donors.

1.To create an object:

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

Enter the label name >> Venue

Plural label name >> Venues

Enter Record Name Label and Format

Record Name >> Venue Name

Data Type >> Text

2. Click on Allow reports and Track Field History,Allow Activities.
3. Allow search >> Save.

- **Drop-Off Point:** Stores receiver location and proximity logic.

1.To create an object:

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

Enter the label name >> Drop-Off Point

Plural label name>> Drop-Off Points

Enter Record Name Label and Format

Record Name >> Drop-Off point Name

Data Type >> Text

2. Click on Allow reports and Track Field History,Allow Activities
3. Allow search >> Save.

- **Task:** Central object linking venues and volunteers to action.

1.To create an object:

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

Enter the label name>> Task

Plural label name>> Tasks

Enter Record Name Label and Format

Record Name >> Task Name

Data Type >> Text

2. Click on Allow reports and Track Field History,Allow Activities
3. Allow search >> Save.

- **Volunteer:** Captures availability, skills, and contact.

- 1.To create an object:

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

Enter the label name>> Volunteer

Plural label name>> Volunteers

Enter Record Name Label and Format

Record Name >> Volunteer Name

Data Type >> Text

2. Click on Allow reports and Track Field History, Allow Activities
3. Allow search >> Save.

- **Execution Detail:** Joins Task and Volunteer records.

- 1.To create an object:

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

Enter the label name >> Execution Detail

Plural label name >> Execution Details

Enter Record Name Label and Format

Record Name >> Execution Detail Name

Data Type >> Text

2. Click on Allow reports and Track Field History, Allow Activities
3. Allow search >> Save.

4.3 Custom Fields & Relationships

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
- Click on Next >> Next >> Save and new.

To create another fields in an 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 "Phone" and Click on Next
4. Fill the Above as following:
 - Field Label : Contact Phone
 - Field Name : Contact Phone
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Geolocation" and Click on Next
4. Fill the Above as following:
 - Field Label : Location
 - Decimal Places : 4
 - Field Name : Location
 - Description : Enter the Geolocation of your Venue
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Long Text Area" and Click on Next
4. Fill the Above as following:
 - Field Label : Venue Location
 - Field Name : Venue_Location

- Click on Next >> Next >> Save and new.

Drop-Off Point Object:

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
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 “Formula” and Click on Next
4. Fill the Above as following:
 - Field Label : distance calculation
 - Field Name : distance_calculation
 - Formula Return Type : Number
 - Formula Options : `DISTANCE(Location_2__c , Venue__r.Location__c , 'km')`
 - Click on Next >> Next >> Save and new.

Formula Options

Formula Return Type: Number

Decimal Places: 4

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
 Example: `Fahrenheit = 1.8 * Celsius__c + 32` [More Examples...](#)

Simple Formula | Advanced Formula

Insert Field | Insert Operator

distance calculation (Number) = `DISTANCE(Location_2__c , Venue__r.Location__c , 'km')`

To

Create another fields in an 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 "Picklist" and Click on Next
4. Fill the Above as following:
 - Field Label : State
 - Field Name : State
 - Enter values, with each value separated by a new line :
Andhra Pradesh,Arunachal Pradesh,Assam,Bihar,Chhattisgarh,Goa
Gujarat,Haryana,Himachal Pradesh,Jharkhand,Karnataka,Kerala
Maharashtra,Madhya Pradesh,Manipur,Meghalaya,Mizoram
Nagaland,Odisha,Punjab,Rajasthan,Sikkim,Tamil Nadu,Tripura
Telangana,Uttar Pradesh,Uttarakhand,West Bengal,Andaman & Nicobar (UT)
Chandigarh (UT),Dadra & Nagar Haveli and Daman & Diu (UT),Delhi [National
Capital Territory (NCT)],Jammu & Kashmir (UT),Ladakh (UT),Lakshadweep
(UT),Puducherry (UT)
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Number" and Click on Next
4. Fill the Above as following:
 - Field Label : Distance
 - Field Name : Distance
 - Length : 14
 - Decimal Places : 4
 - Click on required check box
 - Click on Next >> Next >> Save and new.

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
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Date" and Click on Next
4. Fill the Above as following:
 - Field Label : Date
 - Field Name : Date
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Picklist (Multi-Select)" and Click on Next
4. Fill the Above as following:
 - Field Label : Food Category
 - Field Name : Food Category
 - Enter values, with each value separated by a new line :
Veg,Non-Veg,Salad,Snack
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Number" and Click on Next
4. Fill the Above as following:
 - Field Label : Number of People Served
 - Field Name : Number_of_People_Served
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Text" and Click on Next
4. Fill the Above as following:
 - Field Label : Name of the Person
 - Field Name : Name_of_the_Person
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Phone" and Click on Next
4. Fill the Above as following:
 - Field Label : Phone
 - Field Name : Phone
 - Click on Next >> Next>> Save and new.

To create another fields in an 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 "Pick List" and Click on Next
4. Fill the Above as following:
 - Field Label : Rating
 - Field Name : Rating

- Enter values, with each value separated by a new line :
1,2,3,4,5
- Click on Next >> Next >> Save and new.

To create another fields in an 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 "Long Text Area" and Click on Next
4. Fill the Above as following:
 - Field Label : Feedback
 - Field Name : Feedback
 - Click on Next >> Next >> Save and new.

Volunteer Object:

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
 - Click on Next >> Next >> Save and new.
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Picklist" and Click on Next
4. Fill the Above as following:
 - Field Label : Gender
 - Field Name : Gender

- Enter values, with each value separated by a new line :

Female

Male

- Click on Next >> Next >> Save and new.

To create another fields in an 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 "Date" and Click on Next
4. Fill the Above as following:
 - Field Label : Available On
 - Field Name : Available On
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 "Number" and Click on Next
4. Fill the Above as following:
 - Field Label : Age
 - Field Name : Age
 - Click on required check box
 - Click on Next >> Next>> Save and new.

To create another fields in an 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 "Email" and Click on Next
4. Fill the Above as following:
 - Field Label : Email
 - Field Name : Email
 - Click on required check box

- Click on Next>> Next >> Save and new.

To create another fields in an 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 “Number” and Click on Next
4. Fill the Above as following:
 - Field Label : Contact Number
 - Field Name : Contact_Number
 - Click on required check box
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 “Text Area (Long)” and Click on Next
4. Fill the Above as following:
 - Field Label : Address
 - Field Name : Address
 - Click on Next >> Next >> Save and new.

To create another fields in an 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 “Date” and Click on Next
4. Fill the Above as following:
 - Field Label : Date of Birth
 - Field Name : Date_of_Birth
 - Click on Next >> Next >> Save and new.

Execution Detail:

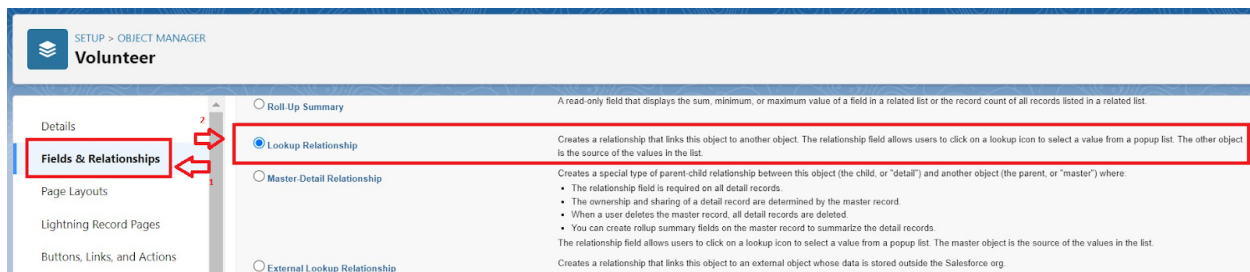
Creation of fields for the Execution Details object

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
 - Click on Next >> Next >> Save and new.

4.4 Relationship Fields

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.

Creation of Master Detail Relationship Field on Execution Details Object :

1. Go to setup >> click on Object Manager >> type object name(Execution Details) 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 "Volunteer" and click next.
5. Field Name : Volunteer
6. Field label : Auto generated
7. Next >> Next >> Save.

Creation of Master Detail Relationship Field on Execution Details Object :

1. Go to setup >> click on Object Manager >> type object name(Execution Details) 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 "Task" and click next.
5. Field Name : Task
6. Field label : Auto generated
7. Next >> Next >> Save.

Creation of Lookup Relationship Field on Drop-Off Point Object :

1. Go to setup >> click on Object Manager >> type object name(Drop-Off Point) in the search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Lookup relationship
4. Select the related object "Venue" and click next.
5. Field Name : Venue
6. Field label : Venue__c
7. Next >> Next >> Save.

Creation of Lookup Relationship Field on Task Object :

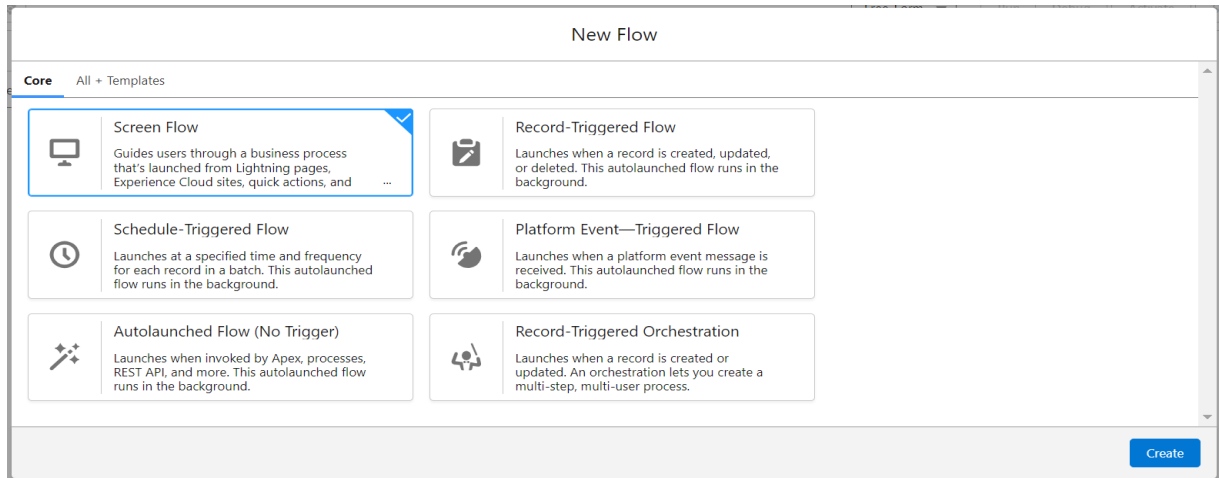
1. Go to setup>> click on Object Manager >> type object name(Task) in the search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Lookup relationship
4. Select the related object "Venue" and click next.
5. Field Name : Sponsored By
6. Field label : Auto generated
7. Next >> Next >> Save.

Creation of Lookup Relationship Field on Task Object :

1. Go to setup>> click on Object Manager >> type object name(Task) in the search bar >> click on the object.
2. Now click on "Fields & Relationships" >> New
3. Select Lookup 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.

Create Flow to create a record in Venue object

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.



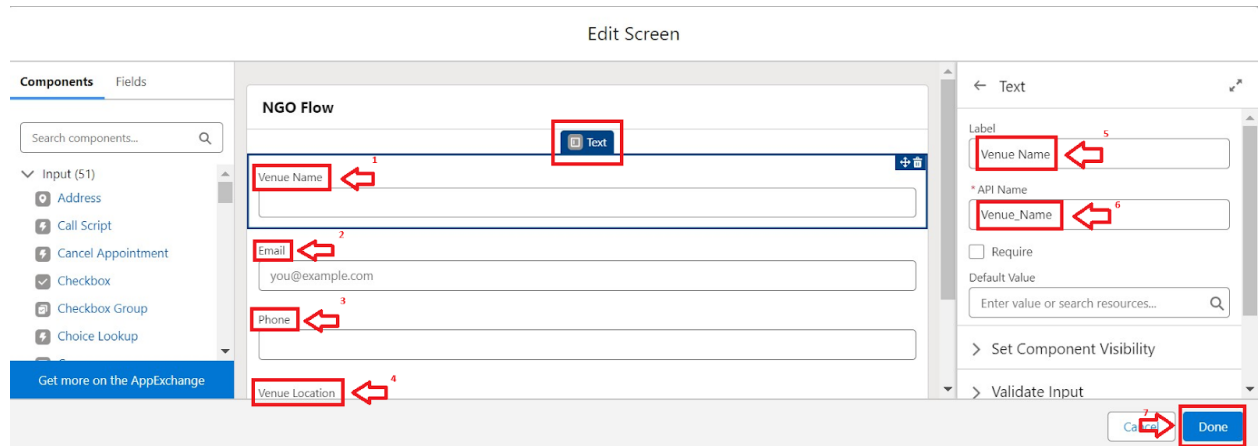
3. Click on the '+' icon in between start and end, and click on screen element.
4. Under the Screen Properties:
Label : Venue Details
API Name : Venue_Details
5. Now lets add components in this flow. Click on Text Component and name it as:
Label : Venue Name
API Name : Venue_Name
6. Click on Email Component 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

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}

14. This would look like:

Create a Record of This Object

*Object

Venue

Set Field Values for the Venue

Field		Value	
Contact_Email__c	←	Aa Contact_Email > Value ×	
Contact_Phone__c	←	Aa Contact_Phone > Value ×	
Name	←	Aa Venue_Name ×	
Venue_Location__c	←	Aa location ×	

15. Click on Save as:

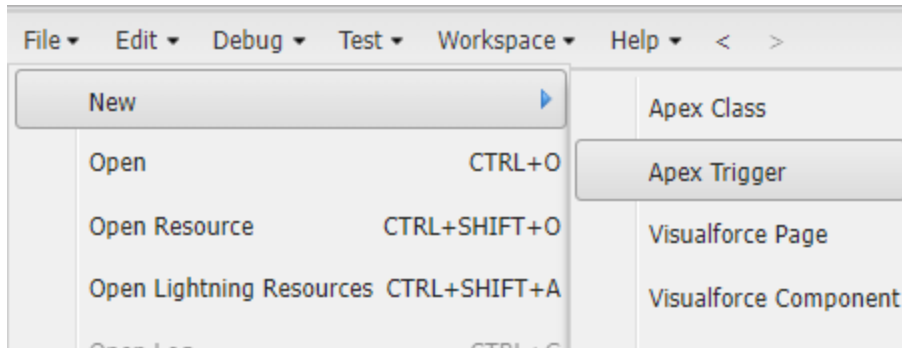
Flow Label : Venue Form

Flow API Name : Venue_Form

4.5 Automation

Trigger (DropOffTrigger): Create a Trigger

1. Log into the trailhead account, navigate to the gear icon in the top right corner.
2. Click on developer console and you will be navigated to a new console window.
3. Click on the File menu in the toolbar, and click on new >> Trigger.
4. Enter the trigger name and the object to be triggered.

A screenshot of the 'New Apex Trigger' dialog box. It has a title bar with a close button. Inside, there are two input fields: 'Name:' with a text box and 'sObject:' with a dropdown menu. At the bottom right, there is a 'Submit' button.

5. Enter Name : DropOffTrigger

sObject: Drop-Off Point

6. Click on Submit.

Trigger Code

(This Trigger is to assign Distance field to the Distance Calculation field. So that we can assign the distance in the sharing rules.)

Code:

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

Profiles

1. Go to setup page >> type Profiles in Quick Find bar >> click on Profiles >> click on 'S'
2. Click on Clone beside Standard Platform User.
3. Under Clone Profile:
Profile Name : NGOs Profile
Then click on Save

- **Flow (Venue Form):** Screen flow to insert venue record with multiple fields and validations.

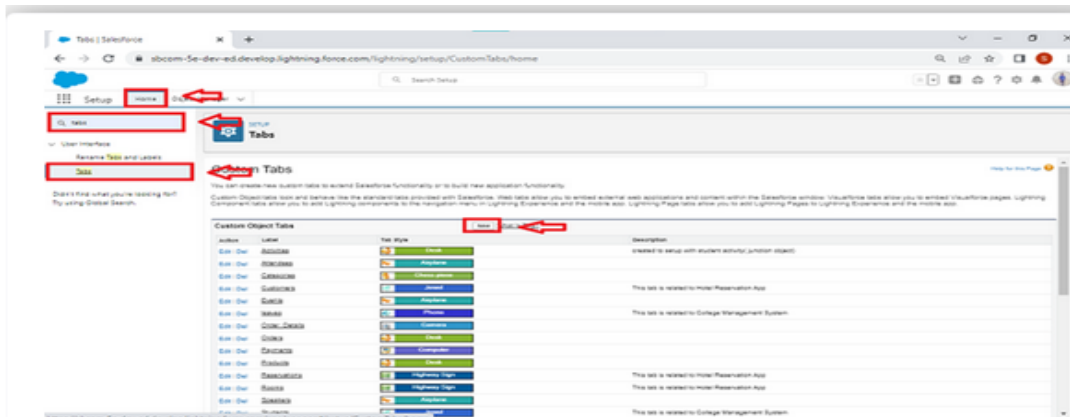
5. UI/UX Development & Customization

5.1 Lightning App

- App name: FoodConnect
- Navigation: Home, Venue, Drop-Off Point, Task, Volunteer, Execution Detail, Reports
- Default Landing Page: Customized Lightning Home Page

5.2 Tabs & Page Layouts

- Custom tabs created for each object with field visibility as per requirement.
To create a Tab:(Venue)
1. Go to setup page >> type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)



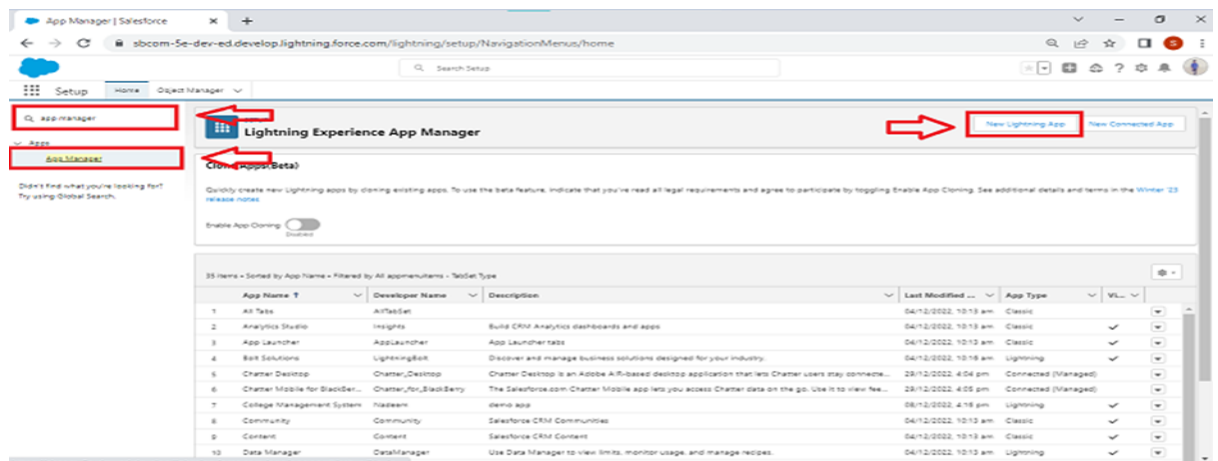
2. Select Object(Venue) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
 3. Make sure that the Append tab to users' existing personal customizations is checked.
 4. Click save
- Now create the Tabs for the remaining Objects, they are “Drop-Off Point, Task, Volunteer, Execution Details”.
Follow the same steps as mentioned in Activity -1 .

5.3 Lightning Home Page

- Components used: Flow component (Venue Form), Dashboard Component

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.



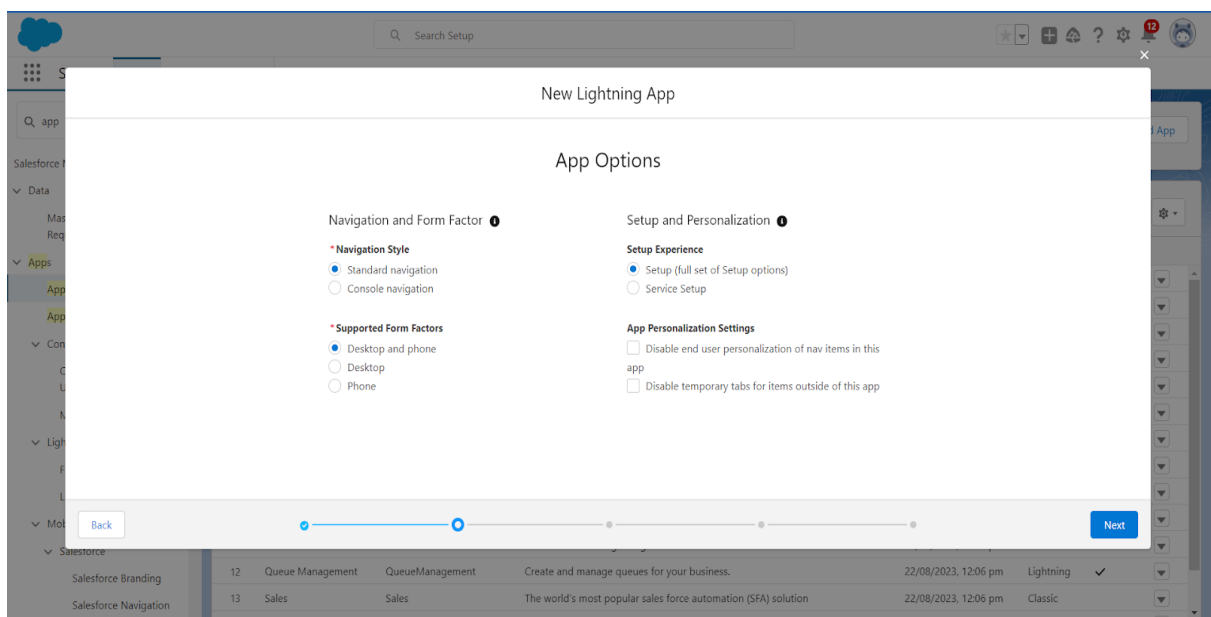
2. Fill the app name in app details and branding as follow

App Name : FoodConnect

Developer Name : This will auto populated

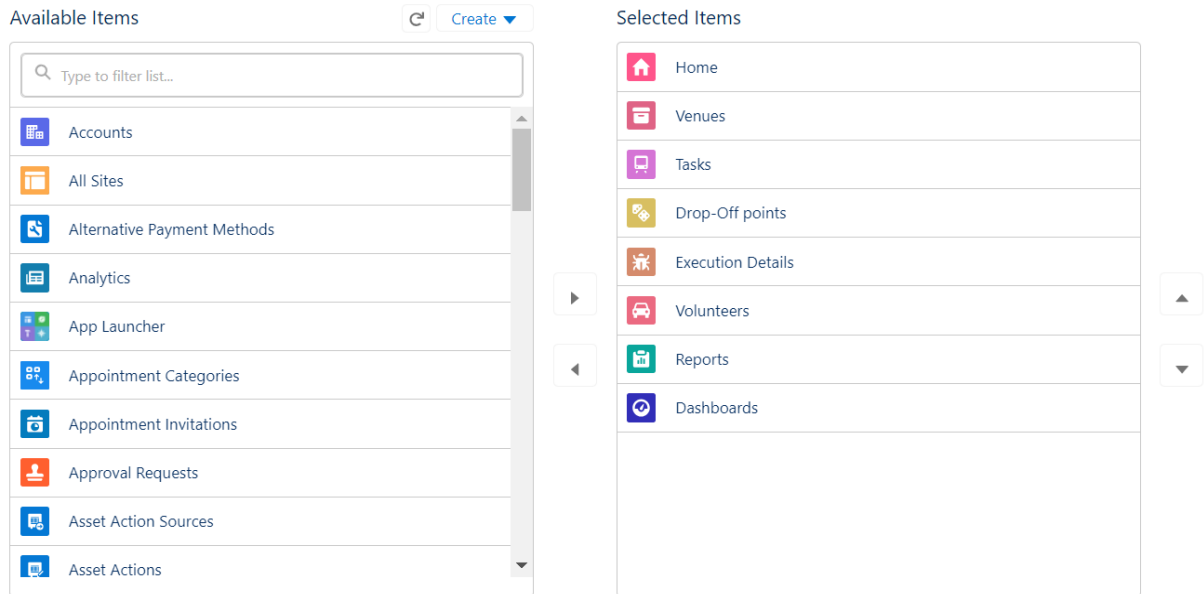
Image : optional (if you want to give any image you can otherwise not mandatory) Primary color hex value : keep this default.

3. Then click Next >> (App option page) Set Navigation Style as Standard Navigation >> Next.



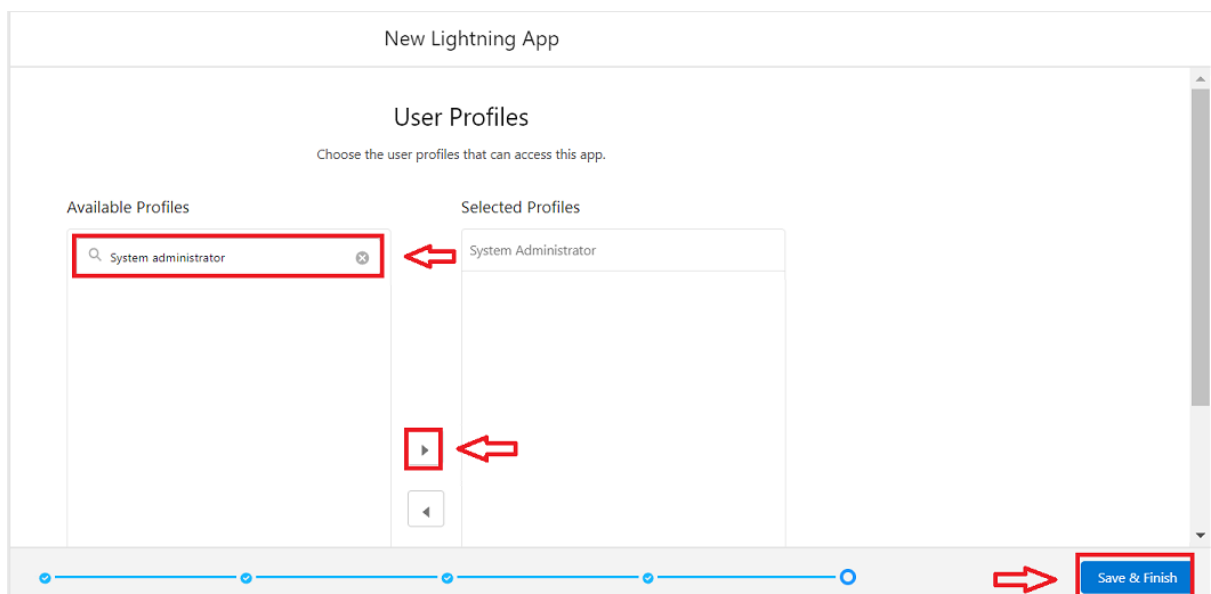
4. (Utility Items) keep it as default >> Next.

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.

5.4 Reports and Dashboards

Creation of Report Types

1. Go to setup page >> type Report Types in Quick Find bar >> click on Report Types
>> click on Continue >> Click on New Custom Report Type.
2. In Define the Custom Report Type:
Primary Object : Select Venues
Report Type Label : Venue with DropOff with Volunteer
Report Type Name : Venue_with_DropOff_with_Volunteer
Description : Venue with DropOff with Volunteer
Store in Category : Select Other Reports
Deployment Status : Deployed
3. Click on Next
4. Near Click to relate another Object Select Drop-Off Points.
5. And also select "A" records may or may not have related "B" records.
6. Now again Near Click to relate another Object Select Volunteers.
7. Now click on Save.

Creation of Report on Venue with DropOff with Volunteer

1. Go to the app(FoodConnect) >> click on the reports tab
2. Click on New Folder.
Folder Label : Custom Reports
Folder Unique Name : CustomReports
3. Open Custom Reports and click on New Report
4. Select Report Type : Venue with DropOff with Volunteer
5. Then click on Start Report.
6. In GROUP ROWS : Add Volunteer Name
7. In Columns : Add Venue Name, Drop-Off point Name, Distance.

<div> <div>Outline</div> <div>Filters 2</div> </div> <div> <div>Groups</div> <div>GROUP ROWS</div> <div>Add group...</div> <div>Volunteer Name</div> <div>GROUP COLUMNS</div> <div>Add group...</div> </div> <div> <div>Columns</div> <div>Add column...</div> <div>Venue Name</div> <div>Drop-Off point Name</div> <div># Distance</div> </div>		<div> <div>Previewing a limited number of records. Run the report to see everything.</div> <table> <tr> <th>Volunteer Name</th><th>Venue Name</th><th>Drop-Off point Name</th><th>Distance</th></tr> <tr> <td rowspan="4">- (4)</td><td>La Royale Banquet Hall.</td><td>Shapur</td><td>5.1161</td></tr> <tr> <td>La Royale Banquet Hall.</td><td>Jeedimetla</td><td>6,902.9995</td></tr> <tr> <td>Paradise Garden Function Hall</td><td>Suraram Village</td><td>28.2332</td></tr> <tr> <td>Ujwala Grand</td><td>-</td><td>-</td></tr> <tr> <td colspan="2">Subtotal</td><td></td><td>6,936.3488</td></tr> <tr> <td colspan="2">Total (4)</td><td></td><td>6,936.3488</td></tr> </table> </div>		Volunteer Name	Venue Name	Drop-Off point Name	Distance	- (4)	La Royale Banquet Hall.	Shapur	5.1161	La Royale Banquet Hall.	Jeedimetla	6,902.9995	Paradise Garden Function Hall	Suraram Village	28.2332	Ujwala Grand	-	-	Subtotal			6,936.3488	Total (4)			6,936.3488
Volunteer Name	Venue Name	Drop-Off point Name	Distance																									
- (4)	La Royale Banquet Hall.	Shapur	5.1161																									
	La Royale Banquet Hall.	Jeedimetla	6,902.9995																									
	Paradise Garden Function Hall	Suraram Village	28.2332																									
	Ujwala Grand	-	-																									
Subtotal			6,936.3488																									
Total (4)			6,936.3488																									

8. Now click on Save & Run.

9. Give Label as :

10. Report Name : venue and Drop Off point

11. Report Unique Name : Auto Populated

12. Click on Select Folder and select Custom Report, then click on Save.

Creation of Report on Volunteers with Execution Details and Tasks

1. Go to the app(FoodConnect) >> click on the reports tab

2. Click on Custom Reports Folder and click on New Report

3. Select Report Type : Volunteers with Execution Details and Tasks.

4. Then click on Start Report.

5. In GROUP ROWS : Volunteer ID

6. In Columns : Add Volunteer : Volunteer Name, Task : Task Name, Execution Detail : Execution Detail Name, Volunteer: Owner Name, Task: Date, Task : Rating.

REPORT

Volunteer Task

Volunteers with Execution Details and Tasks

↶

↷

Add Chart

Save & Run

Save

Close

Run

Fields

Outline

Filters

GROUP ROWS

Add group...

Volunteer ID

GROUP COLUMNS

Add group...

Columns

Add column...

Volunteer: Volunteer Name

Task: Task Name

Execution Detail: Execution Detail

Volunteer: Owner Name

Task: Date

Task: Rating

Previewing a limited number of records. Run the report to see everything.

Update Preview Automatically

Volunteer ID	Volunteer: Volunteer Name	Task: Task Name	Execution Detail: Execution Detail Name	Volunteer: Owner Name	Task: Date	Task: Rating
2 (1)	Charan	Task 2	Execution 2	Iksha Foundation Iksha_Foundation	28/03/2024	5
Subtotal						
4 (1)	Bhavika	Task 1	Execution 1	Iksha Foundation Iksha_Foundation	28/03/2024	4
Subtotal						
Total (2)						

Row Counts

Detail Rows

Subtotal

Grand Total

Now click on Save & Run.

8. Give Label as :

Report Name : Volunteer Task

Report Unique Name : Auto Populated

Click on Select Folder and select Custom Report, then click on Save.

Adding venue and Drop Off point Report to the Dashboard

1. Go to the app(FoodConnect) >> click on the Dashboards tab.
2. Click on New Folder.

Folder Label : Custom Dashboards

Folder Unique Name : Auto Populated

3. Open Custom Dashboards and click on New Dashboards
4. Name : Organization Details
5. Click on Widget and select Chart or Table
6. In Select Report : Select venue and Drop Off point Report.
7. Then click on select
8. In Add Component:

Display As : Select Lightning Table

Component Theme : Select Dark (Optional)

The screenshot shows the configuration interface for a report in the FoodConnect app. On the left, the 'Report' section has a search bar with 'venue and Drop Off point' and a checkbox for 'Use chart settings from report'. Below this, the 'Display As' section shows various widget icons, with the 'Lightning Table' icon selected. The 'Groups' section has a search bar with 'Add group...'. The 'Columns' section has a search bar. On the right, the 'Preview' section shows a dark-themed table with the title 'venue and Drop Off point'.

Venue Name ↑	Drop-Off point Name	Distance
La Royale Banquet Hall.	Shapur	5.1161
La Royale Banquet Hall.	Jeedimetla	6.9030k
Paradise Garden Function Hall	Suraram Village	28.2332
Ujwala Grand	-	-

View Report (venue and Drop Off point)

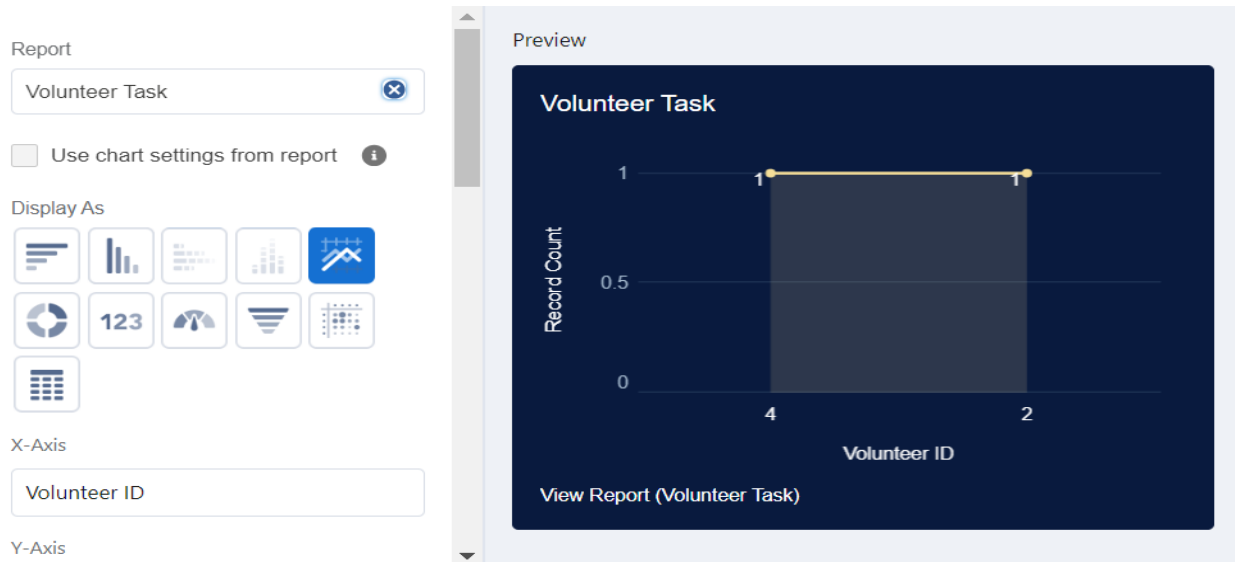
Now click on save.

Adding Volunteer Task Report to the Dashboard

1. Click on Widget and select Chart or Table
2. In Select Report : Select Volunteer Task Report.
3. Then click on select
4. In Add Component:

Display As : Select Line Chart

Component Theme : Select Dark (Optional)



Now click on save.

Adding a Picture to the Dashboard :

(Note : To upload an image into the Dashboard, we have to first download an image from google or other sources into your system)

1. Click on Widget and select Image. Then click on Browse Files.
2. Then Select the Picture you want to upload in this Dashboard.
3. Then click on Save As :

Name : Task Execution Details

Click on Select Folder and select Custom Dashboards

4. Click on Select Folder and then Save.



Task Execution Dashboard (Line Chart with Volunteer data)

6. Data Migration, Testing & Security

6.1 User Management

Creation of User1

1. Go to setup page >> type users in Quick Find bar >> click on users>> New user.
2. In General Information give details as: (Note : create users as per your wish NGO's)

First Name : Iksha Foundation

Last Name : Iksha_Foundation

Alias : iiksh

Email : Give Your Email

Username : ikshafoundation@sb.com (give the username different)

Nickname : Auto Populated

User License : Salesforce Platform

Profile : NGOs Profile

Active : Check

General Information	
First Name	Iksha Foundation
Last Name	Iksha_Foundation
Alias	iksh
Email	bhargavipaila1023@gmail.ci
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"/>

3. Click on Save

Creation of User2, User3

1. Create another Two Users by following steps in Activity - 1 with similar User License and Profile.
2. Give Different First Name, Last Name based on Different NGO's.

	Edit Login	<u>Iksha_Foundation, Iksha Foundation</u>	<u>iksh</u>	<u>ikshafoundation@sb.com</u>		<u>NGOs Profile</u>
	Edit Login	<u>NSS, NSS</u>	<u>nnss</u>	<u>nss@sb.com</u>		<u>NGOs Profile</u>
	Edit Login	<u>Street_Cause, Street Cause</u>	<u>sstre</u>	<u>streetcause@sb.com</u>		<u>NGOs Profile</u>

6.2 Public Groups & Sharing Rules

Creation of Public Group 1

1. Go to setup page >> type Public Groups in Quick Find bar >> click on Public Groups >> click on New.

2. Under Group Information:
 Label : Iksha
 Group Name : Iksha
 Grant Access Using Hierarchies : Check
3. In Search, Select Users.
4. In Selected Members Add Iksha Foundation and System Administrator

Creation of Public Group 2

1. By Following Steps in Activity 1, Create other two Public Groups for other two users.
2. After Saving this would look like this.

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

Creation of sharing rules

1. Go to setup >> type Sharing Settings in quick find box >> Click on the Sharing Settings.
2. Scroll down and find Drop-Off point Sharing Rules.
3. Click on new near Drop-Off point Sharing Rules and Name it as:
 Label : Rule 1
 Rule Name : Rule_1
4. Select your rule type : Select Based on criteria.
5. Select which records to be shared:
 Field : Operator : Value = Distance : less than : 15
6. Select the users to share with : Near Share With
 Public Groups : Iksha
7. Click on Save.

8. Click on new near Drop-Off point Sharing Rules and Name it as:

Label : Rule 2

Rule Name : Rule_2

9. Select your rule type : Select Based on criteria.

10. Select which records to be shared:

Field : Operator : Value = Distance : greater than : 15

Field : Operator : Value = Distance : less or equal : 30

11. Select the users to share with : Near Share With

Public Groups : NSS

12. Click on Save.

13. Click on new near Drop-Off point Sharing Rules and Name it as:

Label : Rule 3

Rule Name : Rule_3

14. Select your rule type : Select Based on criteria.

15. Select which records to be shared:

Field : Operator : Value = Distance : greater than : 30

Field : Operator : Value = Distance : less or equal : 50

16. Select the users to share with : Near Share With

Public Groups : Street Cause

17. Click on Save.

Drop-Off point Sharing Rules			
		New Recalculate	Drop-Off point Sharing Rules Help ?
Action	Criteria	Shared With	Access Level
Edit Del	Drop-Off point: Distance LESS OR EQUAL 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

6.3 Testing Process

1. Created sample records for each object.
2. Validated distance calculation formula.
3. Verified successful record creation through Venue Flow.
4. Tested dashboards and report output.

6.4 Data Tools

1. Data Import Wizard for bulk uploads.
2. Manual testing for accuracy and UI navigation.

7. Deployment & Maintenance

1. Deployment done in Developer Org.
2. Future-ready for Change Sets or Ant-based deployment.
3. Maintenance handled by Salesforce Admin:
 - Monitoring reports and dashboards
 - User access changes
 - Debugging and fixing trigger/flow errors

Test Case ID	Description	Expected Result	Actual Result	Status
TC001	Distance-Based Sharing Rule Enforcement	Verify that NGOs only see Drop-Off Points within their assigned distance range.	As per criteria.	Pass
TC002	Venue Creation via Flow	Venue Creation via Flow	As entered.	Pass
TC003	Distance Calculation Accuracy	Verify that the Drop-Off Point's Distance field is calculated correctly based on Venue and Drop-Off Point locations.	Matches calculated value.	Pass.
TC004	Volunteer Task Report Accuracy	Verify that the Volunteer Task report shows correct Volunteer names, Task names, Execution Details, Dates, and Ratings.	As expected.	Pass
TC005	Sharing rules work as intended	only intended groups can records	As expected	Pass

8. Conclusion

FoodConnect successfully digitizes the NGO food distribution model. It enables structured data storage, automated workflows, and efficient task delegation. From donor to volunteer, every entity is linked to form a cohesive ecosystem within Salesforce. With scalable architecture, the application is ready for future expansions and integrations. The project stands as a robust solution for any nonprofit handling field-level operations and stakeholder coordination.

9. Future Enhancements

- Integration with Google Maps API for live routing.
- Scheduled Flows for volunteer reminders.
- AI-based task-volunteer assignment.
- Chatbot support for rapid data entry and communication.
- SMS and Email notification integration.

Appendices

List of Custom Fields per Object

Object	Field Label	Field Name	Data Type
Venue	Contact Email	Contact_Email__c	Email
Venue	Contact Phone	Contact_Phone__c	Phone
Venue	Location	Location__c	Geolocation
Venue	Venue Location	Venue_Location__c	Long Text Area
Drop-Off Point	Location 2	Location_2__c	Geolocation
Drop-Off Point	State	State__c	Picklist
Drop-Off Point	Distance Calculation	distance_calculation__c	Formula
Task	Task ID	Task_ID__c	Auto Number
Task	Food Category	Food_Category__c	Multi-Select Picklist
Volunteer	Gender	Gender__c	Picklist
Volunteer	Date of Birth	Date_of_Birth__c	Date
Execution Detail	Execution ID	Execution_ID__c	Auto Number

