

FoodConnect Salesforce Setup and Customization Documentation

Introduction

The FoodConnect project is an initiative aimed at redistributing leftover food to those in need. This Salesforce implementation serves as the backbone of the FoodConnect app, enabling efficient management of venues, volunteers, tasks, execution details, and drop-off points. The system leverages Salesforce's robust CRM features, custom objects, fields, relationships, and flow automation to streamline operations and ensure that food is delivered effectively to the intended recipients.

Custom Objects Creation

To meet the specific needs of the FoodConnect app, several custom objects were created in Salesforce. These objects include **Venue**, **Volunteers**, **Tasks**, **Execution Details**, and **Drop-Off Points**. Each of these objects has a tailored set of fields and relationships to capture relevant data.

The creation process for these objects involved navigating to the Object Manager within Salesforce, selecting 'Create' and then 'Custom Object.' For instance, the Venue object was set up with "Venue Name" as the Record Name, and it was configured to allow reporting, activity tracking, and search functionality. The same process was followed to create the other objects, ensuring consistency and data integrity across the system.

1. Venue

- **Label:** Venue
- **Plural Label:** Venues
- **Record Name:** Venue Name (Text)
- **Fields:**
 - **Contact Email:** Email (Required)
 - **Contact Phone:** Phone (Required)
 - **Location:** Geolocation (Decimal Places: 4)
 - **Venue Location:** Long Text Area

Fields & Relationships					
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)		✓

2. Volunteer

- **Label:** Volunteer
- **Plural Label:** Volunteers
- **Record Name:** Volunteer Name (Text)
- **Fields:**
 - **Volunteer ID:** Auto Number
 - **Gender:** Picklist (Male, Female, Other)

Fields & Relationships					
FIELD LABEL		FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address		Address__c	Long Text Area(32768)		
Age		Age__c	Number(18, 0)		
Available On		Available_On__c	Date		
Contact Number		Contact_Number__c	Number(18, 0)		
Created By		CreatedById	Lookup(User)		
Date of Birth		Date_of_Birth__c	Date		
Drop-Off Point		Drop_Off_Point__c	Master-Detail(Drop-Off Point)		✓
Email		Email__c	Email		
Gender		Gender__c	Picklist		

Fields & Relationships		
13 Items, Sorted by Field Label		
Contact Number	Contact_Number__c	Number(18, 0)
Created By	CreatedBy	Lookup(User)
Date of Birth	Date_of_Birth__c	Date
Drop-Off Point	Drop_Off_Point__c	Master-Detail(Drop-Off Point)
Email	Email__c	Email
Gender	Gender__c	Picklist
Last Modified By	LastModifiedBy	Lookup(User)
Owner Name	Owner_Name__c	Text(20)
Volunteer ID	Volunteer_ID__c	Auto Number
Volunteer Name	Name	Text(80)

3. Task

- **Label:** Task
- **Plural Label:** Tasks
- **Record Name:** Task Name (Text)
- **Fields:**
 - **Task ID:** Auto Number (TASK-{0})
 - **Distance:** Number (14,4) (Required)
 - **Date:** Date (Required)
 - **Food Category:** Picklist (Multi-Select) (Veg, Non-Veg, Salad, Snack) (Required)
 - **Number of People Served:** Number (Required)
 - **Name of the Person:** Text
 - **Phone:** Phone
 - **Rating:** Picklist (1, 2, 3, 4, 5)
 - **Feedback:** Long Text Area

Fields & Relationships				
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date	Date__c	Date		
Drop-Off Point	Drop_Off_Point__c	Lookup(Drop-Off Point)	✓	
Feedback	Feedback__c	Long Text Area(32768)		
Food Category	Food_Category__c	Picklist (Multi-Select)		
Last Modified By	LastModifiedById	Lookup(User)		
Name of the Person	Name_of_the_Person__c	Text(20)		
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Owner	OwnerId	Lookup(User,Group)	✓	

Fields & Relationships				
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Number of People Served	Number_of_People_Served__c	Number(18, 0)		
Owner	OwnerId	Lookup(User,Group)	✓	
Phone	Phone__c	Phone		
Rating	Rating__c	Picklist		
Sponsored By	Sponsored_By__c	Lookup(Venue)	✓	
Task ID	Task_ID__c	Auto Number		
Task Name	Name	Text(80)	✓	
Venue__c	Venue__c	Lookup(Drop-Off Point)	✓	
Volunteer	Volunteer__c	Lookup(Volunteer)	✓	

4. Execution Details

- **Label:** Execution Details
- **Plural Label:** Execution Details
- **Record Name:** Execution Detail Name (Text)
- **Fields:** Add fields as needed for execution details.

Execution Detail

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Execution Detail Name	Name	Text(80)		✓
Execution ID	Execution.ID__c	Auto Number		
Last Modified By	LastModifiedById	Lookup(User)		
Task	Task__c	Master-Detail(Task)		✓
Volunteer	Volunteer__c	Lookup(Volunteer)		✓

5. Drop-Off Point

- **Label:** Drop-Off Point
- **Plural Label:** Drop-Off Points
- **Record Name:** Drop-Off Point Name (Text)
- **Fields:**
 - **Location:** Geolocation (Decimal Places: 4)
 - **State:** Picklist (List of States)
 - **Distance Calculation:** Formula (Number) - DISTANCE(Location_2__c, Venue__r.Location__c, 'km')

Drop-Off Point

Fields & Relationships

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Distance	Distance__c	Number(14, 4)		
distance calculation	distance_calculation__c	Formula (Number)		
Drop-Off Point Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Location 2	Location_2__c	Geolocation		
Owner	OwnerId	Lookup(User, Group)		✓
State	State__c	Picklist		
Venue	Venue__c	Lookup(Venue)		✓

Custom Tabs Creation

To facilitate easy access to the newly created objects, corresponding custom tabs were created in Salesforce. These tabs serve as entry points for users to interact with the data stored within each object.

The process involved navigating to the Tabs setup section, selecting 'New' under the Custom Object Tabs, and choosing the appropriate object (e.g., Venue). After selecting a suitable tab style, the tabs were added to the profiles and apps as needed. Care was taken to ensure that the tabs were available to the appropriate user profiles while also maintaining customization flexibility.

To Create custom tabs for each object:

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

Relationships

To establish meaningful connections between the different objects, several relationship fields were created. These include both Lookup and Master-Detail relationships, which enable the system to link related records across objects.

For example, a Master-Detail relationship was created on the Volunteer object to associate it with the Drop-Off Point object. This relationship allows for easy tracking of which volunteers are assigned to which drop-off points. Similarly, the Execution Details object was linked to the Volunteer and Task objects, ensuring that execution plans are tightly integrated with the people and tasks involved.

Volunteer Object

- **Master-Detail Relationship:** Drop-Off Point

Execution Details Object

- **Master-Detail Relationship:** Volunteer
- **Master-Detail Relationship:** Task

Drop-Off Point Object

- **Lookup Relationship:** Venue

Task Object

- **Lookup Relationship:** Venue
- **Lookup Relationship:** Drop-Off Point

Lightning App Page Creation

A Lightning app named **FoodConnect** was created to provide a user-friendly interface for managing the various aspects of the project. This app serves as the central hub where users can access different components such as Home, Venue, Drop-Off Point, Task, Volunteer, Execution Details, and Reports.

The app was configured with standard navigation and default utility items. Navigation items were carefully selected to include all relevant objects, ensuring that users can easily find and interact with

the data they need. The app was also assigned to the System Administrator profile, allowing for seamless management and oversight.

FoodConnect Lightning App

- **App Name:** FoodConnect
- **Navigation Items:** Home, Venue, Drop-Off Point, Task, Volunteer, Execution Details, Reports
- **User Profiles:** System Administrator

The screenshot shows the FoodConnect Lightning App interface. At the top, there's a navigation bar with links for Home, Venues, Drop-Off Points, Tasks, Volunteers, Execution Details, Reports, and Dashboards. Below the navigation is a search bar and a toolbar with various icons. The main area is divided into sections: 'Organization Details' (listing venue and drop-off points), 'Volunteer Task' (a chart showing record counts for different volunteer IDs), and a 'Venue Form' section where a new venue can be created with fields for name, email, phone, location, latitude, and longitude. A photo of people volunteering at a food distribution point is also visible.

Custom Fields Creation

Each custom object was populated with fields tailored to capture the necessary data for the FoodConnect project. For the Venue object, fields such as Contact Email, Contact Phone, Location (Geolocation), and Venue Location (Long Text Area) were created to store venue-specific details.

Similar fields were created for the other objects, including Drop-Off Points, Tasks, Volunteers, and Execution Details. For instance, the Task object includes fields like Food Category (Picklist), Number of People Served (Number), and Feedback (Long Text Area) to capture details related to each food distribution task.

Venue Object Fields

1. **Contact Email**
 - Type: Email
 - Required: Yes
2. **Contact Phone**
 - Type: Phone
 - Required: Yes
3. **Location**
 - Type: Geolocation

- Decimal Places: 4

4. Venue Location

- Type: Long Text Area

The screenshot shows the 'FoodConnect' application interface. On the left, there's a sidebar with 'Venues' and 'Recently Viewed' sections. The main area is titled 'New Venue' and contains a form for creating a new venue. The form has sections for 'Information' (with required fields marked with an asterisk) and 'Location' (with fields for Latitude and Longitude). At the bottom, there are three buttons: 'Cancel', 'Save & New', and 'Save'.

Drop-Off Point Object Fields

1. Location

- Type: Geolocation
- Decimal Places: 4

2. State

- Type: Picklist
- Values: List of Indian States

3. Distance Calculation

- Type: Formula (Number)
- Formula: DISTANCE(Location_2__c, Venue__r.Location__c, 'km')

The screenshot shows the FoodConnect application interface. On the left, there's a sidebar with 'Drop-Off Points' and 'Recently Viewed' sections. The main area is titled 'New Drop-Off Point' and contains a form with the following fields:

- Information** section:
 - * Drop-Off Point Name: A text input field containing the letter 'l'.
 - Owner: Shruthikaa R.
 - Location 2: Latitude and Longitude input fields.
 - Venue: A search bar labeled 'Search Venues...' with a magnifying glass icon.
 - * State: A dropdown menu showing '--None--'.
 - Distance: An input field.
- Buttons at the bottom: 'Cancel', 'Save & New', and 'Save'.

Task Object Fields

1. Task ID

- Type: Auto Number
- Display Format: TASK-{0}
- Required: Yes

2. Distance

- Type: Number
- Length: 14
- Decimal Places: 4
- Required: Yes

3. Date

- Type: Date
- Required: Yes

4. Food Category

- Type: Picklist (Multi-Select)
- Values: Veg, Non-Veg, Salad, Snack
- Required: Yes

5. Number of People Served

- Type: Number
- Required: Yes

6. Name of the Person

- Type: Text

7. Phone

- Type: Phone

8. Rating

- Type: Picklist
- Values: 1, 2, 3, 4, 5

9. Feedback

- Type: Long Text Area

New Task

* = Required Information

Information

* Task Name	Owner
<input type="text"/>	Shruthikaa R
Venue_c	
<input type="text"/> Search Drop-Off Points... <input type="button" value="🔍"/>	
Sponsored By	
<input type="text"/> Search Venues... <input type="button" value="🔍"/>	
Drop-Off Point	
<input type="text"/> Search Drop-Off Points... <input type="button" value="🔍"/>	
Task ID	
* Date	<input type="text"/> <input type="button" value="📅"/>
* Food Category	
Available: <input type="text"/> <input type="button" value="▶"/> Chosen: <input type="text"/> <div style="display: flex; justify-content: space-around;"> <input type="button" value="Cancel"/> <input type="button" value="Save & New"/> <input type="button" value="Save"/> </div>	

*** Food Category**

Available	Chosen
Veg	
Non-Veg	
Salad	
Snack	

*** Number of People Served**

Name of the Person

Phone

Rating

Feedback

Volunteer

Cancel **Save & New** **Save**

The screenshot shows a Salesforce page with a 'Food Category' section containing a picklist and a 'Volunteer' section with various input fields. The 'Food Category' section has two columns: 'Available' and 'Chosen'. The 'Available' column contains items: Veg, Non-Veg, Salad, and Snack. The 'Chosen' column is currently empty. Below this is a field for 'Number of People Served' with a text input field. Following that are fields for 'Name of the Person' (text), 'Phone' (text), 'Rating' (dropdown menu with option '--None--'), and 'Feedback' (text). At the bottom, there is a 'Volunteer' section with three buttons: 'Cancel', 'Save & New', and a blue 'Save' button.

Volunteer Object Fields

1. Volunteer ID

- Type: Auto Number

2. Gender

- Type: Picklist
- Values: Male, Female, Other

New Volunteer

* = Required Information

Information

* Volunteer Name

* Drop-Off Point

 Search Drop-Off Points...

Volunteer ID

Gender

* Available On

* Age

* Email

Cancel

Save & New

Save

* Contact Number

* Available On

* Age

* Email

* Contact Number

Address

Date of Birth

Owner Name

Cancel

Save & New

Save

Reports Creation

The screenshot shows the FoodConnect application's Reports section. The left sidebar has a 'Reports' category with 'Created by Me' selected, showing 2 items. The main area displays a table with columns: Report Name, Description, Folder, Created By, Created On, and Subscribed. There are two entries:

Report Name	Description	Folder	Created By	Created On	Subscribed
venue and Drop Off point		Custom Reports	Shruthikaa R	31/7/2024, 6:29 pm	<input checked="" type="checkbox"/>
Volunteer Task		Custom Reports	Shruthikaa R	1/8/2024, 11:41 am	<input checked="" type="checkbox"/>

1. Venue and Drop off point

The screenshot shows a report titled 'Report: Venue with DropOff with Volunteer'. The table has the following data:

Total Records	Total Distance		
2	11,237.9532		
Volunteer Name	Venue Name	Drop-Off Point Name	Distance
ashu (1)	erode	coimbatore	6,658.1581
Subtotal			6,658.1581
prathiv (1)	guindy	karur	4,579.7951
Subtotal			4,579.7951
Total (2)			11,237.9532

2. Volunteer Task

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

Report: Volunteers with Execution Details and Tasks
Volunteer Task

Total Records: 4

	Volunteer ID	Volunteer Name	Task Name	Execution Detail Name	Owner Name	Date	Rating
<input type="checkbox"/>	a03dL0000071Gb1 (1)	prathiv	-	-	Shruthikaa	-	-
Subtotal							
<input type="checkbox"/>	a03dL0000071P1x (2)	Aventhu	Food Distribution	Donate	Shruthikaa	30/08/2024	5
		Aventhu	Snack Distribution	-	Shruthikaa	04/09/2024	5
Subtotal							
<input type="checkbox"/>	a03dL000007BJU1 (1)	ashu	-	-	Shruthikaa	-	-
Subtotal							
Total (4)							

Dashboard

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

Dashboards
Created by Me
1 item

DASHBOARD	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Organization Details	Custom Dashboards	Shruthikaa R	1/8/2024, 11:43 am		
Created by Me						
Private Dashboards						
All Dashboards						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						

The screenshot shows the FoodConnect Salesforce dashboard with the following components:

- Organization Details:** Shows the date as "As of 23-Aug-2024, 10:35 pm - Viewing as Shruthikaa R".
- venue and Drop Off point:** A table with columns "Venue Name" and "Drop-Off Point Name" and "Distance". It lists two rows: "erode" with "coimbatore" and "6.6582k", and "guindy" with "kanur" and "4.5798k".
- Volunteer Task:** A line chart titled "Volunteer Task" showing "Record Count" versus "Volunteer ID". The chart has three points labeled 1, 2, and 1. The x-axis is "Volunteer ID" and the y-axis is "Record Count".
- Image:** A photograph of volunteers in red shirts sorting food items like tomatoes and lettuce in boxes.

Conclusion

The Salesforce implementation for FoodConnect represents a comprehensive solution to managing the distribution of leftover food. Through the use of custom objects, fields, relationships, tabs, and automation, the system is designed to be both robust and user-friendly.