





PROJECT TITLE: AN CRM APPLICATION ON FOODCONNECT Overview:

The *FoodConnect Initiative* is designed to achieve key objectives aimed at creating an effective volunteer management system, particularly for food distribution logistics. These objectives are intentionally structured to enhance operational efficiency, accuracy, and participant engagement within the Salesforce environment.

1. Efficient Task Allocation and Resource Management:

■ Create an intelligent system for task assignment that matches volunteer availability and location with distribution events, ensuring timely completion of tasks and optimal resource utilization across multiple sites.

2. Enhanced Data Integrity and Reliability:

■ Implement processes for data validation and synchronization to maintain accurate records across all locations, minimizing inconsistencies and ensuring stakeholders have access to trustworthy, current information.

3. Streamlined Communication Channels:

■ Facilitate real-time communication through in-platform messaging and notifications, ensuring that all participants are quickly updated on their responsibilities and any modifications to distribution plans.

4. Improved Volunteer Engagement and Retention:

■ Establish feedback loops and track satisfaction levels to enhance the volunteer experience, encouraging long-term participation and commitment.

5. Detailed Reporting and Analytical Insights:

 Create a reporting dashboard within Salesforce to track key metrics related to distribution, task completion, and volunteer engagement, providing actionable insights for ongoing improvements and alignment with strategic goals.

Objectives:

The FoodConnect Initiative is focused on achieving key business objectives and specific technical outcomes to enhance volunteer management and optimize food distribution logistics.

Business Goals:

• Improve Volunteer Management Efficiency:

■ Establish a structured system for task allocation to simplify coordination, making it easier for volunteers to grasp their roles and remain engaged.

• Enhance Data Accuracy and Reliability:

■ Introduce protocols to maintain accurate and up-to-date information regarding venues, drop-off points, and volunteers, facilitating easy access to dependable

data.

• Improve Communication and Coordination:

■ Develop a robust communication framework to foster effective interactions among volunteers, coordinators, and other stakeholders involved in the food distribution process.

Specific Outcomes:

Creation of Custom Data Models:

Develop custom data models in Salesforce to manage Venues, Drop-Off Points, Tasks, Volunteers, and Execution Details, enabling organized data storage and easy access.

• Development of a User-Friendly Lightning App:

 Create a Lightning App featuring a streamlined interface that provides quick access to essential information and ensures smooth navigation across various functionalities.

• Implementation of Specific Sharing Rules:

Set up sharing rules to regulate data access based on geographic proximity, allowing volunteers to see tasks and information relevant to their specific locations.

Salesforce Key Features and Concepts Used:

To achieve the project objectives, the following Salesforce features and concepts have been utilized:

• Custom Objects:

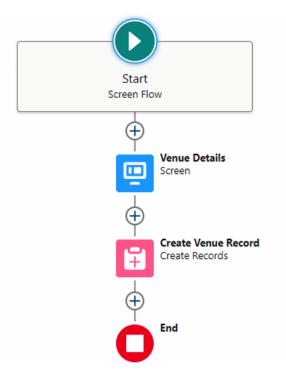
- **Venues:** Stores key information about locations designated for food distribution, including Venue Name, Address, Capacity, and Contact Information.
- **Drop-Off Points:** Records details about specific delivery locations, ensuring volunteers have clear directions for food pickup and drop-off.
- Tasks: Monitors volunteer assignments, containing fields for Task Name, Description, Due Date, and Assigned Volunteer.
- **Volunteers:** Keeps track of all participants in the program, including their contact details and availability status.
- **Execution Details:** Documents completed tasks, providing a comprehensive record of each volunteer's contributions.

Relationships:

Master-Detail and Lookup Relationships: Establishes connections between data entities. For example, a Master-Detail relationship between Tasks and Execution Details allows multiple execution records for each task, while a Lookup relationship between Volunteers and Drop-Off Points facilitates tracking volunteer assignments to specific locations.

Flows:

■ Salesforce Flow: Automates the process of creating Venue records and guides users through structured steps to ensure the accurate collection of all necessary information. The implemented Screen Flow is detailed below:



Triggers:

■ Apex Triggers: Automate actions based on defined criteria, such as computing the distances between venues and volunteer locations whenever records are created or modified.

• Reports and Dashboards:

■ Custom Reports and Dashboards: Deliver visual insights into volunteer activities, monitoring metrics such as the number of tasks completed, total volunteer hours, and statistics related to food distribution.

Detailed Solution Design Steps:

The following steps outline the design and implementation process for the *FoodConnect* solution:

A. Developer Account Setup:

- Register for a Salesforce Developer account to serve as the development and testing environment for the project.
- Verify the account via the confirmation email to gain access to all Salesforce functionalities.

B. Creation of Custom Objects:

 Navigate to the Object Manager in Salesforce Setup to create the necessary custom objects, ensuring each object has fields tailored to accurately capture relevant data.

C. Custom Tab Setup:

• Establish custom tabs for each object to enhance user navigation within the Salesforce interface.

D. Lightning App Development:

- Use the App Manager to develop a Lightning App named "FoodConnect."
- Include key navigation items such as custom objects and reports, and assign user profiles to control access based on role-specific permissions.

E. Establishing Relationships:

 Create Lookup and Master-Detail fields in the Object Manager to define the relationships between data entities, facilitating efficient data retrieval and reporting.

F. Field Configuration for Objects:

 Define the necessary fields for each custom object, specifying data types (e.g., Text, Number, Date) and attributes (e.g., Required, Unique) to ensure comprehensive data capture.

G. Flow Design:

• Design a screen flow for inputting Venue information, allowing users to enter data easily while automating record creation for accuracy.

H. Trigger Implementation:

 Develop Apex triggers to automate calculations, such as determining the distance between volunteers and venues. This functionality will aid in assigning volunteers to nearby tasks, enhancing logistical efficiency.

I. User Management Setup:

 Create user profiles for various roles, including volunteers and administrators, and assign appropriate permissions to manage data access and system functionality.

J. Reporting Types and Dashboards:

 Set up custom report types to track volunteer activities and create dashboards to visualize key metrics related to food distribution and volunteer engagement.

Testing and Validation:

A comprehensive testing phase ensures the system operates as intended:

- **Unit Testing:** Conduct unit tests on Apex classes and triggers to validate their functionality and reliability across different scenarios.
- **User Interface Testing:** Assess the user interface to ensure it is intuitive and accessible, allowing users to navigate and complete tasks effortlessly.

Key Scenarios Addressed in the Salesforce Implementation:

The FoodConnect project effectively addresses several critical scenarios:

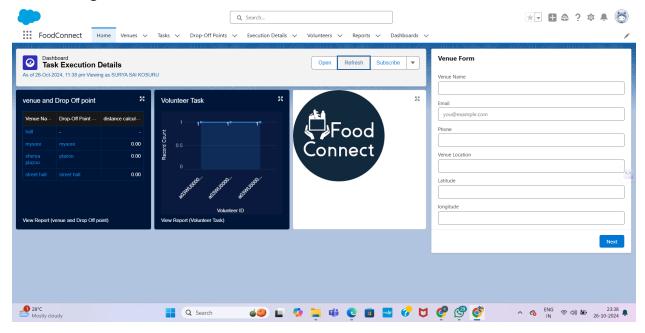
- **Volunteer Assignment Management:** Volunteers are assigned tasks based on their availability and location, improving efficiency in food distribution logistics.
- **Tracking Food Distribution:** The system oversees food distribution across various venues and drop-off points, enabling coordinators to monitor progress and enhance operational effectiveness.
- **Reporting on Volunteer Activities:** Reports generated by the system provide insights into volunteer activities, including completed tasks and feedback received, supporting improvements for future initiatives.

Conclusion:

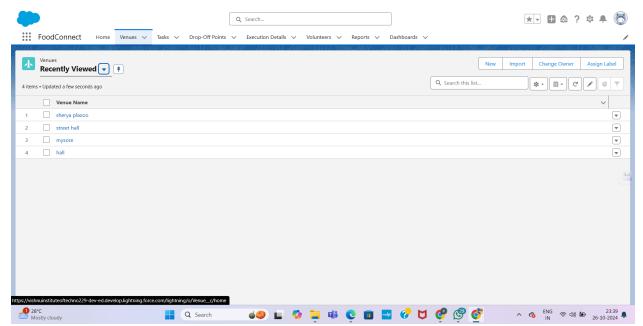
The *FoodConnect* project has successfully established a robust volunteer management system within Salesforce, achieving significant improvements in data management, user experience, and operational efficiency. By utilizing custom objects, relationships, and automation, food distribution processes have become more streamlined, enhancing the organization's capacity to coordinate volunteer efforts effectively.

IMAGES OF APPLICATION:

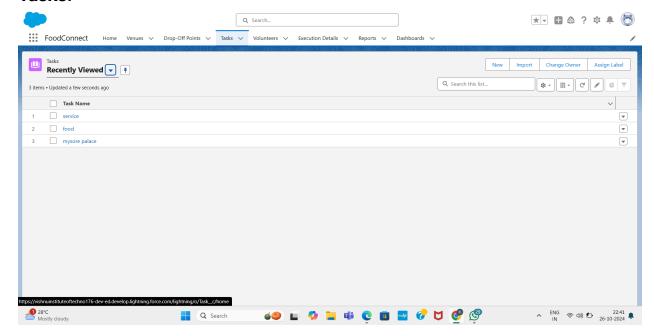
Home Page:



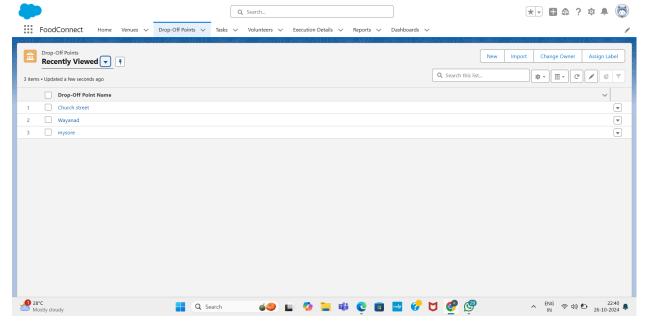
venues:



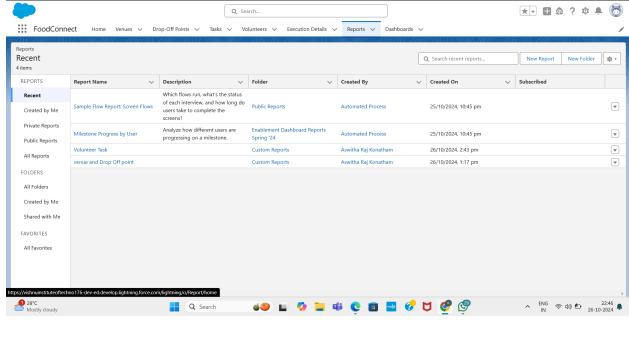
Tasks:



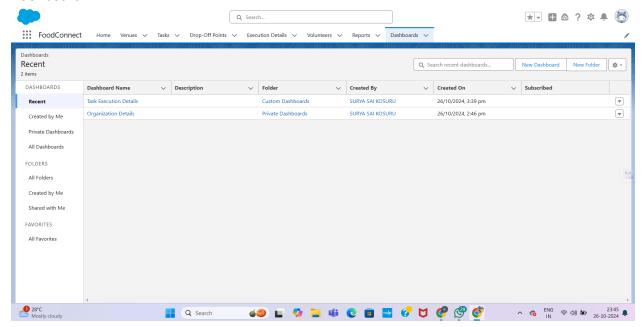
DropOffPoints:



Reports:



Dashboard:



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