QuickEats

A salesforce - based app to dual challenges of global food waste and local hunger

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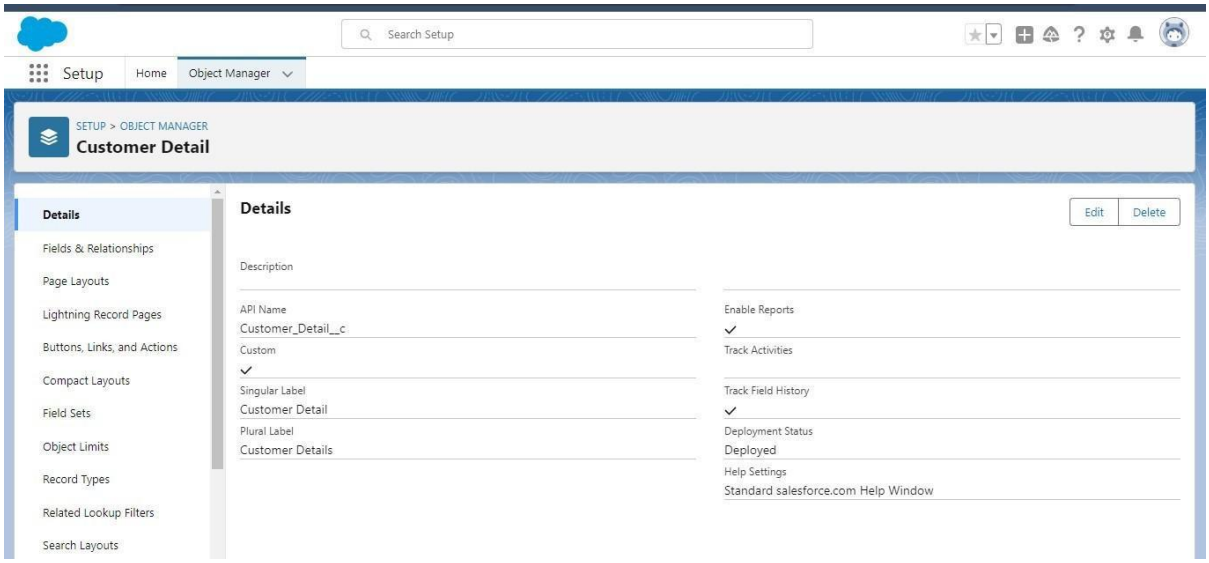
1. Introduction

The "QuickEats" project is a Salesforce-based platform designed to address the dual challenges of global food waste and local hunger. It provides an organized and efficient solution for food redistribution by connecting food donors, such as restaurants and hotels, with organizations serving the underprivileged, like NGOs and community kitchens. Leveraging Salesforce's automation and CRM capabilities, the system simplifies the donation process, optimizes logistics, and provides real-time tracking to ensure surplus food reaches those in need promptly. The platform's objective is to create a sustainable and replicable model for communities to manage food surplus and combat food insecurity.

2. Object

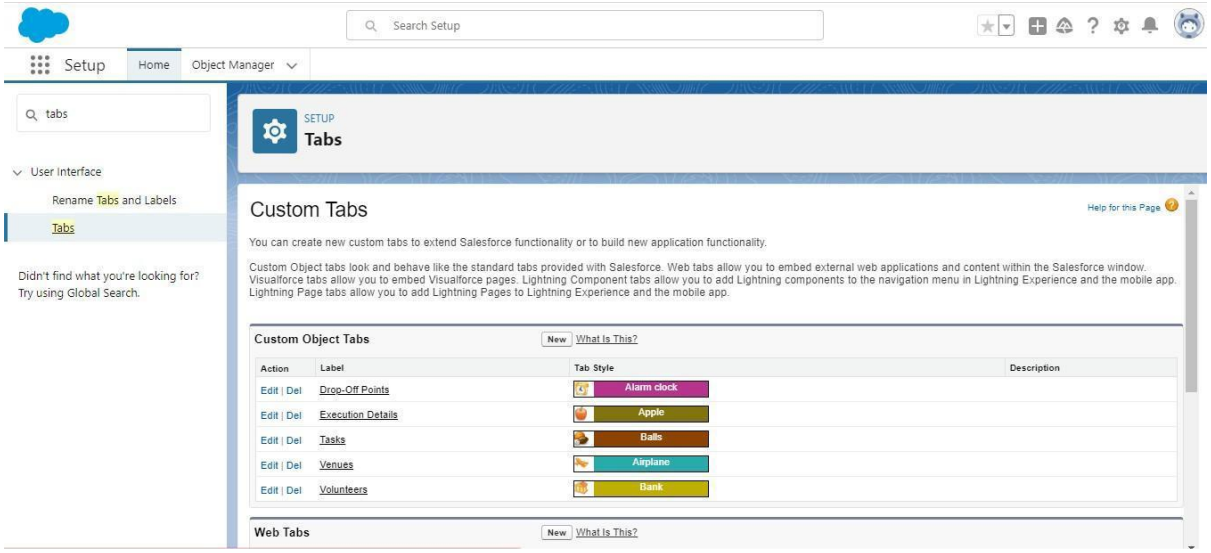
Data within the platform is managed using Salesforce Objects, which are structured to store specific information. The configuration utilizes Standard Objects such as 'Account' to represent food donors and NGOs, 'Contact' for associated individuals, and 'Case' to manage process issues. Additionally, several Custom Objects were created to meet specific project needs, including 'Venue' (food source locations), 'Dropoff Point' (recipient locations), 'Task' (process actions), 'Volunteer' (helper details), and 'Execution Details' (logistical implementation data).



3. Tabs

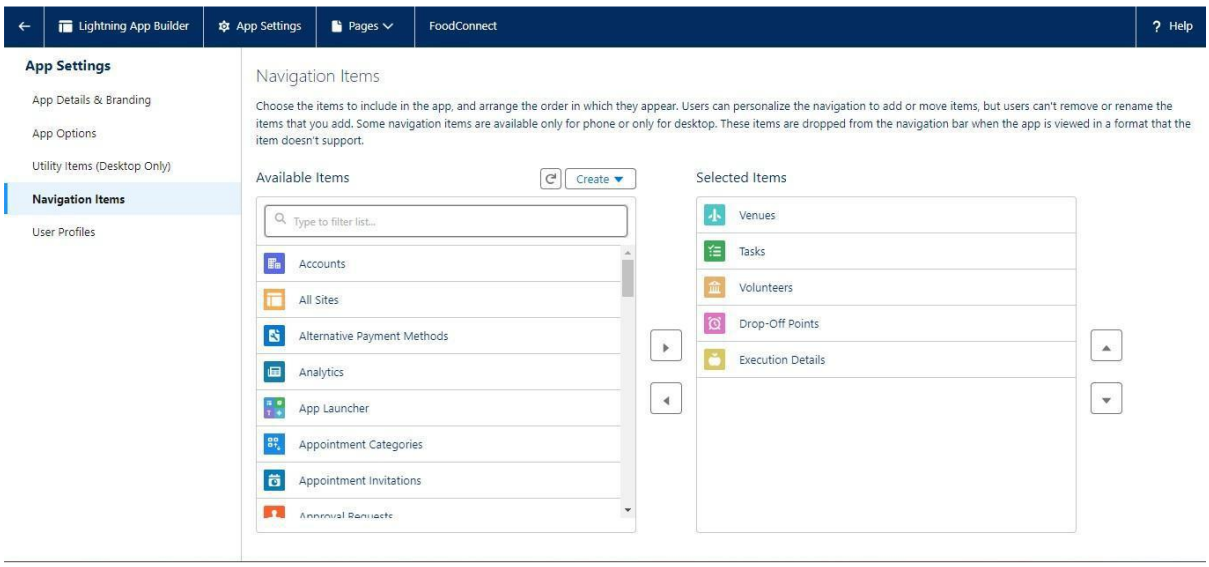
To ensure user accessibility, custom Tabs were configured for the primary custom objects. A tab serves as the user interface component that allows users to view and create records for a specific object. Following the standard setup process, tabs

were created for 'Venue,' 'Drop-Off Point,' 'Task,' 'Volunteer,' and 'Execution Details'. These tabs were then bundled into the main application to provide a convenient navigation bar for all users.



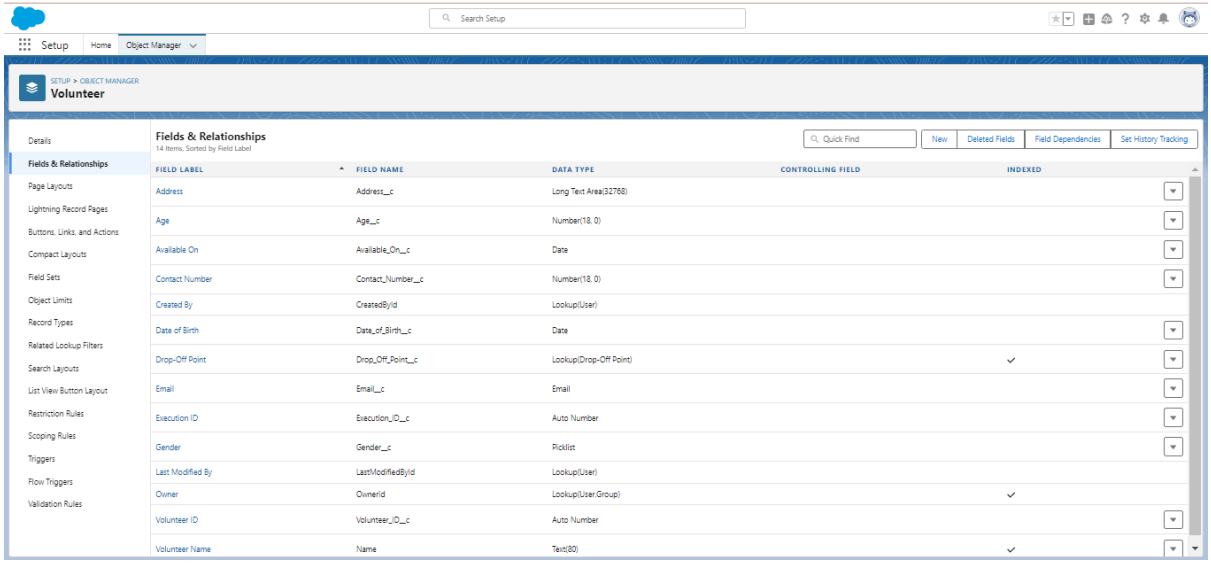
4. The Lightning App

A dedicated Lightning App named "QuickEats" was constructed to serve as the central hub for users. This app bundles all essential components, providing users with access to a curated set of objects, tabs, and other items in a single, convenient navigation bar. The app was configured with standard navigation and includes tabs for 'Home,' 'Venue,' 'Drop-Off Point,' 'Task,' 'Volunteer,' 'Execution Details,' and 'Reports' to streamline the food redistribution workflow.



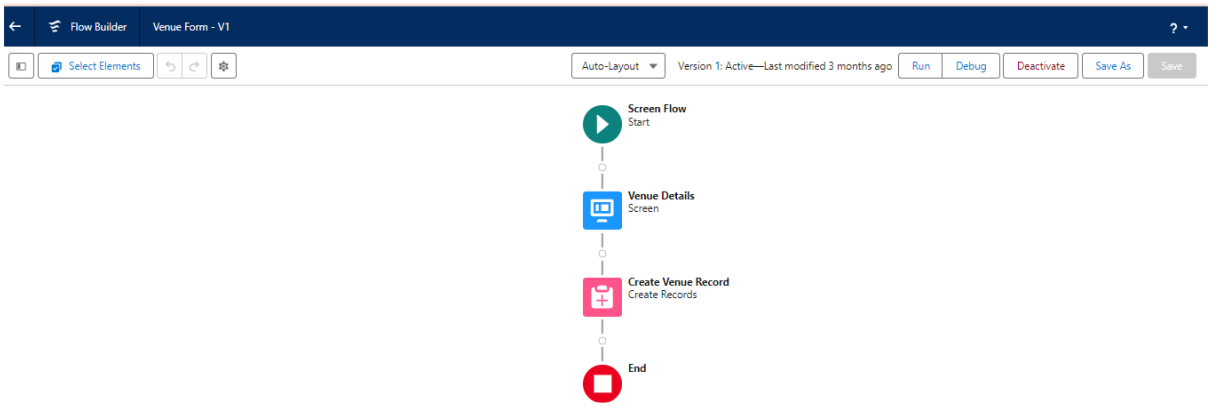
5. Fields

Custom fields and relationships were established to link objects and capture necessary data for the application's processes. A key implementation involved creating a Master-Detail relationship on the 'Volunteer' object. This field establishes a direct link to the 'Drop-Off point' object, allowing for structured data management that associates specific volunteers with their assigned delivery locations.



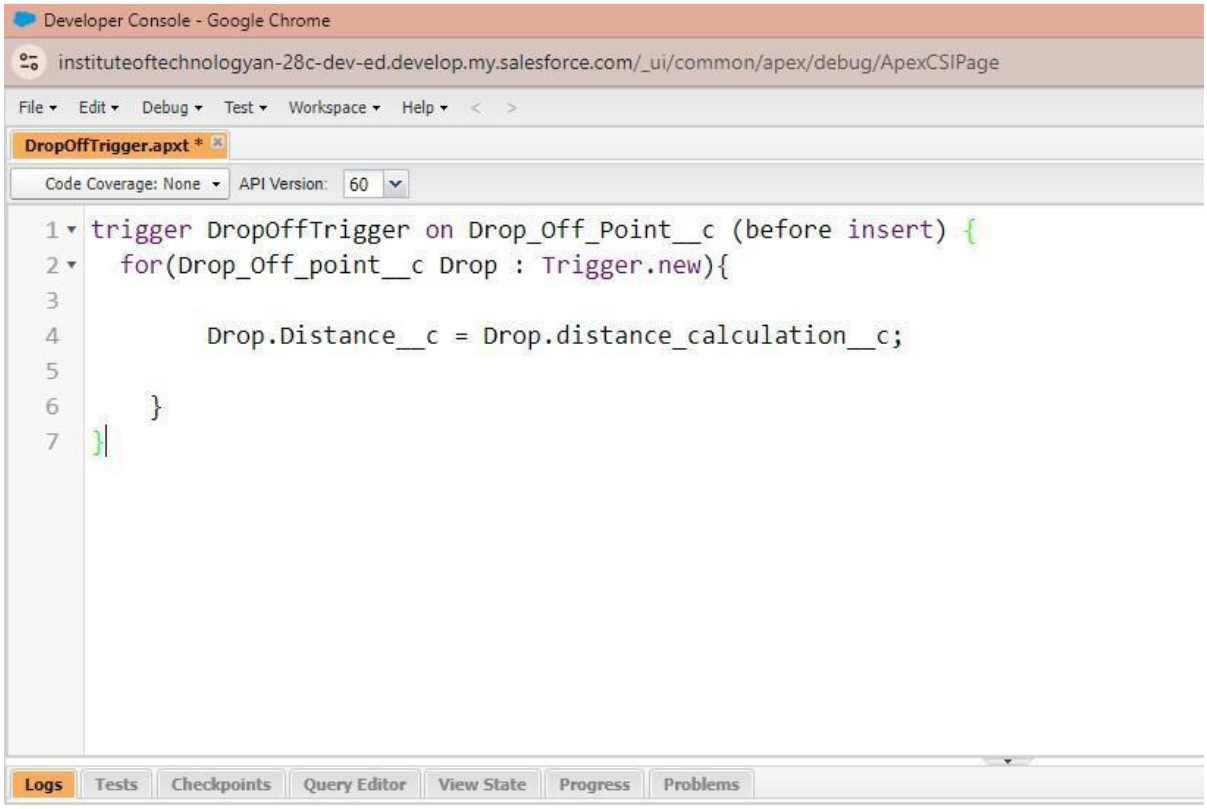
6. Flows

Process automation was implemented using Salesforce Flows to guide users and create records efficiently. A key example is the "Venue Form," a Screen Flow designed to capture new food donor locations. This flow presents a user screen to input venue details, including name, contact information, and location coordinates. Once the user submits the information, the flow automatically executes a "Create Records" element, which generates a new 'Venue' object record with the collected data.



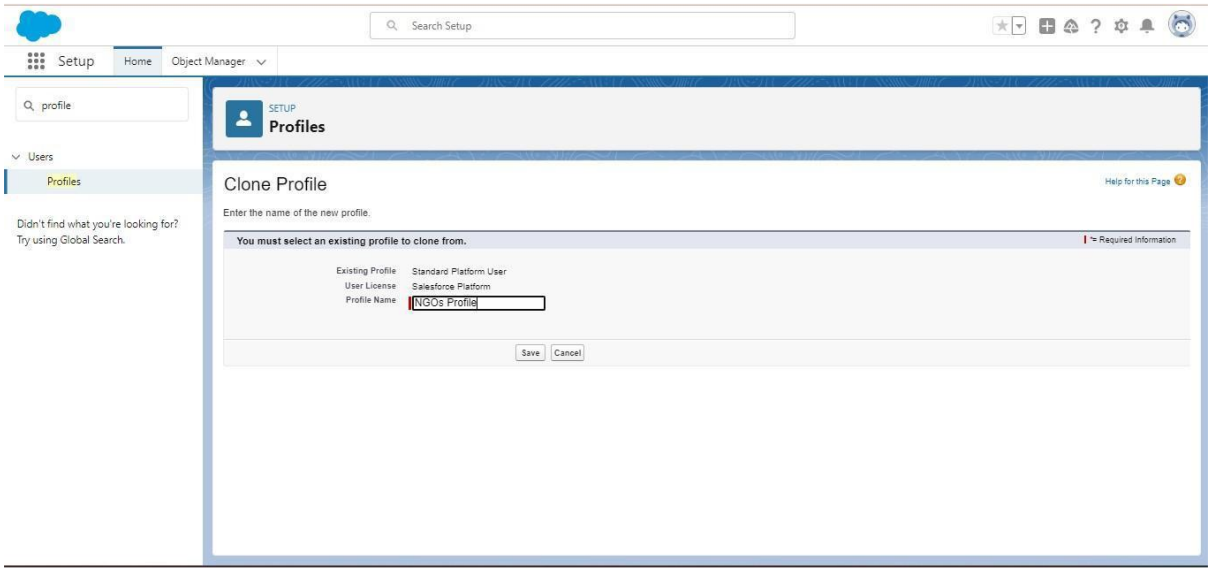
7. Trigger

For more complex, code-based automation, an Apex trigger was developed. A trigger named "DropOffTrigger" was implemented on the 'Drop_Off_Point__c' object, configured to run "before insert" (before a new record is saved). This trigger automatically populates the 'Distance__c' field by copying the value from the 'distance_calculation__c' field for each new record being created.



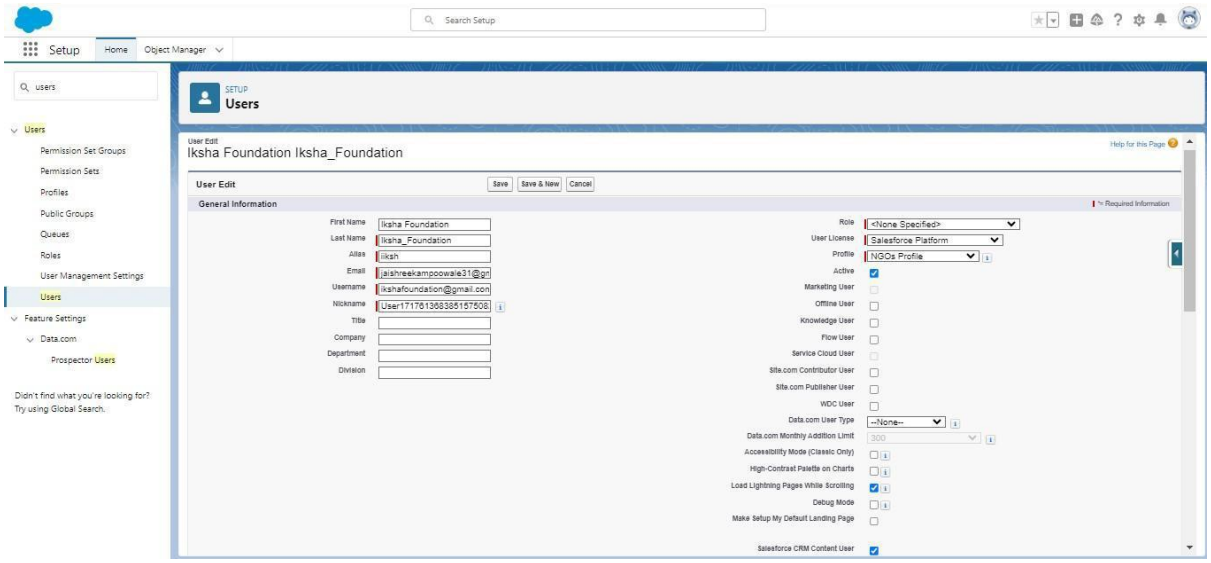
8. Profiles

To manage user permissions and data access levels, a custom profile was established. The "NGOs Profile" was created by cloning the 'Standard Platform User' profile. This custom profile is designed to be assigned to NGO users, ensuring they have the appropriate permissions to access the specific objects, fields, and tabs required for their role in the food distribution process.



9. Creation of Users

New users, representing the NGO partners, were created within the system to grant them access. The standard user creation process was followed, populating general information such as the user's name and email. For example, a user for "Iksha Foundation" was set up and assigned the 'Salesforce Platform' user license and the custom "NGOs Profile". This ensures that all NGO users have the correct, predefined access rights upon logging in.

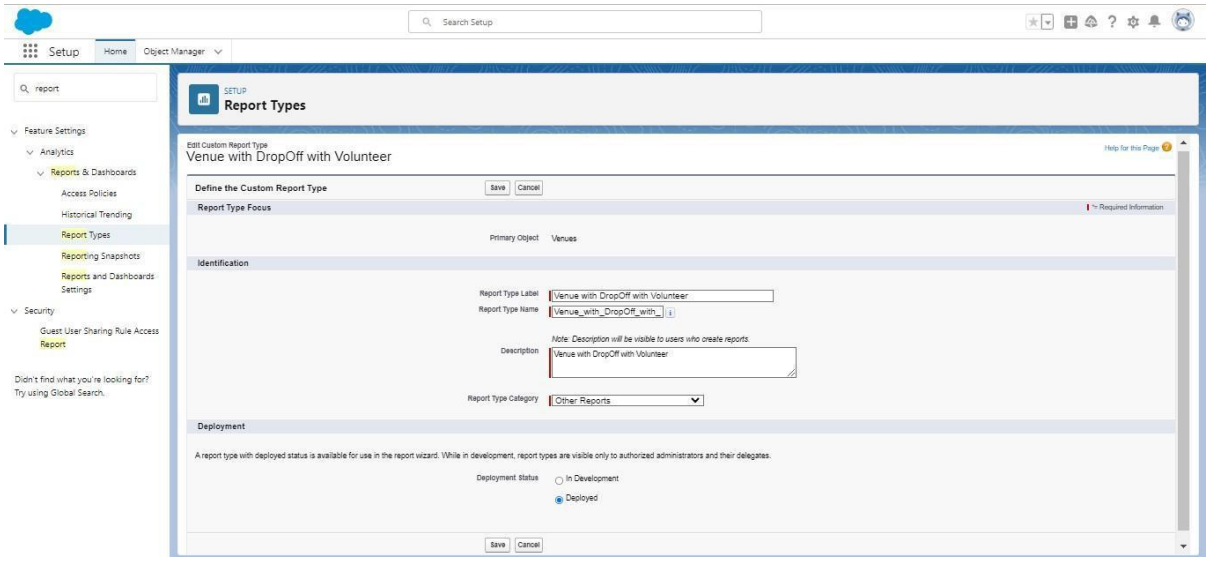


10. Public Group

Public Groups were established to facilitate the sharing of records and to manage data visibility. For instance, a group labeled "Iksha" was created. This group contains specific users as members, including the "Iksha Foundation" user and the "System Administrator". These groups are foundational for defining sharing rules, allowing records to be shared with multiple users simultaneously.

11. Report Types

To facilitate meaningful analysis, new Custom Report Types were defined to specify the object relationships for reporting. One such report type, "Venue with DropOff with Volunteer," was created with 'Venues' as the primary object. This report type joins 'Venues' with its related 'Drop-Off Points' and 'Volunteers,' allowing users to analyze data across all three objects in a single report. A second custom report type was also created to link 'Volunteers with Execution Details and Tasks'.



12. Reports

Leveraging the custom report types, specific analytical reports were built and saved in a "Custom Reports" folder. One key report, "venue and Drop Off point," uses the 'Venue with DropOff with Volunteer' report type. This report is configured to group data by 'Volunteer Name' and displays columns for 'Venue Name,' 'Drop-Off point Name,' and 'Distance,' providing a clear overview of volunteer assignments and logistics. A "Volunteer Task" report was also developed to track volunteer activities.

13. Dashboards

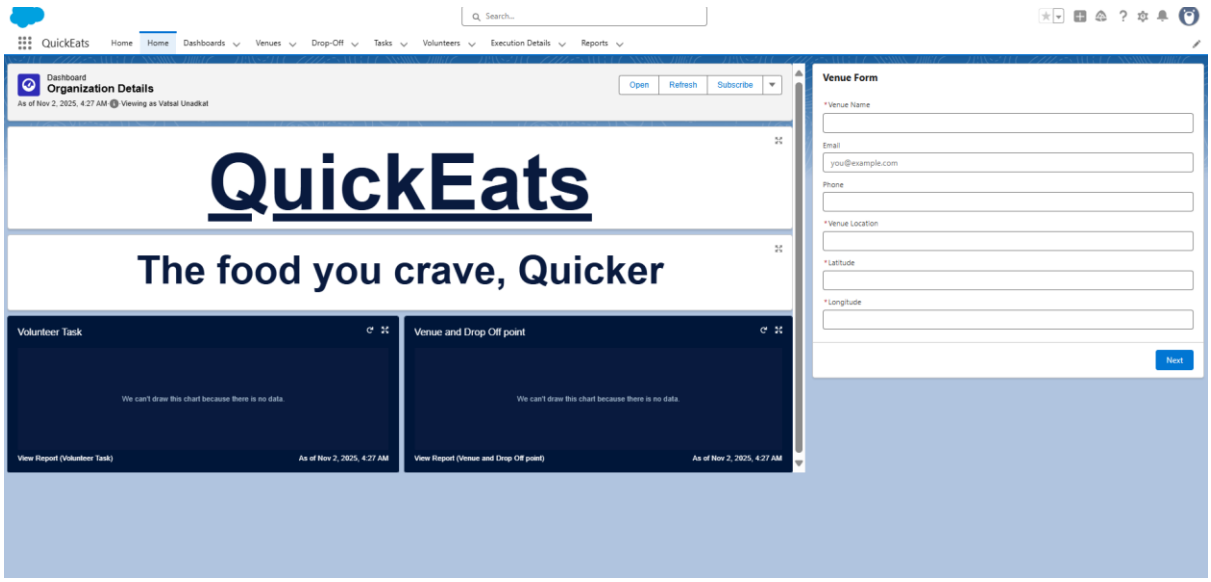
To provide a high-level, visual summary of key metrics, dashboards were configured. A "Custom Dashboards" folder was created to house them. The primary dashboard, "Organization Details," was built to consolidate operational data. This dashboard features a widget that adds the "venue and Drop Off point" report, displaying it as a Lightning Table to give users a real-time, consolidated view of organizational activities.

14. Sharing Rules

Criteria-based Sharing Rules were implemented to automatically expand record access to relevant users. Several rules were configured for the 'Drop-Off point' object based on the 'Distance' field. For example, "Rule 1" automatically shares any 'Drop-Off point' record with a 'Distance' of less than 15 to the "Iksha" Public Group. Subsequent rules grant access to other public groups (like "NSS") based on different distance criteria, ensuring the correct teams have visibility of relevant logistical records.

15. Homepage

A custom "HOME Page" was designed using the Lightning App Builder to provide users with a productive landing page. The 'Standard Home Page' template was selected and customized by adding key components. A 'Flow' component was embedded to feature the "Venue Flow" directly on the homepage, alongside a 'Dashboard' component to display key operational charts. This new page was then activated and assigned as the default homepage for the "QuickEats" application.



16. Conclusion

The Salesforce-based food redistribution platform successfully addresses the challenges of food waste and hunger by providing an organized system for managing surplus food. Through the use of custom objects like 'Venue,' 'Dropoff Point,' and 'Volunteer,' the system meticulously tracks the entire donation and distribution process. The project's automation and real-time data insights enhance operational efficiency, ensure prompt delivery, and maximize the impact of donations. This implementation serves as a powerful, replicable model demonstrating how technology can be leveraged to create sustainable solutions for pressing social issues.