Project Design Phase
Solution Architecture

Date	27 June 2025
Team ID	LTVIP2025TMID38851
Project Name	TO SUPPLY LEFTOVER FOOD TO POOR

Solution Architecture:

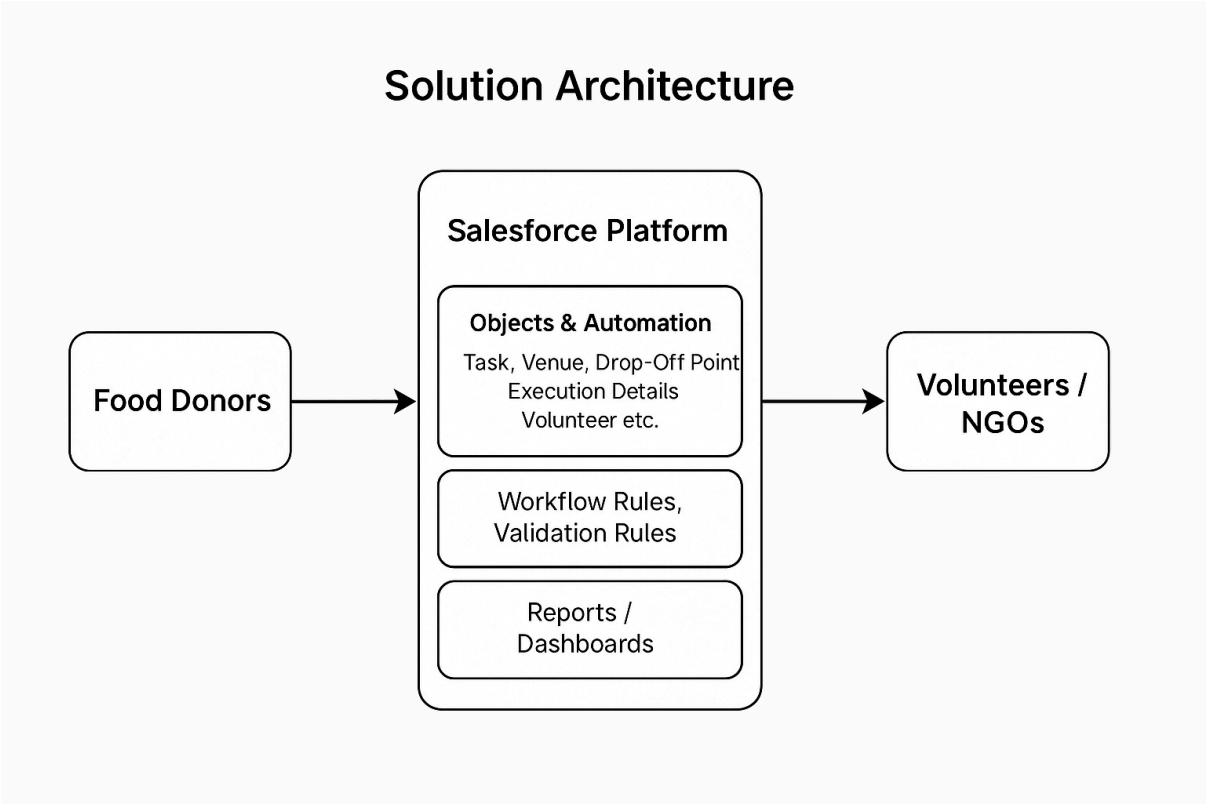
The solution architecture defines how various system components (data, process, logic, user interface, security, and automation) are structured and integrated using the Salesforce Platform to build a scalable and efficient food redistribution system.

Core Components of the Architecture:

Component	Technology Used	Role in Solution
Frontend(UI Layer)	Salesforce Lightning Experience	User interface for food donors, volunteers, and NGOs to interact with the system.
Backend (Data & Logic)	Salesforce Custom Objects, Apex, Flows	Manages data processing, logic, and storage related to tasks, venues, drop-off points, and volunteers.
Integration Layer	Salesforce Platform Events, Triggers	Automates logic such as distance calculations and task assignment.
Security Layer	Profiles, Public Groups, Sharing Rules	Ensures role-based access control, visibility, and collaboration across NGOs.
Reporting Layer	Salesforce Reports & Dashboards	Provides real-time insights into food distribution activities and volunteer engagement.

Data Model (Custom Objects):

Object	Purpose
Venue	Stores food donor details and geolocation.
Drop-Off Point	Represents target delivery locations. Includes location and distance logic.
Task	Captures food delivery information: date, quantity, category, rating, etc.
Volunteer	Manages Volunteers Profiles,availability,contact info
Execution Detail	Tracks volunteer-task linkage, i.e., who delivered which food task.



Conclusion:

The solution architecture for the FoodConnect system leverages Salesforce's cloud infrastructure, data modeling capabilities, automation tools, and secure access controls to deliver a powerful, scalable, and transparent platform for leftover food redistribution. It ensures that donors, NGOs, and volunteers are connected efficiently, and food reaches those in need with minimal delay and maximum accountability.