

Project Design Phase

Solution Architecture

Date	26 June 2025
Team ID	LTVIP2025TMID31149
Project Name	To Supply Leftover Food To Poor
College Name	Ideal Institute Of Technology

Solution Architecture:

The solution architecture for the "Supplying Leftover Food to the Poor" system using Salesforce is designed to bridge the gap between the pressing social issue of food wastage and the technological capabilities of cloud-based platforms. At its core, the architecture integrates Salesforce CRM, Service Cloud, and Einstein AI to enable seamless food donation, real-time tracking, and intelligent donor-recipient matching. The system is structured into layers: a user-friendly interface built with Lightning Web Components for donors, NGOs, and volunteers; a robust backend powered by Apex and Salesforce Flow to manage donation workflows; and a secure data layer using Salesforce Standard and Custom Objects to store and manage food records, user details, and delivery logs. External APIs such as Google Maps and Aadhaar/DigiLocker are used for location services and identity verification, while Heroku supports scalable services and machine learning extensions. This modular and scalable architecture ensures flexibility, high performance, and reliability, allowing the platform to expand across regions while maintaining trust, security, and efficiency in the mission to reduce food waste and hunger.

Solution Architecture Flow Chart:

