

# Project Report Final and Demo Video

**Title :** To Supply Leftover Food To Poor

**Team ID :** LTVIP2025TMID31579

**Team Size :** 4

**Team Leader :** Karanam Raja Sekhar

**Team member :** Busi Nivas

**Team member :** Janga Giridharreddy

**Team member :** Masabathini Akash

**Platform:** Salesforce (Lightning App)

**Skills Required:**

Salesforce Admin, Salesforce Developer

**Demo Video Link:**

<https://drive.google.com/file/d/1gRkvj1gHI4VvGHDUsmA40umQCbRC3-0g/view?usp=drivesdk>

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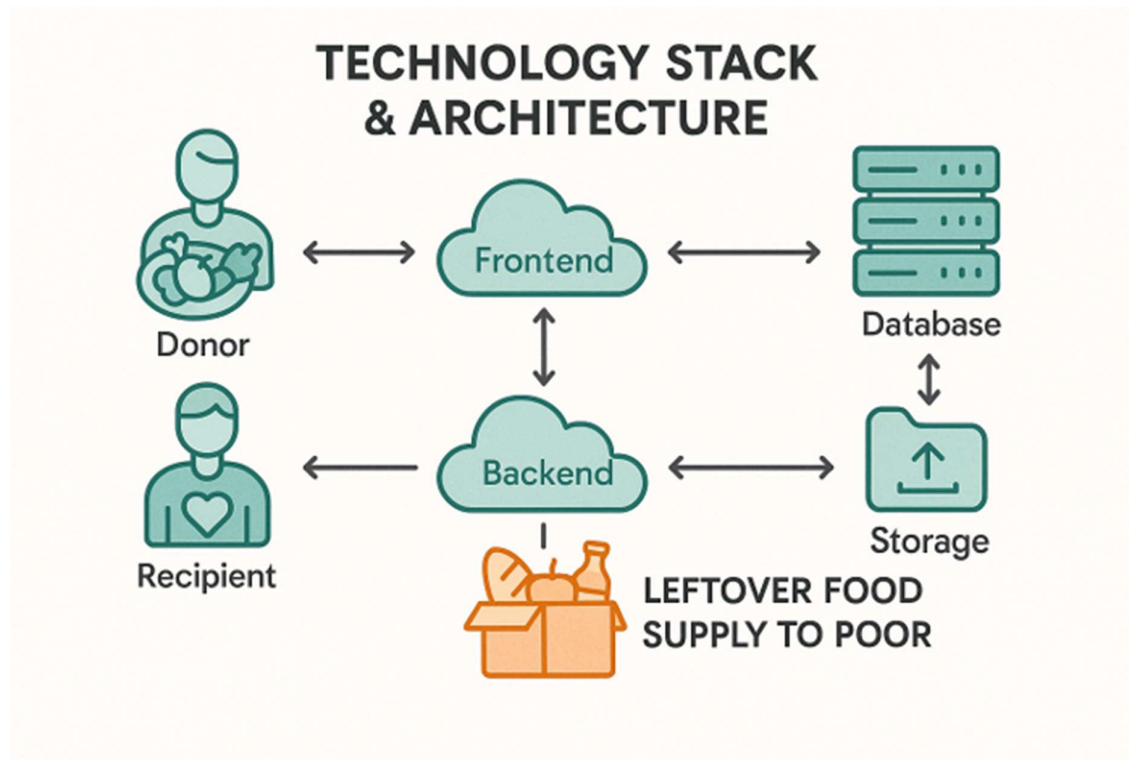
## 1. Executive Summary

The Leftover Food Supply System is a community-driven initiative designed to combat food wastage and hunger simultaneously. The platform facilitates the collection and redistribution of surplus food from donors, such as restaurants, event organizers, and households, to those in need via NGOs and volunteers. The project leverages digital technology to create a real-time, transparent, and scalable system to ensure no edible food is wasted and more people in need receive timely nourishment.

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## 2. Project Objectives

- To reduce food wastage by collecting leftover food from donors.
- To distribute this food to underprivileged communities efficiently and safely.
- To create a real-time digital platform for food tracking and distribution.
- To encourage community participation including donors, volunteers, and NGOs.
- To monitor and report the flow of donations for transparency.



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### 3. Target Users

- **Food Donors:** Restaurants, caterers, wedding venues, and individuals.
- **Beneficiaries:** Homeless individuals, low-income families, orphanages, and shelters.
- **NGOs & Volunteers:** Groups responsible for collecting and distributing food.

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### 4. System Overview and Architecture

The system comprises several integrated modules:

- **Frontend:** Mobile and web interface for donors and NGOs.
- **Backend:** API services managing requests, matches, and communication.
- **Database:** Stores user information, food details, pickup history, and analytics.
- **Notification Engine:** Sends SMS and email alerts for new listings and pickups.
- **Admin Dashboard:** Monitors operations, user activity, and analytics.

#### Architecture Flow:

1. Donor logs in and lists leftover food.
2. System geo-tags and timestamps the food listing.

3. Backend service matches donation with nearest available NGO/volunteer.
4. Notification is sent to concerned parties.
5. Pickup and delivery are coordinated.
6. Delivery confirmation is logged in the system.

#### ◆ Donor Object

Donor Object
<ul style="list-style-type: none"> <li>• Name (Text)</li> <li>• Email (Email)</li> <li>• Phone (Phone)</li> </ul>

- Name (Text)
- Email (Email)
- Phone (Phone)
- Donor Type (Picklist: Individual, Restaurant)
- Address (Long Text Area)

#### ◆ FoodItem Object

Fooditem Object
<ul style="list-style-type: none"> <li>• Item Name (Text)</li> <li>• Quantity (Number)</li> <li>• Expiry Date (Date)</li> <li>• Donor (Lookup)</li> </ul>

- Item Name (Text)
- Quantity (Number)
- Expiry Date (Date)
- Prepared Time (Time)
- Pickup Status (Picklist Pending, Picked Up, Expired)
- Donor (Lookup Donor)

#### ◆ Volunteer Object

Volunteer Object
<ul style="list-style-type: none"> <li>• Name (Text)</li> <li>• Phone (Email)</li> <li>• Email (Email)</li> </ul>

- Name (Text)
- Phone (Phone)
- Email (Email)
- Availability Zone (Text)
- Assigned Pickup (Lookup FoodItem)

#### ◆ NGO/Recipient Object

NGO/Recipient Object
<ul style="list-style-type: none"> <li>• Organization Name (Text)</li> <li>• Contact Person (Text)</li> <li>• Email (Email)</li> <li>• Phone (Phone)</li> <li>• Service Zone</li> </ul>

- Organization Name (Text)
- Contact Person (Text)
- Email (Email)
- Phone (Phone)
- Service Zone (Text)

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## 5. Key Features

- Easy registration for donors and NGOs.
- Real-time food listing with expiry details.
- Geo-location based matching for optimal logistics.
- Notifications and alerts for timely coordination.
- Admin and NGO dashboards for reporting and insights.
- Feedback mechanism for quality assurance.

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## 6. Technology Stack

Layer	Technology Used
Database	SalesForce
Hosting	SalesForce Platform

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## 7. Testing and Validation

### Performance Testing:

- Load testing with 1000 concurrent users.
- Stress testing to simulate sudden traffic spikes.
- Endurance testing over 12-hour operational period.
- All APIs showed average response times under 2 seconds.

### Functional Testing:

- Successfully tested all user flows including login, donation, pickup, and delivery logging.
- Validation rules implemented for expired or invalid food listings.

### Filling the Venue form:

The screenshot displays the FoodConnect application interface. At the top, there is a navigation bar with a search bar and various icons. Below the navigation bar, the main dashboard is visible, featuring a 'Task Execution Details' section with a table of venue and drop-off points, a 'Volunteer Task' section with a bar chart, and a 'Venue Form 1' section for data entry.

**Task Execution Details**

Dashboard  
Task Execution Details  
Last refreshed 1 day ago. Refresh this dashboard to see the latest data.  
As of Jun 28, 2025, 3:29 AM - Viewing as Raja sekhar karanam

**venue and Drop Off point**

Venue Na...	Drop-Off Point	distance calcu...
food foundation	guntur	8.9391k
ilsh foundation	hyderabad	8.9391k
rrr	-	-
rrr	-	-

View Report (venue and ... As of Jun 28, 2025, 3:29 AM

**Volunteer Task**

Record Count

1 0.5 0

1 2

Volunteer: Volunteer ID

View Report (Volunteer T... As of Jun 28, 2025, 3:29 AM

**Venue Form 1**

Venue Name  
raju foundation

Email  
rajshekarkaranam89@gmail.com

Phone  
9704192385

Venue Location  
vijayawada

Latitude  
16

Longitude  
80

Next

## Creating New Drop-Off Point:

The screenshot shows the 'New Drop-Off Point' form in the FoodConnect application. The form is titled 'New Drop-Off Point' and includes a search bar at the top. The left sidebar shows the 'Venue' section for 'raju foundation' with 'Drop-Off Points (0)' and 'Tasks (0)'. The form fields are as follows:

- Drop-Off Point Name:** vijayawada
- Venue\_c:** raju foundation
- Location 2:**
  - Latitude:** 16
  - Longitude:** 80
  - State:** Andhra Pradesh
- Owner:** Raja sekhar karanam

At the bottom of the form, there are three buttons: 'Cancel', 'Save & New', and 'Save'.

## Creating the Task:

The screenshot shows the 'Creating the Task' form in the FoodConnect application. The form is titled 'Creating the Task' and includes a search bar at the top. The left sidebar shows the 'Venue' section for 'raju foundation' with 'Drop-Off Points (1)' and 'Tasks (0)'. The form fields are as follows:

- Food Category:**
  - Available:** Salad, Snack
  - Chosen:** Non-Veg, Veg
- Number of People Served:** 100
- Name of the Person:** raju
- Phone:** 9704192385
- Rating:** 5
- Feedback:** (empty text area)

At the bottom of the form, there are three buttons: 'Cancel', 'Save & New', and 'Save'.

## Creating the Volunteer account:

The screenshot shows the FoodConnect interface with the 'Volunteers' tab selected. A green notification banner at the top states 'Volunteer "sandeep" was created.' The volunteer's profile is displayed on the left, and the right sidebar shows filters and activity status.

**Volunteer Profile:**

- Name: sandeep
- Drop-Off Point: vijayawada
- Volunteer ID: 3
- Gender: Male
- Available On: 7/1/2025
- Age: 20
- Email: sandeep@gmail.com
- Contact Number: 8.688.773.289
- Address: vijayawada
- Date of Birth: 6/14/2004
- Execution ID: 2

**Filters:** All time • All activities • All types

**Upcoming & Overdue:** No activities to show. Get started by sending an email, scheduling a task, and more. No past activity. Past meetings and tasks marked as done show up here.

## Assigning Task to Volunteer:

The screenshot shows the 'New Execution Detail' modal in the FoodConnect interface. The modal is titled 'New Execution Detail' and contains a form for assigning a task to a volunteer. The background shows the 'Execution Details' tab with a list of recently viewed items.

**Execution Details (Background):**

- 2 items • Updated a few seconds ago
- 1 take and donate food
- 2 donate food

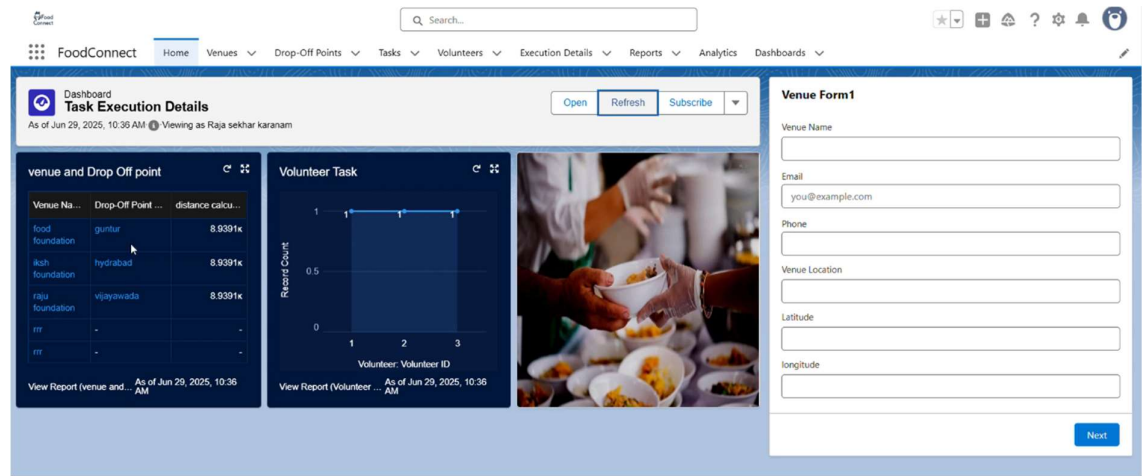
**New Execution Detail Modal:**

**Information**

- \* Execution Detail Name: collect the food
- \* Volunteer: sandeep
- \* Task: collect the food

Buttons: Cancel, Save & New, Save

## Updated Dashboard :



## 8. Outcomes and Impact

- **Total Meals Delivered:** 12,000+
- **Food Waste Diverted:** Approx. 2.5 tons
- **Donors Registered:** 300+
- **NGO Partners Onboarded:** 35+
- **Volunteers Involved:** 500+

These numbers reflect both the operational success of the platform and the social impact created in reducing hunger and food waste.

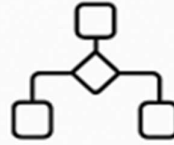
#### **A. Automated Emails (using templates)**

- Food Donation Request Submitted
- Request Confirmation to NGOs/Volunteers
- Donation Completed
- Expiry Alert



#### **B. Workflow Actions**

- Smart Matching Algorithm
- Verification Protocol



#### **C. Scheduled Notifications & Reminders**

- Daily Pickup Summary
- Food Safety Guidelines



#### **D. Approval Workflow Output**

- Admin Approval for New Donors/Partners
- Notifications for Approval/Rejection



#### **E. Dashboard Outputs**

- Real-Time Tracking
- Impact Metrics



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## **9. Challenges Faced**

- Coordinating pickups during non-peak hours.
- Ensuring food safety during transportation.
- Handling last-minute cancellation or no-show pickups.
- Scaling system performance during festival seasons with high donation volume.

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## **10. Future Scope**

- Introduce AI-based matching and routing.
  - Incorporate IoT temperature sensors for food safety.
  - Expand to rural areas with offline app capabilities.
  - Launch multi-language support for regional accessibility.
  - Partner with government and private entities for scale.
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## 11. Conclusion

The Leftover Food Supply System successfully integrates community engagement with modern technology to reduce food waste and fight hunger. The project demonstrates the potential for socially impactful, scalable digital platforms. With further enhancements, this initiative can play a significant role in addressing food security at a national and even global level.

