PROJECT TITLE: **To Supply Leftover Food to Poor**

TEAM MEMBERS:

Team Member ID: C3124D6CC1FC37B95554473A7A466D68(team leader)

Team Member ID: 945A29719D93F1C943D49C6C6B4EBA92

Team Member ID: 7E5E1AE4752A63DA86A4EB17119B572D

Team Member ID: 45C24F4DA9FE6D1F95B344D765B24F31B

Team Member ID: 85C82250FF834518DA4415311FEDD3AF

1. PROJECT OVERVIEW:

This project is designed to address food waste reduction and hunger alleviation by redistributing surplus food to those in need. The goal is to implement a sustainable solution using logistics and community partnerships to efficiently collect, manage, and distribute leftover food from restaurants, events, and households to shelters and individuals experiencing food insecurity. Through this project, we aim to improve food availability for low-income communities, reduce food waste, and support humanitarian goals.

2. OBJECTIVES:

- **Business Goals:**
  - Establish a reliable network for surplus food collection and distribution.
  - Build partnerships with local restaurants, food suppliers, and NGOs.
  - Minimize food wastage in the community.
- **Specific Outcomes:**
  - Launch an app or web platform for real-time updates on food availability and collection.
  - Develop a volunteer network for food distribution logistics.
  - Achieve measurable reductions in food waste within the community.

3. KEY FEATURES AND CONCEPTS UTILIZED:

- **Platform Features:**
  - Digital platform or mobile app to connect donors with food recovery services.
  - GPS tracking for optimizing collection and distribution routes.
  - Data analytics for monitoring food collection, distribution efficiency, and waste reduction impact.

4. DETAILED STEPS TO SOLUTION DESIGN:

- **Data Model Design:**
  - Develop data models to track donors, recipients, food types, expiration dates, and distribution routes.
- **User Interface Design:**
  - Create a simple and accessible UI for food donors, volunteers, and recipients.
  - Implement push notifications for real-time updates on food pick-up and delivery.
- **Business Logic and Workflow:**
  - Establish automated workflows for notifying volunteers of available surplus food, scheduling pick-ups, and confirming deliveries.

5. TESTING AND VALIDATION:

- **Unit Testing:**
  - Test core functionalities, such as food listing, volunteer notifications, and location tracking.
- **User Interface Testing:**
  - Validate the app or platform with end-users to ensure usability, clarity, and accessibility.

6. KEY SCENARIOS ADDRESSED BY THE PROJECT:

- **Food Collection and Distribution:** Address scenarios where food is close to expiration but still consumable, ensuring timely redistribution.
- **Volunteer Management:** Handle volunteer scheduling, notifications, and tracking of successful food deliveries.
- **Real-Time Monitoring:** Utilize data insights to refine operations, ensuring food reaches those in need effectively and minimizing spoilage.

7. CONCLUSION:

- **Summary of Achievements:**
  - Created a reliable, community-driven system for surplus food redistribution.
  - Formed partnerships to streamline food collection and distribution logistics.
  - Demonstrated a positive impact in reducing food waste and feeding the hungry.

OUTCOME: