

## ABSTRACT

The Food Donation Project is a transformative initiative aimed at addressing the dual challenges of food waste and hunger by leveraging technology to create a seamless and efficient food redistribution system. This project is built around three interconnected modules designed to streamline and optimize the donation process. The Restaurant Module provides a platform for restaurants to easily report and manage surplus food through an intuitive interface, enabling them to notify the system about available leftover items with details such as type, quantity, and special handling instructions. The Admin Module acts as the central coordination hub, aggregating data from restaurants, managing logistics, and scheduling pickups. It ensures that surplus food is redistributed effectively by overseeing its allocation to various recipient organizations, such as orphanages and charitable institutions, based on priority and need. Finally, the Orphanage Module connects recipient organizations with the donation network, allowing them to request and manage food donations, track delivery status, and provide feedback. This module ensures that the donated food reaches the intended beneficiaries in a timely and safe manner. By integrating these three modules, the Food Donation Project creates a comprehensive ecosystem that not only reduces food waste but also supports equitable resource distribution, thereby enhancing community welfare and fostering a culture of sustainability and generosity.

## MODULE DESCRIPTION

1. **Restaurant Module:** The Restaurant Module serves as a vital interface for restaurants to manage and report surplus food. Through this module, restaurants can input details about leftover food, including its type, quantity, and any specific handling instructions. The system offers a user-friendly interface that simplifies the process of notifying the network about available surplus. This module ensures accurate notifications and supports efficient food management by providing restaurants with tools to track and update their surplus inventory.
2. **Admin Module:** The Admin Module acts as the central hub for coordinating the food redistribution process. Upon receiving notifications from the Restaurant Module, this module aggregates and analyzes data on available food. It oversees logistics, including scheduling pickups and coordinating transportation. The Admin Module also manages the allocation of food to various recipient organizations, prioritizing based on

need and location. It ensures that surplus food is redistributed efficiently and equitably to orphanages and other charitable institutions. This module also provides oversight and support to maintain the integrity and safety of the food distribution process.

3. **Orphanage Module:** It provides a platform for these organizations to track delivery statuses, and manage received items. This module facilitates communication between the recipients and the Admin Module, ensuring that the donated food meets the needs of the beneficiaries and adheres to safety standards. It also enables recipient organizations to provide feedback, which helps refine the process and improve service delivery.