

# DEVSHOUSE



## REDUCING FOOD WASTE CAMPAIGN.

HACK TITANS

Environmental Sustainability



GDG on Campus



**VIT<sup>®</sup>**

**Vellore Institute of Technology**

(Deemed to be University under section 3 of UGC Act, 1956)

CHENNAI

# Problem Statement

**Reducing urban food waste with smart management solutions.**

## **Aim**

**A significant amount of food in urban cities is discarded daily because it is not consumed. This not only contributes to environmental issues but also represents a missed opportunity to redistribute edible food to communities in need.**



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# Product Idea

**Food Donation:** Individuals and organisations can donate surplus food.

**Food Request:** People in need can request food through an easy-to-use platform.

**Expiry Date Tracking:** Donors must mention the expiry date of food items to ensure safety and proper utilization.

**Expiry Alerts:** Automated notifications for quick action.

**Extra Grocery Donations:** Enable users to donate surplus non-perishable items like biscuits and packaged goods, ensuring efficient redistribution to those in need.

**Huger Alleviation:** Orphanages, shelters, and vulnerable communities can access food donations easily.

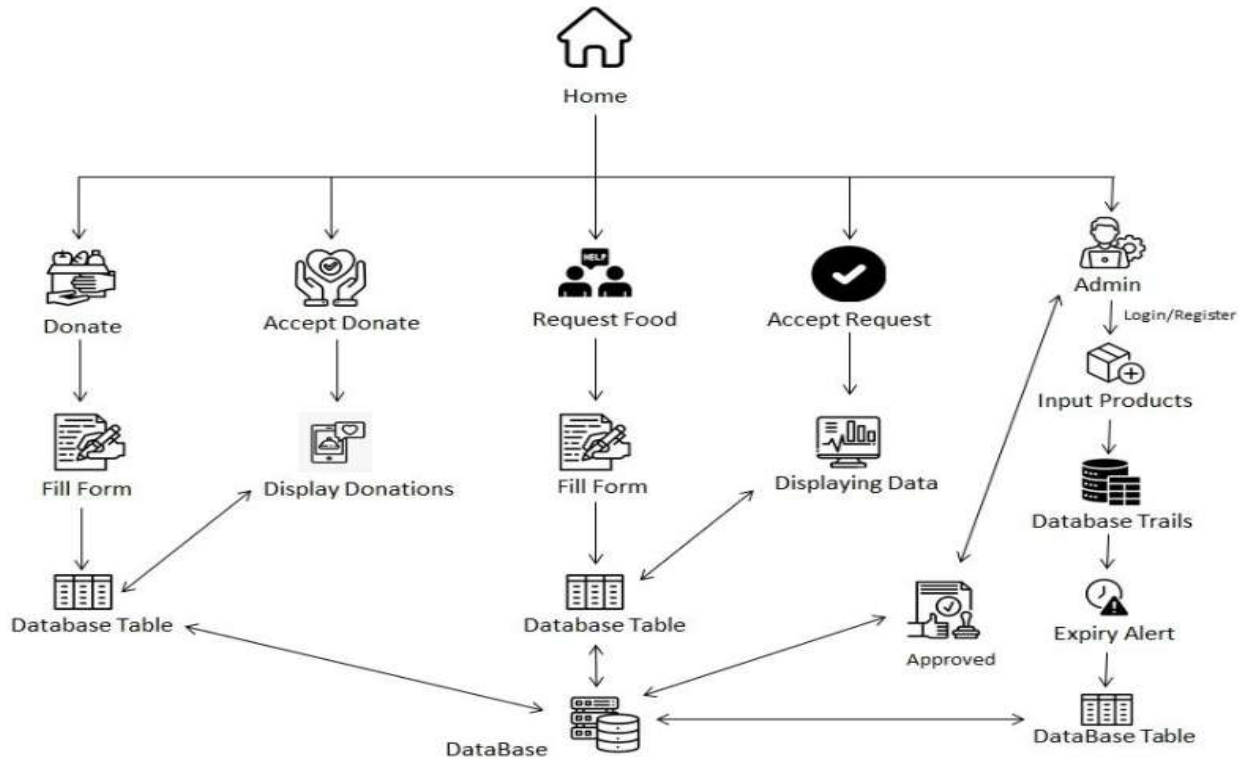
**Directed NGO Donations:** If food remains unclaimed, it is proactively donated to a selected NGO, ensuring effective redistribution and zero waste.



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# Architecture Diagram



# How Unique is it?

## Existing Work vs Coined Novelty

### Existing Work:

**Food Donation Platforms:** Current platforms like food banks, apps, and websites that connect surplus food donors with recipients (e.g., Too Good To Go, Olio, etc.).

**NGO Coordination:** Systems that already exist for routing surplus food to NGOs or shelters.

**Food Expiry Tracking Systems:** Some large-scale organizations already track food expiry to prevent wastage, though usually focused on inventory management.

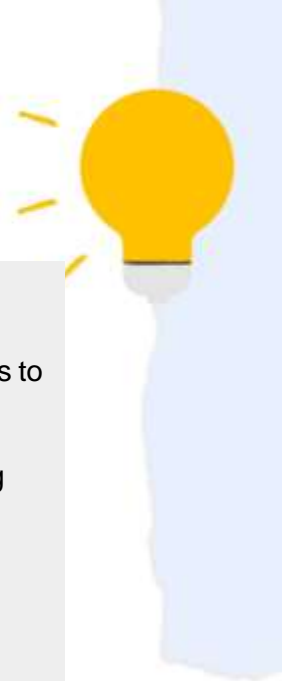
### Coined Novelty:

**IoT Integration for Food Freshness:** Using sensors to detect food freshness via smell and temperature, offering real-time alerts to ensure optimal storage.

**Automated Expiry Alerts:** Real-time expiry tracking for donors, with proactive alert systems for quick redistribution.

**Reserved Instance Usage for Cost Optimization:** Unique use of cloud-based reserved instances to optimize the scalability and cost-effectiveness of the system.

**Real-Time Food Request System:** People in need can directly request food from the platform, ensuring faster and more efficient food allocation..



# Tech Stack



**FrameWork** : Nodejs with Expressjs, Tailwind CSS and Bootstrap, Embedded JavaScript



**DataBase** : MongoDB, AWS Console



**APIs** : JavaScript, Node.js, JSON



**IOT** : Food Smell and Temperature Detection Sensor



**Sky is the Limit** : IoT Integration , Real Time Monitoring and Alerts !





## Team Members

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