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Food Waste ManagementSystem

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Abstract: A drastic increase can be seen in food waste. As per data given by Food and Agriculture Organization , 1/3rd of food produced for human consumption is wasted globally . It accounts for almost 1.3 billion tons per year. As per WHO, 20% of the population face extreme food shortages. Hence there is a need to come up with a solution that can avoid food waste and can help feed the needy.

Keywords: Web Based Application ,Food Donation, Excess Food

I. INTRODUCTION

The basic concept of this project "Food Waste Management System is to collect excess/left over food from donors such as marriage halls, hotels etc. and distribute to needy people. The food details are being displayed in the main page by the admin, where the user can check through it and get to know full details regarding the available food. This web based application for food waste management system can assist in collecting the leftover food from hotels, marriage halls, political and religious functions to distribute among those who are in need. This project is actually helping poor communities to battle against starvation and malnutrition. Once the food request is obtained from user, then the team under the admin will collect the food from the respective donor for distribution.in this way this project will help the donors to reduce food waste and help in feeding the poor and needy people.

II. PROPOSED SYSTEM

In proposed system, we reduce the current problem i.e. food wastage using the web application. Here the admin collects food details from donors and provide them tonearest orphanages/poor . After receiving the requirement of food , the admin gives alert message to that donor and through this way we can reduce the food wastage problem. It is helpful for the restaurants to know that how much food they have produced in excess day-by-day. It also helps to donate the leftover/excess food regularly for the needy people.

A. Working Principle

The project comprised three modules namely Admin, Visited users and Food donors. Admin module allows the system, including user management, data management and system configuration. The admin will have access to various features like adding new users, monitoring system activities, generating reports and performing system maintenance. Visited users and donor module focus on managing the interactions between the system and the users who generate foodwaste or donate food. This module could include features such as web portal or mobile application that allows users to report and track their food, donation and recovery activities. The module could also facilitate between food donors and food recovery organizations providing notifications and alerts to the users when their food is picked up.

III. SYSTEM DESIGN

A. Use Case diagram

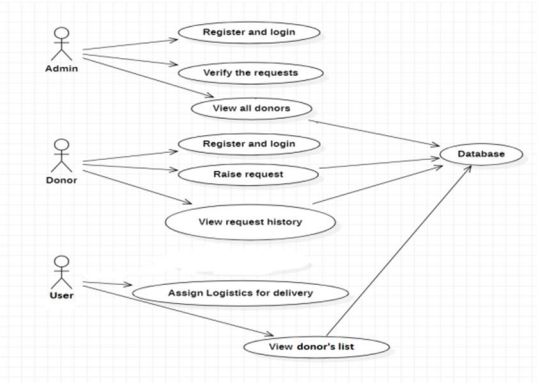


Fig 3.1 Use case diagram

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B. Workflow Diagram



Fig 3.2 Workflow diagram

The use case diagram specifies the activities performed by each user and is shown in Fig. 3.1. The workflow of this project is shown inFig. 3.2.

IV. SYSTEM IMPLEMENTATION

The system comprises of three major modules:

A. Admin

1) View the request raised by Food donor and Visited User.
2) Accept or deny the request from the usersafter verify true information or not.
3) View the compliants and suggestions about the requestsand can reply it.
4) Mapping the food details with admin team.

B. Food Donor

1) Register with name, username, password andsome personal information.
2) Login with the username and password.
3) Raise the request with details like number of packetsto send and other details as well.
4) View the status regarding whether the request isaccepted or denied by the admin.
5) Can give compliants or suggestions about the website capabilities.

C. Visited User

1) User can visit the website and check the food details.
2) View the website clearly and get to know the main motive.
3) User can see the contact details and can contact thewebsite administrator for any queries.
4) View the available donated food and send the request for the food.
5) User can also request the available food as per the requirement.

V. EXECUTION

In the home page the end users have to be registered in various holes such as Food donor and Visited users. After registration,the Visited users can raise the requests with the availability for food from the respective food donors. Then the admin can log into his environment and can either accept or deny the request of the food donor.

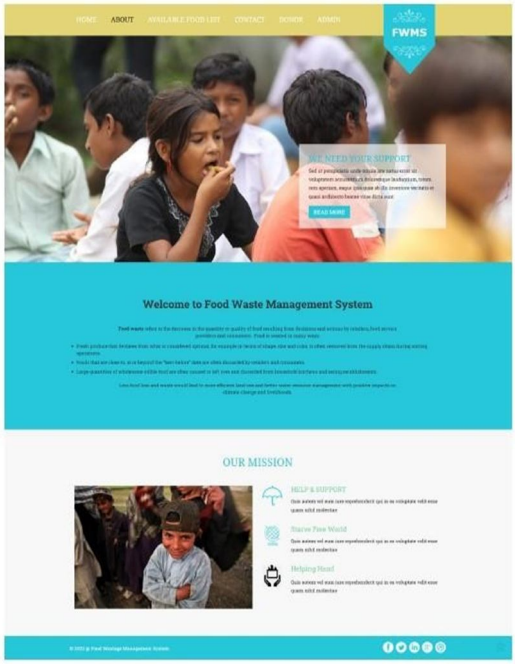


Fig 5.1 Home page of the website



Fig 5.2 About Us

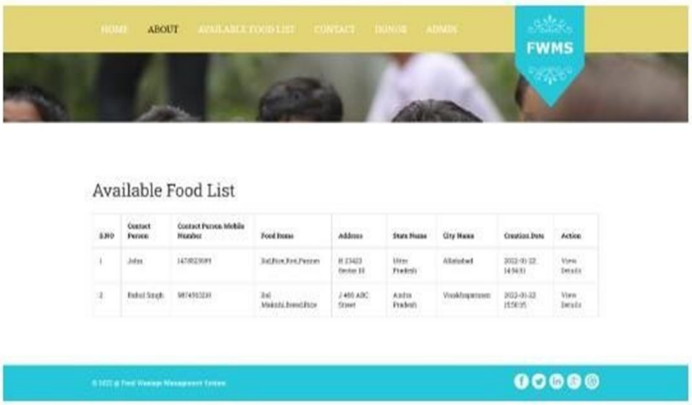


Fig 5.3 Available Food List

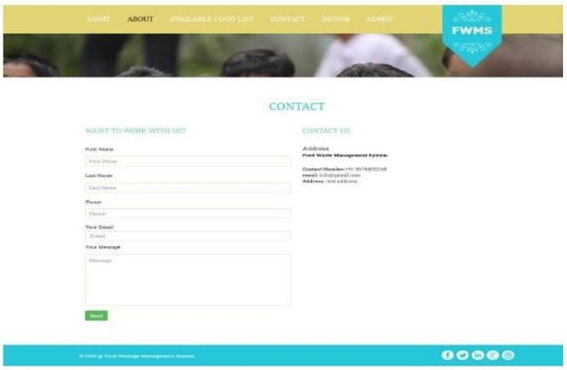


Fig 5.4 Contact Us

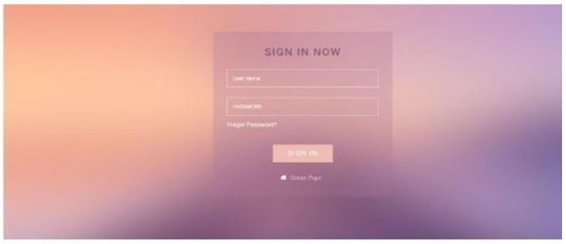


Fig 5.5 Admin Login

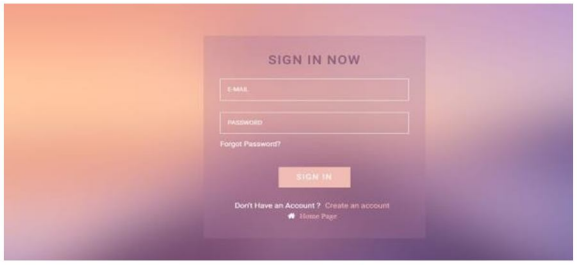


Fig 5.6 Food Donor Login

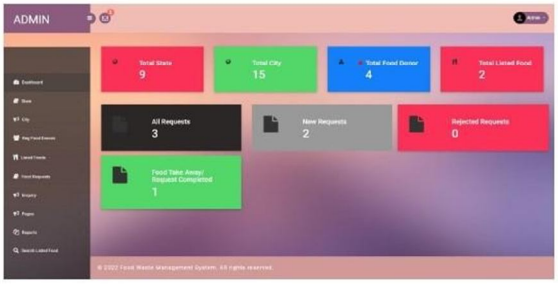


Fig 5.7 Admin Dashboard



Fig 5.8 Admin Profile



Fig 5.9 Donor Dashboard

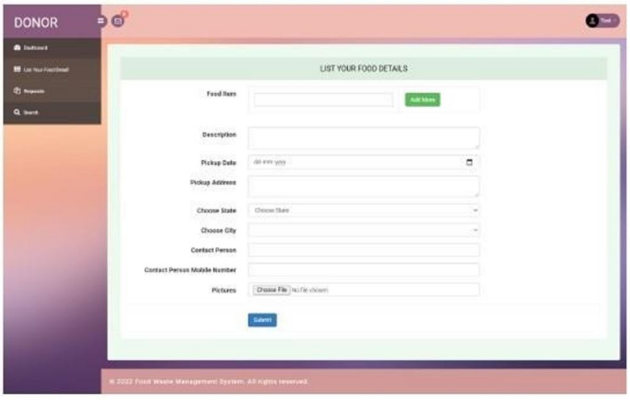


Fig 5.10 Donor adds Food details

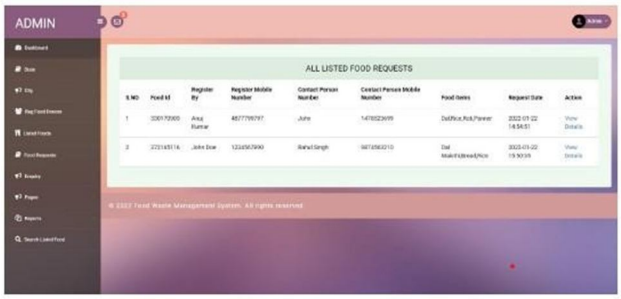


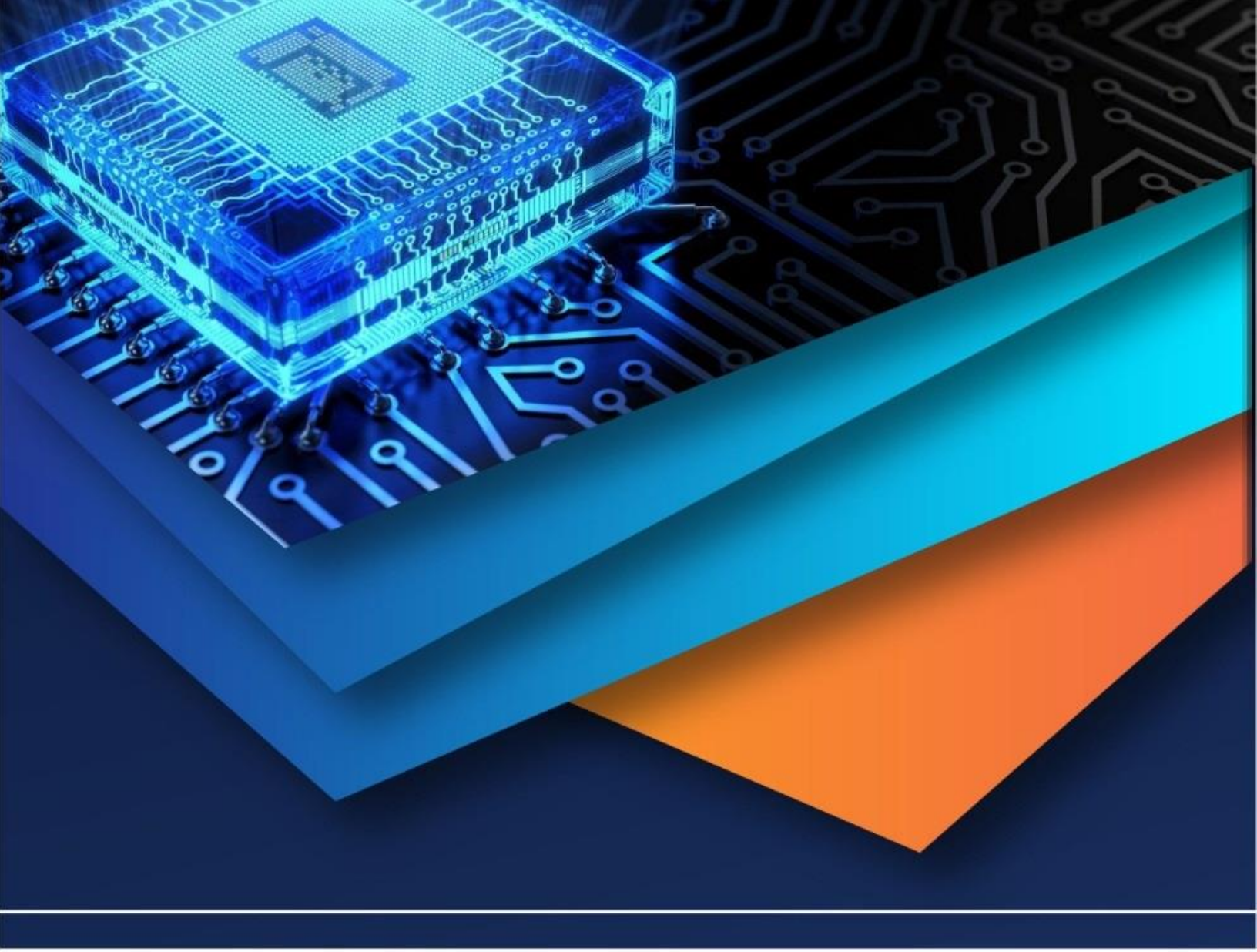
Fig 5.11 Listed Food details

VI. CONCLUSION

The project titled as Food waste management system was deeply studied and analysed to design the code and implement. In my project, I am targeting the person who wants to donate wastage food and this will create a great impact in cost saving and also reduce the food waste.

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