

FOOD WASTAGES MANAGEMENT SYSTEM

A PROJECT REPORT

for

Project (KCA451)

Session (2023-24)

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**Submitted in partial fulfilment of the
Requirements for the Degree of**

MASTER OF COMPUTER APPLICATION

**Under the Supervision of
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Submitted to

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(June 2024)

DECLARATION

I hereby declare that the work presented in this report entitled “Food Wastages Management system”, was carried out by me. I have not submitted the matter embodied in this report for the award of any other degree or diploma of any other University or Institute. I have given due credit to the original authors/sources for all the words, ideas, diagrams, graphics, computer programs, experiments, results, that are not my original contribution. I have used quotation marks to identify verbatim sentences and given credit to the original authors/sources. I affirm that no portion of my work is plagiarized, and the experiments and results reported in the report are not manipulated. In the event of a complaint of plagiarism and the manipulation of the experiments and results, I shall be fully responsible and answerable.

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Food Wastage Management System

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ABSTRACT

Our project aims to create an easy-to-use web platform that connects food donors with NGOs that distribute food to those in need. This project seeks to reduce food waste and help feed hungry people by facilitating the donation process.

Many times, individuals and businesses have surplus food that they are willing to donate, but they don't know how to get it to those in need. On the other hand, NGOs are constantly in search of food to distribute to needy people, but they often struggle to find reliable sources. Our web platform bridges this gap by providing a seamless way for food donors to connect with NGOs.

The platform works by allowing food donors to create an account and list the food items they have available for donation. They can specify the type of food, the quantity, and the time it will be available. NGOs can also create accounts and browse available food donations. They can search for specific types of food or look for donations that are available in their area.

Once an NGO finds a suitable donation, they can contact the donor through the platform to arrange for pickup. The platform includes features such as messaging, scheduling, and location services to make the coordination process smooth and efficient. Both donors and NGOs can leave feedback after the transaction, which helps build trust and reliability within the community.

The platform is designed to be user-friendly, ensuring that even those with minimal technical skills can easily navigate and use its features. It is also mobile-friendly, allowing users to access it from their smartphones or tablets.

Security is a priority, and the platform includes measures to protect the privacy and data of its users. Only registered users can view the details of donations and contact information is kept confidential until a match is made.

In addition to helping distribute food, the platform aims to raise awareness about food waste and hunger. By providing information and resources, we hope to encourage more people to donate surplus food and support local NGOs.

Overall, this project seeks to create a positive impact on society by ensuring that surplus food reaches those who need it most. By leveraging technology, we aim to make the donation process simple, efficient, and effective.

ACKNOWLEDGEMENTS

Success in life is never attained single-handedly. My deepest gratitude goes to my thesis supervisor, **Dr. Ankit Verma** for his guidance, help and encouragement throughout my research work. Their enlightening ideas, comments, and suggestions.

Words are not enough to express my gratitude to **Dr. Arun Kumar Tripathi**, Professor and Head, Department of Computer Applications, for his insightful comments and administrative help at various occasions.

Fortunately, I have many understanding friends, who have helped me a lot on many critical conditions.

Finally, my sincere thanks go to my family members and all those who have directly and indirectly provided me with moral support and other kind of help. Without their support, completion of this work would not have been possible in time. They keep my life filled with enjoyment and happiness.

Vikas Kumar Gupta

Tanuj Tayal

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CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

Our FWMS focuses on creating a platform that connects food donors with NGOs to help feed people in need. The idea behind this project stems from the widespread issue of food waste and the persistent problem of hunger. Many individuals and organizations have surplus food that often goes to waste, while numerous people struggle to find their next meal. By building a bridge between these food donors and NGOs, we aim to provide a solution that benefits both sides and, most importantly, supports the community.

The platform is designed to be simple and user-friendly, ensuring that anyone can easily navigate it. Food donors, whether they are individuals, restaurants, supermarkets, or other businesses, can quickly create an account and list the food they have available for donation. They provide details such as the type of food, quantity, and availability. This transparency ensures that NGOs can find the right type of food they need for their distributions.

NGOs also create accounts on the platform and can browse the listings of available food donations. They can search for specific types of food or filter results based on their location, making it easier to find donations that meet their needs. When an NGO finds a suitable donation, they can contact the donor directly through the platform to arrange for pickup or delivery. This streamlined communication helps ensure that food is transferred quickly and efficiently, reducing the chances of spoilage.

One of the key features of our platform is the feedback system. Both donors and NGOs can leave reviews after each transaction, which helps build a community of trust and reliability. This system encourages high standards and accountability, ensuring that donations are handled properly and reach the intended recipients.

In addition to facilitating food donations, the platform aims to educate users about the importance of reducing food waste and addressing hunger. By providing informative resources and statistics, we hope to inspire more people to contribute to this cause. The platform also highlights successful stories and positive impacts, further motivating the community to participate.

Security and privacy are crucial aspects of our project. The platform includes robust security measures to protect user data and ensure safe interactions. Personal information is kept confidential, and only registered users can access detailed listings and contact information. This ensures that all transactions are conducted securely and with respect for privacy.

Our project is not just about building a website; it's about creating a movement. By connecting food donors with NGOs, we are working towards a world where surplus food is effectively redistributed to those who need it the most. This initiative not only helps reduce food waste but also plays a significant role in combating hunger.

The project also plans to integrate additional features in the future, such as logistics support for transportation and partnerships with local government agencies to enhance reach and impact. By continuously improving and expanding the platform, we aim to make it an indispensable tool in the fight against hunger and food waste.

In conclusion, our web-based project offers a practical and innovative solution to a pressing social issue. By leveraging technology, we create an efficient system that ensures surplus food reaches those in need. This project has the potential to make a significant difference in communities, helping to alleviate hunger and reduce food waste simultaneously. Through the collaboration of donors and NGOs, we can create a positive impact and work towards a more equitable distribution of resources.

1.2 OBJECTIVE

The primary objective of our FWMS is to create a platform that connects food donors with NGOs to ensure surplus food reaches people in need. By achieving this goal, we aim to tackle two critical issues: reducing food waste and alleviating hunger.

Food waste is a significant problem globally, with large amounts of edible food being discarded daily. This waste occurs at various levels, from households and restaurants to supermarkets and food manufacturers. At the same time, many people lack access to sufficient food, leading to widespread hunger and malnutrition. Our platform aims to address both these issues by providing a convenient way for food donors to give away their surplus food to NGOs that distribute it to needy individuals.

The platform's design is straightforward and user-friendly, making it easy for anyone to participate. Food donors can quickly create an account and list the food items they have available. They provide essential details like the type of food, quantity, and the time frame for availability. This detailed information helps NGOs find the exact types of donations they need, ensuring efficient and effective distribution.

NGOs also benefit from the platform by being able to search for food donations that meet their specific requirements. They can filter listings based on location, type of food, and other criteria, making it easier to find suitable donations. Once an NGO identifies a donation that fits their needs, they can contact the donor directly through the

platform. This direct communication facilitates quick and efficient arrangements for pickup or delivery, ensuring the food reaches its destination promptly.

A key feature of our platform is the feedback system, which allows both donors and NGOs to leave reviews after each transaction. This system helps build a trustworthy community by encouraging high standards and accountability. Positive feedback fosters a reliable network of participants, while constructive criticism helps improve the process and address any issues that may arise.

Educating users about the importance of reducing food waste and addressing hunger is another objective of our platform. We aim to provide valuable resources and information to raise awareness and inspire action. By sharing statistics, success stories, and practical tips, we hope to motivate more people to participate in food donation and support local NGOs.

Security and privacy are crucial components of our project. We have implemented robust security measures to protect user data and ensure safe interactions. Only registered users can access detailed listings and contact information, maintaining privacy and confidentiality. This secure environment helps build trust among participants and ensures that transactions are conducted safely.

Beyond the immediate goal of connecting food donors with NGOs, our project has broader objectives. We aim to create a movement that encourages more people to donate surplus food and support the fight against hunger. By showcasing the positive impacts and successful stories of food donation, we hope to inspire a larger community to join our cause.

Future plans for the platform include adding features that enhance its functionality and reach. For example, we aim to integrate logistics support to help with the transportation of donations, making it easier for NGOs to collect food. We also plan to establish partnerships with local government agencies and other organizations to expand our network and increase our impact.

In conclusion, the objective of our FWMS is to create an efficient and effective system for redistributing surplus food from donors to NGOs. By addressing the issues of food waste and hunger, we aim to make a positive difference in communities. Through technology and collaboration, we provide a practical solution that benefits both donors and recipients, ultimately working towards a more equitable distribution of resources. Our platform is more than just a website; it is a catalyst for change, inspiring action and fostering a community committed to reducing food waste and feeding the hungry.

1.3 PROJECT FEATURE

Our FWMS is all about making it easy for people to donate surplus food and ensuring it reaches those who need it most through NGOs. Here's how it works and what you can expect from our platform:

Firstly, our website is designed to be super user-friendly. Whether you're a food donor with extra goodies or an NGO looking to help others, you'll find our platform easy to navigate.

Signing up is a piece of cake. Food donors and NGOs can create accounts quickly and easily. Just provide some basic information, and you're good to go. No complicated forms or long wait times.

Once you're registered, it's time to start listing donations. If you're a food donor, you can easily list the surplus food you have available. Just tell us what type of food it is, how much you have, and when it's available. Simple as that!

For NGOs, finding donations is a breeze. Our platform allows you to search for specific types of food or filter results based on location. This way, you can find exactly what you need without wasting time scrolling through irrelevant listings.

Once you find a donation that matches your needs, you can contact the donor directly through the platform. No need to exchange emails or phone numbers – everything can be done right here on our website.

After the donation is made, both donors and NGOs can leave feedback about their experience. This helps build trust within the community and ensures that future transactions go smoothly.

And don't worry – we take privacy and security seriously. Your personal information is kept confidential, and all user data is protected.

Overall, our platform aims to make food donation as easy and efficient as possible. By connecting donors with NGOs, we're working towards a world where surplus food is redistributed to those who need it most. Together, we can make a real difference in the fight against hunger!

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Food Waste Management Systems (FWMS) are web-based platforms designed to tackle the significant issues of food waste and food insecurity. The primary function of FWMS is to connect food donors, such as individuals, restaurants, and grocery stores, with NGOs that distribute food to needy people. This literature review explores various aspects of FWMS, including their significance, benefits, challenges, and best practices, based on existing studies and real-world implementations.

2.2 SIGNIFICANCE OF FOOD WASTE MANAGEMENT SYSTEMS

Food waste is a global problem with substantial environmental, economic, and social implications. According to the Food and Agriculture Organization (FAO), approximately one-third of all food produced for human consumption is wasted annually. This waste not only represents a loss of valuable resources but also contributes to environmental degradation through greenhouse gas emissions from decomposing food in landfills. At the same time, millions of people around the world suffer from food insecurity, lacking reliable access to sufficient, nutritious food.

FWMS addresses these twin issues by redirecting surplus food from waste streams to those who need it most. This not only helps reduce food waste but also supports food-insecure populations, creating a more sustainable and equitable food system.

2.3 BENEFITS OF FWMS

Several studies have highlighted the numerous benefits of implementing FWMS:

- **Reduction in Food Waste**

By providing a structured platform for food donations, FWMS significantly decreases the amount of food that ends up in landfills. This has positive environmental impacts,

including reduced greenhouse gas emissions and more efficient use of agricultural resources.

Alleviation of Hunger

- FWMS helps ensure that surplus food reaches people in need, thereby reducing hunger and improving food security. NGOs can access a consistent supply of food donations, allowing them to better serve their communities.

Cost Savings for Donors

- Food donors, such as restaurants and grocery stores, can reduce disposal costs by donating surplus food. In some regions, they may also benefit from tax deductions or other incentives for charitable contributions.

Community Engagement

- FWMS fosters a sense of community by encouraging local businesses and individuals to contribute to a common cause. This can strengthen community ties and promote a culture of sharing and sustainability.

2.4 CHALLENGES AND LIMITATIONS

Despite its benefits, implementing an effective FWMS comes with several challenges:

- **Technical Challenges**

Developing a robust and scalable platform that can handle large volumes of data and transactions is complex. Ensuring the platform is user-friendly and accessible on various devices adds to the technical demands.

- **Logistical Issues**

Coordinating the collection, storage, and distribution of food donations requires efficient logistics. Perishable items, in particular, need to be handled swiftly to avoid spoilage.

- **Regulatory Compliance**

FWMS must navigate various legal and regulatory frameworks, including food safety laws, liability concerns, and tax regulations. Compliance with these regulations is essential to ensure the safety and legality of food donations.

- **User Engagement**

Encouraging consistent participation from both donors and NGOs is crucial for the success of FWMS. Building trust and demonstrating the platform's value are key to maintaining high levels of user engagement.

2.5 STRATEGIES FOR SUCCESS

Based on these case studies, several strategies emerge as critical for the success of FWMS:

- **User-Centric Design**

Ensuring the platform is easy to use and accessible on multiple devices is crucial. Clear instructions, intuitive interfaces, and responsive customer support can enhance user satisfaction and engagement.

- **Strong Partnerships**

Building strong relationships with local businesses, NGOs, and government agencies can expand the reach and impact of FWMS. Partnerships can also provide additional resources and support for logistics and regulatory compliance.

- **Education and Awareness**

Raising awareness about the issues of food waste and food insecurity can drive participation in FWMS. Educational campaigns and community outreach can inform potential donors and recipients about the benefits of the platform.

- **Incentives for Participation**

Offering incentives, such as tax deductions for food donations or recognition programs for top contributors, can encourage more businesses and individuals to participate in FWMS.

- **Continuous Improvement**

Regularly collecting feedback from users and stakeholders can help identify areas for improvement. Iterative development and updates based on this feedback can ensure the platform remains effective and relevant.

2.6 TECHNOLOGICAL CONSIDERATIONS

The technology underpinning FWMS is critical to its success. Key technological considerations include:

- **Scalability**

The platform must be able to scale to accommodate growing numbers of users and transactions. Cloud-based solutions can provide the necessary scalability and flexibility.

- **Security**

Protecting user data is paramount. Implementing robust security measures, such as encryption and secure authentication protocols, is essential to safeguard sensitive information.

- **Integration with Existing Systems**

FWMS should be able to integrate with other systems used by NGOs and donors, such as inventory management and logistics software. This can streamline operations and improve efficiency.

- **Real-Time Data and Analytics**

Providing real-time data on available donations and demand can help optimize food distribution. Analytics tools can also provide valuable insights into usage patterns and areas for improvement.

2.7 CONCLUSION

The literature on Food Waste Management Systems underscores their potential to make a significant impact on food waste reduction and food insecurity. By connecting surplus food donors with NGOs, FWMS can ensure that edible food reaches those who need it most, contributing to a more sustainable and equitable food system. However, the success of FWMS depends on addressing various challenges, including technical, logistical, regulatory, and user engagement issues. Learning from successful implementations and adopting best practices can help maximize the effectiveness of FWMS and drive meaningful change in communities.

CHEPTER 3

SYSTEM ANALYSYS

3.1 INTRODUCTION

System Analysis works with users to identify goals and build system to achieve them. System Analysis is an important phase of any system development process. System analysis is a step-by-step process used to identify and develop or acquire the software need to control the processing of specific application. System analysis is a continuing activity the stages of the systems development. The system is studied to the minutes details and analysed. In analysis, a detailed study of these operation performed by a system and their relationships within and outside of the system is done. The aim of the proposed system is to develop a system with improved facilities. The proposed system can overcome all the limitation of the existing system, such as it will provide a platform for donors and seekers after they successfully register into the system. If a user wishes to donate something, he/she can send a message in application. Proposed system is cost effective.

3.2 EXISTING SYSTEM

Currently, people donate stuff manually by visiting each organization number of times. In order to reduce the problems of food wastage, some websites like www.rescuingleftovercuisine.org and www.annakshetra.org have taken efforts to help people donate their surplus food to shelters through their official website, where in people can donate food, donate funds and also volunteer for various activities.

3.2.1 LIMITATION OF EXISTING SYSTEM

The main limitation of the existing system is lack of time. Currently, people needs to visit the organizations for many times to donate things. It is a time-consuming process. Sometimes, if anyone have extra food because of any function or in their home it will be become waste because instantly there is no way to share with anyone if they are having lots of food. Even if they want to give that extra food to any orphanage or poor people, they don't have time or don't have an idea about that.

3.3 FEASIBILITY STUDY

After doing the project, study and analysing all the existing or required functionalities of the system, the next task is to do the feasibility study for the project. All projects are feasible-given unlimited resources and in finite time. Feasibility study includes consideration of all the possible ways to provide a solution to the given problem. The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements. There are three parts in feasibility study

1. Technical Feasibility
2. Economic Feasibility
3. Operational Feasibility
4. Scheduling Feasibility
5. Security and Privacy Feasibility
6. User Engagement and Feedback

3.3.1 TECHNICAL FEASIBILITY

The technical feasibility of the FWMS project looks promising. The platform can be built using widely available web technologies such as HTML, CSS, JavaScript, and a backend framework like Django or Node.js. Cloud services can handle hosting and data storage, ensuring scalability and reliability. Existing APIs can facilitate real-time communication and geolocation services for efficient donation pickups. The project team has the necessary skills and experience to develop and maintain the platform. Overall, the technical requirements are manageable with current technology and resources.

3.3.2 ECONOMIC FEASIBILITY

The economic feasibility of the Food Waste Management System (FWMS) is promising. The initial development and maintenance costs are manageable and can be offset by potential funding from grants and donations. By reducing food waste and feeding the needy, the project can attract support from community stakeholders and government programs. The operational costs are low due to the online nature of the platform, and the value generated by efficiently distributing surplus food outweighs the investment. Overall, FWMS is a cost-effective solution that addresses food waste and hunger, making it economically viable.

3.3.3 OPERATIONAL FEASIBILITY

FWMS is operationally feasible as it leverages existing technology and infrastructure to connect food donors with NGOs. The platform is user-friendly,

ensuring that donors and NGOs can easily navigate and use it. It requires minimal training for users, making the onboarding process quick and straightforward. The system includes efficient communication tools, streamlining the coordination of food pickups and deliveries. The feedback system helps maintain quality and trust within the community. Additionally, robust security measures ensure data protection, enhancing user confidence. Overall, FWMS can be smoothly integrated into the daily operations of both donors and NGOs.

3.3.4 SCHEDULING FEASIBILITY

The scheduling feasibility of the FWMS project is promising. The development timeline is realistic, with clear milestones for each phase, including design, coding, testing, and deployment. The project plan allows for adequate time to address potential issues, ensuring smooth progress. Resources and team members are available to meet deadlines, and the use of agile methodologies will help adapt to any changes quickly. Overall, the project can be completed on schedule, making it a feasible initiative to connect food donors with NGOs efficiently.

3.3.5 SECURITY AND PRIVACY FEASIBILITY

FWMS ensures top-notch security and privacy for all users. Personal data of donors and NGOs is protected with robust encryption. Only registered users can access detailed information, and contact details are kept confidential until a match is made. Regular security audits are conducted to maintain data integrity. The platform complies with data protection laws to safeguard user information, ensuring a safe and secure environment for food donations and distributions.

3.3.6 USER ENGAGEMENT AND FEEDBACK

User engagement for FWMS involves creating an intuitive interface where donors and NGOs can easily interact. Regular notifications and updates keep users informed about new donations and requests. A feedback system allows users to rate their experiences, fostering trust and improving service quality. Surveys and user forums provide additional avenues for feedback, helping us continually refine the platform based on user needs and suggestions. This engagement ensures a responsive and user-focused service, increasing participation and effectiveness in food distribution.

3.4 PROPOSED SYSTEM

In proposed system we are reduce that food wastage using that application. Proposed system will provide a platform for donors and seekers after they successfully register into the system. If a user wishes to donate something, he/she can send a message in application. This message will be shown as notification in donations tab to other users. This message will be stored in backend in the database. Once a notification is sent, the orphanages who wish to claim the donations can reply to the donor and contact him/her. The user interface of this system will be simple and user-friendly. An

agent module is there in this project. Here, different agencies can register in the system and they can act as a third party to donate things to poor people. The registered agency is approved by the admin. Admin has the full control over the system. We all know the importance of computerization. The world is moving ahead at lightning speed and everyone is running short of time. One always wants to get the information and perform a task he/she/they desire(s) within a short period of time and too with amount of efficiency and accuracy. The application areas for the computerization have been selected on the basis of following factors:

3.4.1 ADVANTAGE OF PROPOSED SYSTEM

In proposed system we are reduce that food wastage using that application. The user interface of this system will be simple and user-friendly. At present, we are aiming to avoid the major wastage that usually happens in India and that is foodstuffs. If a user wishes to donate something, he/she just needs to send a message in application. The needed organization will contact him/her later

CHEPTEr 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

Functional requirements specify what the system or software should do or the actions it should perform. They describe the intended functionality, features, and capabilities of the system. These requirements outline the system's behaviour, inputs, outputs, and interactions with users or other systems. Functional requirements are typically specific, measurable, and verifiable. Examples include user authentication, data input validation, report generation, and system integration.

- **User Registration:** Users should be able to create accounts as either food donors or NGOs, providing necessary information such as name, contact details, and organization affiliation.
- **User Authentication:** A secure authentication system is needed to verify the identity of users during the registration process and each login attempt.
- **Profile Management:** Users should have the ability to edit their profiles, including updating contact information and managing donation preferences.
- **Donation Listing:** Food donors must be able to list surplus food items available for donation, specifying details like type, quantity, expiration date, and pickup location.
- **Search and Filter Functionality:** NGOs should be able to search for available donations based on various criteria such as type of food, quantity, location, and availability date.
- **Donation Requesting:** NGOs should have the capability to request specific donations directly from food donors, providing details about their organization's needs.
- **Communication Tools:** A messaging system is essential to facilitate communication between donors and NGOs, allowing them to discuss donation details and coordinate pickup/delivery logistics.

- **Donation Scheduling:** Users should be able to schedule pickup or delivery times for donations, ensuring timely transfer of food from donors to NGOs.
- **Location Services:** Integration with location services is necessary to provide accurate pickup/delivery information and to match donors with NGOs in the same geographical area.
- **Feedback System:** A feedback mechanism should be in place to allow users to rate their experiences with donations and interactions, helping to maintain quality and accountability.
- **Notification System:** Users should receive notifications about new donations, donation requests, messages, and other relevant updates to stay informed and engaged with the platform.
- **Data Privacy and Security:** Strong measures must be implemented to protect user data, including encryption of sensitive information and compliance with data protection regulations.
- **Admin Panel:** An administrative interface is necessary for platform administrators to manage user accounts, monitor activities, and address any issues that may arise.
- **Mobile Responsiveness:** The platform should be optimized for mobile devices, allowing users to access and use FWMS seamlessly on smartphones and tablets.
- **Documentation and Help Resources:** Comprehensive documentation and help resources should be provided to assist users in navigating the platform and resolving any issues they encounter.

By fulfilling these functional requirements, FWMS can effectively serve its purpose of facilitating food donations from donors to NGOs, ultimately helping to alleviate hunger and reduce food waste in communities.

4.2 NON-FUNCTIONAL REQUIREMENTS

Non-functional requirements, also known as quality attributes or constraints, define the characteristics and constraints of the system beyond its functionality. These requirements describe how the system should perform, rather than what it should do. Non-functional requirements are often related to performance, reliability, security, usability, and other aspects that contribute to the overall system quality. Examples include response time, system availability, data encryption, user interface design, and regulatory compliance.

- **Performance**

The platform must provide quick response times, especially during real-time updates.

Load testing should be conducted to ensure optimal performance under varying user loads.

- **Security**

Robust security measures must be in place to protect user data and privacy.

Encryption protocols should be implemented for secure data transmission.

- **Scalability**

The system should be designed to handle a growing number of users and recipes.

Scalability testing should be performed to assess the platform's ability to expand.

- **Usability**

The user interface should be intuitive, accommodating users with varying levels of technical expertise.

User experience testing should be conducted to ensure ease of use.

- **Reliability**

The platform must be reliable, minimizing downtime and service interruptions.

Implementing backup and recovery mechanisms is essential for data integrity.

- **Regulatory Compliance**

The system must comply with relevant data protection and privacy regulations.

Transparency in terms of service and privacy policies is crucial for user trust.

- **Feedback Mechanism**

A user feedback mechanism should be implemented for continuous improvement.

Analytics tools must be in place to monitor user behaviour and preferences.

In conclusion, the requirement analysis for FWMS highlights the critical features needed for a successful web-based platform to facilitate food donations. By thoroughly understanding user needs and system requirements, we can ensure that FWMS effectively connects food donors with NGOs, streamlining the process of distributing surplus food to those in need. The analysis emphasizes the importance of performance, scalability, security, and usability in creating a reliable and accessible platform. Moving forward, these insights will guide the development and implementation of FWMS, ultimately enabling it to make a significant impact in combating food waste and hunger in communities.

4.3 SOFTWARE REQUIREMENT

S. NO.	DESCRIPTION	TYPE
1	Operating System	Windows, MacOS
2	Language	HTML5, CSS3, JavaScript, Bootstrap, ExpressJS, NodeJS
3	IDE	VS Code
4	Database	MySQL server
5	Browser	Internet Explorer, Mozilla Firefox, Google Chrome

Table 4.3 Software Requirement for FWMS

4.4 HARDWARE REQUIREMENTS

S. NO.	DESCRIPTION	TYPE
1	Processor	Intel(R) Pentium(R)
2	Clock Speed	3.0GHz
3	RAM	8GB
4	SSD	512GB
5	Key Board	Standard Windows Keyboard
6	Mouse	Two or Three Button Mouse

Table 4.4 Hardware Requirement for FWMS

CHEPTEr 5

SYSTEM ARCHITECTURE AND DESIGN

5.1 INTRODUCTION

In this project design technique used is top-down, object- oriented dynamic modelling technique. A top-down design approach starts by identifying the major components and iterating until the desired level of details is achieved. In object-oriented design technique, the modules in the design represent data abstraction. A dynamic model aims to specify new the state of various objects changes as events occur.

5.2 INPUT DESIGN

Input design is a part of overall system design, which requires very careful attention. Input design features can ensure the reliability of the system and produce result from accurate data, or they can result in the production or erroneous information. The input design also determines whether the user can interact efficiently with the system. Admin who was a person which they can add student to the system. placement Office who was manage the student details and can conduct the workshops for the students. Company can register in this system and they can give their company details and company can conduct online exam, display the mark and select the students according to the mark... also the students can register with their profile and they can attend online exams. View whether they are passed or not

5.3 OUTPUT DESIGN

One of the important features of an information system for users is the output produces. Output is the information delivered to users through the information system. Output design is very important phase because the output will be interactive manner. In order to create the most useful output possible. To make a user-friendly output and for better communication the programmer can use the features of a window. admin can view the student details; Company can view the student registered for the vacancies and their information's. Student can view the online exam results and vacancies and related information.

5.4 DATABASE DESIGN

Database design is the process of producing a detailed data model of database. This data model contains all the needed logical and physical design choices and physical storage The

process of doing database design generally consists of a number of steps which will be carried out by the database designer. Usually, the designer must:

1. Determine the data to be stored in the database.
2. Determine the relationships between the different data elements.
3. Superimpose a logical structure upon the data on the basis of these relationships.

In this project database design generally, the data is to be stored in the database whether it can more relation for each module. And it provides the logical relation between them.

5.5 ARCHETECTURAL DESIGN

Architectural design is of crucial importance in software engineering during which the essential requirements like reliability, cost, and performance are dealt with. Architectural design is the responsibility of developers, some other people like user representatives, systems engineers, hardware engineers, and operations personnel are also involved. All these stakeholders must also be consulted while reviewing the architectural design in order to minimize the risks and errors. In Consumer fed is whole managed by the admin and regional office who was consulted the project on the requirements of each user whether it will minimize the errors and risks.

5.6 SYSTEM MODULES

- **Admin module**

Admin has the full control over the system. First, admin login into the system. State and District entry is done. Then approve the new agencies registered. Admin will manage the donor registration, receiver registration and providing information's to them. Admin can view the donation notifications send by the donors and the Request notifications send by the receivers. The admin will approve the agencies, only after that they can login into the system.

- **Donor module**

The Donor performs operations like Registration and Login into the System. He can also put-up items for donation and view all donation requests (items required by organizations).

- **Receiver module**

The Receiver can also perform operations like requesting for items, viewing requested items and claiming donations. They can book the donor order and collect the food.

- **Agency module**

Agency has a login into the system. Admin will approve the agency, approved agency can login into the system and they can view the requests and accept it.

5.7 FORM DESIGN

A form designing means deciding the contents and layout of forms for the purpose of collecting and processing the required information economically and efficiently. The importance of forms designing can be understood because of the following points:

1. Forms are used to collect record and communicate the required information according to the expectations of the needy persons. Therefore, forms are treated as tools of office work. If the forms are badly designed, it reduces the speed of operation of office work.
2. The forms create psychological impact on the people who use it. The people may be frustrated and get tired if the forms are not designed properly.
3. The badly designed forms results in a greater number of mistakes in clerical work. Hence, there is a need of well-designed forms to avoid mistakes in clerical work.
4. Sometimes, the designed form may project a poor image in the minds of the customers. This may adversely affect the good will of the company.
5. System is the basis for form design. Hence, forms are designed according to the needs of the system. If forms are badly designed, they can ruin a whole system.
6. The well-designed forms contribute much to the efficiency of employees of an organization and efficiency of the system.
7. The cost of forms is less than the cost of completing office forms, transporting and filling of office forms. The ratio will be greater if the forms are badly designed.



5.8 TABLE DESIGN

Table Number: 1

Table Name: admin

Primary Key: Aid

admin

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Aid 	int(11)			No	None		AUTO_INCREMENT
2	name	text	utf8mb4_general_ci		No	None		
3	email 	varchar(60)	utf8mb4_general_ci		Yes	NULL		
4	password	text	utf8mb4_general_ci		No	None		
5	location	text	utf8mb4_general_ci		No	None		
6	address	text	utf8mb4_general_ci		No	None		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	Aid	0	A	No	
email	BTREE	Yes	No	email	0	A	Yes	

Partitions

 No partitioning defined!

Information

Space usage			Row statistics	
Data	16.0	KiB	Format	dynamic
Index	16.0	KiB	Collation	utf8mb4_general_ci
Overhead	0	B	Next autoindex	5
Effective	32.0	KiB	Creation	Apr 30, 2024 at 01:51 AM
Total	32.0	KiB	Last update	May 23, 2024 at 06:51 PM
			Last check	May 23, 2024 at 06:51 PM



Fig: 5.8.1 admin table

Table Number: 2

Table Name: delivery_persons

Primary Key: Did

delivery_persons

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Did 	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(255)	utf8mb4_general_ci		No	None		
3	email 	varchar(255)	utf8mb4_general_ci		No	None		
4	password	varchar(255)	utf8mb4_general_ci		No	None		
5	city	varchar(50)	utf8mb4_general_ci		Yes	NULL		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	Did	0	A	No	
email	BTREE	Yes	No	email	0	A	No	

Partitions

 No partitioning defined!

Information

Space usage			Row statistics	
Data	16.0	KiB	Format	dynamic
Index	16.0	KiB	Collation	utf8mb4_general_ci
Overhead	0	B	Next autoindex	6
Effective	32.0	KiB	Creation	Apr 30, 2024 at 01:51 AM
Total	32.0	KiB	Last update	May 23, 2024 at 06:54 PM
			Last check	May 23, 2024 at 06:54 PM


Fig: 5.8.2 delivery_persons table

Table Number: 3

Table Name: food_donations

Primary Key: Fid

food_donations

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Fid 	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(50)	utf8mb4_general_ci		No	None		
3	email	varchar(60)	utf8mb4_general_ci		No	None		
4	food	varchar(50)	utf8mb4_general_ci		No	None		
5	type	text	utf8mb4_general_ci		No	None		
6	category	text	utf8mb4_general_ci		No	None		
7	quantity	text	utf8mb4_general_ci		No	None		
8	date	datetime			Yes	current_timestamp()		
9	address	text	utf8mb4_general_ci		No	None		
10	location	varchar(50)	utf8mb4_general_ci		No	None		
11	phoneno	varchar(25)	utf8mb4_general_ci		No	None		
12	assigned_to	int(11)			Yes	NULL		
13	delivery_by	int(11)			Yes	NULL		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	Fid	3	A	No	

Partitions

 No partitioning defined!

Information

Space usage			Row statistics	
Data	16.0	KiB	Format	dynamic
Index	0	B	Collation	utf8mb4_general_ci
Overhead	0	B	Next autoindex	30
Effective	16.0	KiB	Creation	Apr 30, 2024 at 01:51 AM
Total	16.0	KiB	Last update	May 23, 2024 at 06:54 PM
			Last check	May 23, 2024 at 06:54 PM

Fig: 5.8.3 food_donations table

Table Number: 4

Table Name: login

Primary Key: id

login

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name	text	utf8mb4_general_ci		No	None		
3	email 🔑	varchar(60)	utf8mb4_general_ci		No	None		
4	password	text	utf8mb4_general_ci		No	None		
5	gender	text	utf8mb4_general_ci		No	None		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	email	0	A	No	
id	BTREE	Yes	No	id	0	A	No	

Partitions

⚠ No partitioning defined!

Information

Space usage			Row statistics	
Data	16.0	KiB	Format	dynamic
Index	16.0	KiB	Collation	utf8mb4_general_ci
Overhead	0	B	Next autoindex	18
Effective	32.0	KiB	Creation	Apr 30, 2024 at 01:51 AM
Total	32.0	KiB	Last update	May 23, 2024 at 06:55 PM
			Last check	May 23, 2024 at 06:55 PM


Fig: 5.8.4 login table

Table Number: 5

Table Name: user_feedback

Primary Key: feedback_id

user_feedback

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	feedback_id 	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(255)	utf8mb4_general_ci		Yes	NULL		
3	email	varchar(255)	utf8mb4_general_ci		Yes	NULL		
4	message	text	utf8mb4_general_ci		Yes	NULL		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	feedback_id	0	A	No	

Partitions

 No partitioning defined!

Information

Space usage			Row statistics	
Data	16.0	KiB	Format	dynamic
Index	0	B	Collation	utf8mb4_general_ci
Overhead	0	B	Next autoindex	7
Effective	16.0	KiB	Creation	Apr 30, 2024 at 01:51 AM
Total	16.0	KiB	Last update	May 23, 2024 at 06:55 PM
			Last check	May 23, 2024 at 06:55 PM

Fig: 5.8.5 user_feedback table

5.9 UML DIAGRAM

5.9.1 Use Case Diagram

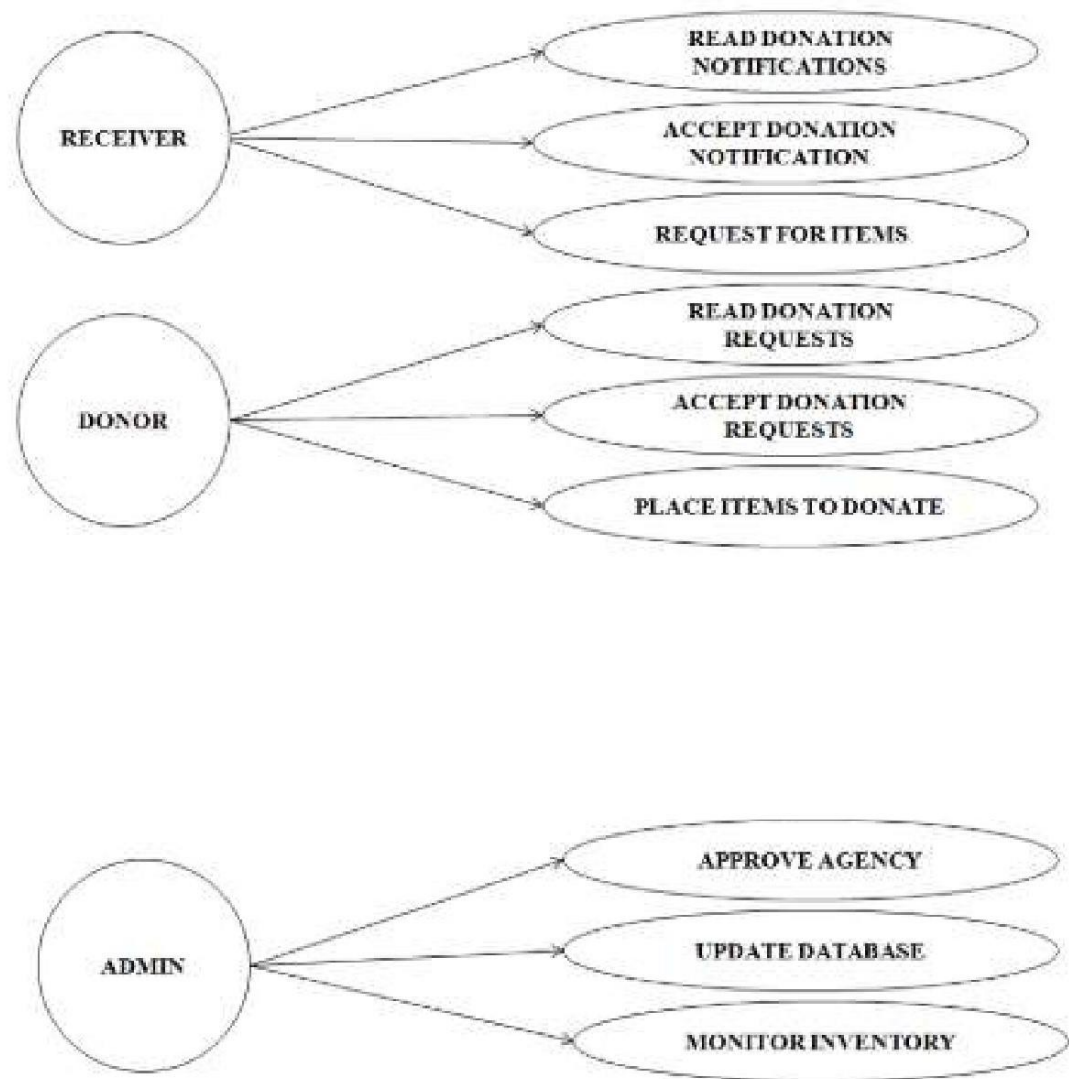


Fig: 5.9.1 use case diagram

5.9.2 Activity Diagram

admin

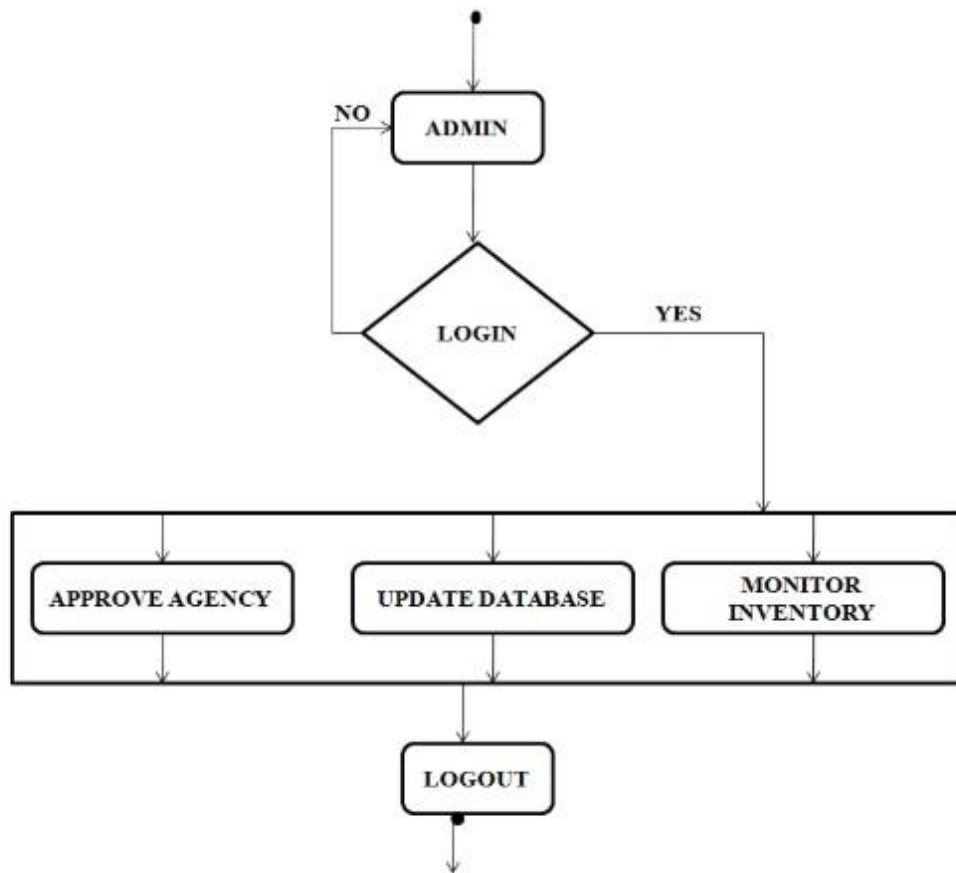


Fig: 5.9.2.1 activity diagram admin

donor

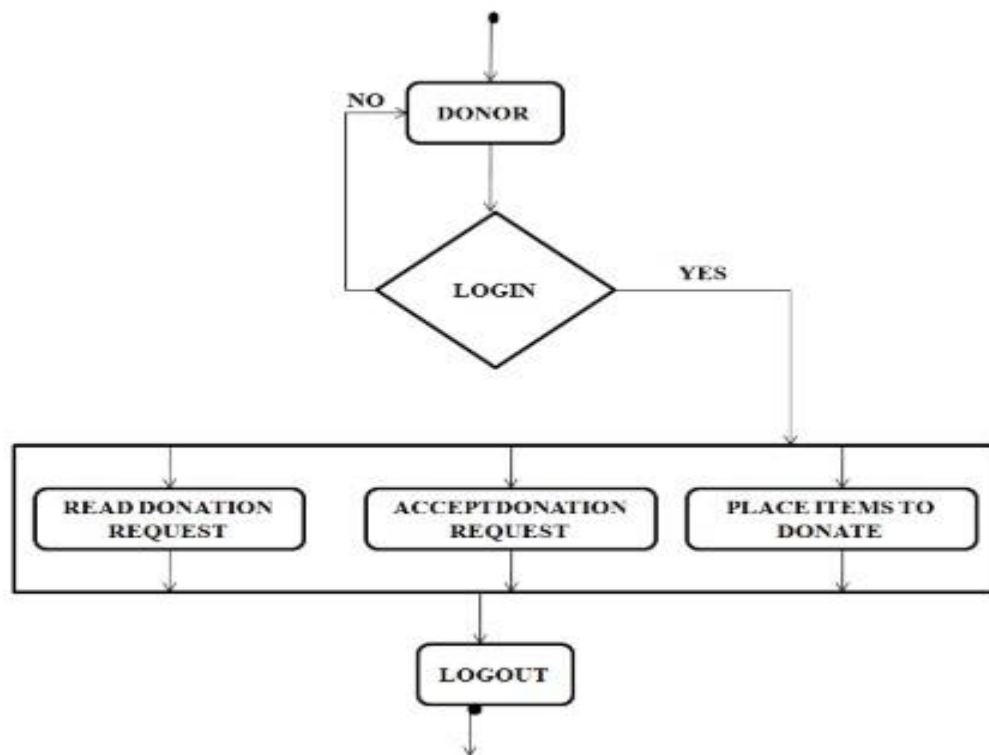


Fig: 5.9.2.2 activity diagram donor

receiver

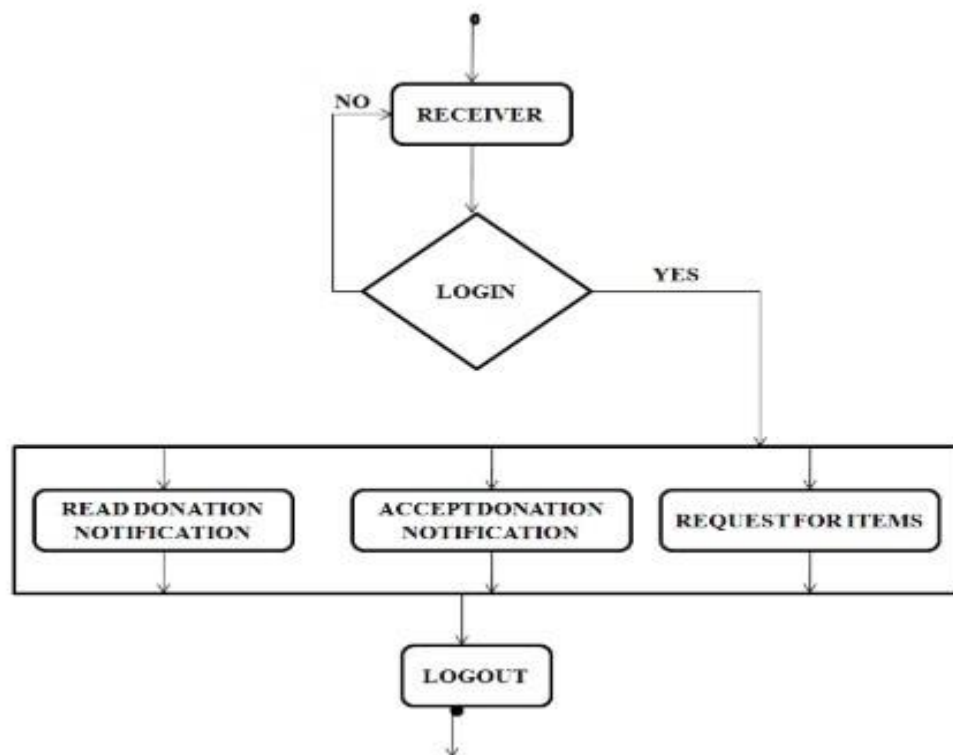


Fig: 5.9.2.3 activity diagram receiver

5.9.3 Sequence Diagram

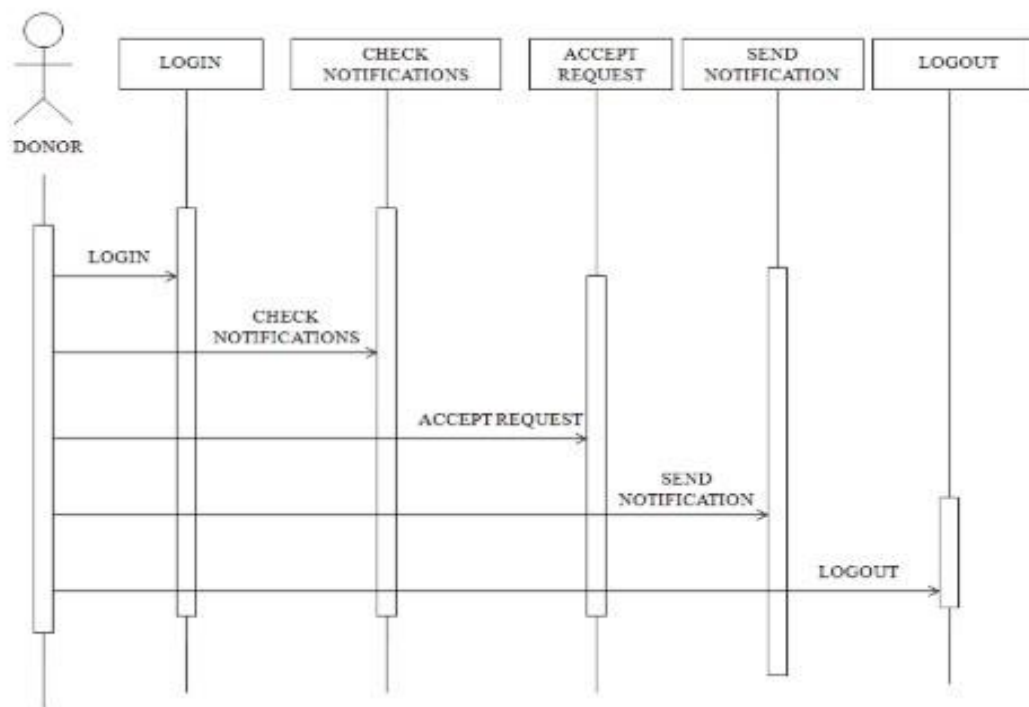


Fig: 5.9.3 sequence diagram

CHEPTEP 6

SYSTEM TESTING

6.1 INTRODUCTION

Testing is the process of examining the software to compare the actual behaviour with that of the expected behaviour. The major goal of software testing is to demonstrate that faults are not present. In order to achieve this goal, the tester executes the program with the intent of finding errors. Though testing cannot show absence of errors but by not showing their presence it is considered that these are not present.

System testing is defined as the process by which one detects the defects in the software. Any software development organization or team has to perform several processes. Software testing is one among them. It is the final opportunity of any programmer to detect and rectify any defects that may have appeared during the software development stage. Testing is a process of testing a program with the explicit intention of finding errors that makes the program fail. In short system testing and quality assurance is a review in software products and related documentation for completion, correctness, reliability and maintainability.

System testing is the first stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. Testing is vital to the success of the system. System testing makes a logical assumption that if all the parts of the system are correct and the goal will be successfully achieved. A series of testing are performed for the proposed system before the proposed system is ready for user acceptance testing.

6.2 UNIT TESTING

This method of testing tests the smallest unit of software called modules. It will test all the important path to find errors within the boundary of module. This has enabled the detection of errors in coding and logic. Various test cases are prepared. For each module these test cases are implemented and it is checked whether the module is executed as per the requirements and outputs the desired result. In this test each service input and output parameters are checked. In unit testing, all independent paths through the control structures are executed to ensure that all statements in the modules have been executed at least once. Error handling paths are also tested.

6.3 INTEGRATION TESTING

Integration testing is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. In this testing, all individual modules were combined and module wise shifting was verified to be alright. The integration testing is performed in the Helping Hands by combining the four modules, i.e., by combining the admin, receiver, donor, agency and found all modules are running without any error.

6.4 VALIDATION TESTING

Validation testing can be defined in many ways, but a simple definition is that validation succeeds when the software functions in a manner that is reasonably accepted by user. Software validation is achieved through a series of tests that demonstrate conformity with requirement. Deviation or error discovered at this step in this project is corrected prior to completion of the project with the help of the user. In Helping Hands verifications are done correctly. So, there is no chance for users to enter incorrect values. It will give error messages by using different validations. The validation testing is done very clearly and found it is error free.

6.5. ALPHA TESTING

Alpha testing is one of the most common software testing strategies used in software development. It is specially used by product development organizations.

1. This test takes place at the developer's site. Developers observe the users and note problems.
2. Alpha testing is testing of an application when development is about to complete. Minor design changes can still be made as a result of alpha testing.
3. Alpha testing is typically performed by a group that is independent of the design team, but still within the company, e.g. in-house software test engineers, or software QA engineers. Alpha testing is final testing before the software is released to the general public. It has two phases:
 - (a) In the first phase of alpha testing, the software is tested by inhouse developers. They use either debugger software, or hardware assisted debuggers. The goal is to catch bugs quickly.
 - (b) In the second phase of alpha testing, the software is handed over to the software QA staff, for additional testing in an environment that is similar to the intended use.
4. Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developer's site. Alpha testing is often employed for off-the-shelf software as a form of internal acceptance testing, before the software goes to beta testing.

6.6 BETA TESTING

Beta Testing is also known as field testing. It takes place at customer's site. It sends the system/software to users who install it and use it under real-world working conditions.

1. A beta test is the second phase of software testing in which a sampling of the intended audience tries the product out. (Beta is the second letter of the Greek alphabet.) Originally, the term alpha testing meant the first phase of testing in a software development process. The first phase includes unit testing, component testing, and system testing. Beta testing can be considered pre-release testing.

2. The goal of beta testing is to place your application in the hands of real users outside of your own engineering team to discover any flaws or issues from the user's perspective that you would not want to have in your final, released version of the application. Example: Microsoft and many other organizations release beta versions of their products to be tested by users.

6.7 TEST CASES

A Test Case is a script, program, or other mechanism that exercises a software component to ascertain that a specific correctness assertion is true. In general, it creates a specified initial state, invokes the tested component in a specified way, observes its behaviour, and checks to ensure that the behaviour was correct.

6.7.1 TESTING CASE 1 (Login)

6.7.1.1 Functional Test Cases-

- Verify if a user will be able to login with a valid username and valid password.
- Verify if a user cannot login with a valid username and an invalid password.
- Verify the login page for both, when the field is blank and Submit button is clicked.
- Verify the messages for invalid login.

6.7.1.2 Non-Functional Security Test Cases-

- Verify the time out functionality of the login session.
- Verify the login page by pressing 'Back button' of the browser. It should not allow you to enter the system once you log out.
- Verify if a user should not be allowed to log in with different credentials from the same browser at the same time.

6.7.2 TESTING CASE 2 (Adding Recipes)

6.7.2.1 Functional Test Cases-

- Verify that the all required fields are filled.
- Verify that the ingredients are properly field with commas.
- Verify that the adding recipe will update to the list.
- Verify that the adding recipe will be available for the only registered user or not.
- Verify that the only registered user can edit or delete the save recipe.

6.7.2.2 Non-Functional Security Test Cases-

- Verify that the all fields are visible to the user.
- Verify that the "nav bar" should be visible for direct reach to the "All recipes" tab for show updated recipe.

6.7.3 TESTING CASE 3 (Logout)

6.7.3.1 Functional Test Cases-

- Verify After successful login in Pantry2Plate, click on the profile icon to check logoutbutton is visible or not.
- Verify by Clicking on the sign-out button without an internet connection and reconnecting to the internet to check if it's properly logout or not.
- Verify by clicking on the logout button, after successful logout on the login screen press the back button.
- Verify, login into more than two browser or mobiles and log out from anyone them and check all other account is properly working or all get logout.
- Verify after logout tries to re-login with the same or different account it's allowing or not.

6.7.3.2 Non-Functional Security Test Cases-

- Verify the logs for the login and logout sessions.
- Verify if the logs contain multiple IPs for a single ID at the same time.
- Verify if the logs contain a denial-of-service attack for the login or logout.
- Verify if the log has suspicious activity.

CHEPTER 7

APPENDIX

7.1 APPENDIX A

7.1.1 CODING

- USER HOME PAGE

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>Food Wastage Management System</title>
```

```
<link rel="stylesheet" href="home.css">
```

```
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-  
awesome/4.7.0/css/font-awesome.min.css">
```

```
</head>
```

```
<body>
```

```
<header>
```

```
<div class="logo">Food Wastage <b style="color: #06C167;">Management  
System</b></div>
```

```
<div class="hamburger">
```

```
<div class="line"></div>
```

```
<div class="line"></div>
```

```

    <div class="line"></div>

</div>

<nav class="nav-bar">

    <ul>

        <li><a href="#home" class="active">Home</a></li>

        <li><a href="about.html">About</a></li>

        <li><a href="contact.html">Contact</a></li>

        <li><a href="profile.php">Profile</a></li>

    </ul>

</nav>

</header>

<script>

    hamburger = document.querySelector(".hamburger");
    hamburger.onclick = function () {
        navBar = document.querySelector(".nav-bar");
        navBar.classList.toggle("active");
    }

</script>

<section class="banner">

    <a href="fooddonateform.php">Dontae Food</a>

</section>

<div class="content">

    <p style="font-size: 23px;">

        “Cutting food waste is a delicious way of saving money, helping to feed the world
        and protect the planet.”

    </p>

</div>

<div class="photo">

    <br>

    <p class="heading">Our Works</p>

```

```

<br>

<p style="font-size: 28px; text-align: center;">"Look what we can do together."</p>

<br>

<div class="wrapper">

  <div class="box"></div>

  <div class="box"></div>

  <div class="box"></div>

</div>

<!-- <p style="font-size: 19px;"> The basic concept of this project Food Waste
Management is to collect theexcess/leftover food from donors such as hotels,
restaurants, marriage halls, etc and distribute to the needy people .

  </p> -->

<br>

</div>

<div class="deli" style="display: grid;">

  <p class="heading">DOOR PICKUP</p>

  <br>

  <p class="para">"Your donate will be immediately collected and sent to needy
people "</p>

</div>

<div class="ser">

  <!-- <p class="heading">Our Services</p> -->

</div>

<footer class="footer">

  <div class="footer-left col-md-4 col-sm-6">

    <p class="about">

      <span> About us</span>The basic concept of this project Food Waste
Management is to collect the excess/leftover

```

food from donors such as hotels, restaurants, marriage halls , etc and distribute to the needy people .

</p>

</div>

<div class="footer-center col-md-4 col-sm-6">

<div>

<p> Contact </p>

</div>

<div>

<p> (+00) 0000 000 000</p>

</div>

<div>

<!-- <i class="fa fa-envelope" style="font-size: 17px;
line-height: 38px; color:white;"></i> -->

<p> fwms@gmail.com</p>

</div>

<div class="sociallist">

<ul class="social">

<i class="fa fa-whatsapp"
style="font-size:50px;color: black;"></i>


```

    </div>

</div>

<div class="footer-right col-md-4 col-sm-6">

    <h2> Food Wastage<span> Management System</span></h2>

    <!-- <h2>Food donate</h2> -->

    <p class="menu">

        <a href="#"> Home</a> |

        <a href="about.html"> About</a> |

        <a href="profile.php"> Profile</a> |

        <a href="contact.html"> Contact</a>

    </p>

    <p class="name"> Food Wastage Management System &copy 2024</p>

</div>

</footer>

</body>

</html>

```

- LOGIN PAGE

```

const container = document.querySelector(".container"),
pwShowHide = document.querySelectorAll(".showHidePw"),
pwFields = document.querySelectorAll("#password"),
signUp = document.querySelector(".signup-link"),
login = document.querySelector(".login-link");

// js code to show/hide password and change icon
pwShowHide.forEach(eyeIcon => {
    eyeIcon.addEventListener("click", () => {
        pwFields.forEach(pwField => {

```

```

if (pwField.type === "password") {

pwField.type = "text";


pwShowHide.forEach(icon => {

icon.classList.replace("uil-eye-slash", "uil-eye");

})

} else {

pwField.type = "password";


pwShowHide.forEach(icon => {

icon.classList.replace("uil-eye", "uil-eye-slash");

})

}

})

})

})

// js code to appear signup and login form

signup.addEventListener("click", () => {

container.classList.add("active");

});

login.addEventListener("click", () => {

container.classList.remove("active");

});

• ADMIN PAGE

const body = document.querySelector("body"),

```

```
modeToggle = body.querySelector(".mode-toggle");  
  
sidebar = body.querySelector("nav");  
  
sidebarToggle = body.querySelector(".sidebar-toggle");
```

```
let getMode = localStorage.getItem("mode");  
  
if(getMode && getMode === "dark"){  
  
body.classList.toggle("dark");  
  
}
```

```
let getStatus = localStorage.getItem("status");  
  
if(getStatus && getStatus === "close"){  
  
sidebar.classList.toggle("close");  
  
}
```

```
modeToggle.addEventListener("click", () =>{  
  
body.classList.toggle("dark");  
  
if(body.classList.contains("dark")){  
  
localStorage.setItem("mode", "dark");  
  
}else{  
  
localStorage.setItem("mode", "light");  
  
}  
  
});
```

```
sidebarToggle.addEventListener("click", () => {  
  
sidebar.classList.toggle("close");
```

```

if(sidebar.classList.contains("close")){

localStorage.setItem("status", "close");

}else{

localStorage.setItem("status", "open");

}

})

```

- ABOUT PAGE

```

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

<link rel="stylesheet" href="home.css">

</head>

<body>

<header>

<div class="logo">Food <b style="color: #06C167;">Wastage Management
System</b></div>

<div class="hamburger">

<div class="line"></div>

<div class="line"></div>

<div class="line"></div>

</div>

<nav class="nav-bar">

```

```

<ul>

<li><a href="home.html">Home</a></li>

<li><a href="#about" class="active">About</a></li>

<li><a href="contact.html">Contact</a></li>

<li><a href="profile.php">Profile</a></li>

</ul>

</nav>

</header>

<script>

hamburger = document.querySelector(".hamburger");

hamburger.onclick = function () {

navBar = document.querySelector(".nav-bar");

navBar.classList.toggle("active");

}

</script>

<style>

.coverc {

width: 100%;

height: 400px;

background: url('img/about3.jpg')no-repeat;

background-size: cover;

display: grid;

place-items: center;

padding-top: 8rem;

}

```

```

.title {

font-size: 38px;

text-align: center;

align-items: center;

}

.para p {

font-size: 23px;

margin-left: 20px;

margin-right: 20px;

}

@media (max-width: 767px) {

.para p {

font-size: 16px;

/* margin-left: 10px; */

}

#pptslide {

height: 200px;

width: 300px;

}

#map {

height: 200px;

width: 300px;

}

#overview {

height: 200px;

```

```

width: 300px;

}

.title {

font-size: 28px;

margin: 10px;

text-align: center;

align-items: center;

}

}

</style>

<br>

<br>

<!-- <section class="coverc">

</section> -->

<p class="title">"Welcome to <u> Food Wastage Management System</u> "</p>

<br>

<br>

<br>

<p class="heading">About us</p>

<!-- <p style=" font-size:30px ; text-align: center;" > ABOUT <span>US</span> </p> -
->

<!-- <br> -->

<div class="para">

<!-- <p>"Welcome to Food Donate, India's largest and most trusted donating platform
that connects donors to verified nonprofits. FoodDonate helps you become a ray of hope
for people in need. Choose a cause that is close to your heart and join hands with
millions of donors like you who aim to make this world a better place."</p> -->

```

<p>We are a team of passionate individuals committed to addressing the issue of food waste in India. Our goal is to

create a system that connects food donors with charities and NGOs, while also reducing the environmental impact of

food waste.</p>

</div>

<div class="map" style=" text-align: center; padding-bottom: 50px;">

<p style=" font-size:30px ;"> Location </p>

<iframe

src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3930.2518547826976!2d78.14534951744383!3d9.9129700000000008!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x3b00c5077610d357%3A0x69066b558478379a!2sThiagarajar%20College!5e0!3m2!1sen!2sin!4v1677633156837!5m2!1sen!2sin"

width="777" height="473" style="border:0;" allowfullscreen="" loading="lazy"

referrerpolicy="no-referrer-when-downgrade" id="map"></iframe>

</div>

<!-- <p class="heading"> Our Story</p>

<div class="para">

<p>Our journey began with a realization that food waste is a significant problem in India. According to a report by the United Nations, India is the world's second-largest food producer, yet it also has one of the highest rates of food waste. This waste has a significant impact on the environment, as well as on food security in the country.</p>

</div> -->

<!-- <div class="overview" style=" text-align: center; padding-bottom: 50px;" >

<iframe frameborder="no" border="0" marginwidth="0" marginheight="0" width=1400 height=800

src="https://edrawcloudpublicus.s3.amazonaws.com/viewer/self/3094230/share/2023-3-2/1677763924/main.svg" id="overview"></iframe>

</div> -->

</body>

</html>

7.2 APPENDIX B

7.2.1 SCREENSHORTS

1. Login as Page

Welcome to Food Wastage Management System

Login as

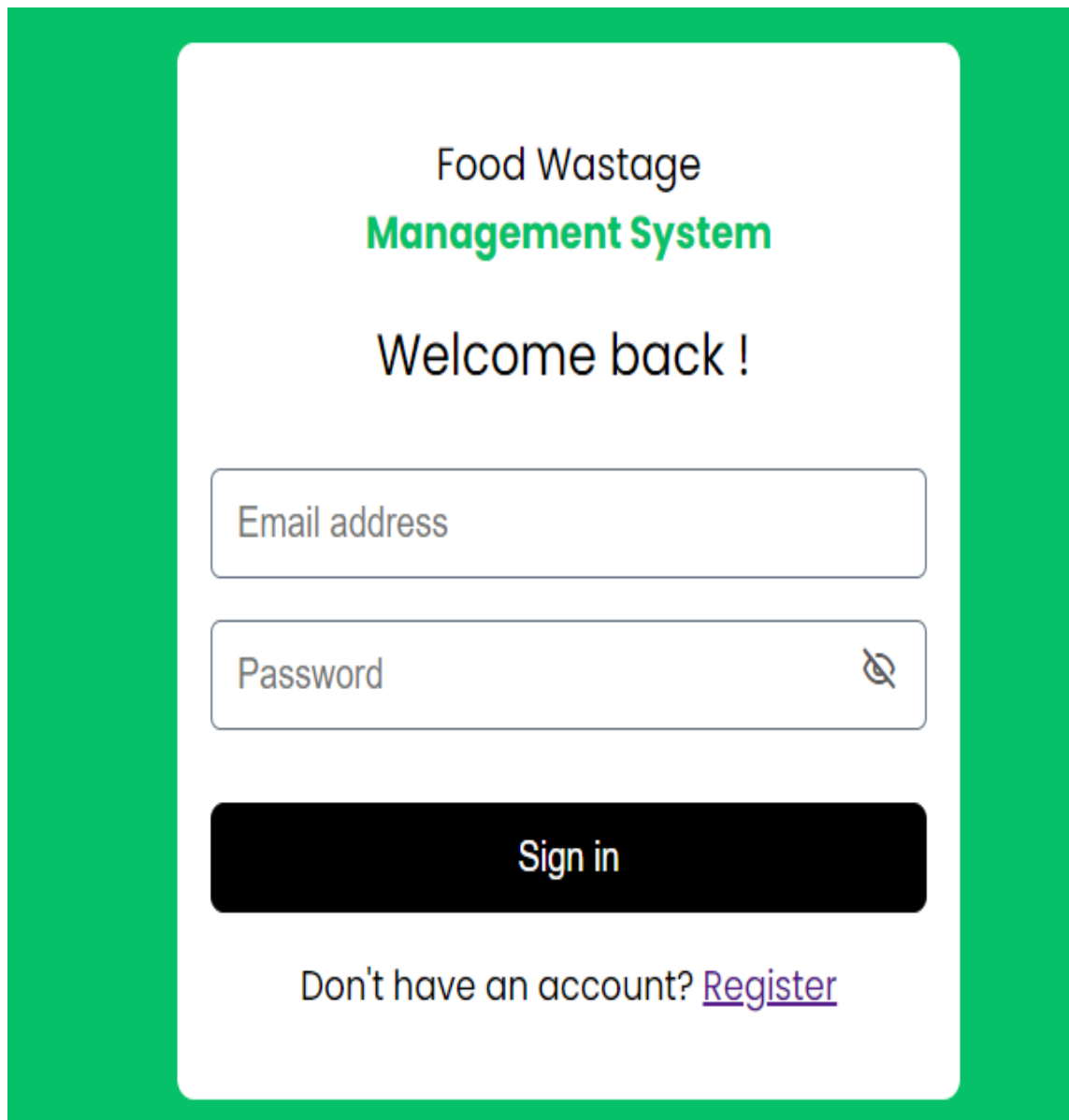
User

Admin

Delivery

Fig: 7.1.1 Login as

2. Login Page




The login page features a green background with a white rounded rectangle in the center. Inside the rectangle, the text 'Food Wastage Management System' is displayed, with 'Management System' in green. Below this, 'Welcome back !' is written. There are two input fields: 'Email address' and 'Password'. The 'Password' field has a toggle icon on the right. A black 'Sign in' button is positioned below the fields. At the bottom, it says 'Don't have an account? [Register](#)'.

Food Wastage
Management System

Welcome back !

Email address

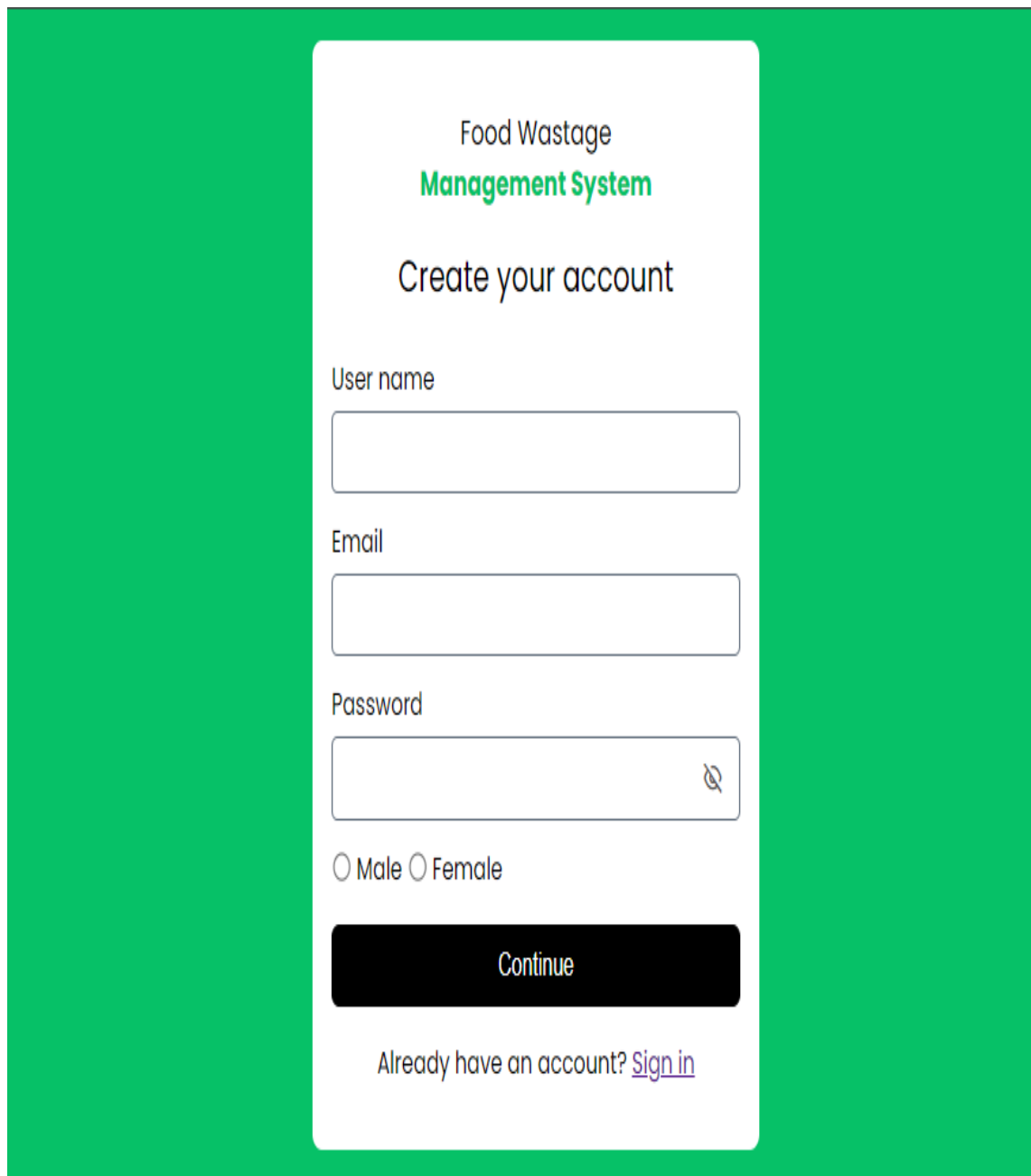
Password 

Sign in

Don't have an account? [Register](#)

Fig: 7.1.2 Login Page

3. Register Page



The image shows a registration form for a 'Food Wastage Management System'. The form is centered on a solid green background. It features a white rounded rectangle containing the system's name, a heading to 'Create your account', and input fields for 'User name', 'Email', and 'Password'. The 'Password' field includes a toggle icon for visibility. Below these fields are radio buttons for 'Male' and 'Female', a black 'Continue' button, and a link to 'Sign in' for existing users.

Food Wastage
Management System

Create your account

User name

Email

Password

☐ Male ☐ Female

Continue

Already have an account? [Sign in](#)

Fig: 7.1.3 Register Page

4. User Home Page




Fig: 7.1.4 User Home Page

5. User Contact Page

Food **Wastage Management System**

[Home](#) [About](#) [Contact](#) [Profile](#)



CONTACT US

[contact us](#)

Name:

Email:

Message:

[Send](#)

Fig: 7.1.5 User Contact Page

6. User Profile Page

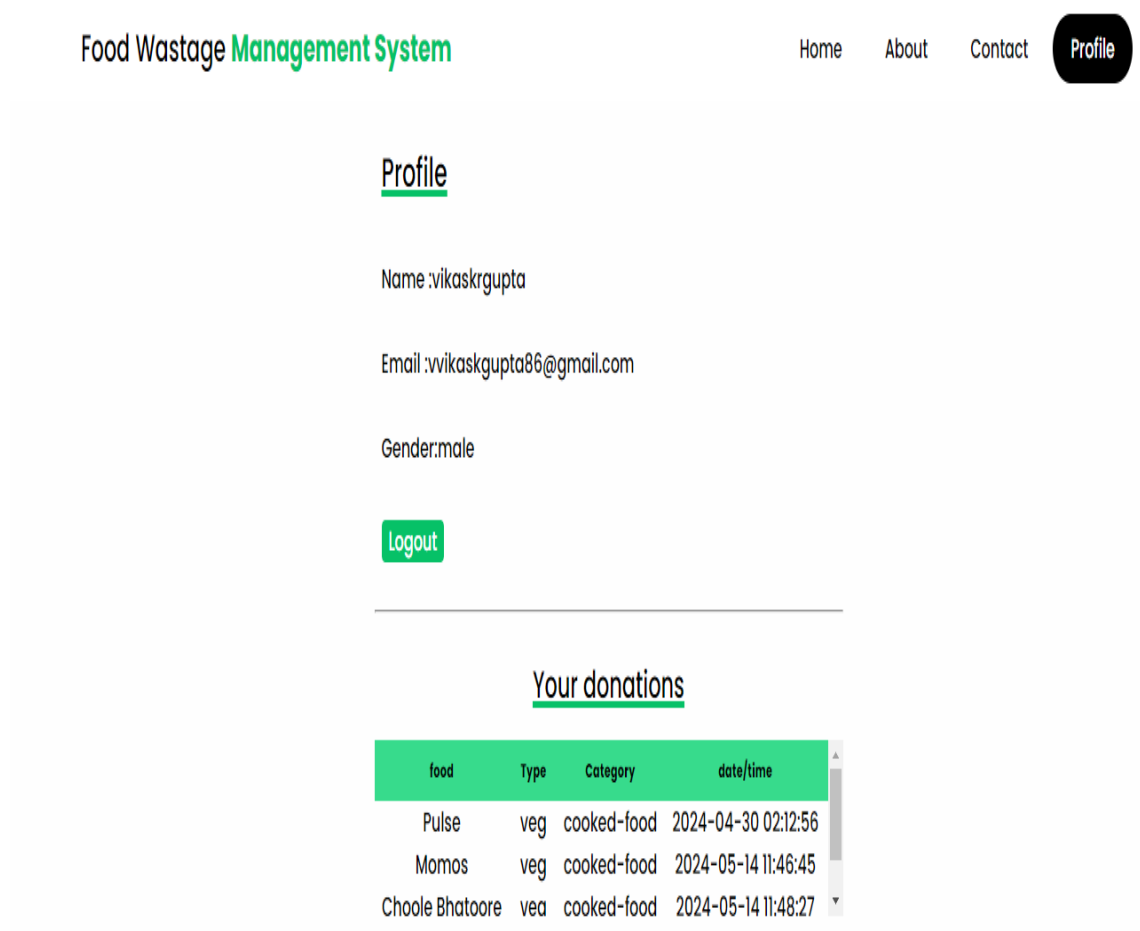


Fig: 7.1.6 User Profile Page

7. Admin Home Page

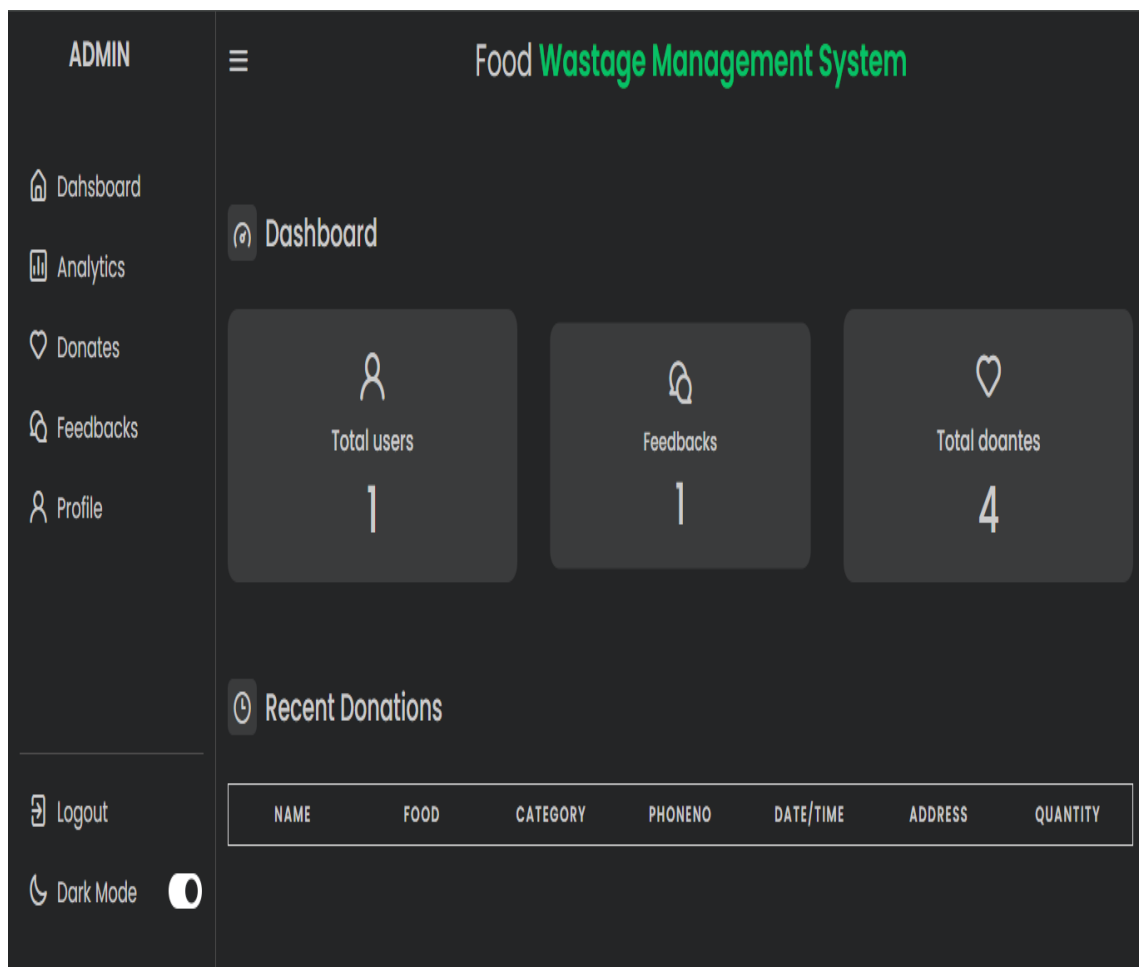


Fig: 7.1.7 Admin Home Page

8. Admin Analytics Page

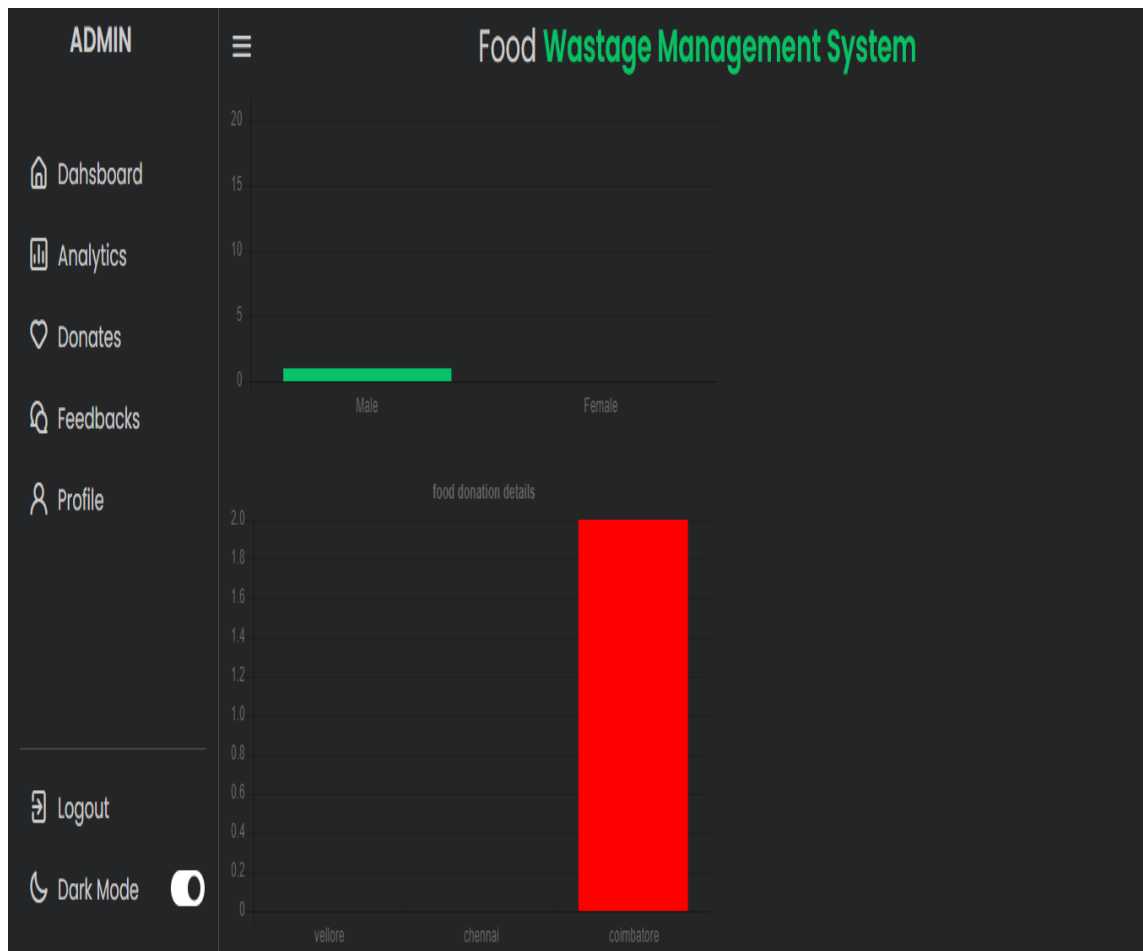


Fig: 7.1.8 Admin Analytics Page

9. Admin Donation Page

ADMIN

Dashboard

Analytics

Donates

Feedbacks

Profile

Logout

Dark Mode

Food Donate

Select Location: Madurai **Get Details**

NAME	FOOD	CATEGORY	PHONENO	DATE/TIME	ADDRESS	QUANTITY
Vandna	Choole Bhatore	cooked-food	1234509876	2024-05-14 11:48:27	Muradnagar	3

Fig:7.1.9 Admin Donation Page

10. Admin Feedback Page

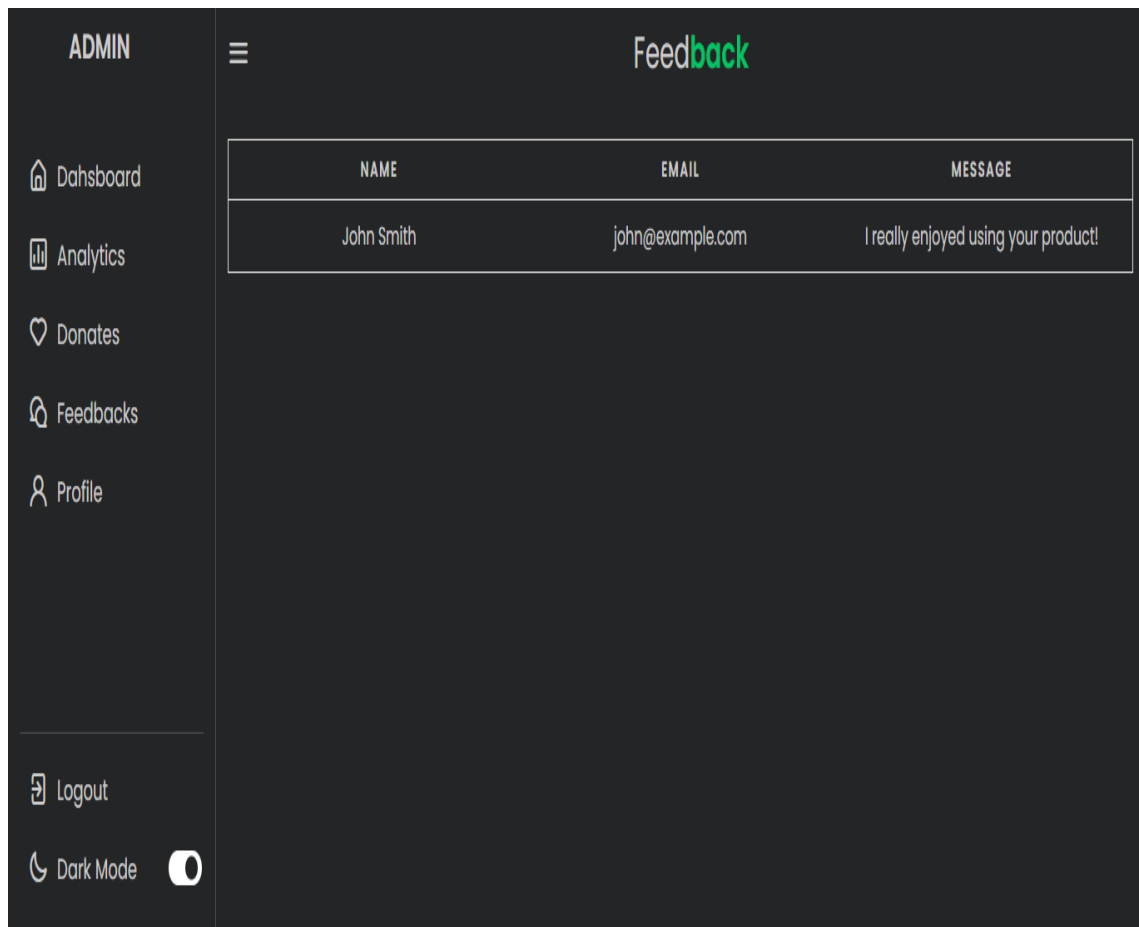


Fig: 7.1.10 Admin Feedback Page

11. Delivery Home Page

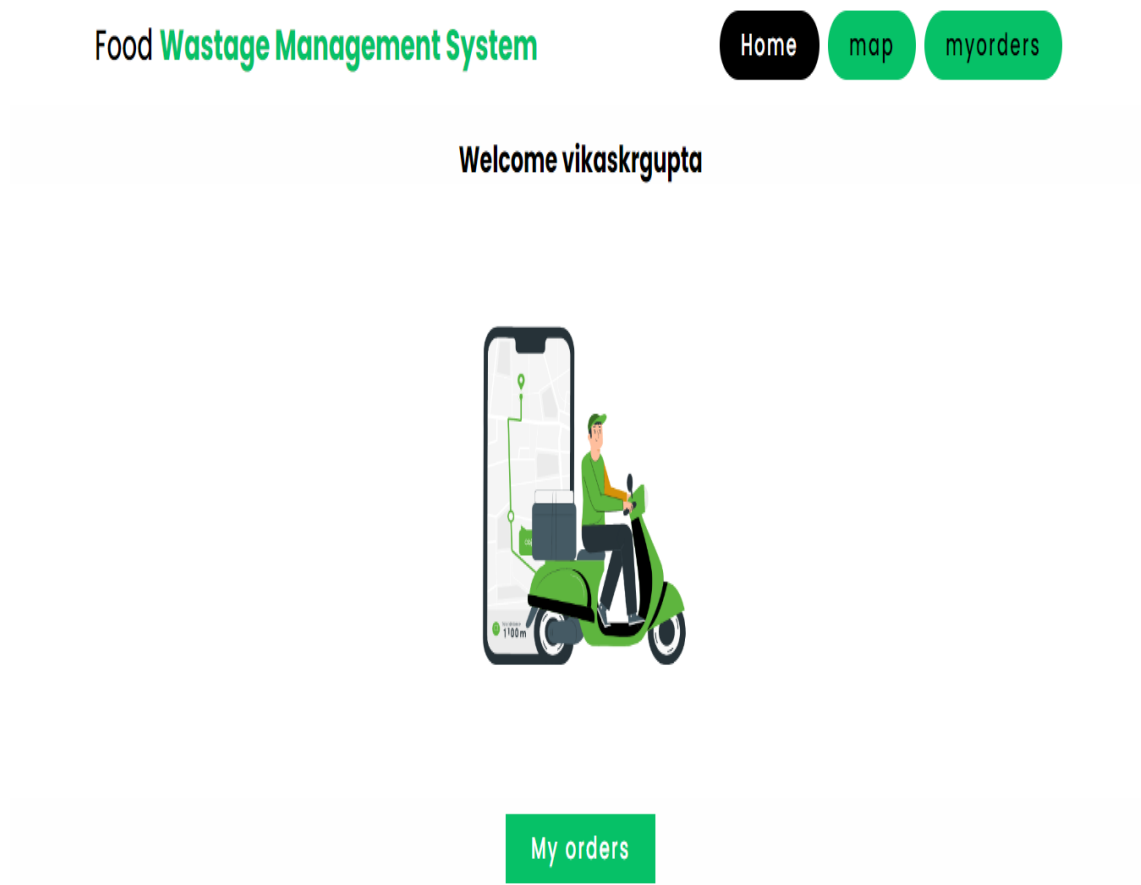


Fig:7.1.11 Delivery Home Page

12. Delivery Map Page

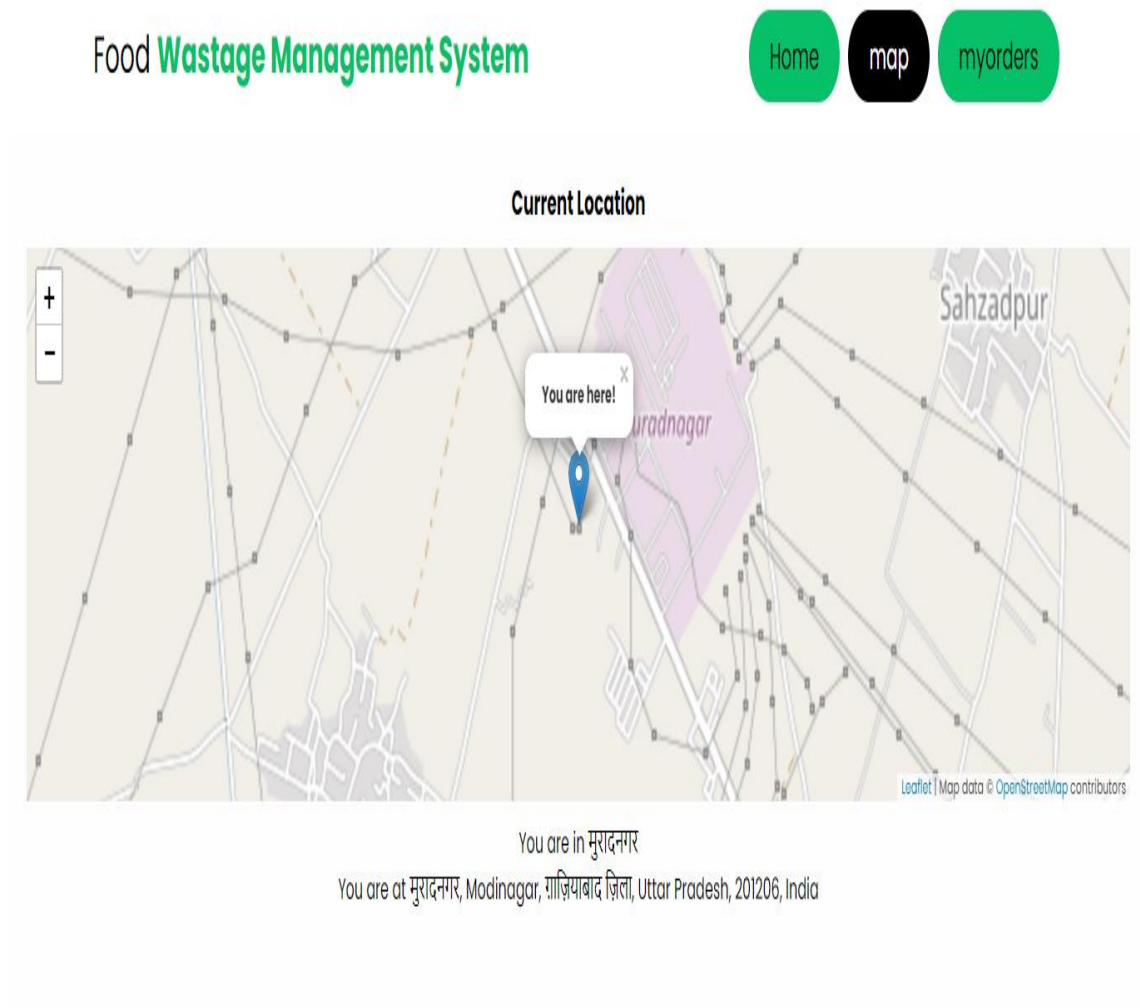


Fig:7.1.12 Delivery Map Page

13. Delivery Order Page



Take orders

Order assigned to you

NAME	PHONENO	DATE/TIME	PICKUP ADDRESS	DELIVERY ADDRESS
vikaskrgupta	7619984304	2024-04-30 02:12:56	ghaziabad	Ghaziabad
deepansh	1234567890	2024-05-14 11:46:45	Friends colony	Ghaziabad

Fig:7.1.13 Delivery Orders Page

7.3 APPENDIX C

7.3.1 ACRONYMS

- HTTP-Hyper Text Transfer Protocol
- ANSI-American National Standards Institute
- CLI-Command Line Interface
- SQL-Structured Query Language
- JVM-Java Virtual Machine
- SDK-Software Development Kit
- CSS-Cascading Style Sheet
- QA-Quality Assurance

7.3.2 REFERENCES

- www.google.com
- www.stackoverflow.com
- www.w3school.com
- www.udemy.com
- www.gitHub.com
- www.youtube.com
- <https://unsplash.com/>
- <https://hoppscotch.io/>