

ONLINE FOOD DONATION SYSTEM

A MINI-PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this mini project “ONLINE FOOD DONATION SYSTEM” is the Bonafide work of “BLESSY ABIDHA B S (2116220701047) & CHITHRA K (2116220701054)” who carried out the project work under my supervision.

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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ABSTRACT

The Online Food Donation Management System is a digital platform designed to connect food donors with organizations in need, creating an efficient and transparent donation process. Donors can register, log in, and provide details about the type and quantity of food they wish to donate. Registered organizations can view these donation requests and respond by accepting or rejecting them based on their specific requirements.

The platform prioritizes ease of use, security, and real-time communication, ensuring a seamless experience for both donors and organizations. By leveraging modern web technologies, this system addresses food waste, supports hunger relief efforts, and encourages a culture of giving. It serves as a scalable solution for building a sustainable food distribution network, empowering communities to tackle food insecurity effectively.

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CHAPTER 1

1.1 INTRODUCTION

The **Online Food Donation Management System** is a platform designed to connect food donors with organizations in need, addressing food waste and hunger. Donors can register, log in, and submit food donation details, while organizations can view and respond to these requests. By streamlining the donation process, the system fosters community collaboration, reduces food wastage, and promotes sustainability, providing an efficient solution to support those in need.

1.2 SCOPE OF THE WORK

The scope of the project includes creating a web-based platform that facilitates food donations by connecting donors and organizations. Donors can register, log in, and submit food donation requests, while organizations can manage these requests by accepting or rejecting them. The project aims to streamline donation processes, minimize food waste, and support organizations in addressing hunger and food insecurity effectively.

1.3 PROBLEM STATEMENT

Food insecurity and waste are pressing global issues, with surplus food often going unused while many people struggle with hunger. A lack of a centralized, efficient system to connect donors with organizations in need exacerbates this problem. The challenge is to create a platform that bridges this gap, enabling donors to contribute food easily and organizations to manage and distribute these resources effectively, ensuring minimal waste and maximum impact.

1.4 AIM AND OBJECTIVES OF THE PROJECT

The Aim of the Online Food Donation project is to develop an efficient and user-friendly online platform that connects food donors with registered organizations, facilitating seamless food donations to reduce food waste and combat hunger.

The Objective of the project is to provide a secure and intuitive interface for donors to create accounts, log in, and submit food donation details effortlessly. Allow registered organizations to view donation requests, evaluate them, and accept or reject based on their needs and capabilities. Implement real-time updates and notifications to keep donors and organizations informed about the status of their requests and actions. Foster a culture of resource optimization by addressing food waste and ensuring surplus food reaches those in need. Employ authentication mechanisms and data protection protocols to maintain user trust and system integrity. Build a user-friendly interface with features like filters, sorting, and responsive design for accessibility across devices. Design a scalable architecture to handle increasing users and data efficiently as the platform grows.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

Processor	: Minimum dual-core processor or higher
RAM	: 4 GB or higher
Storage	: 50 GB of free space for application data logs
Display	: Minimum resolution of 1280x720

2.2 SOFTWARE SPECIFICATIONS

Operating System	: WINDOWS 7 AND PLUS
Front – End	: HTML, CSS, JAVASCRIPT
Back – End	: NODE.JS
Database	: MYSQL

CHAPTER 3

ARCHITECTURE DIAGRAM

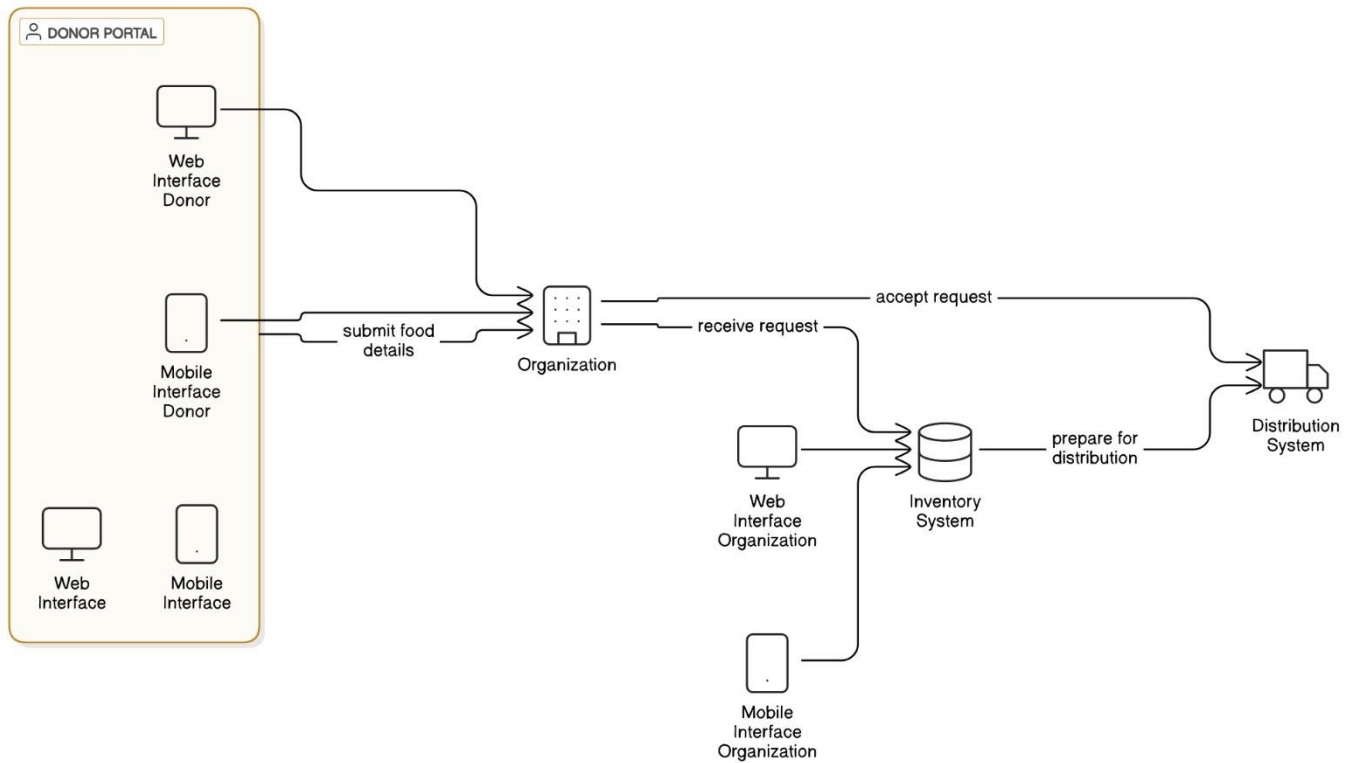


Fig.3.1 Architecture Diagram

The architecture diagram for the Online Food Donation project outlines a modular system consisting of a user interface, web server, business logic layer, and database layer. It incorporates authentication and security features, as well as optional third-party APIs for geolocation and weather updates. The design ensures seamless user interaction, efficient donation management, and real-time notifications for donors and recipients.

CHAPTER 4

MODULE DESCRIPTION

4.1. User Registration and Login Module:

This module allows users to register and create an account on the online food donation platform. Users provide their basic information such as name, email address, and password to create an account. After successful registration, users can log in using their registered email address and password to access the platform's features. This module also includes functionality for password recovery and account management.

4.2. Donation Module:

The Donation Module allows users (donors) to make food donations. Donors can specify the type of food they wish to donate, quantity, and their location. The module ensures that donors can easily upload food details and choose suitable delivery methods (e.g., self-delivery or through the platform's partner delivery services). This module also allows donors to track their donation history and view the impact of their contributions.

4.3. Recipient Module:

The Recipient Module is designed for organizations or individuals who require food donations. This module allows recipients to register their needs, specify the type and quantity of food they require, and their delivery location. It also facilitates communication between recipients and donors, ensuring efficient matching of food donations. Recipients can also track their food requests and receive notifications when a donation is accepted or delivered.

4.4. Food Donation Tracking Module:

The Food Donation Tracking Module enables both donors and recipients to track the status of donations. Donors can view when their donated food is received by the recipient, and recipients can track when their requested food donation is being processed or delivered. This module provides real-time updates, including notifications and alerts, ensuring transparency and effective communication between all parties involved.

4.5. Admin Dashboard Module:

The Admin Dashboard Module provides platform administrators with complete control over the website's content, user management, and operational processes. The admin can monitor food donations, manage registered donors and recipients, approve or reject donation requests, and track the overall performance of the platform. The module also allows admins to add or remove food categories, manage user roles, and access donation reports and statistics.

4.6. Feedback and Review Module:

The **Feedback and Review Module** allows users (both donors and recipients) to share their experiences with the platform. Donors can review their donation process, while recipients can provide feedback on the quality of food received and the delivery process. This module helps improve the platform by gathering user feedback and enables new users to make informed decisions based on the experiences of others.

4.7. About Module:

The **About Module** provides basic information about the website, its mission, and the team behind the online food donation initiative. It also includes information on how users can get involved, contribute, or help spread the word about the platform. This module builds trust by showcasing the platform's purpose and vision for community support.

4.8. Privacy Policy Module:

The **Privacy Policy Module** contains the legal documentation required by privacy laws that explain how the platform collects, uses, and protects user data. It provides transparency to users regarding data collection practices, ensuring compliance with relevant data privacy regulations. The module outlines how personal data (e.g., contact information, donation details) is handled and the measures taken to ensure user confidentiality.

CHAPTER 5

SYSTEM DESIGN

5.1 USE CASE DIAGRAM

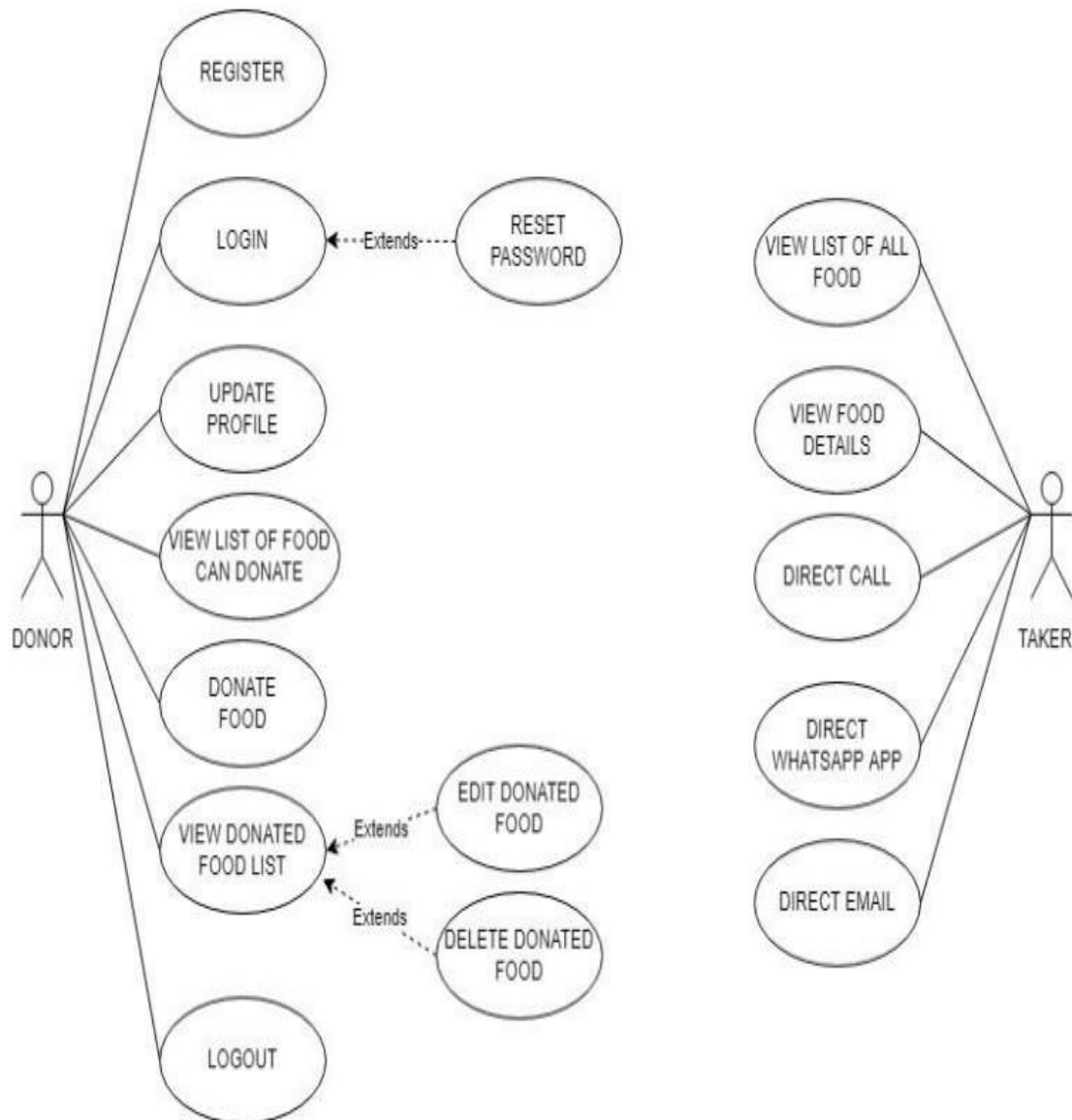


Fig 5.1.1 Use case Diagram

The use case diagram illustrates the interactions between users (donors, organizations, and admins) and the system, highlighting key functionalities such as registration, donation management, and report generation.

5.2 ER DIAGRAM

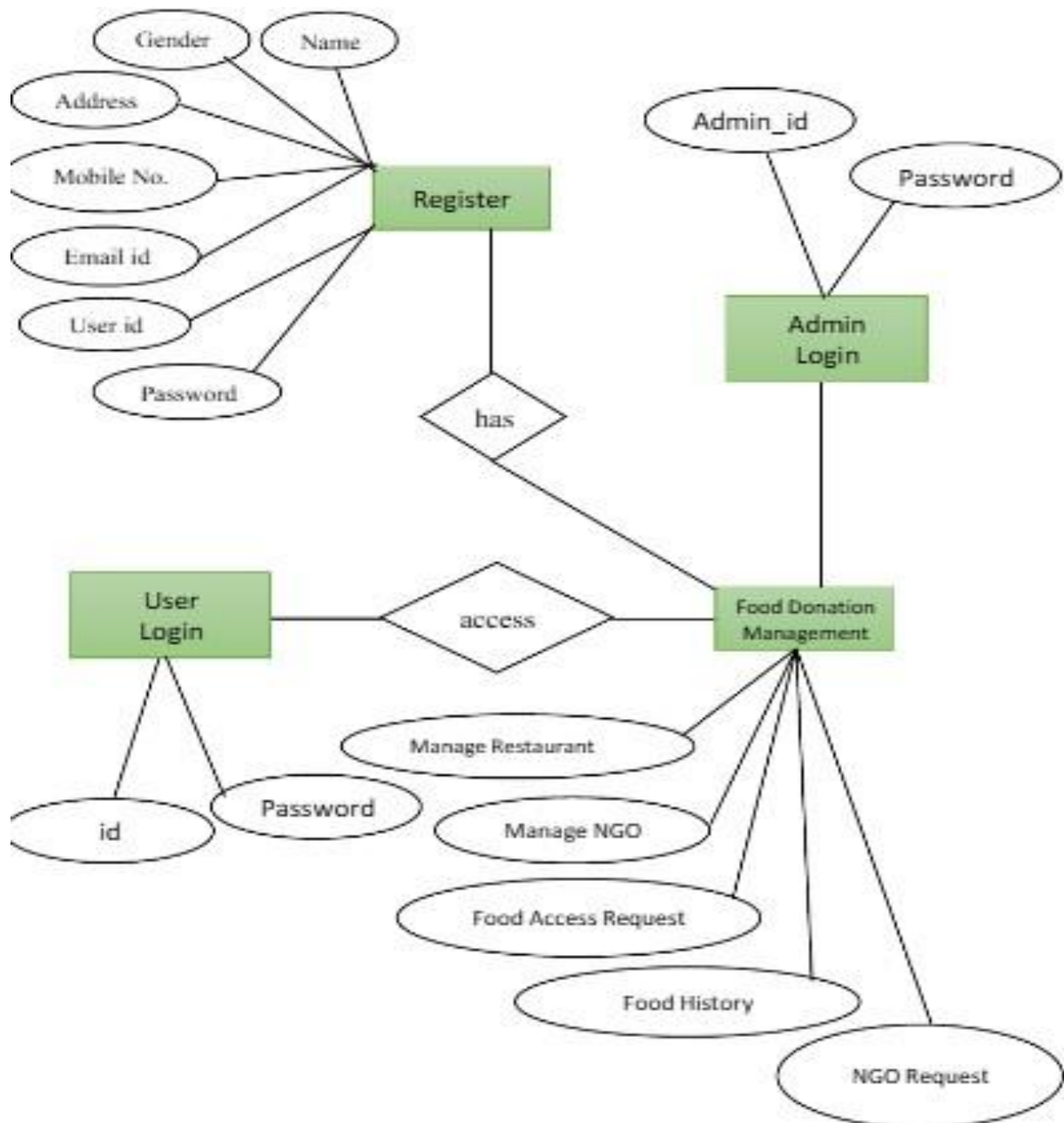


Fig 5.2.1 ER Diagram

The ER diagram visually represents the system's data structure, showcasing entities like donors, organizations, donations, and their relationships.

5.3 DFD Diagram

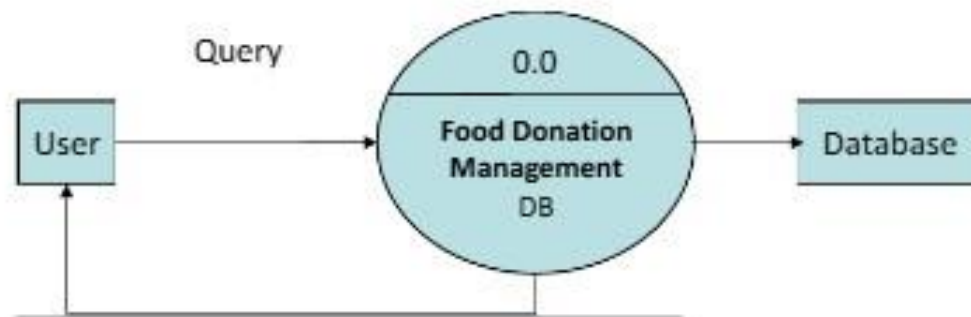


Fig.5.3.1 DFD Level-0 Diagram

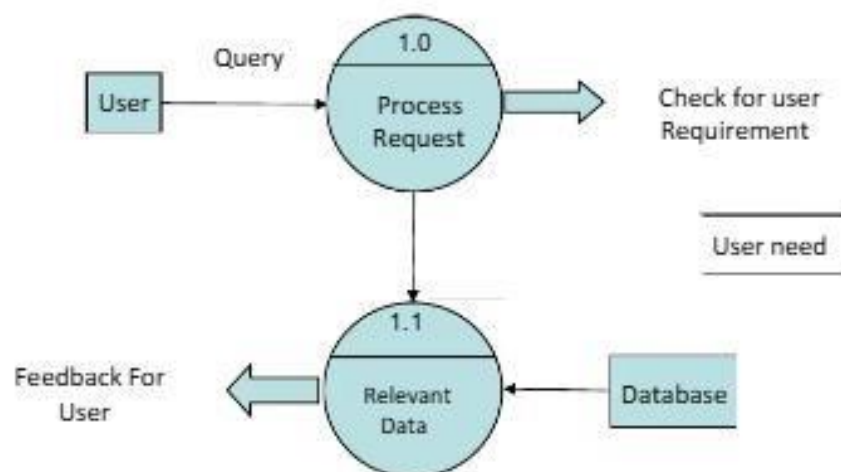


Fig.5.3.2 DFD Level-1 Diagram

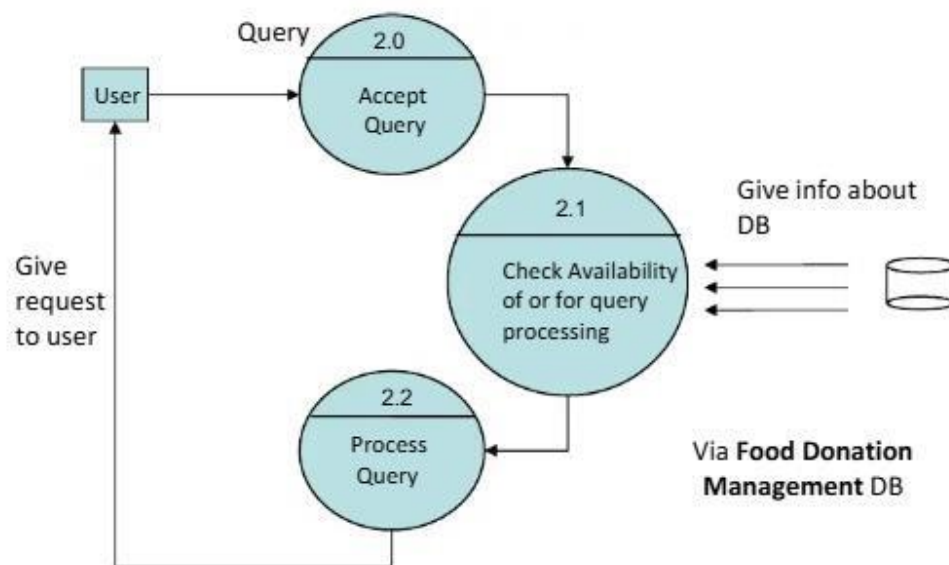


Fig.5.3.3 DFD Level-2 Diagram

5.4 ACTIVITY DIAGRAM

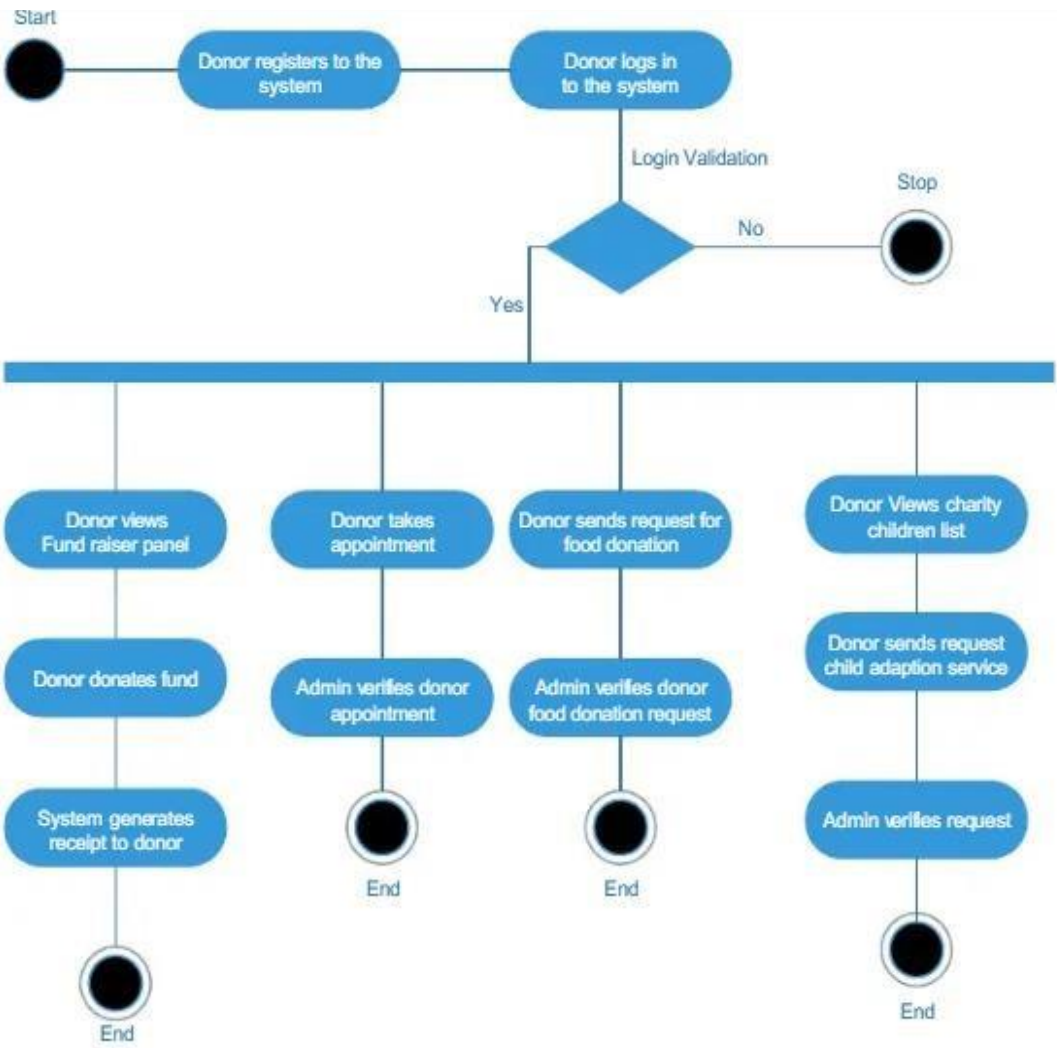


Fig .5.4 Activity Diagram

CHAPTER 6

SCREEN SHOTS

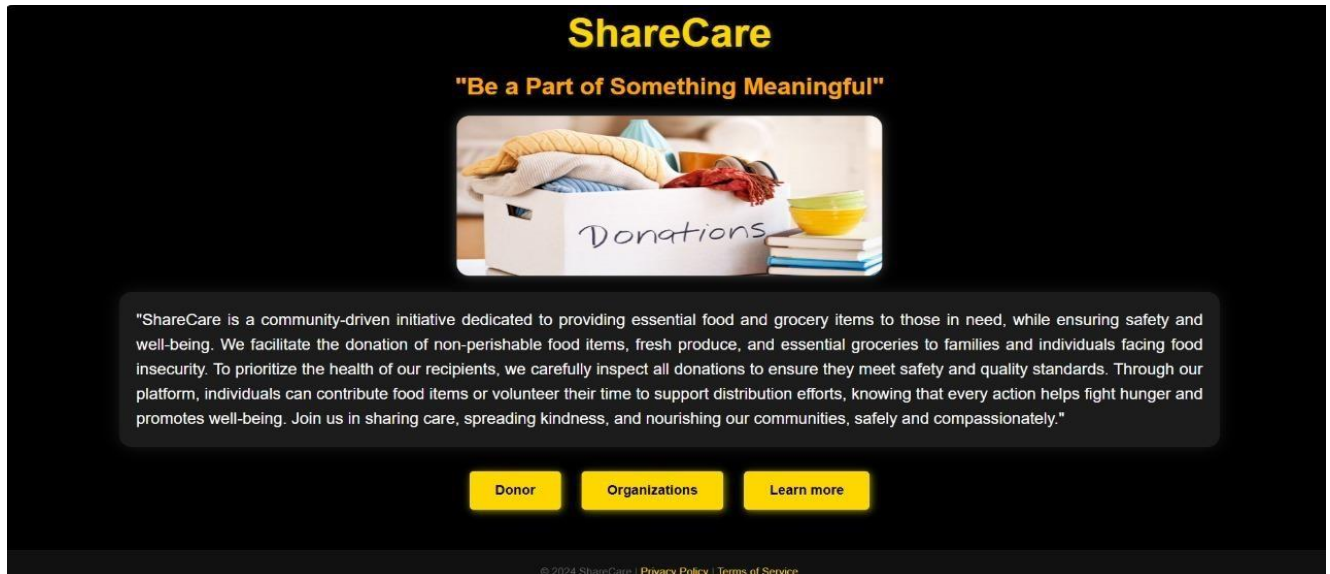


Fig. 6.1 Home Page

From this above figure this is the home page where the Donor and Organization can login.

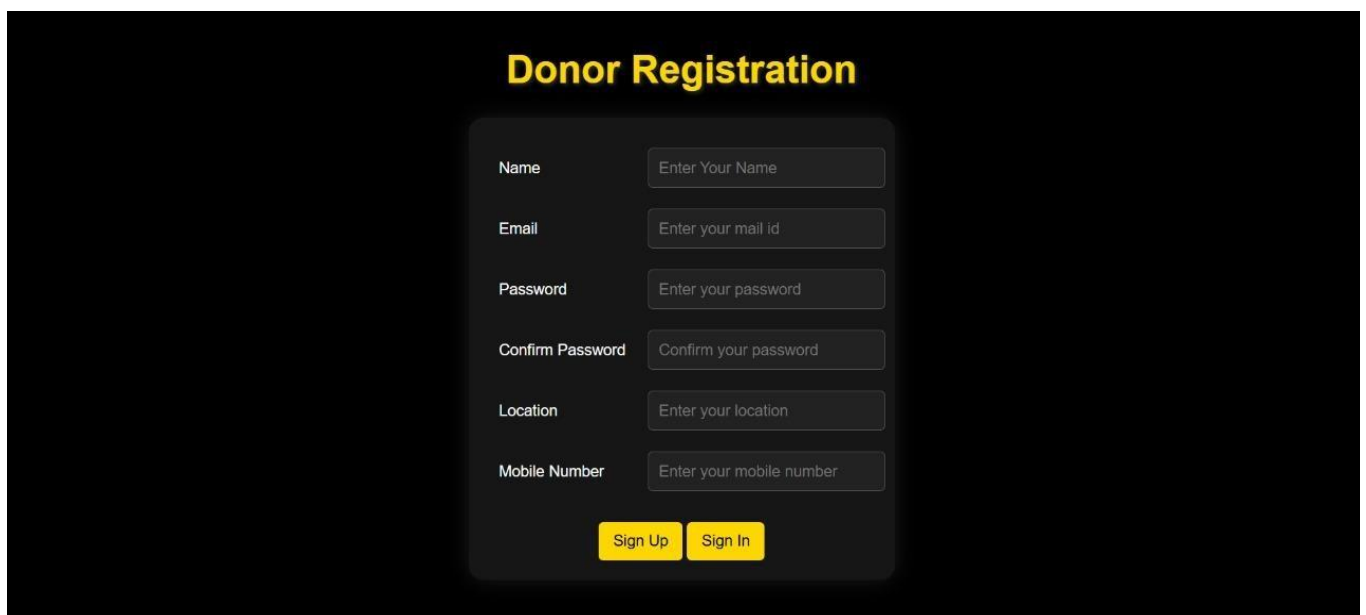
The screenshot shows the Donor Registration page. The title "Donor Registration" is in yellow at the top. Below it is a dark gray form with several input fields. The fields are labeled "Name", "Email", "Password", "Confirm Password", "Location", and "Mobile Number". Each label is followed by a text input field with placeholder text: "Enter Your Name", "Enter your mail id", "Enter your password", "Confirm your password", "Enter your location", and "Enter your mobile number". At the bottom of the form are two yellow buttons: "Sign Up" and "Sign In".

Fig. 6.2 Donor Registration Page

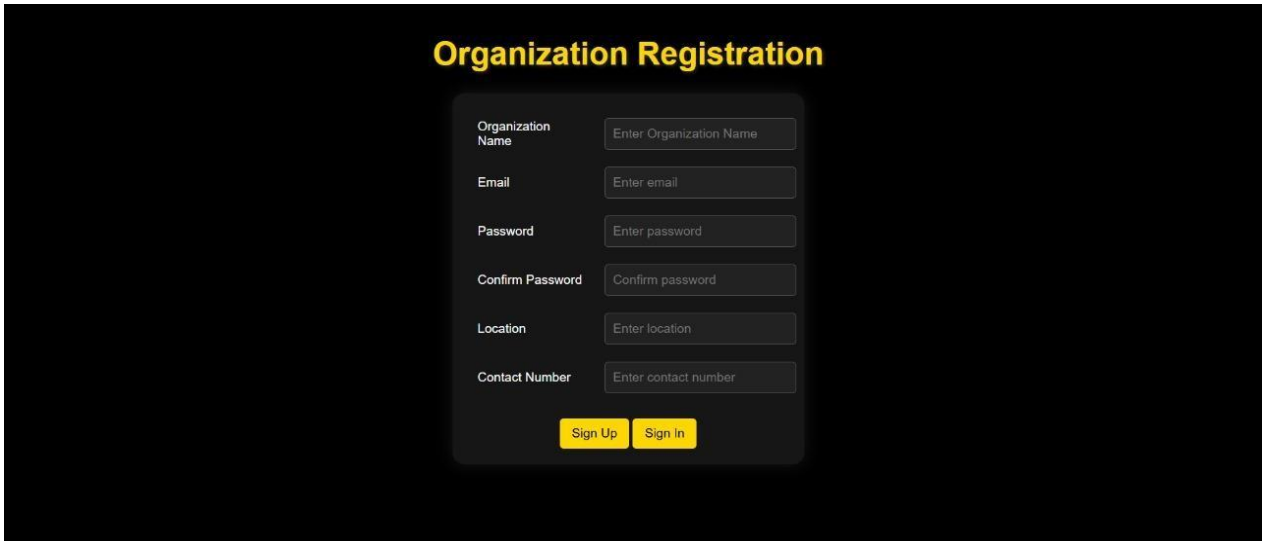
The image shows a dark-themed web page titled "Organization Registration" in yellow text. Below the title is a registration form with a dark gray background. The form contains six input fields, each with a label on the left and a text box on the right: "Organization Name" (placeholder: "Enter Organization Name"), "Email" (placeholder: "Enter email"), "Password" (placeholder: "Enter password"), "Confirm Password" (placeholder: "Confirm password"), "Location" (placeholder: "Enter location"), and "Contact Number" (placeholder: "Enter contact number"). At the bottom of the form are two yellow buttons: "Sign Up" and "Sign In".

Fig. 6.3 Organization Registration page

From this above figure organizations can register by entering their information.

The image shows a dark-themed web page titled "Donation Options" in yellow text, with the tagline "Together, We Can Make a Difference" below it. The page features two main donation options, each in a dark gray box. The first option is "Donate Food", which includes a description: "Food donation serves a dual purpose by reducing food wastage and providing essential sustenance to individuals and families facing economic challenges. Foster a sense of community by donating." and a yellow "Donate" button. The second option is "Donate Grocery", which includes a description: "Support individuals and families facing financial hardship by providing necessary resources to meet their needs. Grocery donations can make a significant difference in community initiatives." and a yellow "Donate" button. At the bottom of the page, there is a small footer with the text "© 2024 ShareCare | Privacy Policy | Terms of Service".

Fig. 6.4 Donation Option page

From this above figure Donors can choose their donation option.

The screenshot shows a mobile application interface for donating food. At the top, the title "Donate Food" is displayed in yellow. Below it, the "Food Items" section includes a text input field with "Food" entered, and a table with two columns: "Item Name" and "Qty". A yellow button labeled "Add Item +" is positioned below the table. The "Donate To:" section features a dropdown menu with "Select Organization" and a downward arrow. The "Contact:" section has a text input field with "Enter contact no". The "Address:" section has a text input field with "Enter address". At the bottom, there is a green button labeled "Donate".

Fig. 6.5 Food Donation page

From this above figure, Donors can enter the food donation details.

The screenshot shows a mobile application interface for viewing donation history. The title "Donation History" is displayed in blue. Below it, there are two donation entries. Each entry includes the following details: "Donation #1", "Item Name: biriyani", "Quantity: 10", "Contact: 6545678765", and "Address: chennai". Below each entry, there are two buttons: a green "Pending" button and a red "Delete" button. At the bottom of the interface, there are two blue buttons: "Donate More" and "Back".

Fig. 6.6 Search page section

From this above figure, donors can view their donation history.

CHAPTER 7

CONCLUSION

In Conclusion, the Online Food Donation platform aims to bridge the gap between food donors and recipients, fostering a sense of community and promoting sustainable food redistribution. Through the various modules integrated into the system, including user registration, donation tracking, recipient management, and feedback, the platform offers a seamless and efficient way to connect those with surplus food to those in need.

By incorporating user-friendly interfaces for both donors and recipients, the platform ensures that food donations are easy to make, track, and receive. Additionally, the admin dashboard empowers administrators to efficiently manage the platform, monitor donation activities, and ensure the smooth operation of the system. The privacy policy and feedback modules further enhance user trust and ensure that the platform adheres to legal and ethical standards.

Overall, this project contributes to addressing food waste and hunger, providing a sustainable solution that benefits both the community and the environment. It is a step forward in leveraging technology to make a positive impact on society by ensuring that excess food reaches those who need it most. The system's potential for scalability and future enhancements makes it a valuable tool for supporting global efforts to reduce food waste and alleviate hunger.

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SweetAlert2 - <https://sweetalert2.github.io/v10.html>