Help by Food

Manjeet Singh Sirohi[1], Shantanu Sinha[2], Prof. Rahul Sharma[3]

[1&2] Student, Department of ECE, Lakshmi Narain College of Technology and Science, Bhopal, India
[3]Project Guide, Department of ECE, Lakshmi Narain College of Technology and Science, Bhopal, India

Abstract— **In a world where hunger persists despite plenty, "Help By Food" emerges as a beacon of hope, leveraging the power of technology to bridge the gap between surplus and scarcity. This abstract delves into the essence of our platform, elucidating its key features and impact. Help By Food is a user-centric online platform designed to facilitate seamless food donations, connecting donors with beneficiaries in need. Our website serves as a centralized hub, where individuals, businesses, and organizations can easily contribute excess food to support local communities and combat hunger. With a simple and intuitive design, our website ensures accessibility for users of all backgrounds. Whether you're a food donor or a recipient, navigating the platform is effortless, fostering a positive user experience.**

Keywords— *Website,Serves, Centralized Hub, Individuals, Businesses, Food.*

I. INTRODUCTION

In highly populated countries like India, food wastage is a disturbing issue. Food wastage is not only an indication of hunger or pollution, but also of many economic problems. Instead of wasting these things we can put them in use by donating them to various people whom so ever need it like orphanages, old age homes etc. The product is basically an internet based website which aims at charity through food donations. In a world where millions go hungry every day, we believe that no one should ever have to worry about where their next meal will come from. That's why we've created Help By Food, a platform dedicated to facilitating food donations and ensuring that surplus food reaches those who need it most. At Help By Food, we serve as the bridge between food donors and community organizations, such as shelters, food banks, and soup kitchens. Our mission is simple: to redistribute surplus food to those facing hunger and food insecurity.

Background- Creating a food donation website involves several key components, each aimed at facilitating the process of donating and distributing food to those in need. Here's a breakdown of what typically goes into the background of such a website:

Purpose and Mission: Clearly define the purpose of the website, which is likely to facilitate the donation of surplus food from individuals, restaurants, grocery stores, and other sources to people or organizations in need. Establish a mission statement that conveys the overarching goal of reducing food waste and addressing food insecurity.

User Experience (UX) Design: Design the website with a user-friendly interface that makes it easy for both donors and recipients to navigate and interact with the platform. Consider factors such as intuitive navigation, clear calls-to-action, and responsive design for mobile devices.

Registration and Authentication: Implement a system for users to register and create accounts, whether they are donors or organizations seeking food donations. Authentication mechanisms such as email verification or two-factor authentication may be employed to ensure security and legitimacy.

Donation Listings: Provide a platform for donors to list surplus food items available for donation. This may include details such as the type of food, quantity, expiration date (if applicable), and any specific handling instructions. Photos can also be included to give recipients a better idea of what is being offered.

Search and Matching: Develop search functionality that allows recipients to browse available food donations based on criteria such as location, type of food, or availability date.

Implement algorithms or filters to match donations with recipients based on their needs and preferences.

Communication Channels: Incorporate messaging or communication features to facilitate communication between donors and recipients. This may include options for scheduling pickups or deliveries, clarifying details about donations, and expressing gratitude for contributions.

Logistics and Scheduling: Integrate tools for scheduling and managing the logistics of food pickup, transportation, and delivery. This could involve coordinating pickup times, assigning delivery routes, and providing real-time updates on the status of donations.

Feedback and Reporting: Allow users to provide feedback on their donation experiences and report any issues or concerns. Use this feedback to continually improve the platform and address any challenges or shortcomings.

Analytics and Metrics: Implement tracking mechanisms to monitor website usage, donation activity, and impact metrics such as the amount of food donated, the number of meals provided, and the communities served. This data can be used to assess the effectiveness of the platform and inform future decision-making.

Legal and Regulatory Compliance: Ensure compliance with relevant laws and regulations governing food donation, transportation, and safety. This may include liability protections for donors, adherence to food safety standards, and compliance with tax regulations. By addressing these aspects in the background of the food donation website, you can create a robust and effective platform for connecting surplus food with those in need, ultimately contributing to efforts to combat food waste and alleviate hunger.

II. LITERATURE SURVEY

Griffin et al. [1] provided a model for quantifying and comparing food waste throughout an entire community food system. The act of donating still-edible food can be viewed as a distinct application of urban mining, where food is reclaimed for its initial purpose - human consumption. While numerous projects have been initiated globally, the scarcity of data results in limited scientific literature on the topic.

Schneider [2], in 2012, provided insights into the distinctions and parallels among present organizations involved in distributing food to those in need, along with an exploration of the political, legal, social, and logistical obstacles and incentives associated with this subject. Food banks acquire donated food from both national and local sources, including The Emergency Food Assistance Program (TEFAP) and supermarkets.

In 2014, Davis et al. [3] designed transportation schedules that facilitated the collection of food donations from local sources by the food bank and the distribution of food to charitable agencies. While food plays a significant role in shaping people's identities, the swift increase in the prevalence of food banks and donation points in supermarkets and schools implies a normalization of food aid.

In 2016, Purdam et al. [4] investigated the discourse surrounding food aid and the stigmatization of individuals living in poverty, the extent of malnutrition, and the experiences of food bank users. They utilized survey data and case studies for their analysis. Non-profit hunger relief organizations aim to mitigate the adverse impacts of food insecurity by offering food and services to individuals in need.

In 2016, Davis et al. [5] conducted a study that analyzed and predicted food donation behavior for a domestic hunger relief organization. Their comprehensive numerical investigation aimed to quantify the level of uncertainty associated with the donor, product, and supply chain structure.

In 2017, Lee et al. [6] explored how BPS (Buy-Donate-Sell) can alleviate food waste in a retail grocer setting and examined its interactions with other waste reduction mechanisms, such as waste disposal fees and tax credits for food donation. The findings indicate that under BPS, the threshold net tax benefit needed to encourage donation rises because BPS competes with donation for surplus primary units. Various policies related to food waste management, reduction, and donation are established to enable and incentivize individuals, organizations, and businesses to diminish their food waste.

In 2018, Chen et al. [7] concentrated on examining activities related to the prevention and diversion of food waste, utilizing data sourced from two U.S. waste reduction recognition programs, namely the U.S. Food Waste Challenge (FWC) and the EPA Food Recovery Challenge (FRC).

In 2020, Roe et al. [8] delved into various subjects within the food waste literature, highlighting ethical issues that, in their perspective, deserve additional contemplation. These encompass the focus on food donation as a strategy for minimizing food waste, the rise of markets for imperfect-looking food (i.e., "ugly food"), the suitability of guilt appeals for instigating reductions in wasted food, and the ethical dilemmas associated with selecting dates on food labels.

III.   TECHNOLOGY AND WORKING

Creating a website for food donation involves several software components to ensure functionality, security & user experience. The Hely By Food website application consist of various languages and written on VS Code writer. We must choose a better development framework for proper building of the website, Frontend technologies for building the structure, style and interactivity of the website. For Backend technologies we must chose a better data base management system to store the user data and other information. Also, we must keep in mind other various terms like security, content management system, version control, hoisting, monitoring and analytics.

Tools & Technologies used-

1. Frontend

2. Backend

3. Webserver

4. Database

Working-

A food donation website serves as a platform to connect food donors, volunteers, and recipients in order to facilitate the donation process. The User module is designed for people who wish to donate their excess or leftover food to help reduce food wastage. The User module is responsible for accepting food donations from users who have excess food, such as marriage halls, restaurants, or individuals. The module provides users with the ability to register, login, and donate food. Users can select the type and quantity of food they want to donate, and the system will match their donation with the nearest needy people or organizations. The module also allows users to view their donations. The User module provides the information to the Admin module for further processing. Users who want to participate in the donation process can register on the website. This includes food donors, volunteers, and organizations or individuals in need of food assistance. Food donors can create listings on the website to offer food items for donation. They provide details such as the type of food, quantity, expiry date (if applicable), and pickup/delivery instructions. Creating a food donation website involves several key components and functionalities to ensure that the platform effectively connects donors with recipients. Here's an overview of how such a website typically works:

Creating an effective homepage for a food donation website involves a balance of engaging content, clear navigation, and compelling calls to action. Here's a breakdown of the key elements and sections to include on the homepage:

1. **Header:** The logo should be positioned at the top left for brand recognition. Links to important pages such as About Us, How It Works, Donate Food, Request Food, Volunteer, Contact Us, and Login/Sign Up. Search Bar: The search bar is optional, for users to quickly find information.

2. **Hero Section:** Background Image/Video should be of High-quality image or video that depicts food donation activities or beneficiaries. Headline consist of a compelling, concise statement about the mission, such as "Fight Hunger. Donate Food." The Subhead line must a brief description of the organization's impact, like "Connecting surplus food to those in need."

3. **Mission Statement:** A short paragraph explaining the mission and vision of the organization. The Key figures that highlight the organization's achievements, such as

meals distributed, families helped, and volunteers involved.

4. **How It Works:** A visual guide with icons and brief descriptions explaining the process for donors, recipients, and volunteers. Display stories and testimonials from beneficiaries, donors, and volunteers. Also include images of people and events to create a personal connection.

5. **Call to Action Section:** Highlighting urgent needs such as emphasizing any immediate needs or ongoing campaigns and encourage users to take action, such as "Donate Now," "Join Us," or "Learn More."

6. **Upcoming Events:** Event Lists contain information on upcoming food drives, volunteer opportunities, and community events. Links contains buttons to sign up or learn more about each event.

7. **Partners and Sponsors:** Display logos of partner organizations and sponsors. Acknowledgement in brief text thanking partners for their support.

8. **Footer:** Contact Information like Address, phone number, and email. Social media links such as icons linking to social media profiles. Add quick links like additional navigation links for ease of access. Mention privacy policy and terms of service and links to legal documents.
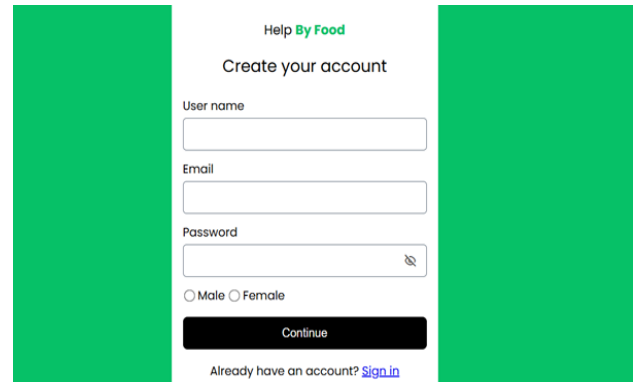

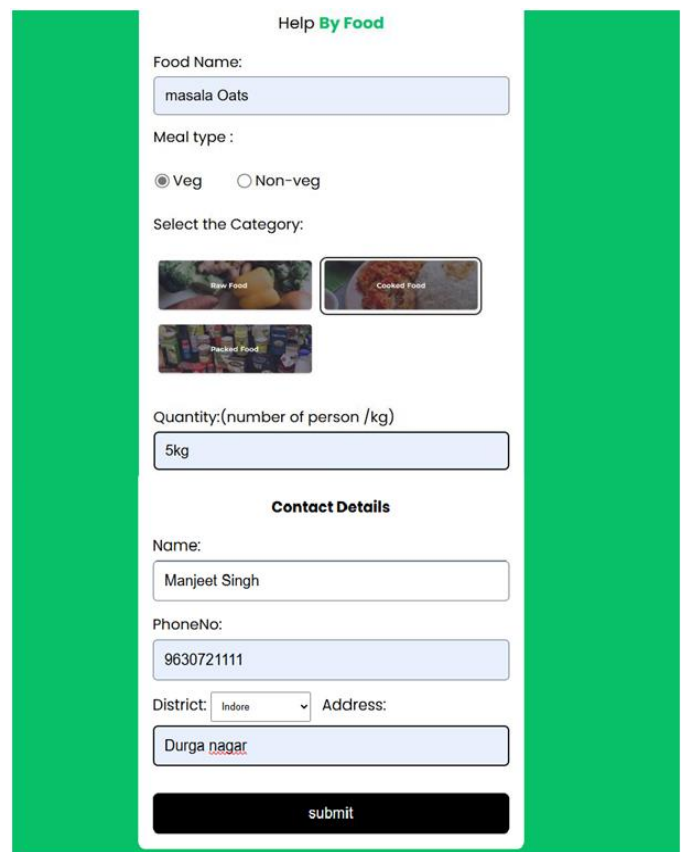Fig. 1 Home page of the Website (a)
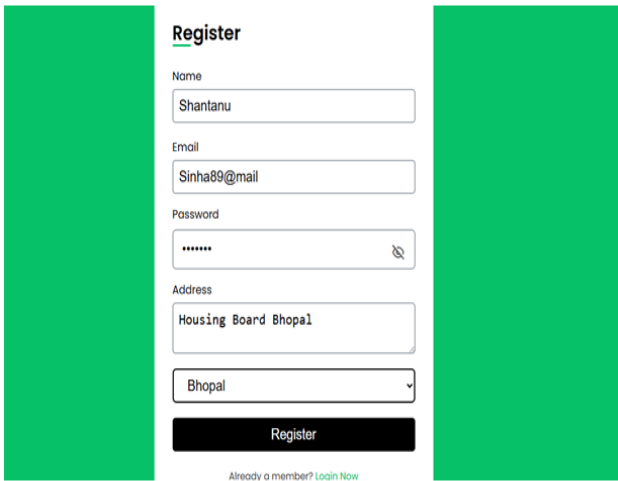

Fig. 2 User login Page
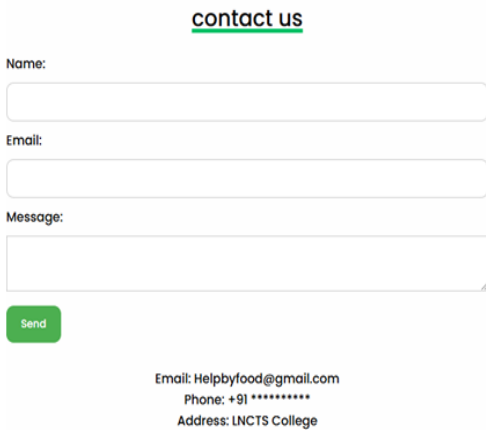

Fig. 3 Food Donation Page

Fig. 4 Admin Login Page

Fig. 5 Contact Us Page

IV. RESULT

Increased Donations: More food and monetary donations through easy-to-use online forms and clear information on how to donate.

Enhanced Awareness: Greater public awareness about food insecurity and the organization's mission through educational content and impact stories.

Streamlined Operations: Efficient coordination of donations, volunteer activities, and events through integrated management systems and user accounts.

Community Engagement: Stronger community involvement by providing a platform for people to volunteer, participate in events, and share their stories.

Better Support for Recipients: Easier access to resources and support for food recipients through clear information and resource guides.

Fundraising Success: Increased financial contributions through secure and user-friendly donation processes.

Improved Volunteer Management: Effective recruitment, management, and retention of volunteers with clear information and sign-up forms.

Data Collection and Reporting: Better data on donations, volunteer hours, and impact metrics, enabling more effective reporting and strategy adjustments.

Positive Public Relations: Enhanced public image and credibility through transparent operations, success stories, and active community presence.

Scalability: The ability to scale operations and expand reach as the website grows in popularity and usage.

By creating a food donation website with these features and focusing on user experience, you can significantly increase the effectiveness of your food donation efforts and make a greater impact in your community.

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