

Helping Hands

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Abstract: "Helping Hands" is a student project designed to provide a platform for event organizers to connect with volunteers who are willing to donate their time and efforts for a good cause. The project is built on MERN stack and comprises of four modules - Admin, Sponsor, Volunteer, and Event Organizer. The Admin module controls the entire system and manages the overall overview of the platform. The Sponsor module allows sponsors to donate money for any event they wish to support. The Volunteer module enables users to register themselves as volunteers and search for events where they can help. The Event Organizer module is responsible for creating new events and managing them. Event organizers can post details of their event, such as date, time, location, and required volunteers. Volunteers can then browse through the available events apply for them, and confirm their participation. The project aims to provide a seamless experience for both event organizers and volunteers, making it easy for them to connect and work together. The platform encourages people to come forward and contribute to social causes by volunteering their time and resources. With the help of this platform, organizers can find the right volunteers for their events, and volunteers can find meaningful opportunities to make a positive impact on their community.

Keywords: HTML, CSS, JavaScript

I. INTRODUCTION

"Helping Hands" is a student project aimed at providing a platform for event organizers to connect with volunteers who are willing to donate their time and resources for social causes. The project is built on the MERN stack and consists of four modules Admin, Sponsor, Volunteer, and Event

Organizer. The platform's primary goal is to create a seamless experience for both event organizers and volunteers, making it easy for them to find each other and work together. By providing a platform for people to come forward and contribute to social causes, Helping Hands aims to encourage more individuals to volunteer their time and resources to make a positive impact on their community. In this case study, we will examine the project's features and its impact on the community it serves.

II. METHODOLOGY

Project Planning and Requirements Gathering: Define the objectives, features, and target audience of the website. Gather all the functional and non-functional requirements. Database Design: Design the database schema using MongoDB to store website data, such as name, email, age, role, etc. Backend Development with Node.js and Express.js: Implement the serverside logic to handle user requests, authentication, and interactions with the MongoDB database. API Development: Create RESTful APIs to handle CRUD operations (Create, Read, Update, Delete) for volunteers and user-related actions. User Authentication and Authorization: Implement user authentication and authorization using tools like JSON Web Tokens (JWT) to secure the API endpoints and manage user sessions. Frontend Development with React.js: Build the user interface for the website, allowing users to browse, search, and submit details. User Interface Design: Design an intuitive and visually appealing user interface with responsive layouts, making it accessible across different devices. User Interaction and Social Features: Allow users to comment recipes. Implement features to create user profiles and save favorite recipes. Testing: Perform unit testing, integration testing, and user testing to ensure the website functions correctly and meets the requirements. Security Considerations: Ensure data security by validating user inputs, sanitizing data, and protecting against common web vulnerabilities. Community

and Feedback: Encourage user engagement, feedback, and community building to enhance the website's growth and content quality.

III. EXISTING AND PROPOSED SYSTEMS

The current website for organizing and managing volunteer activities is functional, but limited in its capabilities. It allows volunteers to sign up for specific events and view upcoming volunteer opportunities, but lacks advanced features such as task assignment, scheduling, and communication tools. The website also lacks a user-friendly interface and is difficult to

navigate, which can lead to confusion and frustration for volunteers. Additionally, the current system does not provide any metrics or analytics, making it difficult to evaluate the success of volunteer efforts and identify areas for improvement. The proposed system aims to provide a platform for event organizers to connect with volunteers who are willing to donate their time and efforts for a good cause to social causes by volunteering their time and resources. With the help of this platform, organizers can find the right volunteers for their events, and volunteers can find meaningful opportunities to make a positive impact on their community.

A) Limitations of the Existing System

- Lack of Centralization
- Limited Accessibility
- Inefficiency

To overcome the drawbacks on the existing system a new system has to be implemented. In the proposed system,

B) Advantages and Features of the Proposed System

- Centralized platform.
- Easy Accessibility.
- Increased Reach.

IV. BACKGROUND

Technologies used in this Project:

The MERN stack is a popular combination of technologies used to build web applications. MERN stands for MongoDB, Express.js, React.js, and Node.js. Each component of the stack has a specific role to play in the web application development process. MongoDB is a NoSQL database that is used to store and manage the application data. Express.js is a server-side framework for Node.js that helps in building RESTful APIs and handling HTTP requests. React.js is a front-end framework used for building user interfaces. Node.js is a serverside JavaScript runtime used to build scalable and high-performance applications.

V. RESULTS AND DISCUSSIONS

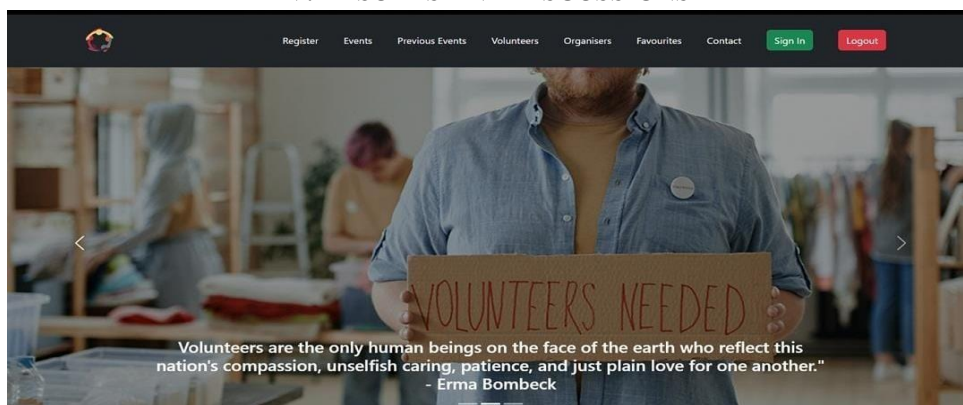


Figure 1: Admin Page

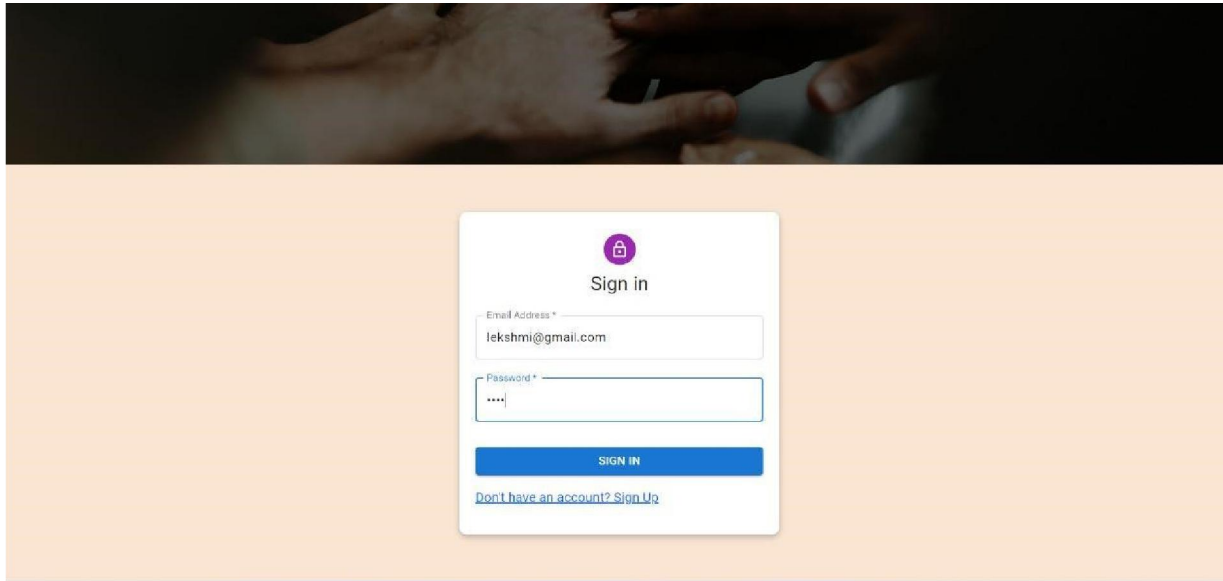


Figure 2: Sign IN page

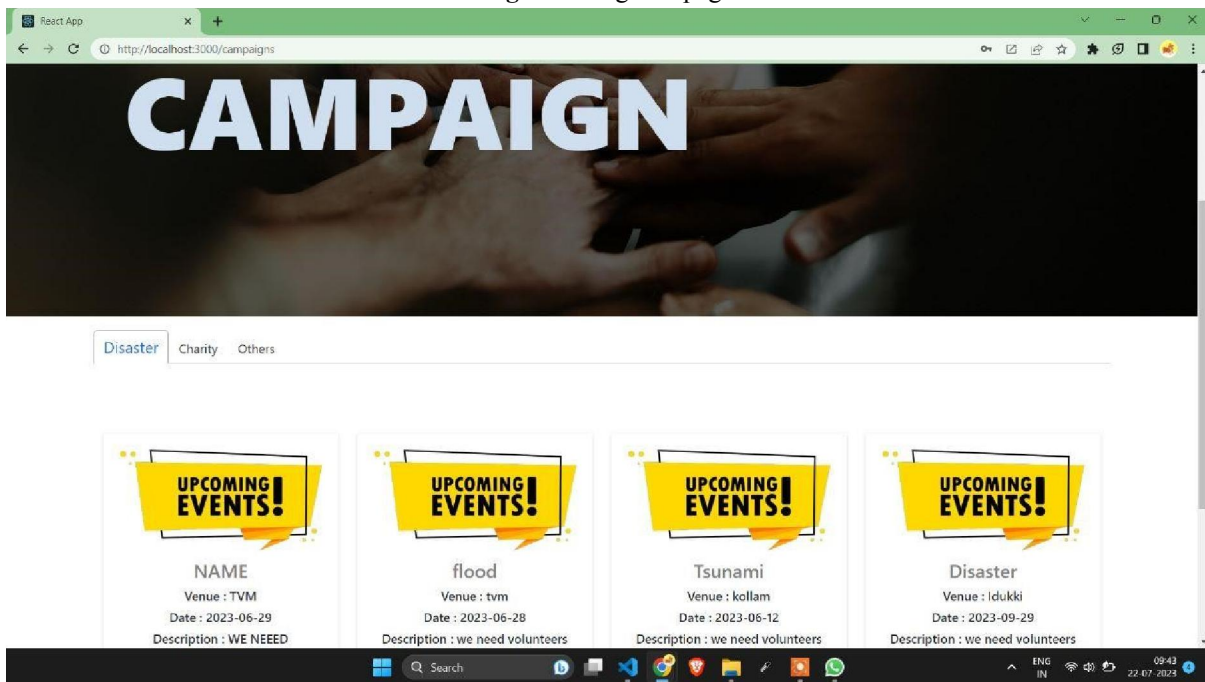


Figure 3: All Events page

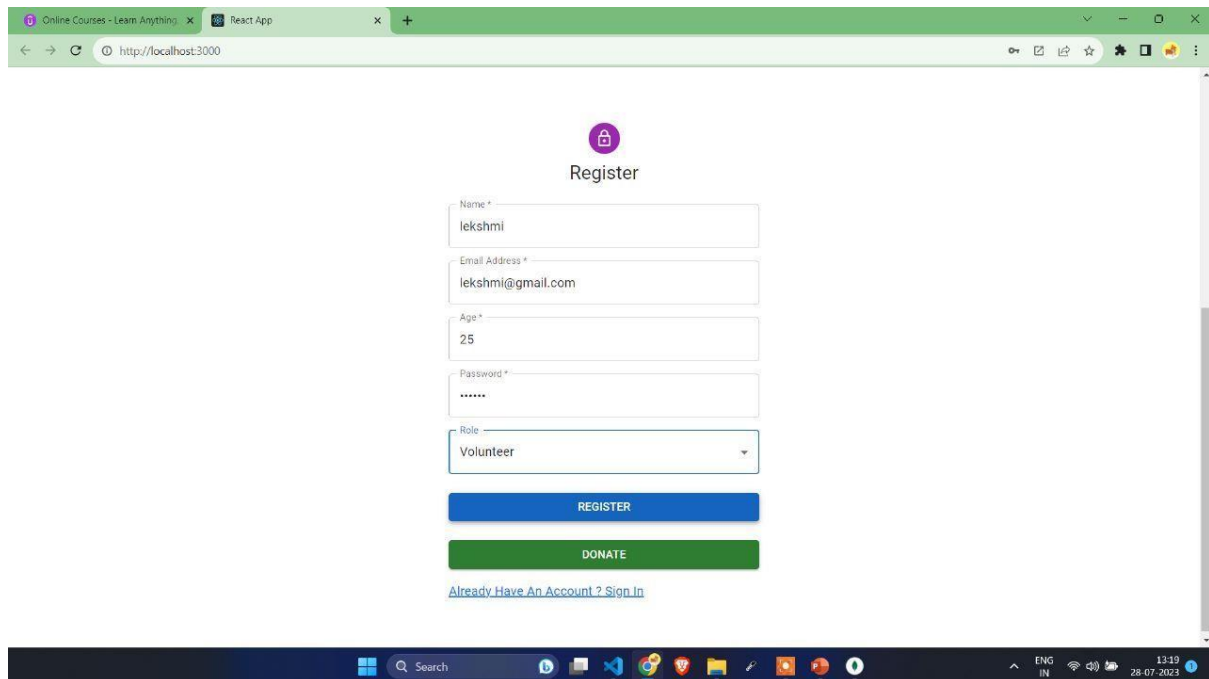


Figure 4: Role Register page

VI. CONCLUSION

The Helping Hands project is a platform that provides a seamless experience for event organizers and volunteers to connect and work together for a good cause. The platform comprises of four modules: Admin, Sponsor, Volunteer, and Event Organizer, each with its unique features and functionalities. The proposed system is built on the MERN stack and implements user authorization mechanisms to ensure data security and privacy. The user interface is intuitive and easy to navigate, allowing users to quickly find the information they need. The platform encourages people to come forward and contribute to social causes by volunteering their time and resources. With the help of this platform, organizers can find the right volunteers for their events, and volunteers can find meaningful opportunities to make a positive impact on their community.

Further improvements and extensions can be made in the system to make overall work easier. The major enhancements are Mobile App Integration with social media, Gamification, Automated Scheduling etc.

REFERENCES

- [1]. Aziz, M., Khandaker, M., & Rahman, M. (2020). Volunteer recruitment and management system for nonprofit organizations using a web-based platform. *International Journal of Computer Science and Network Security*, 20(3), 170-181.
- [2]. Balci, M. A., & Gudukbay, U. (2019). Volunteer management system. *International Journal of Advanced Computer Science and Applications*, 10(9), 86-91.
- [3]. Chaudhary, N., & Kaur, J. (2018). Volunteer management system using block chain technology. In *Proceedings of the 2nd International Conference on Inventive Systems and Control* (pp. 360364). IEEE.
- [4]. Fung, V. (2015). Citizen participation and the rise of the open source city in the United States and Canada. *Journal of Urban Technology*, 22(2), 3-19.
- [5]. Huda, M. N., & Chakraborty, S. (2020). Volunteer management system for social events using block chain. In *Proceedings of the 1st International Conference on Innovative Technologies and Applications for Smart Cities* (pp. 180-185). Springer.