

DBMS MINI PROJECT – GROUP 09

Project Name: Volunteer Connect System

Website Name: Helping Hands

Indian Institute of Information Technology, Allahabad

IEEE Report

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Links of our project:

<http://172.16.15.7:5003/>

<http://172.16.15.7:5003/helpinghands>

<http://172.16.15.7:5003/login>

Volunteer Connect System

(HELPING HANDS)

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Abstract — Volunteer Connect System is a web-based platform which enables the local volunteers to help the people in need. The name of our volunteer connect system is Helping Hands

This report presents the design and implementation of the system, which aims to connect volunteers with people in need of their services. The system was developed using the Node.js and HBS for frontend and MYSQL as database and features two primary user types: volunteers and help seekers. Volunteers can register on the platform and sign up for volunteer opportunities that match their skills and schedule, while help seekers can post volunteer opportunities and manage volunteer schedules. The system was implemented using an Agile methodology tested for usability, functionality, and security. This results in the Volunteer Connect System has successfully connected volunteers with people, making the process more efficient and straightforward.

Index Terms — volunteer management, web based platform, Node.js, MYSQL, HBS.

Requirements ----

1. Volunteer opportunities management: The system should allow volunteer to register and manage them. This includes creating new users, editing existing ones.

2. Volunteer sign-up management: The system should allow volunteers to sign up for volunteer opportunities. This includes browsing available opportunities, selecting the ones that match their skills and availability, and canceling request if necessary.

3. Communication: The system should allow people to communicate with volunteers and vice versa. This includes sending notifications about upcoming events, providing instructions to volunteers, and responding to inquiries. So a chat system should be provided to do it

4. Security: The system should be designed with security in mind, including protecting user data and preventing unauthorized access to the system.

5. Usability: The system should be designed to be user-friendly and intuitive, with a focus on user experience. This includes ensuring that the interface is easy to navigate and that users can complete tasks quickly and efficiently.

6. Performance: The system should be designed to handle a large volume of users and data, with fast response times and minimal downtime.

I. Introduction

Volunteering has become an essential aspect of many organizations worldwide. However, managing volunteers can be a challenge, especially when it comes to finding scheduling. Volunteer Connect System aims to simplify the process of finding and managing volunteers for people by creating an efficient and straightforward platform.

II. Background

Volunteer Connect System is a web-based platform that connects volunteers with organizations in need of their services. The system aims to simplify the process of finding and managing volunteers for various problems.

III. Related Work

There are several existing volunteer management systems available in the market, such as VolunteerMatch, GiveGab, and SignUpGenius. These systems offer similar functionalities to Volunteer Connect System, but they may have different features and pricing models but in our system we only provide service locally which will enable to connect with local people more effectively. Volunteer Connect System aims to provide a simple and cost-effective solution for organizations to manage volunteers.

IV. System Design

Volunteer Connect System is developed using the Node js and HBS. The system has two primary user types: volunteers and help seekers. Volunteers can register on the platform and sign up for volunteer opportunities that match their skills and schedule, while help seekers can post volunteers and manage volunteer schedules. The system features a dashboard for both volunteers and organizations.

There is also a chat system included for effective real time communication

V. Implementation

Volunteer Connect System was implemented using Node js. The system was tested extensively for usability. The system's user interface was designed to be intuitive and easy to use, with a focus on user experience.

Here in our website the people who want to do volunteer work will register using their official Gmail Id.

After registering in the website, the volunteers can view the help requests posted by the people or help seekers and can view their profile to decide whether to help or not.

After deciding to help they will accept the request and a separate chat room will be created to the help seeker with all the people who accepted the help request.

After that they can communicate with each other in that chatroom and the help seeker will decide whom to accept as the volunteer.

Many other updates can also be made in this volunteer connect system.

The other end of our system is help seekers where people who needs help will also register as volunteers.

After registering as I said that they can either help or post help request.

If the volunteer post a help request then they don't have to accept it because it is their request and also they can delete it. But the other volunteers just have right to accept and enter the chat.

This system also have option to edit profile and image once it is registered.

Only the official gmail accounts are added here.

This system will provide the help requests in the hierarchial manner which will provide better user experience in viewing the help requests for user.

The requests tab has seperate options to view self requests and requests posted by other users. It makes searching for specific request easier

VI.Expected Results

After using this volunteer connect system people may easily solve problems instead working on other sites to search for the kind of volunteer we need. After finding the right choice they can solve their problem

VII. Future Work

There are several areas where Volunteer Connect System can be further improved. One potential improvement is to integrate the system with social media platforms to expand its reach and attract more volunteers. Another potential improvement is to provide more advanced reporting and analytics features to help people track their volunteer engagement and impact.

We can also add aadhar card validation during registering to provide better security.

We can also add razorpay API in it as if the help seekers are willing to pay any amount for the volunteers they can pay that.

We can also search volunteers on the basis of location and also we can add rating system to it, so that help seekers can give feedback and rating to the volunteers.

We can also add a recommendation system by machine learning to recommend the help

requests based on their recent searches and interested activities, regions etc.

VIII. Conclusion

Volunteer Connect System is a web-based platform that simplifies the process of finding and managing volunteers for organizations. Volunteer Connect System will successfully connect volunteers with organizations, making the process more efficient and straightforward. The system has also provided people with a tool to find volunteers effectively.

Acknowledgements

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References:

<https://stackoverflow.com/questions/44894789/node-js-express-session-creating-new-session-id-every-time-i-refresh-or-access-t>

<https://stackoverflow.com/questions/59188483/error-invalid-login-535-5-7-8-username-and-password-not-accepted>

<https://stackoverflow.com/questions/53951166/express-session-cookie-not-persisting-after-cors-calls>

<https://www.geeksforgeeks.org/moment-js-moment-date-method/>