

A Volunteer Management System for Emergency Response

Company Name:

VolunTech Assemblage:

Where Technology and Volunteerism Converge for a Better Tomorrow

Mobile/ Web App Title:

VolunTech Management System

Target Clients:

Non-profit Organization

Volunteer Coordinators/ Managers

Development Team:

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Executive Summary

VolunTech Assemblage is a company that aspires to develop a volunteer management system designed for speed and efficiency, particularly in emergencies. This system is intended for use by groups or organizations in need of quick assistance.

This project aims to develop and implement a web-based volunteer management system, VolunTech Management System, to address the inefficiencies faced by non-profit organizations, government agencies, and educational institutions in managing their volunteer workforce. VolunTech Management System will automate volunteer registration and task assignment task tracking, and reporting, saving time and resources for organizations. The platform will provide secure communication channels, and task updates functionalities, fostering better collaboration between volunteers and organizations.

Project Description

Many non-profit, government, and educational organizations experience with inefficient task management due to reliance on manual processes. A lot of organizations use paper-based systems for assigning tasks, leading to difficulties in tracking progress and generating reports. Additionally, many organizations solely rely on Messenger for communication, which can be limiting.

This project proposes an organization management system to address these challenges by providing a user-friendly, web-based volunteer management system. for task management, communication, and reporting. This system will improve efficiency, streamline workflows, and empower organizations to better leverage their resources. It will serve as a central platform for organizations to manage volunteers effectively and empower volunteers to contribute their community.

Technical Details

- Front-End: The user interface will be built using a combination of HTML5, CSS3, and JavaScript. This will ensure a user-friendly and responsive experience across various devices.
- Back-End: The server-side logic will be implemented using PHP for its established functionality and ease of integration with databases.
- Git and GitHub: The project will utilize Git for version control and collaboration. GitHub will serve as the central repository, allowing team members to track changes, manage code contributions, and facilitate seamless collaboration.
- Responsive Design: The application will be designed using a responsive web design (RWD) approach, ensuring optimal functionality and usability on desktops, tablets, and smartphones.
- Database Technology: The database management system to be used will be MySQL
- Security Features: The system will implement authentication and data encryption for security measures.

Development Methodology

VolunTech Management System will be developed using an Agile methodology, specifically the Scrum framework. This iterative approach prioritizes flexibility and adapts to changing requirements:

- Sprints: The project will be broken down into short development phases (sprints) with clearly defined goals and deliverables.
- Backlog: A prioritized list of features will be maintained, with the most critical functionalities tackled in each sprint.
- Daily Stand-up Meetings: Short daily meetings will be held to ensure team alignment, track progress, and identify potential roadblocks.
- Sprint Reviews and Retrospectives: After each sprint, reviews will assess completed functionalities and user feedback will be incorporated. Retrospectives will identify areas for improvement in the development process.

Conclusion

The development of this project is divided into five distinct phases. As of May of 2024, the first phase has been completed. The team was able to develop the basic features and functionalities. This include:

- Account Creation and Management: The platform has a log-in, register, and password recovery system. The account registration system has an e-mail verification system.
- Task Management: The users of this system are the volunteers, organization coordinator/ manager, and the system developer. The organization coordinator/ manager has the ability to create and assign tasks to volunteers, they also have the ability to edit or delete an existing task. Once a task has been assigned, a notification will be sent to the volunteers it assigned to. Volunteers meanwhile, will be able to manage whether or not they have finished a task.
- Profile System: A primitive profile system has been implemented, where users can edit and change some of their biographical information.
- Calendar System: The calendar feature is another primitive part of the system. This calendar feature enables users to add or remove events.
- Chat System: The chat system has two separate parts; the first one is a group chat room where it has all of the members of the organization in it. The second ones are private chat rooms between individual members.

The development team is committed to continuously improving VolunTech and fostering a strong volunteer management ecosystem. By incorporating user feedback and exploring innovative features, VolunTech aims to become the go-to platform for organizations and volunteers, empowering them to collaboratively make a positive impact within their communities.