A PRELIMENERY REPORT ON

NGO DONATION

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BACHELOR OF TECHNOLOGY (COMPUTER ENGINEERING)

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01 Introduction

1.1 Overview

The Happy Day Foundation is a non-profit organization committed to making a positive impact on society by addressing critical social issues and fostering community well-being. In our pursuit of a better world, we recognize the importance of harnessing technology to amplify our reach and effectiveness. They are working hard to help underprivileged children. The primary objective of this organization is providing basic educational support to poor and encourage education by implementing targeted schemes, they also provide a medical support. This document outlines the Software Requirements Specification (SRS) for the development of the Happy Day Foundation's official website, aimed at facilitating communication, engagement, and collaboration among our stakeholders.

1.2 Motivation

In a world marked by challenges, the Happy Day Foundation stands as a beacon of hope, committed to creating positive change and fostering community well-being. Motivated by a vision of a better, more compassionate world, we recognize the pivotal role that technology plays in amplifying our impact and connecting with those who share our passion for social change.

The motivation behind the development of the Happy Day Foundation's website is rooted in our unwavering commitment to overcoming existing barriers and maximizing our reach and effectiveness. This online platform is not merely a digital presence; it is a dynamic tool that will empower us to transcend geographical boundaries, break down communication barriers, and forge meaningful connections with a global audience.

1.3 Problem Definition and Objective

1.3.1 Definition:

The Happy Day Foundation, as a non-profit organization dedicated to fostering positive societal change, currently faces challenges in effectively communicating its mission, coordinating volunteer efforts, and managing donations. The absence of a robust online presence hinders the foundation's ability to reach a wider audience, engage potential supporters, and streamline its operations. This underscores the need for a comprehensive website that not only showcases the foundation's initiatives but also facilitates seamless interaction with stakeholders.

1.3.2 Objectives:

1. **Increase Outreach:** Develop an online platform that extends the reach of the Happy Day Foundation, attracting a diverse audience and fostering awareness of its mission and initiatives.
2. **Streamline Volunteer Engagement:** Implement features that facilitate volunteer coordination, making it easier for individuals to find opportunities, sign up, and actively contribute to the foundation's projects.
3. **Enhance Donation Management:** Create a secure and transparent donation portal that enables easy contributions, provides clear information on fund utilization, and encourages ongoing support.
4. **Improve Information Accessibility:** Organize and present information about the foundation's projects, success stories, and events in a user-friendly manner, ensuring easy access for all stakeholders.
5. **Encourage Community Interaction:** Incorporate features that promote community building, enabling supporters and volunteers to connect, share experiences, and collaborate on initiatives.

1.4 Problem Scope and Limitations

1.4.1 Scope:

The scope of this project encompasses the design, development, testing, and deployment of a comprehensive website for the Happy Day Foundation. The website will feature various modules and functionalities, including but not limited to:

Home Page: An engaging landing page that introduces the organization and highlights current campaigns or events.

About Us: A section providing detailed information about the Happy Day Foundation, its history, mission, and values.

Activity: Pages dedicated to showcasing the foundation's ongoing projects, campaigns, and success stories.

Get Involved: Information on volunteer opportunities, events, and ways for individuals to contribute to the foundation's work.

Donation Portal: A secure platform for online donations with transparency on fund utilization.

Contact Us: A contact form and details for users to reach out, fostering open communication.

1.4.2 Limitations:

While the Ngo is doing a great job there are some limitations to it too, some limitations include.

1. **Budget Constraints:**
    - Limited financial resources may impact the scope and scale of the website development. It's crucial to balance the desired features with the available budget to ensure a sustainable project.
2. **Technical Challenges:**
    - Technical constraints such as compatibility issues with different browsers and devices, limited server capacity, or integration challenges with existing systems can pose obstacles to seamless website functionality.
3. **Content Availability:**
    - The success of the website relies on the availability and regular update of quality content, including project updates, success stories, and other relevant information. Limited resources for content creation and maintenance can hinder the website's effectiveness.
4. **Data Security and Privacy:**
    - Handling sensitive information, especially in the context of donation transactions, requires robust security measures. Compliance with data protection regulations and ensuring the privacy of users must be a priority.
5. **User Adoption and Digital Literacy:**
    - The success of the website depends on user adoption, and there may be challenges in ensuring that the target audience, including volunteers and donors, are comfortable and familiar with using online platforms.

02 Literature Survey:

In the literature survey, we explored various websites with similar initiatives and referred to them to get a basic idea of how the websites function. These organizations have a similar vision, and they provided a key insight into how the websites should look. The explored websites include organizations such as **FUEL Foundation, Smile Foundation** [1][2].

The key insights of the literature survey are as Listed below:

1. **Educational Facilities**

   Scholarships, Resources, and Infrastructure:

   - The website serves as a digital hub for the NGO's educational initiatives, featuring information on scholarships, educational resources, and infrastructure projects. This allows prospective beneficiaries, donors, and volunteers to access details about the NGO's commitment to education, fostering transparency and community engagement.

2. **Medical Support**

   Healthcare Programs and Partnerships:

   - "Happy Day Foundation" extends its impact to healthcare, providing details on medical camps, clinics, and partnerships with healthcare providers. The website acts as a central repository for information on medical initiatives, creating awareness and encouraging support for these vital programs.

3. **Disaster Relief and Volunteerism**

   Engaging the Community in Natural Disasters:

   - A distinctive feature of the NGO is its active involvement in disaster relief efforts. The website showcases past and ongoing projects related to natural disasters, inviting volunteers to participate. Through the online platform, the NGO effectively mobilizes community support during crises, showcasing the power of technology in driving social change.

Website Development Technologies

1. Frontend Technologies: HTML, CSS, JS

The frontend of the "Happy Day Foundation" website is built using a combination of HTML, CSS, and JavaScript. HTML (Hypertext Markup Language) provides the structure of the web pages, while CSS (Cascading Style Sheets) is responsible for the visual presentation. JavaScript enhances user interaction and dynamic content, ensuring a seamless and engaging user experience.

2. Backend Technologies: Node and Express

Node.js, a server-side JavaScript runtime, is employed for the backend development of the website. It allows for scalable and efficient handling of server-side operations. Express, a web application framework for Node.js, simplifies the development of robust and secure web applications. Together, Node and Express contribute to the functionality and performance of the "Happy Day Foundation" website.

Conclusion

The literature survey highlights the use of HTML, CSS, JS, Node, Express, and SQL in the development of the "Happy Day Foundation" website. This technological foundation ensures an efficient and user-friendly online platform. Additionally, the survey emphasizes the NGO's core strengths in education, healthcare, and disaster relief, showcasing the holistic approach of the "Happy Day Foundation" towards community development.

03 System Design

3.1 System Architecture

The system architecture for our website involves outlining the structure of web-application, detailing the components, their interactions and technologies involved. The simplified representation of the system architecture is as follows:

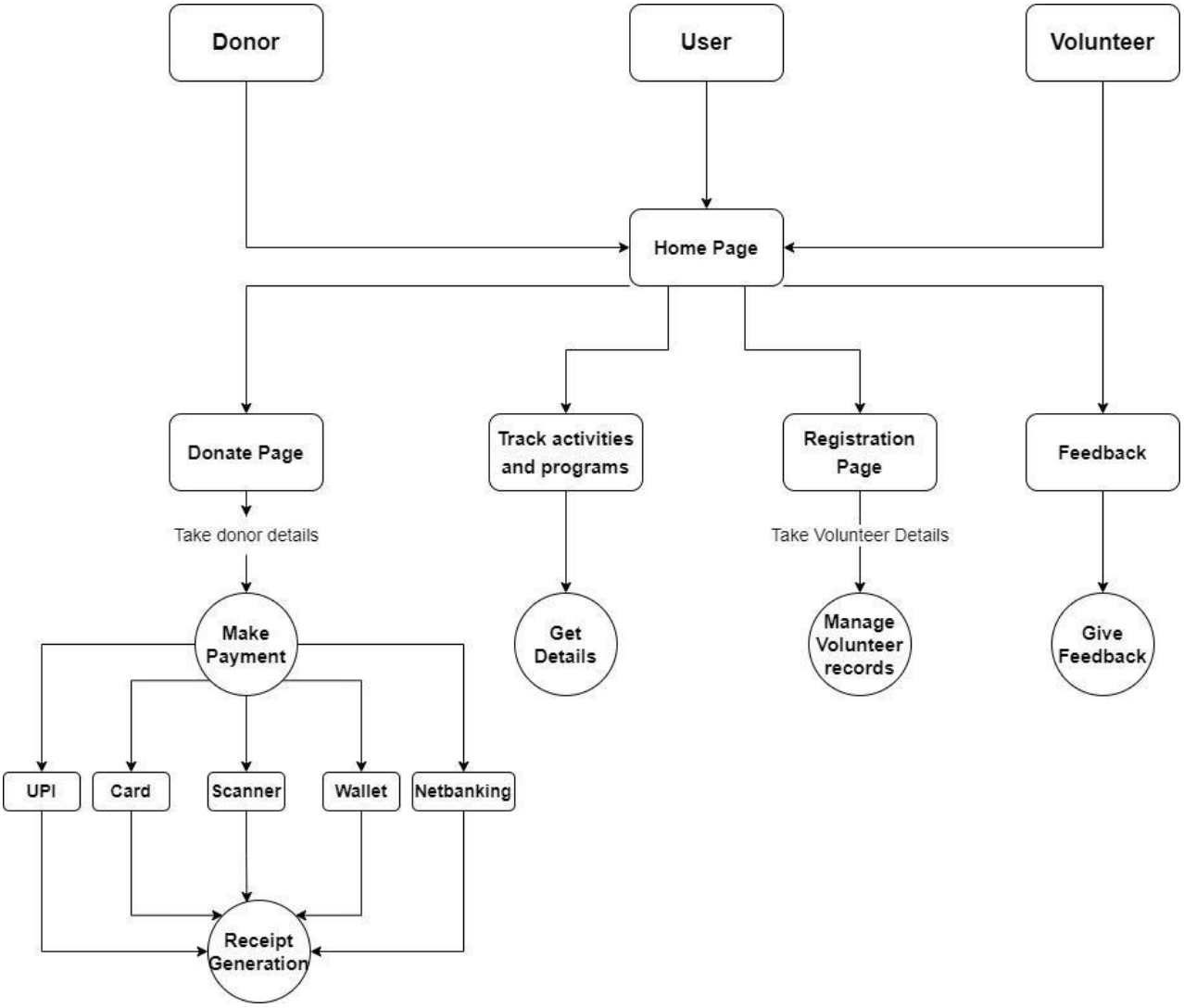
Components:

1. **Frontend:**
   - HTML, CSS, JS: Responsible for the user interface and client-side interactions.
2. **Backend:**
   - Node.js: Server-side JavaScript runtime for handling backend operations.
   - Express.js: Web application framework for Node.js, facilitating the development of robust APIs.
3. **Middleware:**
   - Express Middleware: Handles tasks such as routing, authentication, and request/response processing.
4. **External Services:**
   - Payment Gateways: Razor Pay is used for handling online donations securely.
5. **Security Layer:**
   - SSL/TLS Encryption: Ensures secure data transmission over the network.
   - Authentication and Authorization Middleware: Controls access to sensitive data and functionalities.
6. **User Interface (UI):**
   - Responsive Design: Ensures a seamless user experience across various devices.
   - Accessible UI Elements: Supports users with different abilities.

Data Flow:

a. **User Interaction:**
   Users interact with the frontend UI to explore educational programs, medical initiatives, and volunteer opportunities.
b. **Frontend to Backend:**
   Frontend sends requests to the backend server via API calls, triggering actions like retrieving data from the database or processing volunteer registrations.
c. **External Services:**
   Interaction with payment gateways for secure donation transactions.
d. **Server to Client:**
   Backend processes requests and sends appropriate responses to the frontend, updating the user interface accordingly.

3.2Data Flow Diagrams



04 Project Implementation

4.1 Project Implementation

The project implementation phase marks the transition from planning and design to the actual development of the NGO website. It encompasses various aspects, including front-end and back-end development, the integration of payment gateways, and the collaborative efforts of the team members. Here, we delve into the key components and milestones achieved during this critical phase.

4.1.1 Frontend Development

The team initiated the implementation by focusing on the front-end development of the NGO website. The primary objective was to create a visually appealing and user-friendly interface. Each team member was assigned a specific webpage, aligning with their skills and expertise. This division of tasks streamlined the development process and ensured a comprehensive approach.

The front-end development process involved the use of HTML, CSS, JavaScript, and Bootstrap. These technologies were chosen for their compatibility and effectiveness in creating responsive and engaging web pages. The About Us, Activities, Vision and Mission, and Volunteer pages were meticulously crafted, adhering to the design specifications outlined in the earlier phases.

4.1.2 Donation Page Integration

Following the successful completion of the frontend, the team transitioned to the implementation of the donation page. This crucial component required the integration of a secure and reliable payment gateway. Razorpay was selected as the payment gateway due to its robust features and ease of integration.

The donation page allows users to make contributions to the NGO for education and health purposes. The integration with Razorpay ensures a seamless and secure donation process. The team dedicated three weeks to this phase, addressing both front-end and back-end aspects of the donation page.

4.1.3 Backend Development

With the front end and donation page in place, the team shifted its focus to backend development. Node.js and Express.js were utilized to create a

dynamic and efficient backend that could handle user requests, process donations, and manage website functionalities.

The backend development phase spanned four weeks, during which the team worked collaboratively to ensure the smooth integration of frontend and backend components. This phase involved rigorous testing to identify and address any potential issues, ensuring the overall stability and functionality of the website.

4.1.4 Collaboration and Communication

Effective collaboration and communication were pivotal throughout the implementation phase. The team utilized a combination of Google Meets and in-person meetings every Wednesday to discuss progress, address challenges, and synchronize efforts. This regular communication cadence facilitated a cohesive workflow and allowed for real-time issue resolution.

4.1.5 Team Collaboration and Organization

The success of the project implementation was significantly influenced by the collaborative efforts of the team. The division of tasks among team members, with each focusing on a specific aspect of the website, allowed for a parallel and efficient workflow. Sahil led the development of the Activities page, Swapnil spearheaded the Home page, Jay concentrated on Vision and Mission, and Soham directed efforts towards the About Us page.

Regular team meetings, both online and offline, played a crucial role in maintaining cohesion and addressing any challenges that arose during the implementation phase. The utilization of Google Meets and in-class meetings every Wednesday provided a platform for comprehensive discussions, progress updates, and issue resolutions.

4.1.6 Technology Stack

The technology stack chosen for the project implementation was instrumental in achieving the desired outcomes. HTML, CSS, JavaScript, and Bootstrap were selected for front-end development due to their compatibility and ability to create a responsive and visually appealing user interface. Node.js and Express.js were employed for backend development, ensuring a dynamic and efficient server-side implementation.

The integration of Razorpay as the payment gateway for the donation page added a layer of security and reliability to the financial transactions on the website. This choice was informed by Razorpay's reputation for robust features and ease of integration.

4.1.7 Project Timeline and Gantt Chart

The project timeline, initiated in the third week of August, progressed systematically through various stages. The first two weeks were dedicated to studying multiple NGO websites, collecting data, and preparing a raw model for the website. Subsequently, the team defined the technology stack and selected NGO websites for reference.

The actual development work commenced in the third week, and the project was executed in a phased manner. Frontend development took approximately three weeks, followed by three weeks dedicated to the donation page. The backend development phase spanned four weeks. The use of Gantt charts helped visualize task dependencies, manage timelines effectively, and ensure a coherent workflow.

	Task	Assigned To	Start	End	Dur	%	2023			
							Aug	Sep	Oct	Nov
	Project	All team	8/16/23	11/23/23	70					
1	Requirement Gathering	All team	8/16/23	8/30/23	11					
2	Frontend Development	All team	9/1/23	9/30/23	21					
3	Backend and donation page	All team	10/5/23	11/10/23	26					
4	Volunteer Page	Swapnil	11/15/23	11/23/23	6					

4.2 Tools and Technologies used

1.HTML: Used for structuring the content of web pages.
2.CSS: Employed for styling the HTML elements, enhancing the visual presentation.
3.JavaScript: Utilized for implementing interactive features, client-side validations, and enhancing user experience.
4.MongoDB: Chosen as the database management system for its flexibility and scalability, allowing efficient storage and retrieval of data.
5.Node.js: Employed as the server-side runtime environment for JavaScript, facilitating the execution of server-side logic and handling incoming requests.
6.Express.js: Used as the web application framework for Node.js, simplifying the development of server-side logic and RESTful APIs.
7.Razorpay: Integrated for secure online payment processing, enabling seamless transactions within the application.
8.GitHub: Leveraged as the version control system and collaborative platform for managing project source code, tracking changes, and facilitating team collaboration.

Conclusion of Implementation

In summary, the project implementation phase was characterized by a systematic and collaborative approach to front-end and backend development. The adoption of a well-defined technology stack, integration of a secure donation page, and the effective organization of team efforts culminated in the successful realization of the NGO website. The project now stands ready for the subsequent phases of testing, deployment, and eventual launch.

05 Results

5.1 Outcomes

The implementation of the NGO website yielded several noteworthy outcomes, aligning with the project's objectives and providing a valuable platform for the organization's online presence. Key outcomes include:

5.1.1 Responsive and Visually Appealing Frontend

The front-end development, led by the team members, resulted in a visually appealing and responsive user interface. Each webpage, including Activities, Home, Vision and Mission, and About Us, was meticulously designed to provide a seamless and engaging user experience.

5.1.2 Secure Donation Page Integration

The integration of the donation page, incorporating Razorpay as the payment gateway, ensures a secure and reliable platform for users to contribute to the NGO's causes. The implementation adheres to industry standards for online financial transactions, enhancing user trust.

5.1.3 Robust Backend Architecture

The backend development, powered by Node.js and Express.js, delivered a robust server-side architecture. This ensures efficient communication between the frontend and backend components, enabling seamless data flow and interaction.

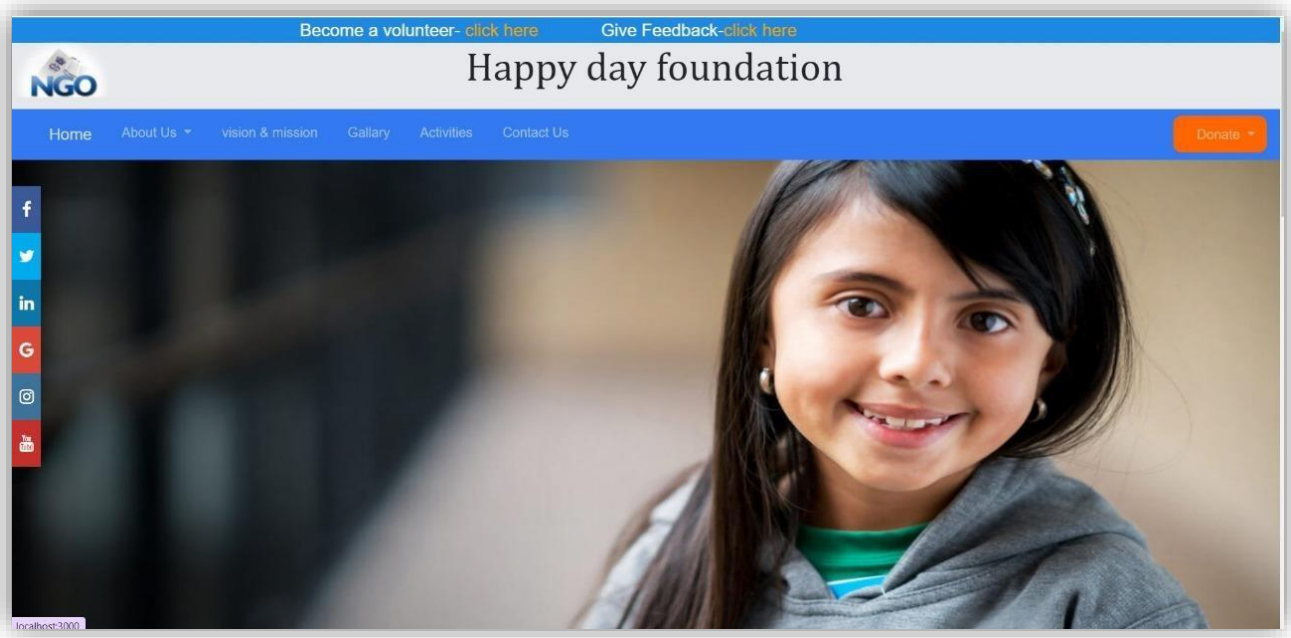
5.1.4 Effective Team Collaboration

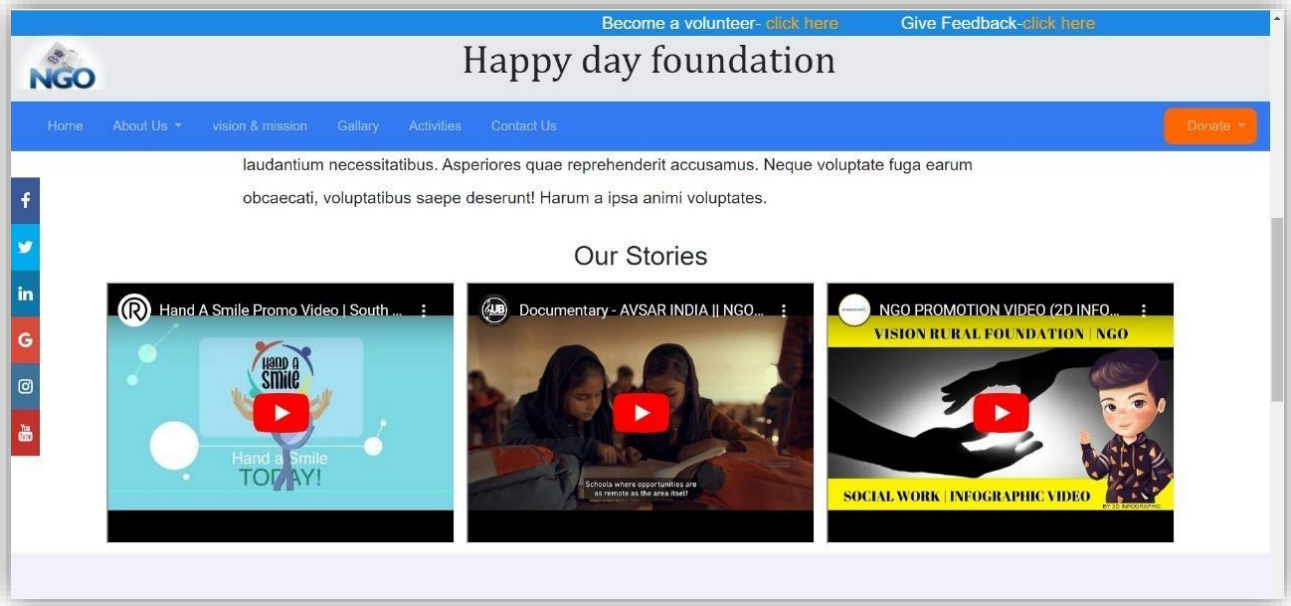
The project benefited from effective team collaboration, with clear task divisions, regular meetings, and open communication channels. This collaborative approach facilitated the smooth progression of the project through its various phases.

5.2 Screen Shots

Below are representative screenshots capturing key aspects of the NGO website:

5.2.1 Home Page


Become a volunteer- click here
Give Feedback-click here
NGO
Happy day foundation
Home
About Us
vision & mission
Gallary
Activities
Contact Us
Donate
localhost:3000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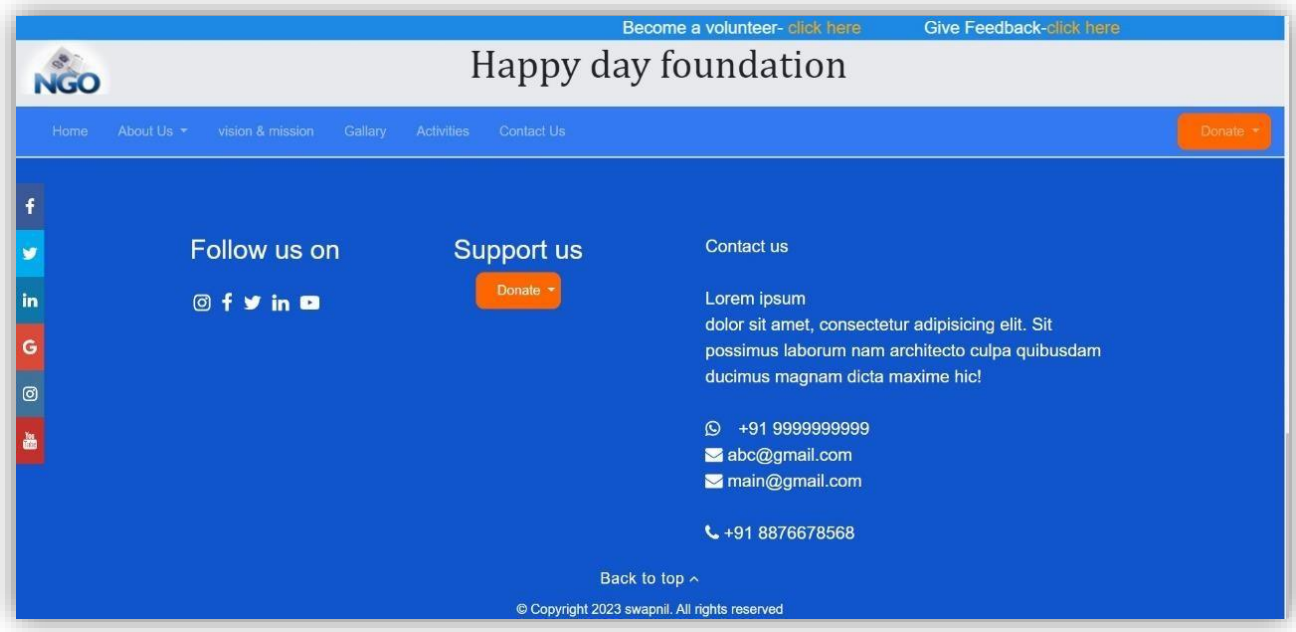
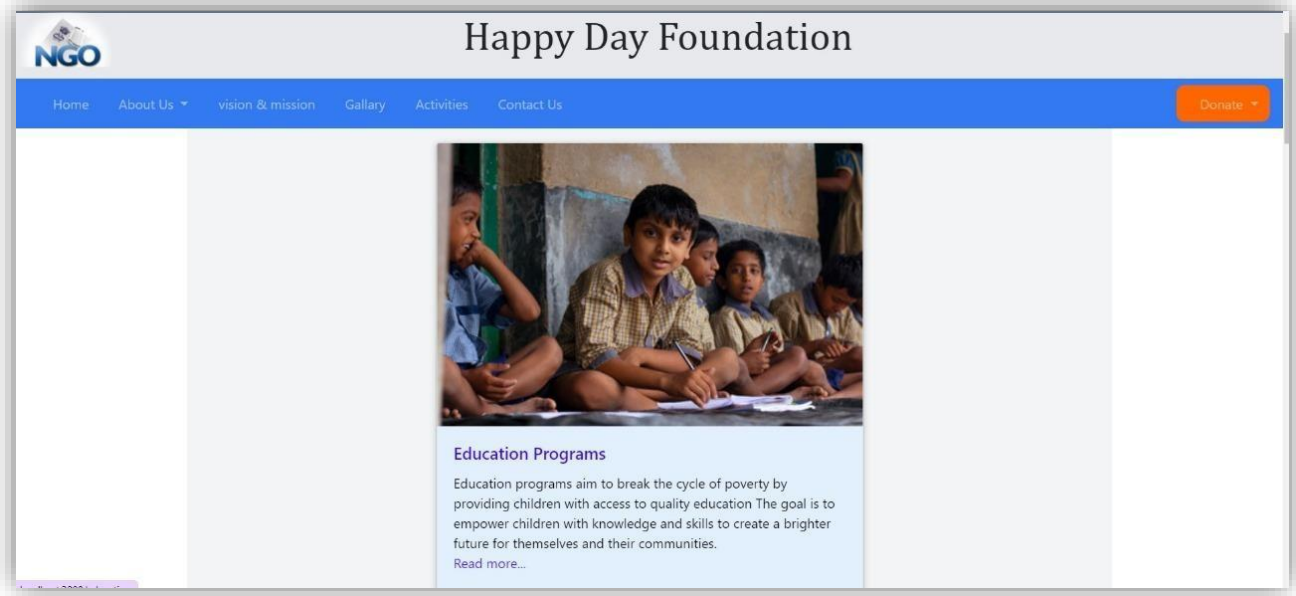
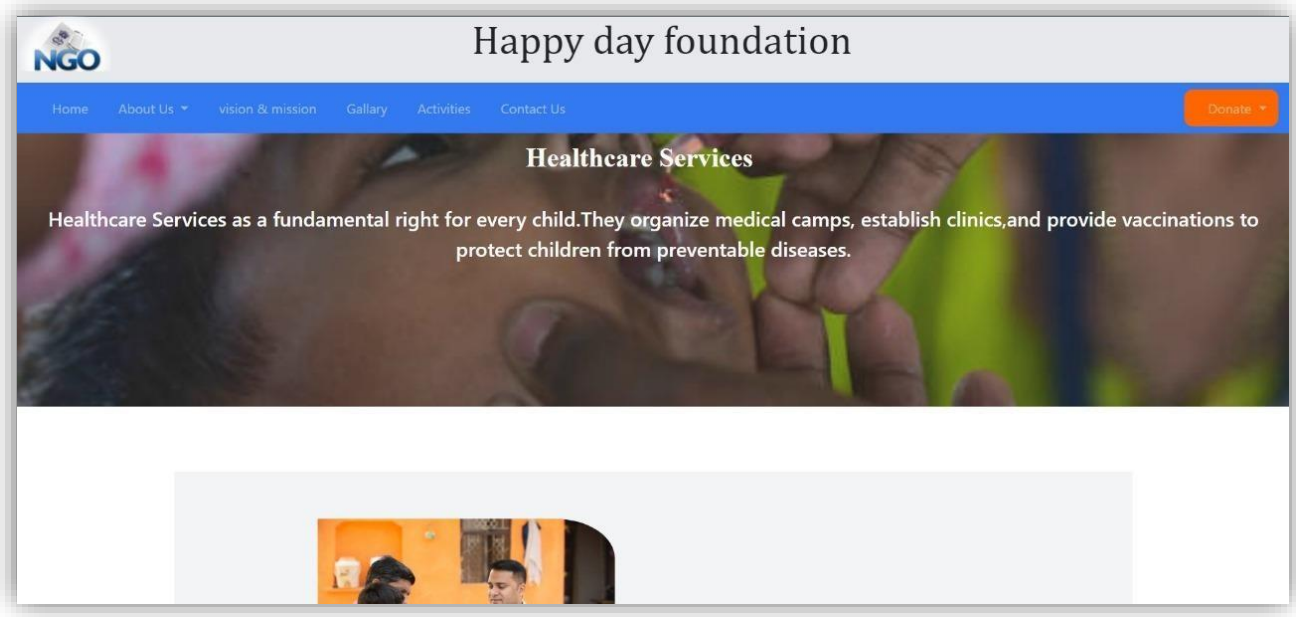
Our Stories
Hand A Smile Promo Video | South ...
Documentary - AVSAR INDIA || NGO...
NGO PROMOTION VIDEO (2D INFO...
VISION RURAL FOUNDATION | NGO
SOCIAL WORK | INFOGRAPHIC VIDEO



Description: The Home page provides an overview of the NGO's mission and initiatives.

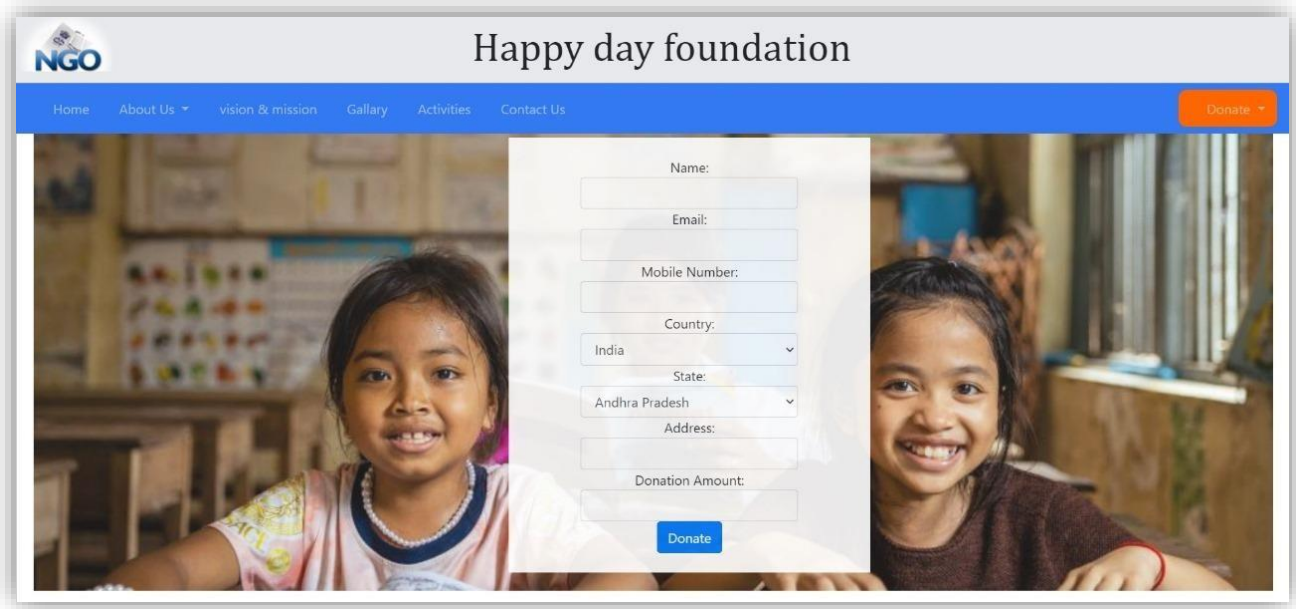
5.2.2 Activities Page

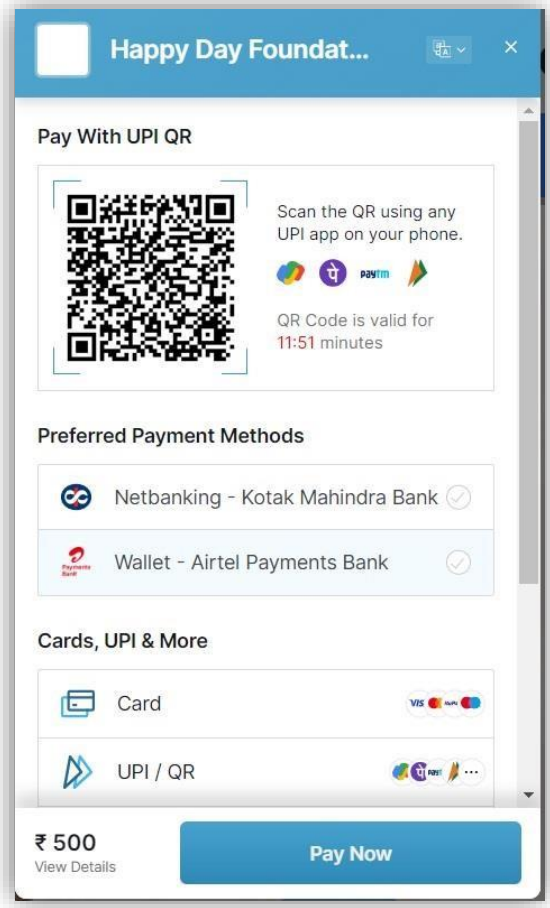




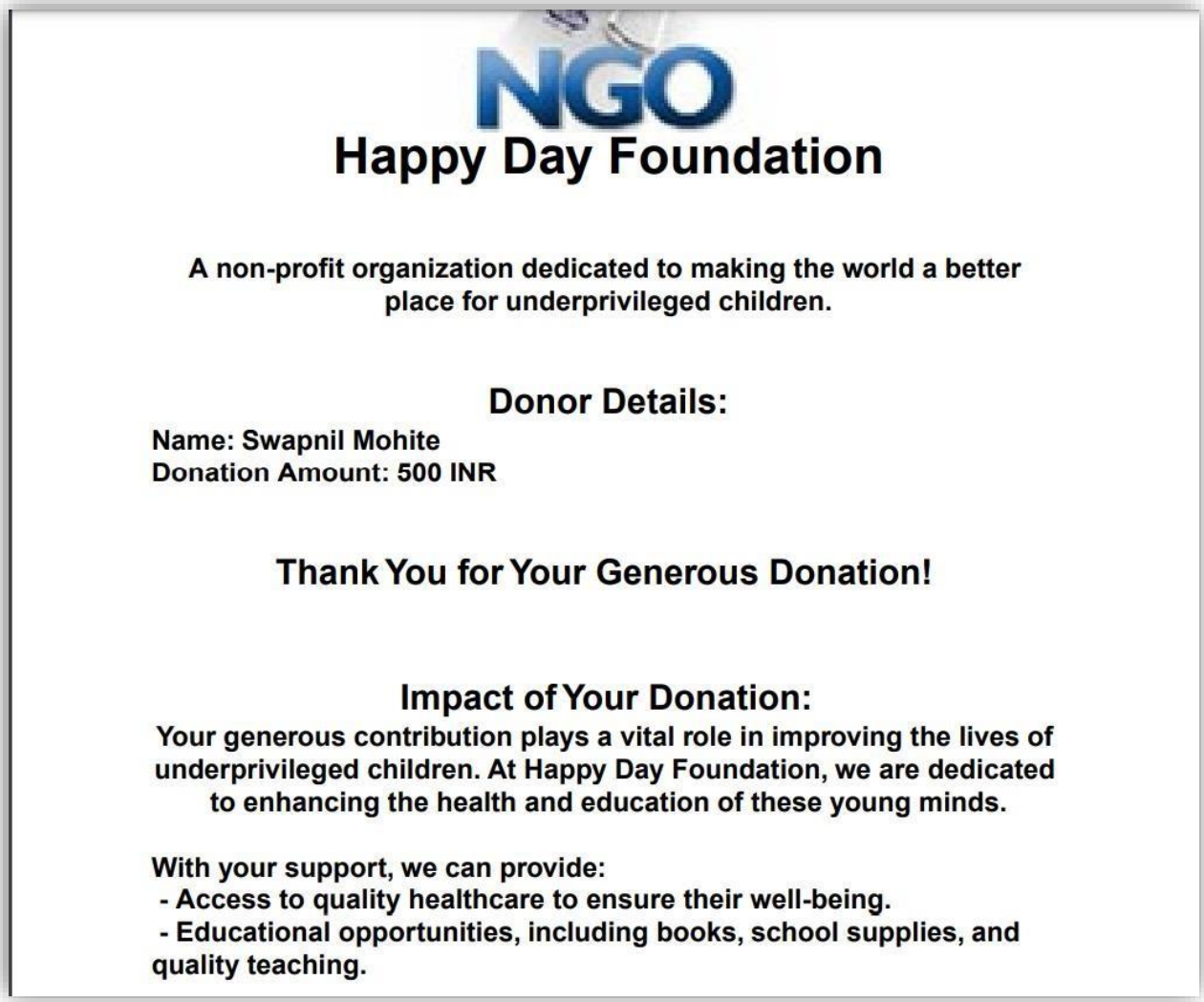
Description: The Activities page showcases the ongoing projects and events organized by the NGO.

5.2.3 Donation Page



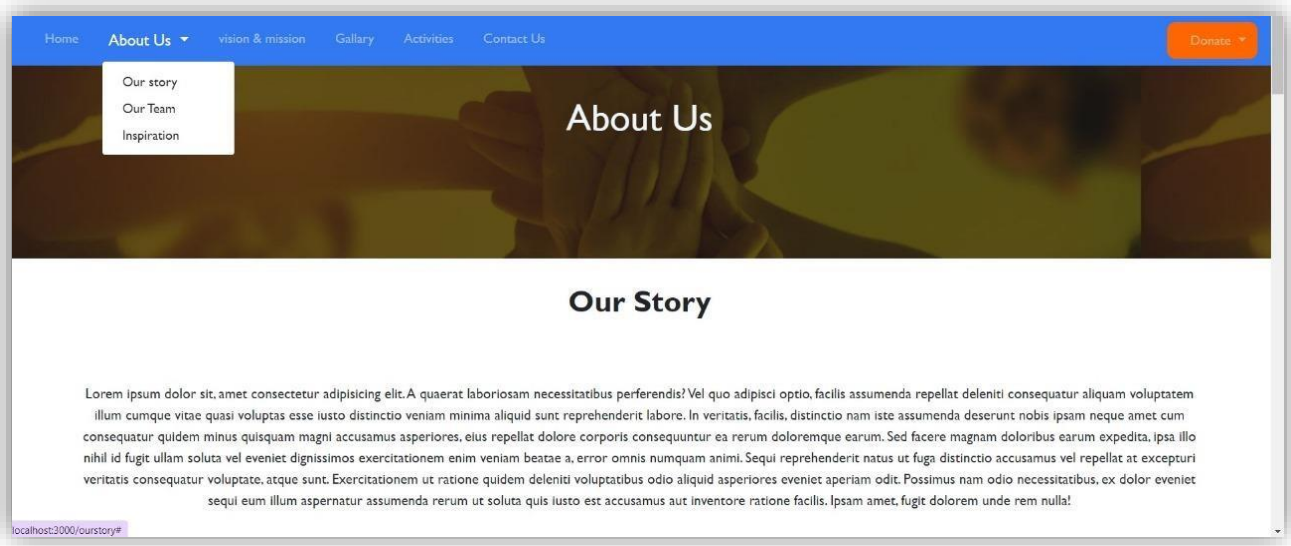

Happy Day Foundat...
Pay With UPI QR
Scan the QR using any UPI app on your phone.
QR Code is valid for 11:51 minutes
Preferred Payment Methods
Netbanking - Kotak Mahindra Bank
Wallet - Airtel Payments Bank
Cards, UPI & More
Card
UPI / QR
₹ 500
View Details
Pay Now


NGO
Happy day foundation
Home
About Us
vision & mission
Gallary
Activities
Contact Us
Donate
Thank You for Your Donation
User Name: Swapnil Mohite
Donation Amount: 500 INR
Download Donation Receipt



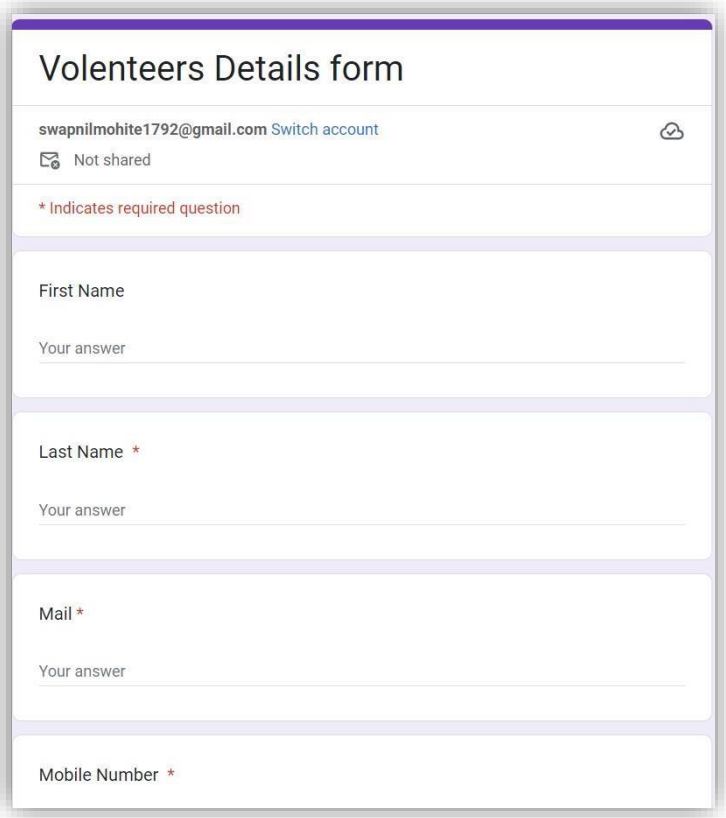
Description: The Donation page allows users to contribute to the NGO's causes securely through Razorpay.

5.2.4 About Us Page



Description: The About Us page provides insights into the NGO's history, mission, and team members.

5.2.5 Volunteer Us



5.2.6 Gallery

These screenshots offer a glimpse into the user interface and functionalities of the NGO website, showcasing the successful implementation of the project.

06 Conclusions

6.1 Conclusions

The development and implementation of the NGO website marks a significant milestone in creating a digital presence for the organization. The project aimed to provide a user-friendly platform, ensuring accessibility and engagement for visitors interested in the NGO's mission and activities. The following conclusions can be drawn:

a. Achievement of Project Objectives:

The project successfully achieved its primary objectives:

User-Friendly Interface: The website boasts a user-friendly interface, making it easy for visitors to navigate and access relevant information about the NGO's initiatives.

Responsive Design: The implementation of responsive design principles ensures that the website adapts seamlessly to various devices, enhancing accessibility for a diverse audience.

Donation Integration: The secure integration of the donation page, powered by Razorpay, facilitates a streamlined process for users to contribute to the NGO's causes.

b. Enhanced NGO Visibility:

The online platform serves as a powerful tool to enhance the visibility of the NGO. Through well-crafted content, compelling visuals, and organized information, the website effectively communicates the organization's mission, activities, and impact.

c. Collaborative Team Effort:

The successful completion of the project is attributed to the collaborative efforts of the team members. Clear task assignments, regular communication, and the use of effective project management tools contributed to the project's smooth progression.

d. Future Recommendations:

As the NGO website is launched, continuous monitoring and updates are recommended. Periodic content reviews, security audits, and user feedback assessments will ensure that the website remains relevant, secure, and aligned with the organization's evolving needs.

e. Acknowledgments

The project's success is not only attributed to the development team but also to the guidance and support received from mentors and stakeholders. Their insights and feedback played a crucial role in shaping the project's outcome.

In conclusion, the NGO website stands as a testament to the commitment of the development team and the organization to leverage technology for social impact. The digital platform opens new avenues for the NGO to connect with a broader audience, garner support, and further its mission of making a positive difference in the lives of those it serves.

6.2 Applications

The developed NGO website has numerous applications that contribute to the organization's mission and objectives. These applications can be categorized into several key areas:

6.1.1 Information Dissemination

The primary application of the NGO website is the dissemination of information. It serves as a central hub where visitors can learn about the organization's background, vision, mission, and ongoing activities. The "About Us" section provides detailed insights into the NGO's history, values, and the team behind its operations.

6.1.2 Awareness and Outreach

The website acts as a powerful tool for raising awareness about the NGO's causes. Through engaging content, impactful visuals, and success stories, the platform helps create a connection with the audience. The inclusion of a dedicated "Activities" page showcases the various initiatives and projects undertaken by the organization, fostering a sense of community engagement.

6.1.3 Donation and Support

One of the critical applications of the website is its capability to facilitate online donations. The integration of the Razorpay payment gateway on the "Donation" page provides a secure and seamless way for supporters to contribute financially to the NGO's programs. This feature enhances the organization's financial sustainability and ability to scale its impact.

6.1.4 Volunteer Engagement

The "Volunteer Us" section serves as an application for recruiting and engaging volunteers. By providing information about volunteer opportunities and a user-friendly registration process, the website encourages individuals to actively participate in the NGO's initiatives. This

fosters a sense of community involvement and expands the network of supporters.

6.1.5 Vision and Mission Alignment

The alignment of the website with the NGO's vision and mission is a crucial application. The platform serves as a digital representation of the organization's values and goals. This alignment strengthens the NGO's identity and helps attract individuals and partners who resonate with its core principles.

6.1.6 Feedback and Interaction

The inclusion of a contact form and social media links provides a channel for user feedback and interaction. Visitors can reach out to the organization, ask questions, and engage in conversations through various online platforms. This application fosters a sense of transparency and openness.

6.1.7 Platform for Collaboration

The website acts as a potential platform for collaboration with other NGOs, businesses, and stakeholders. By showcasing ongoing projects and initiatives, the organization can attract like-minded entities interested in collaborative efforts to address social challenges.

In conclusion, the applications of the NGO website extend beyond information sharing to actively contribute to fundraising, volunteer recruitment, community engagement, and collaboration, ultimately supporting the organization in achieving its broader social impact goals.