

ONLINE CHARITY MANAGEMENT SYSTEM

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Abstract— The majority of NGOs have had trouble obtaining cash or other necessary items. Obtaining donors is a highly difficult endeavour, and occasionally dealing with some donors' conditions can be quite difficult for NGOs to complete. This charity management system will make it simple for NGOs to locate contributors. This system has three modules:

Management (Admin), NGO, and Donor. Admin can oversee the request made by the NGO by approving or denying it by logging in with their credentials. After examining the NGO documents that were uploaded by the NGO, approval will be given. Admin will receive a report on the donations received by NGOs. NGOs can upload NGO documentation to register and submit requests. When admin receives the go-ahead, they can log on with their credentials. An NGO may present requests for assistance to different registered donors. They can look at the list of prior events and the donation report. Donors only need to register and login using their credentials. They will be notified of the donation request put forth by NGOs. Upon request approval, they must fill out the donation information. The donor will receive the contribution date. They can also view the history of donations

Keywords— NGOs, Admin, Donors, System Modules, System Functionality

I. INTRODUCTION

A charity management system is a specialized software/website designed for organizations to automate the process of managing their donor relations, fundraising campaigns, and overall financial operations. It can also be used generate reports on the organization's achievement of its goals. These systems are designed to be user-friendly and flexible to serve the needs of various types of non-profits. A feature often found in these systems is the database. for storing information about donors, volunteers, events, products, pledges etc., customizable reporting tools for generating customized reports on fundraising progress etc., Online donation process to receive donations and more. These controls are beneficial in many ways, including making it easier for an organization to track its progress toward goals and saving time by automating manual processes.

- Develop and integrate an automated system to improve service and reduce time spent on calls and inquiries.
- Create an online payment gateway so people can easily pay via their mobile phones.

II. OBJECTIVES

The main aims and objectives of this project is to design a website that helps the Donors and The NGO's Ease their work. Specifically, the aims are to:

- 1- Develop and integrate an automated system to improve service and reduce time spent on calls and inquiries.
- 2- Create an online payment gateway so people can easily pay via their mobile phones.
- 3- Design and implement users register page, login, and online appointment booking.

Therefore, we want a charity management system to be create for the distribution of charitable donation,so that people are a ware of the surplus and share it with the poor who need help

III. LITERATURE REVIEW

It seemed that little donations—which many people can afford—and the sense of being a founder of a significant project are key motivators for people to support NGOs' projects. A good illustration of using so-called social capital is the combined efforts of a group focused on solving a specific problem.[4]

It is also important to note that a positive atmosphere (fun, joy, a performance) and even the day of the week can affect how many people attend an event and their willingness to participate in projects that are being presented there. The so-called "Sunday effect" was statistically demonstrated in an interesting experiment conducted by Martin and Randal in which donations made to a donation box at the City Gallery in Wellington, New Zealand, were greater and more frequent on Sundays than on other days of the week. [5]

Many large-scale charity initiatives use money collecting at concerts and other outdoor events where attendees can watch one another while contributing for this purpose.[6] Donations of money and charitable assistance are a significant and expanding aspect of the global economy. The overall amount raised in 2007 increased to US\$ 306 billion, whereas registered charity gifts reported in the Giving USA 2007 survey exceeded US\$295 billion in 2006.[7] It is important to note that most donations came from private sources, with media-supported large-scale initiatives accounting for just 1.3% of

total donations. Internet is an efficient means of inexpensively reaching a large audience. [8] The interactive media offer means for delivering textual, audio, and visual content while allowing viewers (participants) to respond right away. Visitors to charity giving websites may choose to donate through an online money transfer (e.g., or credit card payment).[9] By sending a message to their friends, they might contribute to the effort of spreading word about the charity initiative. Finally, a visitor who registers on a website for charitable donations may be informed when new charitable programmes are launched. [10] Websites are as important to charity organizations as they are to for-profit businesses. Like for-profit business websites, charity websites play various roles such as publicizing projects and financial reports (e.g., IRS Form 990), fundraising, recruiting volunteers, reporting performance, and interacting with the public as well as 2 potential contributors (Gomes and Knowles 2001; Hodgkinson and Nelson 2001; Sargeant et al. 2007; Schneider 2003).[11]

Online fundraising continues to grow, and charity websites play an important role in online fundraising. In 2013, according to Network for Good (2014), largest online charity through Network for Good platform (networkforgood.org) is made through charity websites (61%), followed by peer-to-peer giving (e.g., Facebook) (18%), and giving portals (e.g., Charity Navigator) (12%). To facilitate online donations, several charity Organizations can improve the ease of navigation when searching for information, improving personal communication with donors, and a host of features and information (Barton and West 2011).[12]

A review of literature reveals that donation behaviours have been extensively studied, especially in social psychology and marketing. Extant research has employed several terms to reflect donation behaviours such as prosocial, altruistic, helping, charitable-giving, volunteering, contribution, and donation.[13]

We believe that research centres should be given priority giving portals and social network sites because most of the charitable online giving is via charity websites (61%) (Network for Good 2014). Particularly on charity websites, recurring donation be a strong influencer of donations (for example, make a monthly donation as a sponsor for an Ethiopian child from World Vision) (Network for Good 2014). Table 2.6 shows the list of charities that raised at least 10 percent of donations online. Website design, quality, and usability have received extensive attention in the IS research. Early research on websites attempted to better understand the underlying dimensions and measurement scales of a good website (Barnes and Virgen 2001; McKinney et al. 2002) and website usability (Agarwal and Venkatesh 2002; Palmer 2002). By striving to develop measurement scales that provided nomological validity, early learning lays foundation for further research (e.g., Venkatesh and Ramesh 2006). This early website research stream is categorized as a development stage.[14]

This project should lead to increased efficiency in managing the charity's operations. This includes streamlined processes. Transparency is crucial in the charity sector. The project should result in a transparent system that allows donors and stakeholders to track how their contributions are used and ensures

accountability in financial management.[15] A successful charity management project should boost fundraising efforts. This can be possible donors to contribute, implementing effective fundraising campaigns, and providing clear communication about the impact of donations. The project should facilitate better communication with donors, volunteers, and beneficiaries. This can include newsletters, social media integration, and interactive features that engage stakeholders. A charity management system should provide robust reporting and analytics tools. This enables the charity to measure the impact of its programs, identify trends, and make data-driven decisions.[16] For charities relying on volunteers, the project should result in better volunteer recruitment, training, and scheduling. An effective system can help match volunteers with suitable opportunities and track their contributions. Research focus on opinion-based use of websites review how website features influence online consumer behaviours, called an application stage in this study. The main research stream of the application stage is a mind-based approach which comprises of mainly a cognition focus and an emotion focus (see Cyr et al. 2009). In this approach, cognitive/utilitarian and/or emotive/hedonic elements of websites were examined to identify online consumer behaviours using various theories such as trust (McKnight et al. 2002), TAM (Gefen et al. 2003), the theory of planned behaviour (Song and Zahedi 2005), social presence (Gefen and Straub 2003), visual rhetoric (Cyr et al. 2009), and reversal theory (Deng and Poole 2010). [17]

IV. PROPOSED METHODOLOGY

1. UI Design with HTML, CSS, React JS:

Conducted user research to understand preferences and expectations for charity-based web-site design. Implement the user interface using HTML, CSS, and React components based on the design. Utilize React for managing the frontend application state and user interactions. Design forms, donation modules, and other interactive elements using React components.

2. Building the Backend with MongoDB:

Develop RESTful APIs or GraphQL endpoints using Node.js or a framework like Express.js to handle data request between the frontend and MongoDB. Use CRUD (Create, Read, Update, Delete) operations to interact with the MongoDB database. Ensure appropriate verification and validation for data security.

3. Integrating Functionality:

Connect the frontend React components with backend APIs to enable functionalities like user registration, donation submission, volunteer management, etc. Implement data validation on both the frontend and backend sides. Integrate MongoDB queries and commands to store and retrieve data as needed.

4. Security Measures and Data Privacy:

Encryption and secure data storage practices to keep the user private. Comply with data protection laws and ethical considerations when processing user data.

5. Documentation:

Provide comprehensive documentation for users on website features and functionalities.

6. Hosting and Deployment:

Deploy the frontend React application and backend Node.js server on suitable hosting platforms. Configure domain settings, SSL certificates, and security measures. Set up continuous integration and deployment pipelines if required.

7. Post-Launch Maintenance:

Regularly update the website's content, security patches, and dependencies. Monitor server performance, database usage, and website analytics for improvements and enhancements. Address user feedback and make necessary enhancements based on user experiences.

8. Data Management and Backup:

Implement a backup strategy for the MongoDB database to prevent data loss. Consider data security measures to protect sensitive information stored in the database.

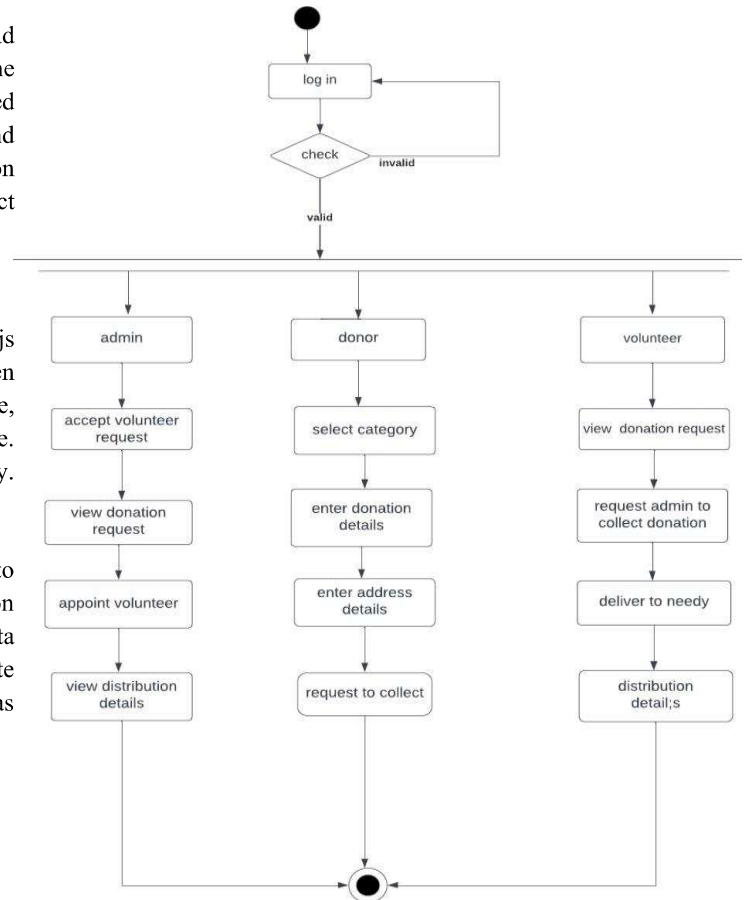


Fig 1. Overview of Proposed work

Fig1 explains that the website provides a login window by which user/donor, admin, volunteer login and perform their operations accordingly.

It has three modules mainly:

1.Admin module will handle all the process of registration, login, validation, role checking of the system. This module will interact with the user table of the database.

2.Volunteer module is used to handle the transactions between donor and needy, validation of data. This module will interact address table and table exchange with database.

3.Donor module is for people to donate and verify the process. This module will interact with the donation table and address table of the database.

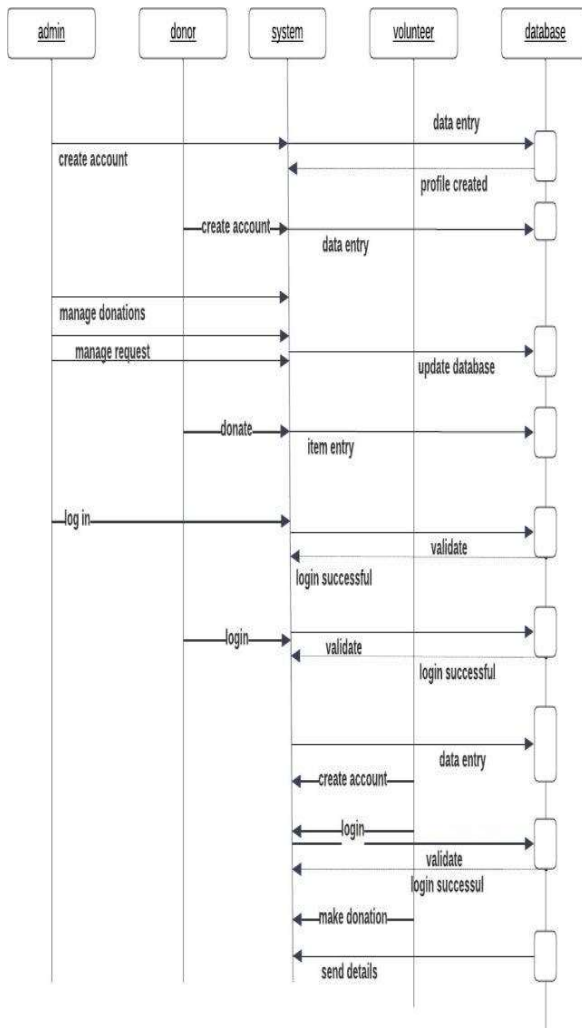


Fig 2 Sequence Diagram

Fig 2 explains explain the sequence of activities done in proposed work.

1. The User asks to sign in to the system.
2. The user receives a login credential prompt from the system.
3. The User offers their login information.
4. The Database is used by the System to confirm the credentials.
5. The System logs the user in if the credentials are validated.
6. The user asks for their login credentials.
7. The User receives their details from the System after it has retrieved them from the Database.
8. Admin can manage and update donations request to the database system.

9. Donor request to donate.

10. Admin received donor request and validate their request to donate by checking some details.

11. Admin update and send transactions or donation details to the database.

12. Database send the donation details or receipt to the donor of their successful donation or not.

13. Volunteer also create their account and Login with their login credentials.

14. Admin update the use of donation items and their details on the system where the donation funding is use.

15. Database show the data of donation collect and use for their related purpose.

V. CONCLUSIONS

Online Charity Management System are designed to be user-friendly and flexible to serve the needs of various types of non-profits. Some of the most common features included in these systems are donors, volunteers, events, products, contracts, etc. stores information about and fundraising announcements, etc. databases that create it. Customizable reporting tools for personalized reporting, free work online with free money and more. The system is also important in terms of security and privacy.

The proposed methodology for developing the web-based charity management system is well-structured and comprehensive. It covers all the key aspects of the project, including the development of front end of webpage, backend servers, database administration.

Overall, the proposed system and methodology have the potential to make a significant contribution to the field of online charity system.

Here are some additional benefits of the proposed system:

- The utilization of modern web development technologies has leveraged the power of the digital landscape, contributing to a dynamic and interactive web presence.
- The implementation of responsive design using HTML, CSS, JavaScript ensures that the website functions seamlessly on various devices, enhancing user accessibility and user experience.
- The responsive design and interactive features have resulted in a user-friendly and engaging website that caters to users across a range of devices.

The proposed system has the potential to save lives and improve the quality of care for patients in emergency situations.

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