

“Care Connect” Charity Management System

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Abstract - The “Care Connect” Charity Management System is a web-based platform designed to streamline and digitalize the process of charitable donations. The system integrates multiple welfare sectors, including orphanages, old-age homes, gaushala centers, and animal care centers, and religious sites into a single unified portal. It provides donors with an accessible and transparent platform where they can contribute funds securely based on their preferred cause. The system allows welfare organizations to display their needs, activities, and ongoing projects, ensuring clarity and trust between donors and beneficiaries. Key features such as donor registration, donation tracking, automated receipt generation, and beneficiary management enhance the overall efficiency of the donation process. The platform reduces manual paperwork, minimizes errors, and improves the visibility of lesser-known welfare centers. By offering real-time updates and secure payment options, the system encourages more individuals to participate in charity. Overall, the Charity Management System aims to create a reliable, user-friendly, and transparent environment that simplifies charitable giving and strengthens social welfare activities.

Keywords: Charity Management System; Online Donation; Orphanage Support; Old-Age Home; Gaushala Center; Animal Care Center; Donor Registration; Donation Tracking; Secure Payment Gateway; Beneficiary Management; Web-Based Application; Social Welfare; Transparency; Resource Management; Community Participation.

I. INTRODUCTION

The “Care Connect” Charity Management System is a digital platform designed to streamline the process of donating to various charitable organizations. It integrates multiple service sectors such as orphanages, old age homes, goshala centers, and animal caring centers, under one unified system.

A: "It uses a technique called RAG (Retrieval-Augmented Generation). When a user asks a question, the backend first queries the MongoDB database for active campaigns. It then feeds this live data into the Google Gemini 1.5 Flash model as context. This allows the AI to answer questions about current donations, not just generic info." A: "We use MongoDB

(NoSQL), so SQL injection isn't possible. However, to prevent NoSQL Injection, we use the express-mongo-sanitize middleware (seen in server.js) which strips out keys starting with \$ or .." A: "We followed the MVC (Model-View-Controller) pattern. models.js handles the Database Schema (Structure), while server.js acts as the Controller handling the API logic. The HTML files in the public folder act as the View." A: "We followed the MVC (Model-View-Controller) pattern. models.js handles the Database Schema (Structure), while server.js acts as the Controller handling the API logic. The HTML files in the public folder act as the View." A: "We use pdfkit on the backend. When a donation crosses a threshold, the server draws a PDF vector graphic canvas in memory, populates the user's name, and streams the binary data directly to the frontend or email attachment." The primary objective of this system is to create a transparent and efficient bridge between donors and charitable institutions. Traditional donation methods often face issues like miscommunication, lack of tracking, and limited accessibility for donors. To overcome these challenges, the proposed system offers a structured interface that simplifies the entire donation workflow. Donors can easily access information about different welfare centers and choose where they wish to contribute.

The system ensures that every donation is recorded accurately, promoting trust and accountability among users. It provides real-time updates to donors about ongoing needs and activities of various centers. Charitable organizations can also manage their requirements, funds, and donor details in a systematic manner. The platform supports both monetary donations and essential items such as food, clothes, or medical supplies. By integrating all centers into one system, it eliminates the need for multiple manual processes. The Charity Management System enhances accessibility for people who wish to support social causes. It also helps organizations maintain proper records and distribution channels for donated resources. This digital approach improves communication and coordination between donors and service centers. Overall, the system aims to promote social welfare by encouraging smooth and transparent donation practices. It contributes significantly to community development and strengthens support systems for vulnerable groups.

II. LITERATURE SURVEY

“Care Connect” Charity Management Systems have gained significant attention in recent years due to the increasing need for transparency and efficiency in donation processes. Traditional donation methods often face challenges such as lack of proper tracking, mismanagement, and limited accessibility for donors. Several researchers have emphasized the importance of digital platforms to connect donors with charitable organizations effectively. Online donation portals have been proposed to facilitate contributions to orphanages, old age homes, and animal care centers. Studies highlight that donor trust improves significantly when donation records are maintained systematically and real-time updates are provided. Management systems enable charitable institutions to maintain inventories of required items, track fund utilization, and report activities efficiently. Literature suggests that integrating multiple charitable sectors into a unified platform enhances convenience for donors and improves organizational coordination. Previous research also indicates that digital systems reduce manual paperwork, minimize errors, and improve accountability. Case studies on similar platforms have shown increased donor participation and better fund allocation. Scholars argue that automation of donation workflows can significantly reduce operational delays in charitable organizations. Research also points out that such systems can facilitate both monetary and in-kind donations, such as food, clothes, or medicines. Security and data privacy are critical factors for donor confidence, and literature emphasizes incorporating secure payment gateways and encrypted records. Mobile-based applications are emerging as an effective solution for expanding reach and accessibility. Surveys show that donors prefer platforms that provide transparent reports and real-time notifications. Studies highlight that centralized management allows organizations to forecast needs accurately and plan outreach programs efficiently. Comparative research demonstrates that systems combining orphanages, old age homes, and animal care centers attract more diverse donations. Literature emphasizes the importance of user-friendly interfaces to encourage donor engagement. Research also discusses the role of technology in streamlining communication between donors and organizations. Previous studies suggest that tracking donation history and issuing receipts digitally builds donor loyalty. Analysis of existing systems reveals that automated notifications and reminders increase repeat donations. Scholars recommend features such as volunteer registration and event management to enhance community participation. Literature concludes that Charity Management Systems not only facilitate donations but also improve social accountability. Studies indicate that integrating analytics and reporting modules helps organizations evaluate impact effectively. Research highlights the need for continuous

updates and system scalability to accommodate growing demands.

III. METHODOLOGY

The methodology for the “Care Connect” Charity Management System involves a systematic approach to facilitate efficient donation processes. The first step is requirement analysis, where the needs of orphanages, old age homes, goshala centers, and animal care centers are identified. The system architecture is designed to support multiple types of donations, including monetary and in-kind contributions. A user-friendly interface is developed to allow donors to register, browse centers, and make donations easily. Database design is implemented to store donor information, donation records, and center requirements securely. Secure payment gateways are integrated to ensure safe monetary transactions. The system incorporates real-time updates to notify donors about their contributions and center needs. Validation mechanisms are included to verify donor information and donation authenticity. Administrators can manage and monitor resources, track fund utilization, and generate reports efficiently. The platform supports centralized management of all participating charitable organizations. Both web and mobile interfaces are developed to increase accessibility and reach. Testing is conducted to identify and resolve errors, ensure data security, and improve usability. Feedback from initial users is collected to enhance system performance and interface design. Deployment involves hosting the system on a secure server with continuous maintenance and updates. The methodology ensures transparency, efficiency, and reliability in connecting donors with charitable organizations effectively.

IV. SYSTEM IMPLEMENTATION

The “Care Connect” Charity Management System is implemented as a web-based and mobile-accessible platform to ensure easy access for donors and administrators. The system is developed using modern programming languages and frameworks to provide a responsive and user-friendly interface. Database integration allows secure storage of donor details, donation records, and center requirements. Secure payment gateways are implemented to process monetary donations safely and efficiently. The system includes modules for managing orphanages, old age homes, goshala centers, and animal caring centers under one platform. Real-time updates notify donors about their contributions and the current needs of each center. Administrators can monitor donations, track fund utilization, and generate detailed reports for transparency. Validation and authentication mechanisms are used to maintain data integrity and security. Testing is conducted at each stage to ensure smooth functionality, error-free operations, and user satisfaction. Overall, the implementation

ensures that donations are managed effectively, promoting transparency, accountability, and social welfare.

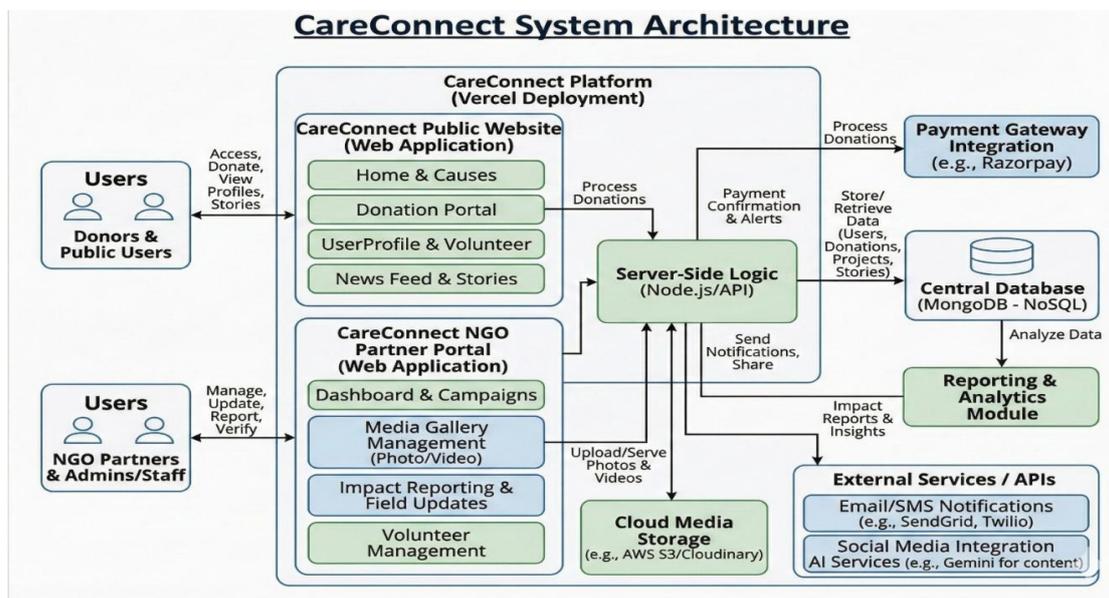
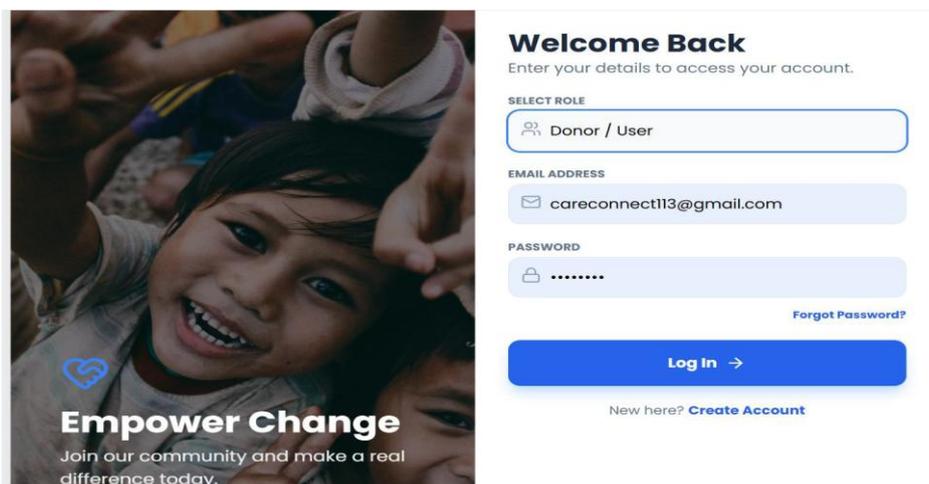


Figure 1: System Architecture

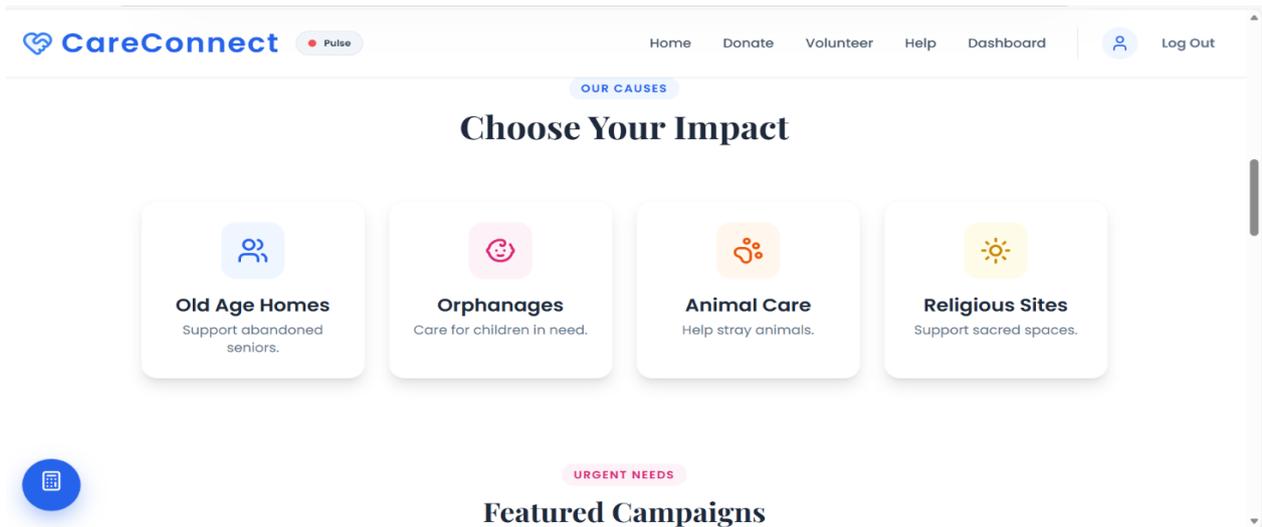
V. RESULTS AND DISCUSSIONS

The Charity Management System successfully provides a unified platform for donors to contribute to orphanages, old age homes, goshala centers, and animal care centers. The system allows donors to make both monetary and in-kind donations efficiently. Real-time updates and notifications improve donor engagement and trust in the system. Administrators can track and manage resources effectively, ensuring proper allocation of donations. The implementation of secure payment gateways ensures safe and reliable monetary transactions. The centralized database allows accurate recording of donor information and donation history. Reports generated by the system enhance transparency and accountability for charitable organizations. User-friendly interfaces increase accessibility and encourage participation from a wider donor base. The system reduces manual work and minimizes errors in managing donations. Integration of multiple charitable sectors under one platform simplifies the donation process for users. Feedback from initial users indicates higher satisfaction and confidence in the system. Automation of donation workflows ensures timely distribution of resources to needy beneficiaries. The system demonstrates improved coordination among different charitable organizations. Overall, the Charity Management System enhances efficiency, transparency, and reliability in donation management. It contributes significantly to social welfare by connecting donors and charitable institutions effectively.

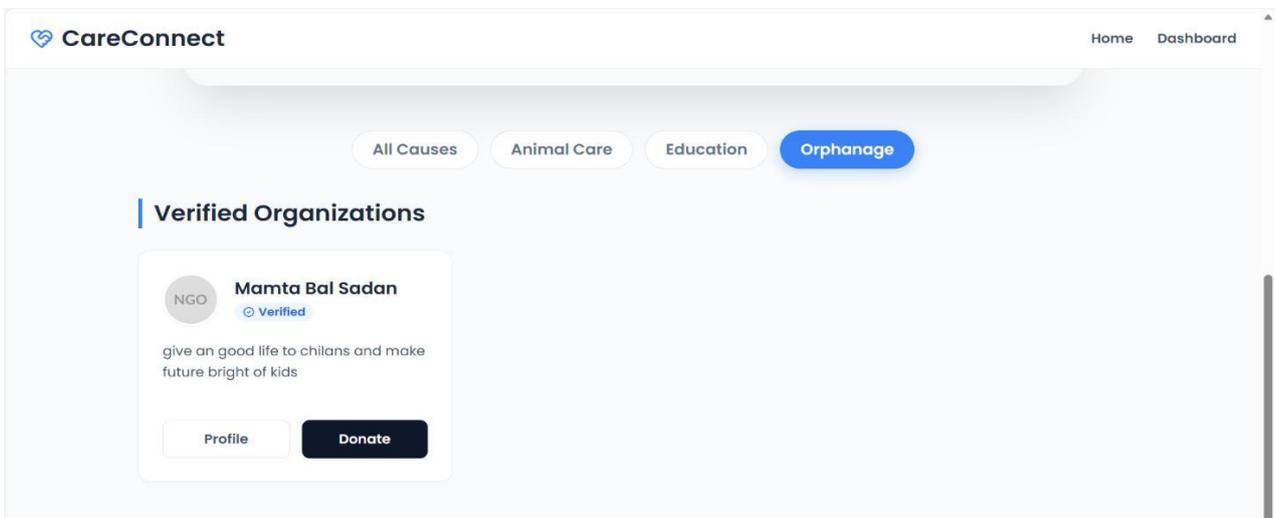
1) Login Page:



2) Registration Page:



3) Dashboard:



VI. CONCLUSION

The Charity Management System provides an effective and transparent platform for managing donations to orphanages, old age homes, goshala centers, and animal care centers. It simplifies the donation process and ensures proper allocation of resources. The system enhances donor engagement through real-time updates and notifications. Secure payment gateways and validation mechanisms increase trust and data integrity. Centralized management allows organizations to track donations, manage requirements, and generate reports efficiently. Automation reduces manual errors and improves operational efficiency for charitable institutions. The user-friendly interface encourages more people to participate in social welfare activities. Integration of multiple charitable sectors under one platform increases accessibility and convenience for donors. Overall, the system promotes accountability, transparency, and effective social support. The Charity Management System contributes significantly to community development and strengthens the bond between donors and charitable organizations.

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