

SAMRIDH: A CATALYST FOR DONATION SUPPORT IN ORPHANAGES AND OLD AGE HOMES

Netala. Kavitha, Assistant Professor of Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, netala.kavitha@gmail.com
P. Sravani, Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, sravanipyla9848@gmail.com
S. Mohitha Swarna Vyshnavi, Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, swarnavyshnavi0111@gmail.com
S. Geethika, Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, saragadamgeethika2906@gmail.com
Sk. Ishak, Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, ishaksk199@gmail.com
V. Kushal, Computer Science Department (CSE), Vignan's Institute of Information Technology, Visakhapatnam, India, vkushal1234@gmail.com

ABSTRACT: Despite the widespread integration of web technologies in addressing societal challenges, a comprehensive digital solution for facilitating seamless donations to orphanages and old-age homes remains conspicuously absent. Challenges persist, including the reliance on physical donations, limited visibility of such institutions, manual and inefficient record-keeping practices, a lack of inter-organizational collaboration, and the constrained scope of existing platforms. To surmount these obstacles, we propose the development of a specialized digital platform tailored explicitly to facilitate donations to these critical social causes. This innovative platform is crafted using HTML, CSS, and JavaScript for the frontend, with Django serving as the robust backend framework and SQLite as the secure database solution. Through a user-friendly interface, donors are provided with a seamless experience, ensuring their information is safeguarded while enabling them to contribute to organizations aligned with their values and principles. In addition to donation functionalities, the platform includes login and registration pages to personalize user experiences and enhance security measures. Furthermore, a secure payment gateway is integrated to facilitate transactions, ensuring the confidentiality and integrity of financial data. This collaborative paradigm encourages concerted efforts toward the overarching objective of enhancing the quality of life for vulnerable populations within orphanages and old-age homes.

Keywords: Seamless donations, Django, SQLite, Security Measures, Payment Gateway.

1. INTRODUCTION

In contemporary society, the integration of web technologies has been pivotal in addressing various societal challenges, from healthcare to education. However, amidst this technological advancement, a significant gap remains in facilitating seamless donations to orphanages and old-age homes. This gap presents challenges such as reliance on physical donations, limited visibility of institutions, inefficient record-keeping practices, and a lack of collaboration among organizations. Recognizing the urgency to bridge this gap, this research paper proposes the development of a specialized digital platform aimed at facilitating donations to orphanages and old-age homes. Nonprofit organizations in India play a crucial role in supporting vulnerable populations, including millions of orphans and elderly individuals. Despite their essential services, many of these organizations struggle to secure the necessary resources due to limited outreach, particularly in remote areas. To address this, innovative solutions leveraging technology are essential. The "Samridh"

application represents a pioneering effort in this regard, offering a centralized platform for seamless contributions to underserved organizations.

By harnessing web technologies such as HTML, CSS, JavaScript, Django, and SQLite, the Samridh application aims to revolutionize the donation process. This user-friendly platform ensures the security of donor information and enables personalized experiences through login and registration pages. Additionally, the integration of a secure payment gateway enhances transparency and instils confidence among donors and organizations.

Through fostering collaboration among diverse institutions, the Samridh application serves as a catalyst for mutual support and resource-sharing, maximizing the impact of donations. By delving into its development, implementation, and potential impact, this research paper seeks to evaluate the efficacy of the Samridh application in addressing the unique challenges faced by nonprofit organizations serving vulnerable populations in India and beyond. Through this exploration, we aim to pave the way for a more inclusive and sustainable approach to philanthropy, ultimately enhancing the quality of life for those in need.

2. LITERATURE REVIEW

The integration of web technologies in addressing societal challenges has garnered significant attention in contemporary literature. Scholars have explored the transformative potential of digital platforms in facilitating various aspects of philanthropy, including fundraising, outreach, and donor engagement [5]. However, a critical gap persists in the realm of facilitating seamless donations to vulnerable populations, such as those residing in orphanages and old-age homes.

India's demographic landscape adds complexity to this challenge. The United Nations has classified India as an 'ageing country,' with a rapidly increasing population over 60 years of age [8]. This demographic shift underscores the urgency of developing innovative solutions to support elderly individuals, many of whom rely on the services provided by nonprofit organizations.

Despite the vital role played by these organizations, they often face formidable obstacles in securing the necessary resources. Limited visibility, reliance on physical donations, and inefficient record-keeping practices hinder their ability to fulfil their missions effectively [6]. Furthermore, the projected increase in India's elderly population exacerbates the strain on existing support systems, necessitating novel approaches to philanthropy and social welfare.

The proposed "Samridh" application represents a promising response to these challenges. By leveraging web technologies such as HTML, CSS, JavaScript, Django, and SQLite, this digital platform aims to revolutionize the donation landscape. The user-friendly interface, secure payment gateway, and personalized donor experiences offered by the Samridh application align with best practices identified in philanthropic literature [7].

Moreover, the collaborative ethos underlying the Samridh application resonates with research emphasizing the importance of inter-organizational cooperation in maximizing the impact of charitable endeavours [4]. By fostering partnerships among diverse institutions, the Samridh application has the potential to amplify the reach and effectiveness of nonprofit organizations serving vulnerable populations.

Overall, the literature underscores the pressing need for innovative solutions to facilitate donations to orphanages and old-age homes, particularly in the context of India's ageing population. The "Samridh" application offers a promising avenue for addressing these challenges, providing a blueprint for leveraging web technologies to enhance philanthropy and support vulnerable populations in India and beyond.

3. EXISTING METHODOLOGIES

Supporting orphanages and old-age homes is a noble endeavour, but it often comes with various challenges for both donors and organizations.

3.1 Lack of Accessibility and Physical Donations: Visiting orphanages and old-age homes to make contributions requires significant time and effort from donors. This process is often inconvenient and may deter potential donors from supporting these institutions regularly. Moreover, finding organizations that resonate with donors' values can be challenging.

3.2 Lack of Visibility and Outreach: Orphanages and old-age homes often struggle to garner

visibility and connect with potential donors due to limited resources for marketing and outreach. This lack of visibility hampers their ability to attract support and sustain their operations effectively.

3.3 Inefficiency in Record-Keeping: The reliance on manual record-keeping for transactions poses challenges in tracking and managing contributions accurately. This manual approach can lead to inefficiencies and errors, making it difficult for organizations to maintain proper financial records.

3.4 Lack of Collaboration and Networking: The absence of a centralized platform hinders collaboration among different institutions, limiting opportunities for mutual support and resource sharing. Without a unified platform, organizations may miss out on chances for joint efforts to address common challenges.

3.5 Lack of Scope and Accessibility of Platforms: Certain donation platforms may have limited scopes, focusing on specific causes or organizations. This restricts donors' options and may not encompass all the causes they wish to support. Additionally, many organizations may lack online donation platforms altogether, or if they have them, they may not be easily accessible or well-known to potential donors. Thus, there is a pressing need for a collective platform where donors can discover various organizations, learn about their services, and understand their donation requirements.

4. PROPOSED WORK

This research paper proposes the development and implementation of a user-friendly web application aimed at facilitating donations to orphanages and old-age homes. The application will address the limitations of the existing donation process by offering features such as a secure payment gateway, search and recommendation functionality, detailed organization profiles, user accounts, robust security measures, and a collaborative platform. By leveraging technology to enhance transparency, accessibility, and efficiency in the donation process, the proposed web application seeks to improve support for vulnerable populations in orphanages and old-age homes. Proposed Features:

4.1 Search and Recommendation Functionality: Enable users to search for organizations based on name, location, or other relevant criteria. Implement a recommendation system to suggest organizations in need of funds, encouraging users to contribute where it's most needed.

4.2 Detailed Organization Profiles: Each organization's profile will include comprehensive information, such as their mission, current funding status, and specific needs. Display a transaction history for transparency, showcasing the impact of past donations.

4.3 User Accounts and Profiles: Allow users to create accounts to track their donation history and receive updates on the impact of their contributions. Organizations should also have profiles to showcase their work and connect with potential donors.

4.4 Security Measures: Implement robust security measures to protect sensitive donor information and financial transactions.

4.5 Rigorous verification process: A rigorous verification process for organizations. Valid and legitimate organizations undergo multiple layers of verification, including email verification, document verification, and physical visits to the organization's premises. This meticulous process ensures that only trustworthy organizations gain access to the platform, thereby increasing user trust and confidence in the donation process.

4.6 Collaborative Platform: Design features that encourage collaboration among organizations, fostering a supportive community. Implement a messaging or forum system to facilitate communication and resource-sharing among institutions.

5. METHODOLOGY

In this project, three distinct modules have been identified: the Organization Module, the Admin Module and User module as shown in figure 1. The Organization Module serves as the interface for organization registration and login. After registration, an email is generated to the organization's email address, informing them that the administrators will visit the organization for verification. Once verified, the organization is included in the list of verified organizations, and they are provided with login credentials. Upon successful authentication, organizations gain access to their profile page, which is visible to users visiting the website. Through this module, organizations can update their profile details, ensuring that the information displayed accurately represents their services, activities, and

contact information. Furthermore, the OrganizationModule provides organizations with insights into their donation history. This feature enables organizations to track and manage incoming donations, fostering transparency and accountability in their financial operations. By accessing donation records, organizations can assess the effectiveness of their fundraising efforts and strategize accordingly to meet their financial needs. The Organization module has two types of users. They are old-age homes and orphanages. In the Admin module, administrators play a crucial role in overseeing the verification process for organizations and addressing user complaints. Admins are granted access to the module through their unique username and password, which ensures secure authentication and accountability. Upon logging in, admins are presented with a dashboard that allows them to manage unverified registrations submitted by organizations. They review these registrations by visiting the organization to ensure that the information provided meets the platform's requirements and standards. Once verified, admins update the status of organizations to "verified" and maintain a record of verified organizations for reference. Additionally, the Admin module provides tools for admins to handle user complaints effectively. Admins are responsible for investigating and resolving complaints submitted by users regarding organizations or platform-related issues. This may involve communicating with relevant parties, conducting inquiries, and taking appropriate actions to address concerns and maintain user satisfaction. In the User module, individuals are categorized as contributors. These contributors can explore a list of registered organizations as well as individual beneficiaries in need. This flexibility allows contributors to choose whether they want to support an established organization or provide direct assistance to an individual in need. Once a choice is made, contributors can initiate their support through various means, such as making donations, offering volunteer services, or participating in fundraising activities. Detailed data flow of all the three modules are shown in figure 2.

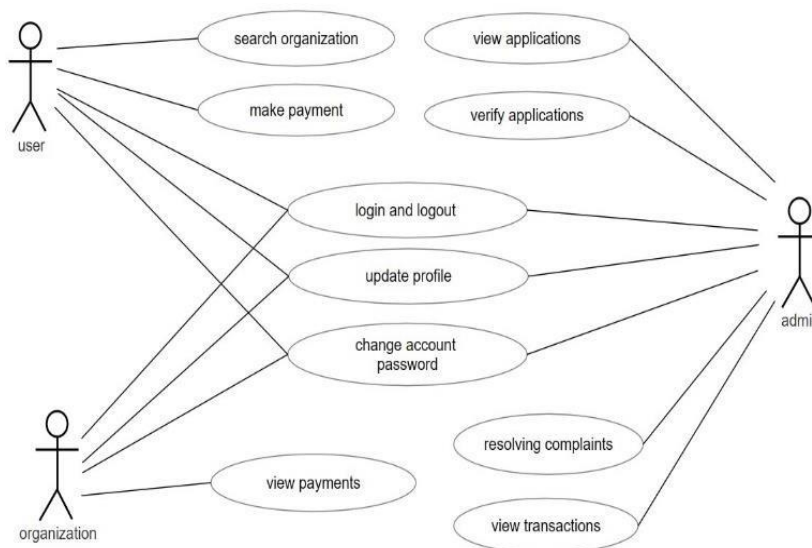


Figure 1: Use case diagram of the project.

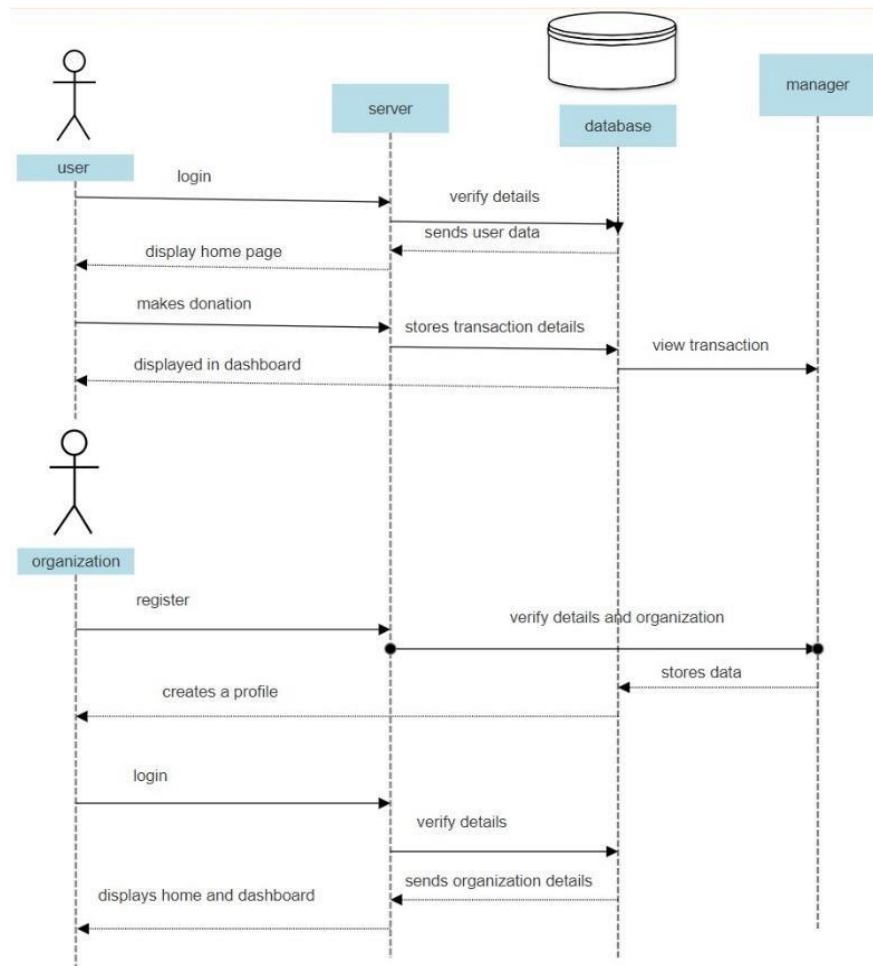


Figure 2: Data Flow Diagram of the project

6. RESULTS AND DISCUSSIONS

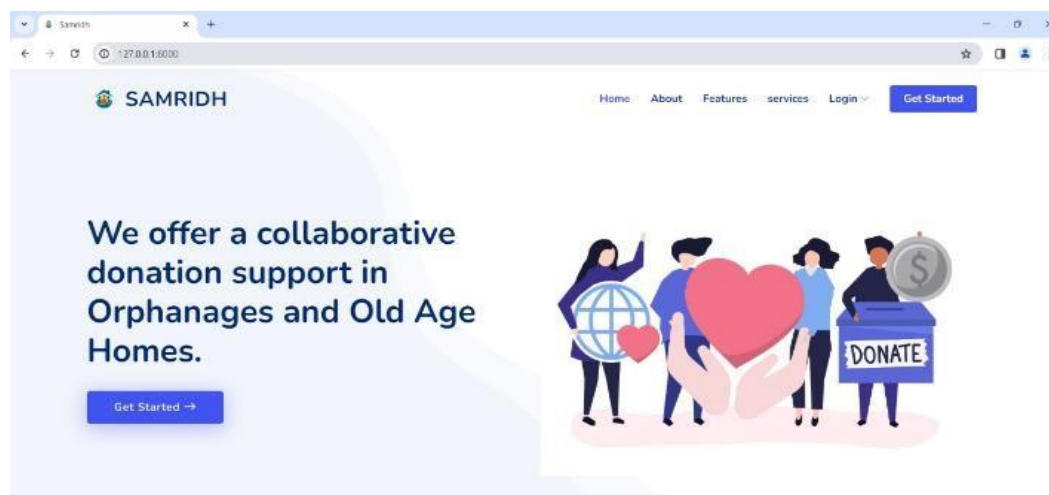


Figure 3: Home page of the project This serves as the homepage presented to both users and organizations.

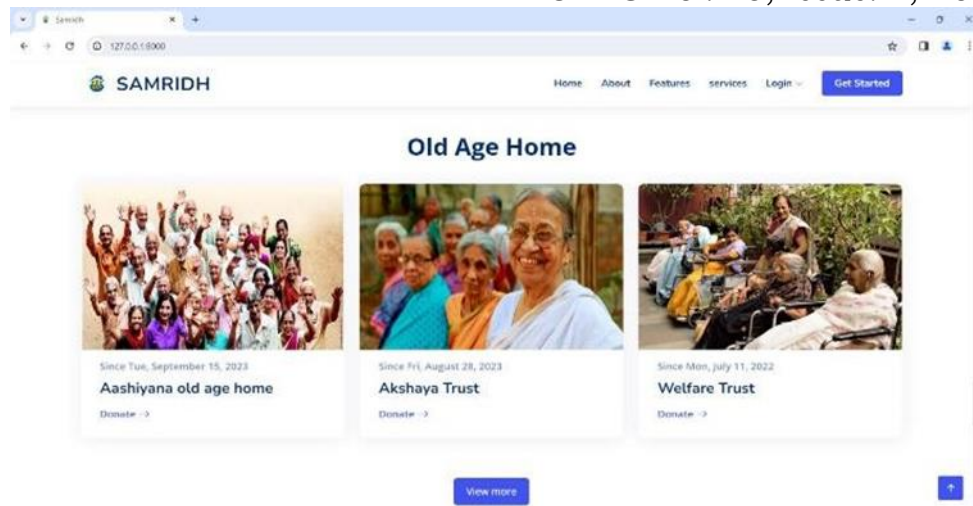


Figure 4: Page to view Old Age homes.

In this page we can view three organizations and can even view other organizations by clicking on view more button.

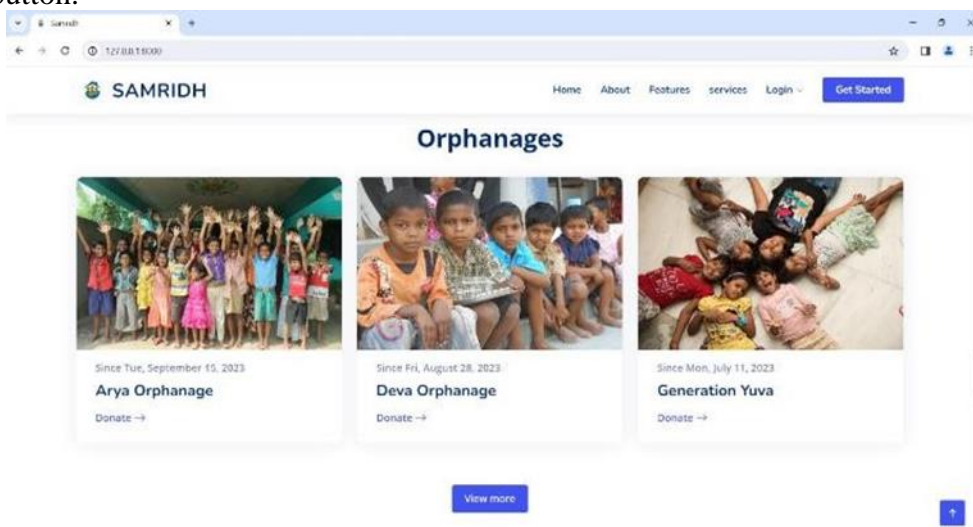


Figure 5: Page to view Orphanages.

In this page we can view three Orphanages and can even view other Orphanages by clicking on view more button.

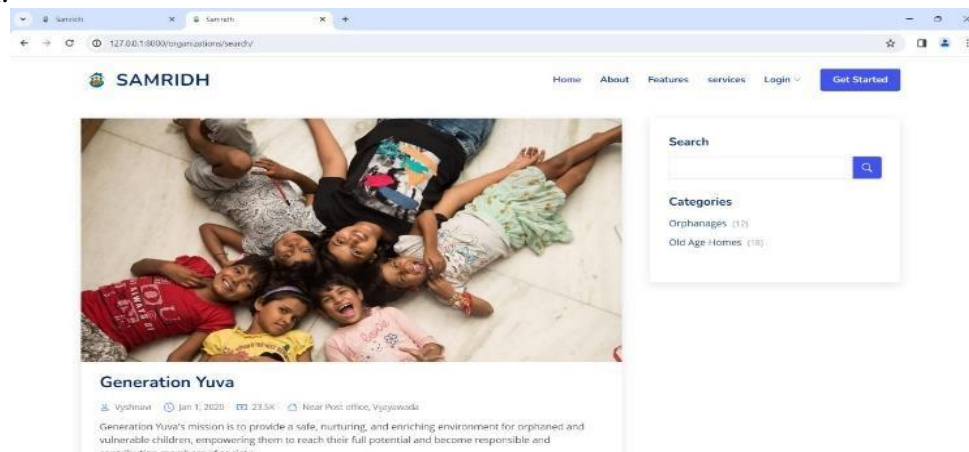


Figure 6: Page to search for the organization to contribute.

From this page, users can search for both old-age homes and orphanages. Additionally, users have the ability to donate their contributions.

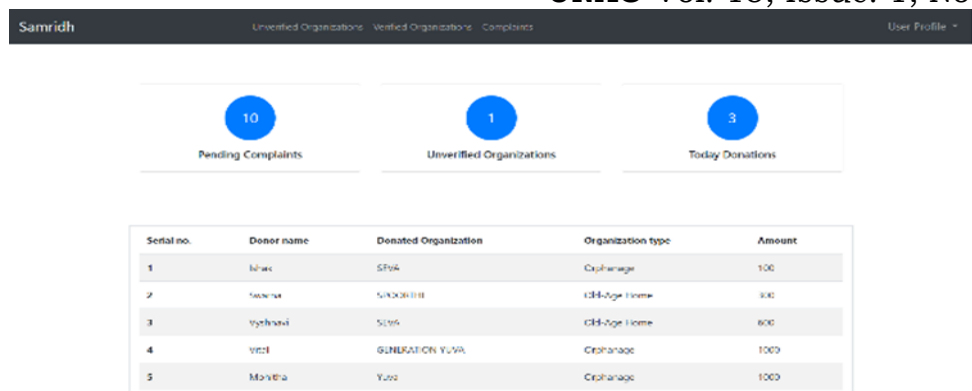


Figure 7: Page where unverified, verified and complaints are managed by administrator. After successful authentication, administrators can access a dedicated page where they can view information about unverified organizations, pending complaints, and donations.

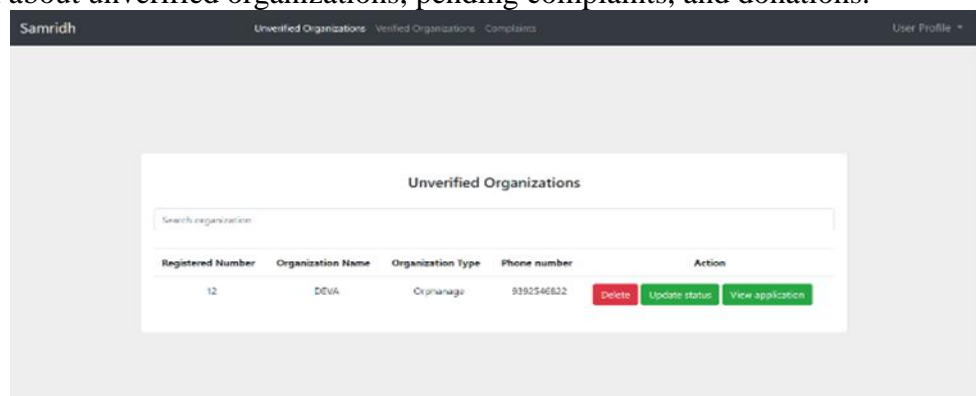


Figure 8: Unverified organization page

Admins have the ability to view, update the status, and delete applications as needed.

7. CONCLUSION

In essence, the development of this project for old-age homes and orphanages not only amplifies the visibility of these vital organizations but also streamlines the process of user engagement and support. By embracing digital transactions and providing detailed information about the activities of these organizations, this project serves as a beacon of hope and opportunity for those in need. As we navigate a fast-paced world where time is of the essence, the reliance on digital transactions underscores the importance of efficiency and accessibility in contributing to the welfare of these organizations. Through this project, we have not only highlighted the plight of organizations in need but have also empowered users to make a tangible difference in their lives. By storing all transactions digitally, we have minimized the burden of manual record-keeping, allowing these organizations to focus on their core mission of serving the community. In conclusion, this project stands as a testament to the power of technology to drive positive change and foster a more inclusive and compassionate society.

8. FUTURE SCOPE

Further features such as posting images of activities which enables the organizations to showcase their activities through images fosters transparency and engagement, allowing users to gain insight into their work and impact. Moreover, incorporating e-commerce functionality provides a platform for organizations to sell products made by their beneficiaries, creating opportunities for sustainable revenue generation and supporting their missions.

REFERENCES:

1. Django Software Foundation. (2022). Django Documentation. Available from: <https://docs.djangoproject.com/en/5.0/>.
2. Jinja Contributors. (2022). Jinja Documentation. Available from: <https://jinja.palletsprojects.com/en/3.0.x/>.
3. Bootstrap Contributors. (2022). Bootstrap Documentation. Available from: <https://getbootstrap.com/docs/5.1/getting-started/introduction/>

4. Anheier, H. K., & Leat, D. (2008). Creative philanthropy. *The Bridge*, 28(4), 25-31.
5. Bekkers, R., & Wiepking, P. (2011). A literature review of empirical studies of philanthropy: Eight mechanisms that drive charitable giving. *Nonprofit and Voluntary Sector Quarterly*, 40(5), 924-973.
6. Manning, R. (2019). Challenges facing non-profit organizations. *Nonprofit Policy Forum*, 10(4), 1-22.
7. Smith, S. R., & McLeod, C. S. (2019). The philanthropic landscape: A critical review of definitions, interpretations, and implications. *Nonprofit and Voluntary Sector Quarterly*, 48(1), 42-64.
8. United Nations. (2019). *World Population Prospects 2019: Highlights*. Retrieved from https://population.un.org/wpp/Publications/WPP2019_Highlights.pdf
9. Desai, R. "Challenges Faced by Orphanages in India." *International Journal of Scientific and Research Publications*, vol. 5, no. 12, 2015, pp. 380-384.
10. Min, J. W., and E. L. Kim. "Challenges and Policy Recommendations for the Elderly in South Korea." *Journal of Aging and Social Policy*, vol. 27, no. 2, 2015, pp. 115-131.
11. Smith, J. "A Review of Online Donation Platforms for Charitable Organizations." *Journal of Nonprofit Education and Leadership*, vol. 8, no. 3, 2018, pp. 226-240.
12. Wu, M. "Digital Solutions for Nonprofit Organizations: A Review." *International Journal of Nonprofit and Voluntary Sector Marketing*, vol. 21, no. 4, 2016, pp. 254-270.