

CHAPTER 1

INTRODUCTION

1.1 DOMAIN INTRODUCTION

ORPHACONNECT

In today's interconnected world, social computing stands at the forefront of leveraging technology to address societal challenges and foster community well-being. OrphaConnect emerges within this domain as a comprehensive solution aimed at revolutionizing the way charitable donations are made, particularly in the context of supporting orphanages and care homes.

Social computing represents the fusion of social behaviour and computational systems, harnessing the power of digital platforms to facilitate meaningful interactions and collaboration among individuals and organizations. It embodies the ethos of collective action and community engagement, driving positive change in various spheres of society.

Charity serves as a cornerstone of social welfare, offering vital support to marginalized communities and individuals in need. Within this framework, OrphaConnect seeks to amplify the impact of charitable initiatives by providing a dynamic platform for streamlined donation processes, ensuring that resources reach those who need them most effectively.

Orphanages and care homes play a crucial role in providing shelter, care, and support to vulnerable children and individuals. However, they often face challenges in sourcing essential supplies and resources to meet

the diverse needs of their beneficiaries. OrphaConnect aims to bridge this gap by offering a centralized platform where donors can contribute a wide range of necessities, from food and funds to essential supplies, thereby empowering orphanages and care homes to better serve their communities.

Food wastage poses a significant environmental and social challenge, exacerbating issues of hunger and food insecurity. OrphaConnect tackles this problem by facilitating the donation of surplus food from various sources, such as events, parties, and restaurants, to nearby orphanages and care homes. Through real-time notifications and seamless coordination, the platform ensures that excess food is redirected to those in need, minimizing wastage and maximizing impact.

OrphaConnect harnesses the latest advancements in web-based technologies to create an intuitive and user-friendly platform for donors and beneficiaries alike. By leveraging features such as authentication mechanisms, donor rewards systems, and fraud prevention algorithms, the platform ensures the integrity and security of the donation process, fostering trust and transparency within the community.

OrphaConnect represents a pioneering endeavour in the realm of social computing, harnessing the power of technology to drive positive social change and uplift the lives of vulnerable individuals and communities. With its holistic approach to charity and innovative features, the platform seeks to inspire a culture of giving and compassion, paving the way for a brighter and more inclusive future for all.

COMPONENTS OF ORPHACONNECT:

The OrphaConnect system comprises several integral components to facilitate efficient donation processes and support orphanages and care homes effectively:

1. User Management System:

- This component manages user registration, authentication, and profile management functionalities.
- Users, including donors and beneficiaries, can create accounts, log in securely, and update their profiles with relevant information.

2. Donation Management System:

- The core component responsible for facilitating donations from users to orphanages and care homes.
- Allows donors to post donation offers, specify donation types (food, funds, supplies), location, quantity, and availability duration.
- Enables beneficiaries to browse available donations and accept/reject donation requests.

3. Real-time Notification System:

- Ensures timely communication between donors and beneficiaries by sending real-time notifications.
- Notifies donors when their donation offers are accepted and alerts beneficiaries of available donations matching their needs.

4. Geolocation and Mapping Integration:

- Integrates geolocation and mapping functionality to identify nearby orphanages and care homes.
- Allows donors to view a map displaying the locations of registered beneficiaries, aiding in donation decision-making.

5. Authentication and Authorization System:

- Implements robust authentication and authorization mechanisms to ensure the security of the donation process.
- Only authenticated users can access the system, with authorization controls based on roles and permissions.

6. Donor Rewards and Recognition System:

- Encourages and rewards donor participation through a rewards and recognition system.
- Donors earn points or levels based on their donation activities, leading to incentives such as certificates of appreciation.

7. Feedback and Improvement System:

- Collects user feedback to improve platform functionality and user experience continually.
- Allows users to submit feedback on donation experiences, interface usability, and suggestions for enhancements.

8. Fraud Prevention and Security Measures:

- Implements algorithms and protocols to prevent fraudulent activities and ensure donation process integrity.
- Includes activity monitoring, verification procedures, and encryption of sensitive data.

1.2 PROBLEM DEFINITION

The existing system for managing food charity operations presents a myriad of challenges that hinder its effectiveness and efficiency. These challenges encompass various facets, ranging from cumbersome processes and lack of automation to difficulties in coordinating donations and beneficiary registration.

One of the primary issues with the current system lies in its manual and disjointed nature, which often leads to inefficiencies and delays in the donation process. Donors encounter hurdles in navigating the donation process, while beneficiaries face challenges in accessing and registering for essential provisions. This disjointedness not only impedes the flow of donations but also hampers the ability of food charity organizations to effectively serve their communities.

Moreover, the lack of a centralized platform for managing donations exacerbates the problem, resulting in redundant efforts, miscommunication, and inefficiencies. Donors struggle to find suitable channels for donating excess food, while beneficiaries face barriers in accessing the provisions they desperately need. This fragmented approach not only wastes valuable resources but also undermines the impact of charitable efforts on alleviating hunger and food insecurity.

Additionally, the absence of robust security measures poses a significant risk to the integrity of the donation process. Without adequate safeguards in place, the system is vulnerable to fraudulent activities and data breaches, compromising the confidentiality and trustworthiness of sensitive information.

Furthermore, the current system fails to leverage technological advancements to optimize donation processes and enhance user experience. In an era dominated by digital innovation, the reliance on manual and outdated methods stifles progress and limits the potential for transformative change within the food charity sector.

In light of these challenges, there is an urgent need for a comprehensive and integrated solution that addresses the inefficiencies inherent in the current system. This solution must streamline the donation

process, enhance transparency and accountability, and leverage technology to maximize the impact of charitable efforts.

The proposed solution, OrphaConnect, aims to tackle these challenges head-on by developing a unified and automated operations management system for food charities. By harnessing the power of technology and innovation, OrphaConnect seeks to revolutionize the way donations are made, ensuring that resources reach those in need swiftly, securely, and efficiently. Through its holistic approach and user-centric design, OrphaConnect endeavors to empower donors, beneficiaries, and food charity organizations alike, fostering a culture of collaboration, compassion, and social responsibility within the community.

1.3 PROJECT DESCRIPTION

The existing system for managing food charity operations reveals significant limitations and inefficiencies, as highlighted within the provided document. These challenges encompass cumbersome processes, a lack of automation, and difficulties in coordinating donations and beneficiary registration. In response to these pressing issues, the proposed solution, OrphaConnect, emerges as a comprehensive and innovative approach to revolutionize food charity management.

OrphaConnect is conceptualized to streamline the entire donation process, commencing from the initial food donation by generous contributors, to the meticulous management of operations within food bank organizations, culminating in the seamless distribution of provisions to registered beneficiaries. Central to the functionality of OrphaConnect are several pivotal components, meticulously designed to interconnect and optimize various facets of the donation ecosystem.

At its core, OrphaConnect boasts a robust user management system, facilitating seamless registration, authentication, and profile management functionalities. This component ensures that all users, ranging from donors to beneficiaries, can effortlessly engage with the platform, fostering inclusivity and accessibility. Donors wield the power to post donation offers, specifying intricate details such as food type, quantity, location, and availability duration. Meanwhile, beneficiaries are empowered to register their pertinent information within the system, laying the foundation for targeted and efficient distribution efforts.

Supervisors play a pivotal role within the OrphaConnect ecosystem, wielding authority over critical processes such as viewing and accepting food collection requests and beneficiary registrations. Their oversight ensures the smooth flow of donations and the effective management of operations within food charity organizations. Additionally, the system features an intricate assignment mechanism, wherein requests are allocated to designated team leaders based on geographical proximity. These team leaders assume responsibility for executing essential tasks, including the completion of necessary forms and the meticulous oversight of food distribution processes.

Furthermore, OrphaConnect prioritizes the implementation of robust fraud prevention and security measures to safeguard the integrity of the donation process. Advanced authentication and authorization mechanisms, coupled with meticulous activity monitoring and verification procedures, fortify the system against fraudulent activities and data breaches, ensuring the utmost confidentiality and trustworthiness.

The benefits of OrphaConnect extend far beyond the realm of operational efficiency, encompassing broader societal and environmental implications. By facilitating the redistribution of surplus food to registered

beneficiaries, the platform tackles the pressing issue of food waste, addressing both social and environmental concerns in tandem. Moreover, OrphaConnect serves as a beacon of transparency, accountability, and trust within the philanthropic community, fostering a culture of compassion and collaboration among stakeholders.

In summation, OrphaConnect stands as a beacon of innovation within the realm of food charity management, offering a holistic and transformative solution to address the multifaceted challenges faced by food charities worldwide. Through its seamless integration of technological prowess and humanitarian principles, OrphaConnect heralds a new era of efficiency, inclusivity, and impact within the realm of philanthropy.

CHAPTER 2

LITERATURE SURVEY

2.1 Donation Management System (2023) by D.I.De Silva, W.A.C Pabasara, S.A.N Wimalasooriya, H.M.C.D Samaraweera, W.S.D Thenabandu, B.A.D.K.M Balachandra, M.G.R Pasan.

The abstract outlines the fundamental premise of the project, emphasizing the significance of addressing disparities in access to quality food within society. It highlights the roles of donors and beneficiaries and underscores the importance of a centralized and trustworthy platform to facilitate secure interactions between these parties. The research methodology involves conducting surveys to gather data and analyze the needs of government schools in Sri Lanka at a provincial level. The ultimate goal is to develop a robust Donation Management System that effectively bridges the gap between donors and beneficiaries, ensuring efficient and secure aid distribution.

2.2 SeVa: A Food Donation App for Smart Living (2021) by Christina Varghese, Drashti Pathak, and Aparna S. Varde

This project introduces SeVa, a mobile application designed to address the critical issue of minimizing food waste during crises such as the COVID-19 pandemic. By repurposing surplus food through the app, SeVa aims to simultaneously alleviate hunger and reduce food waste. The project aligns with the United Nations Sustainable Development Goals (SDGs) and leverages Artificial Intelligence (AI) for Smart Living in Smart Cities. SeVa integrates Internet of Things (IoT) and ubiquitous computing technologies, offering contributions to healthcare and environmental sustainability.

Development principles encompass AI and Human-Computer Interaction (HCI) methodologies, with user surveys conducted to evaluate usability. The project also identifies avenues for potential future enhancements.

2.3 Intelligent Transaction System for Fraud Detection using Deep Learning Networks (2021) by J Fenila Naomi, Roshan Jeniel R, Sakthi Eswaran K, Sanjeev Kumar N M.

This paper proposes a deep representation learning model for online transaction fraud detection, which aims to improve the separability and discrimination of features by combining distance and angle loss functions. The model uses a BiLSTM MaxPooling-BiGRU architecture to extract deep features from transaction data and classify them as genuine or fraudulent. The paper evaluates the model on the IEEE-CIS Fraud Detection dataset and compares it with existing methods. The results show that the proposed model achieves better performance and stability than the state-of-the-art methods.

2.4 FoodX, a System to Reduce Food Waste (2020) by Shinta Oktaviana R, Diana Ambarwati Febriani, Intan Yoshana, Lalu Payanta.

The research addresses the pressing issue of food waste in Indonesia, the second-largest producer globally. Existing manual processes hinder effective distribution of excess food from donors to communities in need. The study introduces the FoodX system, utilizing prototype methodology for faster user feedback. Testing involving volunteers and communities confirms the system's efficacy in catering to the needs of diverse food communities.

2.5 A New Secure One-Time Password Algorithm for Mobile Applications (2020) by Mohamed.H.S.AbouSteit, Dr. Ashraf Farouk Tammam, and Dr. AbdelMoneim Wahdan.

This page presents a paper that proposes a new one-time password (OTP) framework that achieves the confidentiality of exchanging the OTP by using a combination of AES 256 bit, RSA, SHA 512. The paper also discusses the motivation, the proposed system, the performance analysis, the future works, and the conclusions of the research. The paper claims that the proposed model is resilient to different types of attacks and provides end-to-end encryption for the OTP delivery. The paper also compares the proposed model with other existing models and shows its advantages. The paper was published in the 2020 Fourth World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4).

2.6 Task Recommendation in Reward-Based Crowdsourcing Systems (2017) by Ayswarya R Kurup, G P Sajeev.

This research explores task recommendation in reward-based crowdsourcing, where small tasks are outsourced to a crowd for solutions in exchange for monetary rewards. Implicit and explicit features of worker-reward and worker-task attributes are leveraged to recommend tasks to workers. Two models, based on worker-reward features and worker-task features, are introduced. The study aims to exploit interactions between tasks and workers, utilizing real-world datasets for evaluation. The proposed approach is compared with existing techniques, evaluating its effectiveness in improving task recommendations within reward-based crowdsourcing platforms.

2.7 Learning and Modelling User Interests using User Feedback: a Novel Approach (2015) by Tarek Alloui, Imane Boussebough, and Allaoua Chaoui.

This paper presents a novel approach for building user interests for personalized information retrieval. The approach relies on explicit user feedback on the retrieved results to learn the user information needs and construct two sets of keywords that represent the user interests. The paper also shows the experimental results of the approach and discusses its effectiveness.

2.8 Development of Web Annotation Technique for Search Result Records Using Web Database (2015) by Sonali T. Kadam and Sanchika Bajpai.

The paper proposes a method for annotating web pages that contain search results from web databases. The method uses ontology-assisted data extraction, multi-data alignment, and query-based annotation to assign meaningful labels to the data units in the search result records. The paper also describes an automatic wrapper generation technique that can be used to annotate new result pages from the same web database. The paper claims that the proposed method is efficient and effective for web annotation.

2.9 Incentive Mechanism and Protocol Design for Crowdsourcing Systems (2014) by Hong Xie, John C.S. Lui, Joe Wenjie Jiang, Wei Chen.

This paper proposes novel incentive mechanisms and a protocol design for crowdsourcing systems, aiming to enhance user participation and

solution quality. Through game-theoretic analysis, it explores optimal rewards and worker thresholds, mitigates novice free-riding risks, and introduces practical algorithms for task assignment and rating. The findings contribute to understanding incentive mechanisms in crowdsourcing, offering both theoretical insights and practical solutions for system improvement.

2.10 Design and Implementation of Tourism Information System Based on Google Maps API (2014) by Yimeng Wu, Zhixue Liang, Liming Liu.

This paper proposes a tourism information system using Google Maps with Web GIS to provide accurate information for self-navigation tourists. The system is based on J2EE platform and uses Struts2 framework, Google Maps API, Ajax, JSON, and other technologies to implement an open travel information platform. The system allows tourists to access classified tourism information, mark and discuss places they have travelled, and provide feedback. The paper analyses the system's architecture, database design, and key technologies, concluding that the system effectively resolves the defects of information search in traditional tourism websites.

CHAPTER 3

SYSTEM ANALYSIS

3.1 EXISTING SYSTEM

The existing food charity operations management system addresses the global concern of food waste by automating charity operations and enhancing efficiency in food distribution. The system serves as a centralized platform where charitable organizations collect food donations from donors with surplus quantities and redistribute them to needy individuals or communities. Leveraging web-based technology, the system streamlines processes starting from food donation by donors to the management of operations within food bank organizations and the subsequent redistribution of food to registered beneficiaries.

This system significantly improves the efficiency of food charity operations by providing seamless coordination between various entities involved, including food charity organizations, donors, and needy individuals. By automating processes and reducing manual intervention, the system ensures timely and effective distribution of food resources, thereby bridging the food access gap and maintaining a high level of service quality. The use of technology in food charity operations management not only minimizes food waste but also enhances transparency, accountability, and accessibility in charitable endeavours.

3.1.1 DRAWBACKS OF EXISTING SYSTEM

While the existing food charity operations management system offers significant benefits, it also exhibits several drawbacks that hinder its effectiveness:

- **Limited scalability:** The system may struggle to accommodate a growing volume of donations and beneficiaries, potentially leading to delays and inefficiencies in food distribution processes.
- **Lack of personalization:** The system may not provide personalized recommendations or tailored assistance to donors and beneficiaries, resulting in suboptimal matching of food donations to the specific needs of recipients.
- **Dependency on internet connectivity:** Given its web-based nature, the system may pose challenges for users with limited or unreliable internet access, particularly in rural or underserved areas.
- **Complexity of user interface:** The user interface of the system may be overly complex or unintuitive, making it difficult for users to navigate and utilize its features effectively.
- **Security vulnerabilities:** The system may be susceptible to security breaches or data leaks, particularly if adequate measures are not in place to safeguard sensitive donor and beneficiary information.
- **Lack of integration with external platforms:** The system may operate in isolation, without seamless integration with other relevant platforms or databases, potentially limiting its interoperability and effectiveness in coordinating food charity efforts.



Fig 1.1 View of Existing System

3.2 PROPOSED SYSTEM

The proposed OrphaConnect system is envisioned as a comprehensive web application aimed at revolutionizing the process of donating and distributing resources to orphanages and care homes. At its core, OrphaConnect will serve as a user-friendly platform where donors can effortlessly post details about available resources, ranging from food supplies to monetary contributions. This interface will facilitate seamless matching between donations and the specific needs of orphanages and care homes, ensuring efficient allocation of resources. Additionally, the system will feature a robust beneficiary registration system, allowing orphanages and care homes to provide detailed information about their requirements and preferences. This registration process will enable charity organizations to prioritize and allocate resources based on the individual needs of each beneficiary.

Furthermore, OrphaConnect will offer real-time tracking and reporting functionalities, providing donors, charity organizations, and beneficiaries with transparent insights into the status of donations and distributions. This transparency will enhance accountability and trust among stakeholders, fostering a collaborative and supportive environment for charitable endeavors. To ensure accessibility for all users, the system will prioritize mobile compatibility, allowing individuals to access and utilize its features conveniently from any device. Moreover, OrphaConnect will be designed for seamless integration with external platforms and databases, facilitating collaboration and data sharing among organizations involved in charity efforts.

Overall, the proposed OrphaConnect system aims to streamline the donation process for orphanages and care homes, fostering greater efficiency, transparency, and impact in charitable endeavors.

3.2.1 ADVANTAGES OF PROPOSED SYSTEM

The OrphaConnect system offers several key advantages:

- **Automated Efficiency:** OrphaConnect streamlines charity operations seamlessly, providing a user-friendly experience for donors, beneficiaries, and charity organizations alike.
- **Reward-Based Approach:** The system employs a reward-based approach to incentivize contributions, offering certificates, coupons, or product offers as motivating rewards for donors. This encourages active participation and enhances the impact of charitable efforts.
- **Holistic Charity Initiatives:** OrphaConnect supports a comprehensive range of charitable initiatives, encompassing food donations, fund contributions, and other essential resources. This holistic approach ensures a broader impact on the well-being of orphanages and care homes.
- **Enhanced Security Measures:** OrphaConnect prioritizes user trust and data protection by implementing robust security measures. These safeguards safeguard sensitive information and foster confidence among users in the system's reliability.
- **Technological Innovation:** Leveraging advanced algorithms, OrphaConnect ensures adaptability and fraud prevention within the platform. This technological innovation enhances the system's efficiency and reliability, contributing to its overall effectiveness in facilitating charitable contributions.

CHAPTER 4

SYSTEM DESIGN

4.1 SYSTEM ARCHITECTURE

A system architecture is a representation of a system in which there is a mapping of functionality onto hardware and software components, a mapping of the software architecture onto the hardware architecture, and human interaction with these components.

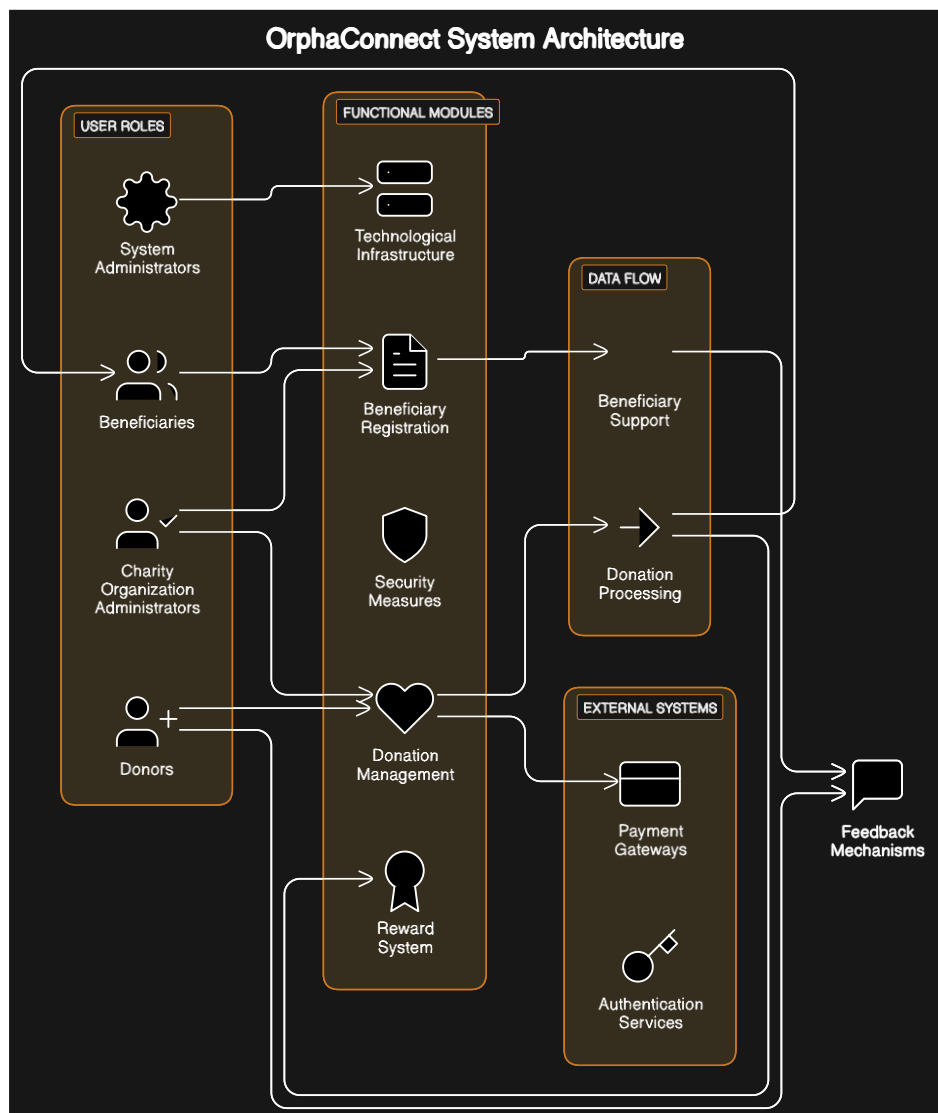


Fig 1.2 OrphaConnect System Architecture

4.2 UML DIAGRAMS

UML stands for Unified Modelling Language. UML is a standardized general-purpose modelling language in the field of object-oriented software engineering. The standard is managed, and was created by, the Object Management Group. The goal is for UML to become a common language for creating models of object-oriented computer software. In its current form UML is comprised of two major components: a Meta-model and a notation. In the future, some form of method or process may also be added to; or associated with, UML.

The Unified Modelling Language is a standard language for specifying, Visualization, Constructing and documenting the artifacts of software system, as well as for business modelling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modelling of large and complex systems. The UML is a very important part of developing objects-oriented software and the software development process. The UML uses mostly graphical notations to express the design of software projects.

GOALS:

The Primary goals in the design of the UML are as follows:

- Provide users a ready-to-use, expressive visual modelling Language so that they can develop and exchange meaningful models.
- Provide extendibility and specialization mechanisms to extend the core concepts.
- Be independent of particular programming languages and development process. Provide a formal basis for understanding the modelling language.

- Encourage the growth of OO tools market.
- Support higher level development concepts such as collaborations, frameworks, patterns and components.
- Integrate best practices.

SEQUENCE DIAGRAM

OrphaConnect System Interactions

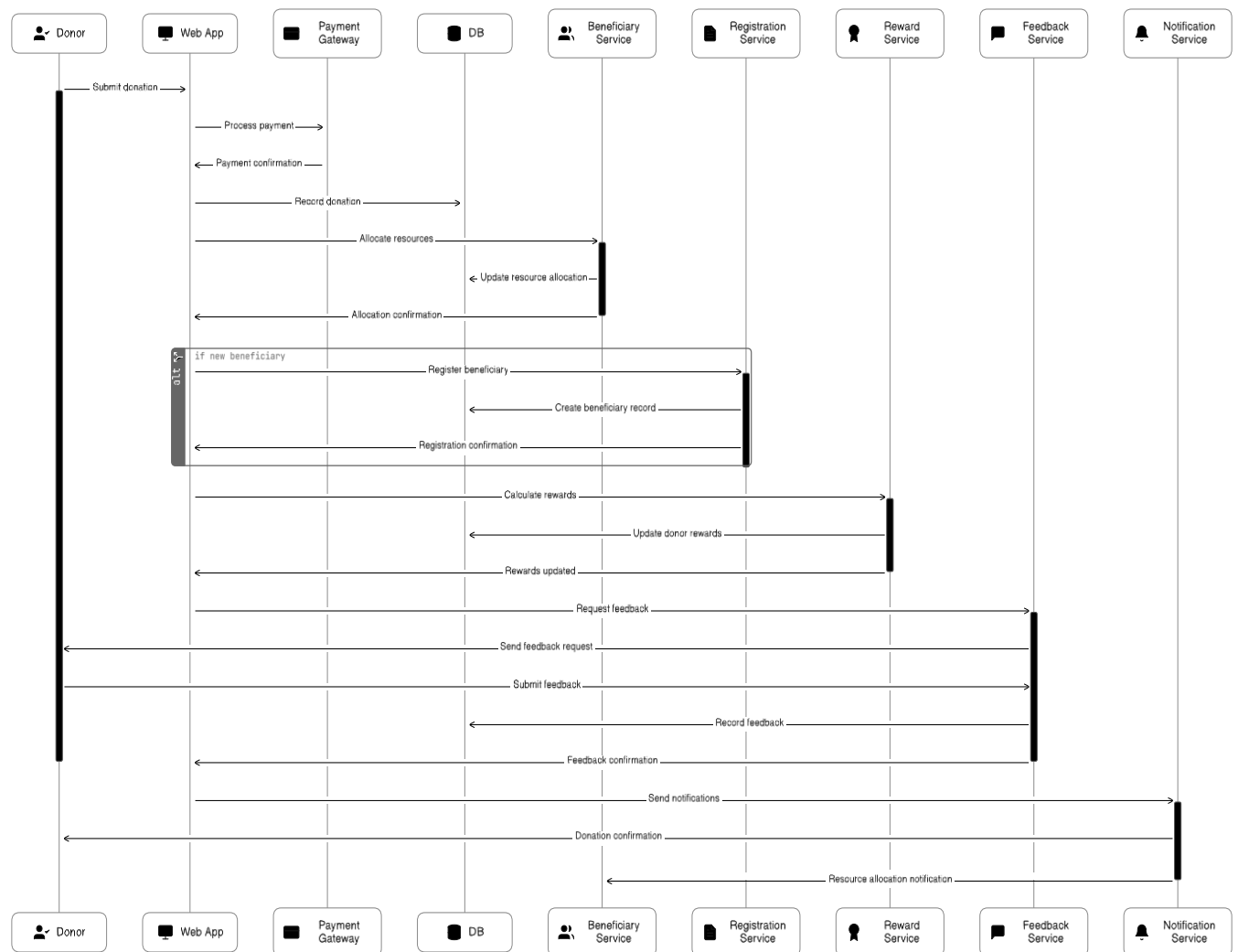


Fig 1.3 Sequence Diagram

CLASS DIAGRAM

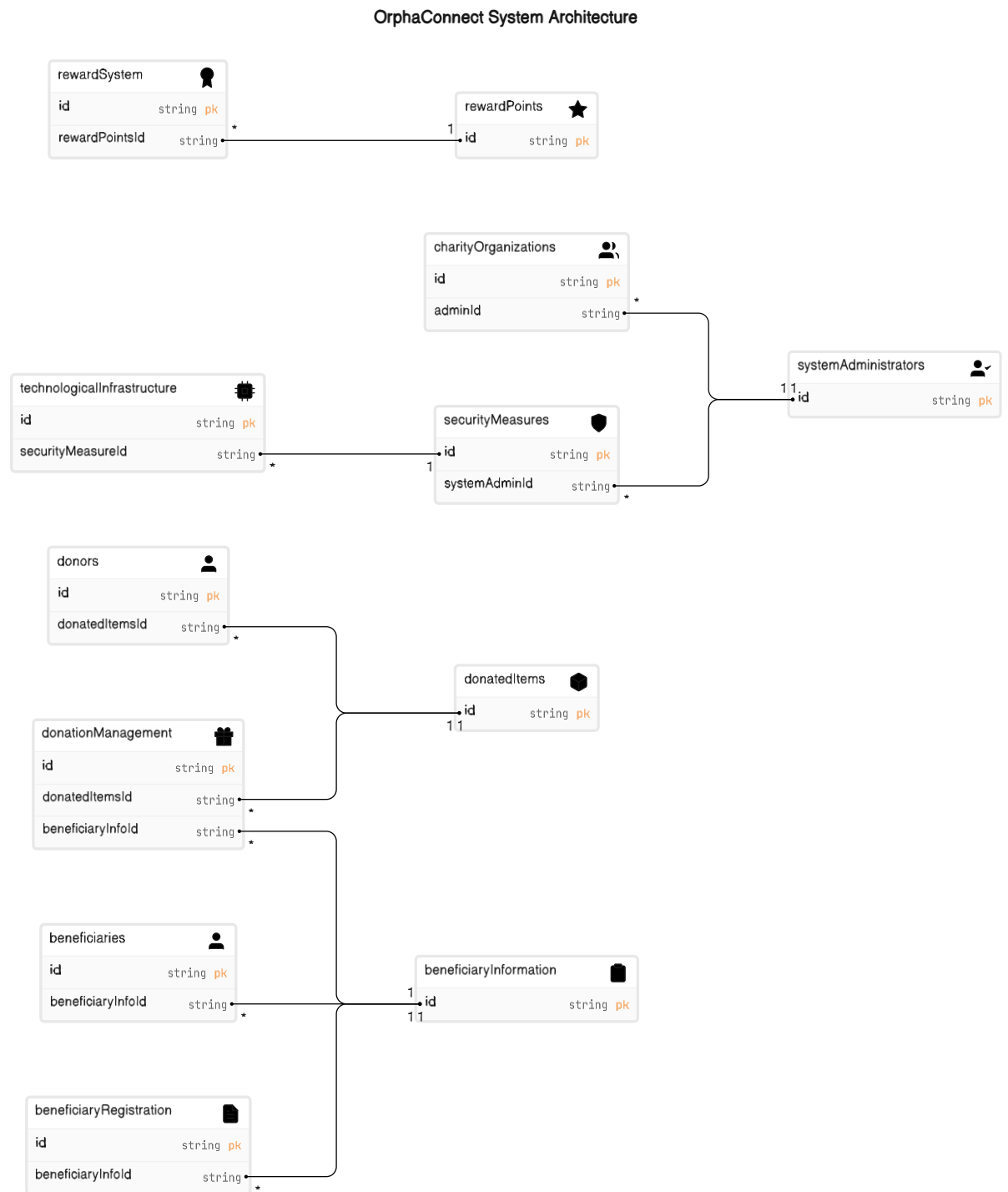


Fig 1.4 Class Diagram

FLOW DIAGRAM

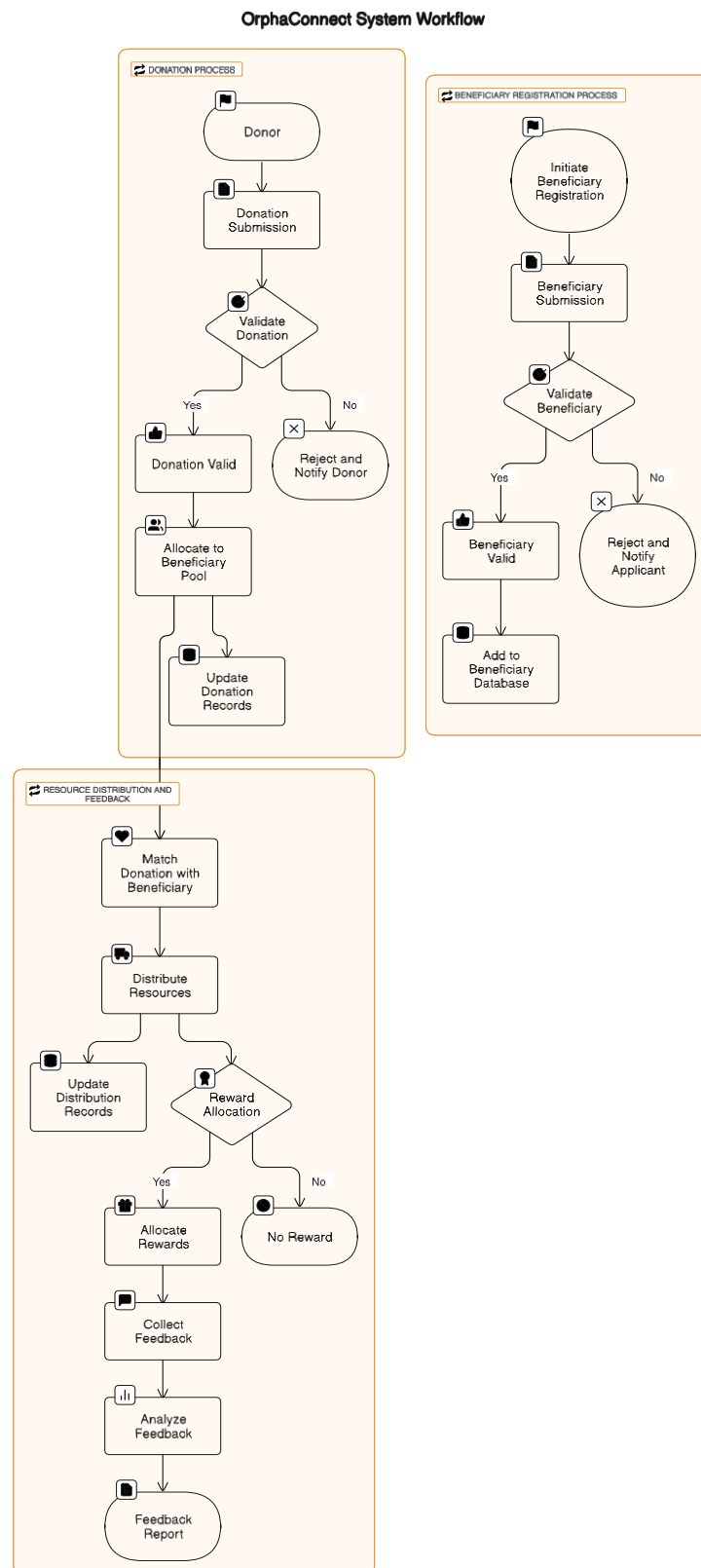


Fig 1.5 Flow Diagram

CHAPTER 5

SYSTEM IMPLEMENTATION

5.1 SOFTWARE REQUIREMENTS

5.1.1 JAVASCRIPT LANGUAGE

JavaScript, initially named LiveScript, was developed by Brendan Eich at Netscape in 1995. It is a high-level, interpreted programming language primarily used for client-side web development. JavaScript allows developers to create dynamic and interactive web pages by manipulating the content and behavior of HTML and CSS.

JAVASCRIPT PROGRAMMING CHARACTERISTICS

- JavaScript is a versatile scripting language that supports both object-oriented and functional programming paradigms.
- It is primarily known for its use in web development to add interactivity and functionality to websites.
- JavaScript code is executed on the client-side by web browsers, enabling dynamic content manipulation without requiring server interaction.
- It is platform-independent and can run on any device with a compatible web browser.
- JavaScript has a rich ecosystem of libraries and frameworks, such as React.js, AngularJS, and Node.js, which extend its capabilities for various purposes, including frontend and backend development.
- The language has a C-like syntax and shares many features with other programming languages like Java and C++.

- JavaScript is event-driven, allowing developers to define actions that occur in response to user interactions or system events.
- It supports asynchronous programming patterns through features like Promises and `async/await`, facilitating efficient handling of tasks that involve waiting for external resources.
- JavaScript's standardization through the ECMAScript specification ensures consistency and compatibility across different environments and implementations.
- It has a vast community of developers contributing to open-source projects, sharing knowledge, and providing support through forums and online communities.

5.1.2 HTML AND CSS

HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) are foundational technologies for web development, providing the structure and styling for web pages.

HTML is a markup language used to create the structure of web pages by defining elements such as headings, paragraphs, images, links, and forms. It consists of a set of tags wrapped around content to define its meaning and structure. HTML documents are interpreted by web browsers to render web pages for users.

CSS is a style sheet language used to describe the presentation of HTML elements, including layout, colors, fonts, and other visual aspects. It allows developers to control the appearance of web pages and ensure consistency across different devices and screen sizes. CSS works by selecting HTML elements and applying styles to them using selectors and declarations.

5.1.3 VISUAL STUDIO CODE

Visual Studio Code (VS Code) is a popular free and open-source code editor developed by Microsoft. It is available for Windows, macOS, and Linux operating systems. The editor offers a wide range of features that help developers to write and debug code efficiently. It supports multiple programming languages including C++, C#, Python, JavaScript, and many others. The editor has a simple and intuitive interface which makes it easy for developers to navigate and use.

One of the most useful features of VS Code is its built-in debugger. Developers can easily set breakpoints and inspect variables while debugging their code. The editor also supports version control systems like Git, which allows developers to easily manage their code changes and collaborate with others.

VS Code has a rich extension marketplace that offers thousands of extensions for additional functionalities such as syntax highlighting, code snippets, and code formatting. These extensions can be easily installed and configured within the editor.

The editor also offers advanced features like IntelliSense, which provides auto-completion suggestions for functions, variables, and other programming constructs, as well as real-time error highlighting and code formatting. It also supports integrated terminals, allowing developers to run commands within the editor without switching to a separate terminal window.

Another advantage of VS Code is its strong community support. As an open-source project, VS Code has a large and active community of

developers who contribute to its development and provide support through forums, blogs, and other online resources.

In this proposed e-district WhatsApp bot project, Visual Studio Code can be used as the code editor to develop and test the Python scripts that interact with the Twilio API. The rich features of the editor can help developers to efficiently write and debug their code, while the extension marketplace can provide additional tools and functionalities to enhance the development process. The community support can also be leveraged to resolve any issues and get help from experienced developers.

5.1.4 MONGODB

MongoDB is a widely used NoSQL database known for its flexibility, scalability, and performance. It stores data in flexible, JSON-like documents, making it easy to work with dynamic and evolving data structures. MongoDB's architecture includes distributed instances of mongod servers and mongos routers, enabling horizontal scaling through sharding and ensuring high availability through replica sets. Its rich query language, indexing capabilities, and aggregation framework facilitate efficient data retrieval and manipulation, while features like GridFS allow storage and retrieval of large files within the database. MongoDB finds applications in various domains such as content management systems, real-time analytics, e-commerce platforms, mobile app backends, and IoT data management. Despite its strengths, MongoDB has limitations, including less efficient join operations compared to relational databases and transaction limitations across multiple documents or shards. However, its active community and comprehensive ecosystem, including drivers, tools, and cloud services like

MongoDB Atlas, continue to make it a popular choice for modern application development.

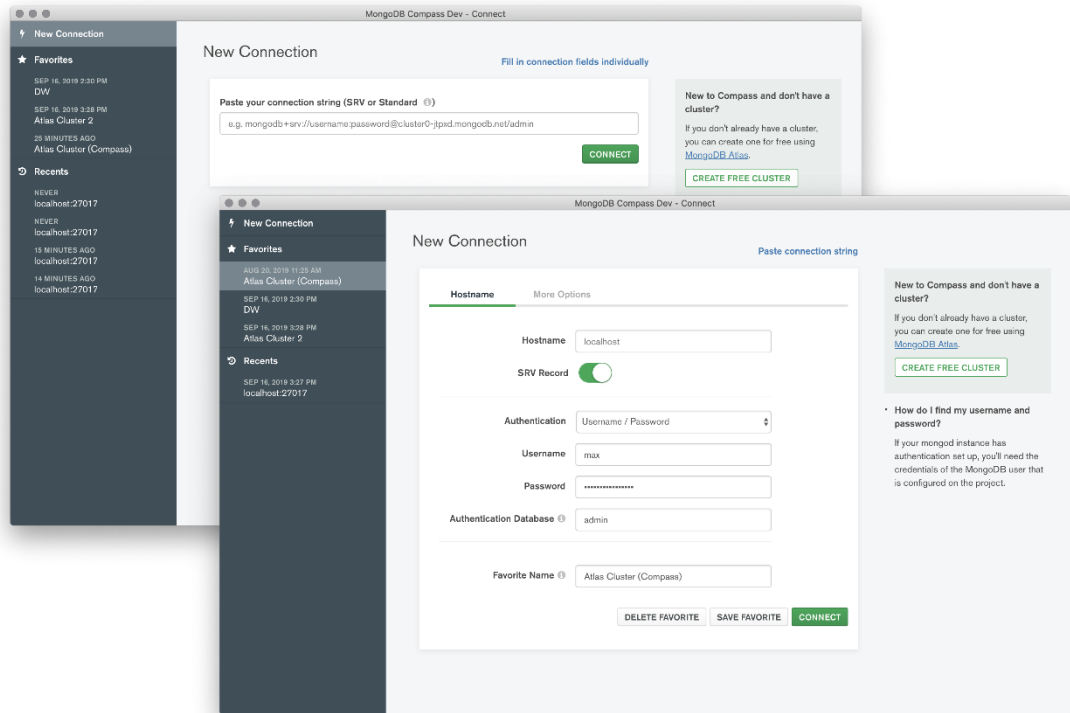


Fig 1.6 MongoDB Compass

5.1.5 ABOUT TWILIO API

Twilio is a cloud communications platform renowned for its APIs and services tailored for building communication applications. With Twilio, developers can seamlessly integrate various communication channels like voice, SMS, chat, video, and email into their applications. Its APIs cover a spectrum of functionalities, including voice calls with features like call recording and IVR systems, SMS services supporting multimedia messaging and two-way messaging, programmable chat for real-time messaging, video capabilities for video calls and conferences, and transactional email support. Twilio's Messaging Services offer a unified interface for managing multiple

channels efficiently. Security features ensure robust authentication and authorization, while analytics tools provide insights into communication activity and performance. Widely adopted across industries, Twilio finds application in customer support, marketing, collaboration, IoT, e-commerce, and more, enabling businesses to enhance engagement and streamline communication workflows effortlessly.

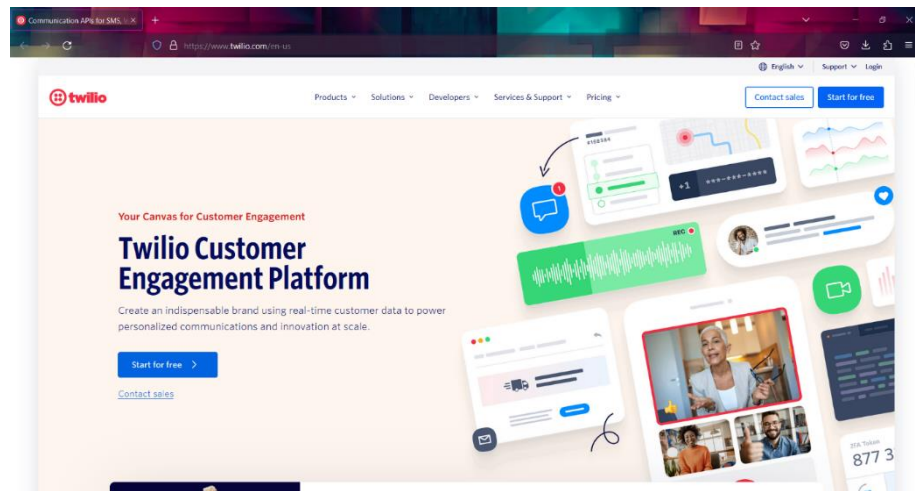


Fig 1.7 Twilio Platform

5.2 LIST OF MODULES

The proposed OrphaConnect system consists of several essential modules to ensure its functionality and effectiveness:

- **Donation Management Module:** This module facilitates the management of donation activities, allowing users to submit donations, track donation history, and manage donation preferences.
- **Beneficiary Management Module:** Responsible for managing beneficiary information, this module enables the registration of orphanages and care homes, tracking their needs, and matching them with relevant donations.

- **Notification Module:** The notification module sends alerts and notifications to users regarding donation opportunities, status updates on donations, and relevant information about orphanages and care homes.
- **Authentication and Security Module:** Ensuring the security and integrity of user data, this module handles user authentication, access control, and implements security measures to prevent unauthorized access and data breaches.
- **Reward System Module:** This module implements the reward system, tracking user contributions, assigning rewards based on donation activity, and managing the distribution of incentives to users.
- **Geolocation Module:** Facilitating location-based services, the geolocation module enables users to locate nearby orphanages and care homes, facilitating the donation process and ensuring efficient resource distribution.
- **Feedback and Analytics Module:** Responsible for gathering user feedback and analyzing system performance, this module collects user reviews, monitors system usage metrics, and provides insights to improve overall user experience and system efficiency.
- **Administrative Dashboard Module:** Providing administrative functionalities, this module offers administrators tools to manage user accounts, monitor system activity, and generate reports on donation activities and system performance.
- **Integration Module:** This module enables integration with external systems or APIs, allowing OrphaConnect to collaborate with other platforms, organizations, or services to enhance its functionality and reach.

CHAPTER 6

RESULT AND CONCLUSION

The OrphaConnect project marks a pivotal effort in addressing the challenges of food wastage and resource distribution in orphanages and care homes. By providing a centralized and user-friendly platform for donors and beneficiaries, OrphaConnect aims to streamline the donation process and foster a culture of giving within communities.

Through innovative features and functionalities, OrphaConnect empowers donors to contribute resources easily, track their donations, and earn rewards for their philanthropic efforts. Simultaneously, beneficiaries gain access to essential resources, receive timely notifications about available donations, and provide feedback to enhance their user experience.

The implementation of OrphaConnect is poised to yield significant benefits for both donors and beneficiaries alike. By offering a transparent and efficient donation ecosystem, the platform encourages community engagement and promotes social responsibility. Moreover, the system's reward-based approach incentivizes sustained participation, ensuring a steady supply of resources to those in need.

Furthermore, OrphaConnect has the potential to alleviate the administrative burden on charitable organizations by automating donation management processes and facilitating equitable resource distribution. This can result in cost savings and operational efficiency, enabling organizations to focus more on their core mission of serving the community effectively.

In conclusion, OrphaConnect represents a significant stride towards building a more compassionate and equitable society, where excess resources

are redirected to those who need them most. Through collaborative efforts and leveraging technological advancements, OrphaConnect aims to make a tangible difference in improving the lives of vulnerable individuals and fostering a sense of solidarity within communities.

CHAPTER 7

FUTURE WORK

In the realm of future enhancements, several avenues present themselves for the refinement and expansion of the proposed project. First and foremost, the development of a dedicated mobile application equipped with a user-friendly interface and intuitive user experience stands as a paramount endeavor. Such an application would not only extend the reach of the project but also streamline accessibility, enabling users to engage with the system seamlessly from their mobile devices.

Additionally, forging strategic partnerships with various corporations or businesses to provide incentives such as coupons and offers could serve to incentivize participation and foster community engagement. Furthermore, prioritizing accessibility features and expanding the product line to cater to the needs of individuals with disabilities or impairments underscores a commitment to inclusivity and equity within the project's scope. Complementing these efforts, the recruitment of volunteers could bolster operational capacity, enabling the project to scale effectively and meet the evolving needs of its user base.

Finally, the integration of AI-driven analytics holds promise for unlocking valuable insights from data, empowering informed decision-making and driving continuous improvement within the project ecosystem. By embracing these future enhancements, the project is poised to evolve into a dynamic and impactful platform that not only addresses the needs of its current stakeholders but also anticipates and adapts to emerging challenges and opportunities in the realm of rare disease management and research.

APPENDICES

Login.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Login</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
      background-color: #f1f1f1;
    }

    main {
      flex-grow: 1;
      display: flex;
      justify-content: center;
      align-items: center;
      min-height: 100vh;
    }

    .log-page {
      display: block;
      max-width: 350px;
    }

    .sign-btn {
      display: inline-flex;
      text-align: center;
      color: #999;
      cursor: pointer;
    }

    .signin-btn, .signup-btn {
      min-width: 155px;
      background-color: white;
      padding: 20px;
      width: 40%;
      border-radius: 0px 0px;
      box-shadow: -2px 0 5px rgba(0, 0, 0, 0.09);
    }

    .login-container {
      min-width: 350px;
      background-color: #fff;
    }
```

```

        border-radius: 0px;
        padding: 20px;
        box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
        width: 40%;
        z-index: 2;
    }

    .login-container h2 {
        text-align: center;
    }

    .login-form {
        margin-top: 20px;
    }

    .form-group {
        margin-bottom: 15px;
    }

    .form-group label {
        display: block;
        font-weight: bold;
        margin-bottom: 15px;
    }

    .form-group input, .form-group textarea {
        min-width: 100%;
        max-width: 100%;
        padding: 10px;
        border: 1px solid #ccc;
        border-radius: 3px;
        box-sizing: border-box;
    }

    .form-group button {
        width: 100%;
        padding: 10px;
        background-color: #4CAF50;
        color: #fff;
        border: none;
        border-radius: 3px;
        cursor: pointer;
    }

    .forgot-password {
        text-align: center;
        margin-top: 10px;
    }

```

```

.forgot-password a {
    color: #999;
    text-decoration: none;
}
#optionsGroup {
    display: none;
}
.optn {
    color: white;
    background-color: #0080ff;
    flex-grow: 1;
    display: flex;
    justify-content: center;
    align-items: center;
    padding: 10px;
    border-radius: 5px;
    margin-bottom: 35px;
    max-width: px;
    cursor: pointer;
    font-size: larger;
}
.opt-msg{
    font-size: larger;
    font-style: italic;
    margin-bottom: 35px;
}
.user-details-form {
    display: none;
    min-width: 350px;
    padding: 20px;
    background-color: #fff;
    border-radius: 5px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
    margin-top: 0px;
}
.benefi-details-form {
    display: none;
    min-width: 350px;
    padding: 20px;
    background-color: #fff;
    border-radius: 5px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
    margin-top: 0px;
}
.return-back {
    cursor: pointer;
    fill: #999;
}

```

```

    }

    </style>
</head>
<body>
    <main>
        <div class="log-page">
            <div class="sign-btn">
                <div class="signin-btn" onclick="showLogin()">Log
In</div>
                <div class="signup-btn" onclick="showSignup()">Sign-
up</div>
            </div>
            <div class="login-container" id="loginContainer">
                <form class="login-form" method="POST"
action="/login.html" id="loginForm">
                    <div class="form-group" id="phoneGroup">
                        <label for="phone">Phone Number:</label>
                        <input type="tel" id="phone" name="phone"
pattern="[0-9]{10}" required>
                    </div>
                    <div class="form-group" id="passwordGroup">
                        <label for="password">Password:</label>
                        <input type="password" id="password"
name="password" required>
                    </div>
                    <div class="form-group" id="loginBtn">
                        <button type="submit">Login</button>
                    </div>
                    <div class="forgot-password" id="forgotPwd">
                        <a href="#">Forgot Password?</a>
                    </div>
                </form>

                <div class="form-group" id="optionsGroup">
                    <p class="opt-msg">Choose Account Type:</p>
                    <div id="options" class="options">
                        <div class="optn" title="Users who volunteer
donating" onclick="donorSignup()">Donor</div>
                        <div class="optn" title="New Account for
Orphanage owners" onclick="benefiSignup()">Beneficiary</div>
                    </div>
                </div>
            </div>
            <div class="user-details-form" id="userDetailsForm">
                <div class="return-back" onclick="showSignup()"> <!--
Change the onclick event to showLogin() -->

```

```

<svg xmlns="http://www.w3.org/2000/svg" height="24"
viewBox="0 960 960 960" width="24">
  <path d="m256-200-56-56 224-224-224-224 56-56 224
224 224-224 56 56-224 224 224 224-56 56-224-224-224 224Z"/>
</svg>
</div>
<h2 align="center">Sign Up</h2>
<form method="POST" action="/signup/donor"
enctype="multipart/form-data">
  <div class="form-group">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name"
pattern="[a-zA-Z]+" required>
  </div>
  <div class="form-group" id="phoneGroup">
    <label for="phone">Phone Number:</label>
    <input type="tel" id="phone" name="phone"
pattern="[0-9]{10}" required>
  </div>
  <div class="form-group">
    <label for="email">Email:</label>
    <input type="email" id="email" name="email"
required>
  </div>
  <div class="form-group">
    <label for="aadhar">Aadhar Card (JPG):</label>
    <input type="file" id="aadhar" name="aadhar"
accept="image/*,.pdf" required>
  </div>
  <div class="form-group">
    <label for="password">Password:</label>
    <input type="password" id="password1"
name="password" required>
  </div>
  <div class="form-group">
    <label for="password">Confirm Password:</label>
    <input type="password" id="password2"
name="password" required>
  </div>
  <div class="form-group">
    <button type="submit">Sign Up</button>
  </div>
</form>
</div>
<div class="benefi-details-form" id="benefiDetailsForm">
  <div class="return-back" onclick="showSignup()"> <!--
Change the onclick event to showLogin() -->

```

```

        <svg xmlns="http://www.w3.org/2000/svg" height="24"
viewBox="0 960 960 960" width="24"><path d="m256-200-56-56 224-224-224-
224 56-56 224 224 224-224 56 56-224 224 224 224-56 56-224-224-224
224Z"/></svg>
    </div>
    <h2 align="center">Sign Up</h2>
    <form method="POST" action="/signup/beneficiary"
enctype="multipart/form-data">
        <div class="form-group">
            <label for="name">Name:</label>
            <input type="text" id="name" name="name"
required>
        </div>
        <div class="form-group" id="phoneGroup">
            <label for="phone">Phone Number:</label>
            <input type="tel" id="phone" name="phone"
pattern="[0-9]{10}" required>
        </div>
        <div class="form-group">
            <label for="email">Email:</label>
            <input type="email" id="email" name="email"
required>
        </div>
        <div class="form-group">
            <label for="certificate">Orphanage Certificate
(JPG):</label>
            <input type="file" id="certificate"
name="certificate" accept="image/jpeg" required>
        </div>
        <div class="form-group">
            <label for="address">Address:</label>
            <textarea id="address" name="address"
required></textarea>
        </div>
        <div class="form-group">
            <label for="password">Password:</label>
            <input type="password" id="password1"
name="password" required>
        </div>
        <div class="form-group">
            <label for="password">Confirm Password:</label>
            <input type="password" id="password2"
name="password" required>
        </div>
        <div class="form-group">
            <button type="submit">Sign Up</button>
        </div>
    </div>

```

```

        </form>
    </div>
</div>
</main>

<script>
    function showLogin() {
        document.getElementById("optionsGroup").style.display =
"none";
        document.getElementById("loginForm").style.display = "block";
    }

    function showSignup() {
        document.querySelector(".sign-btn").style.display = "flex";
        document.getElementById("optionsGroup").style.display =
"block";
        document.getElementById("loginForm").style.display = "none";
        document.getElementById("userDetailsForm").style.display =
"none";
        document.getElementById('benefiDetailsForm').style.display =
"none";
        document.getElementById("loginContainer").style.display =
"block";
    }

    function donorSignup() {
        document.querySelector(".sign-btn").style.display = "none";
        document.getElementById("userDetailsForm").style.display =
"block";
        document.getElementById('benefiDetailsForm').style.display =
"none";
        document.getElementById("loginContainer").style.display =
"none";
    }

    function benefiSignup() {
        document.querySelector(".sign-btn").style.display = "none";
        document.getElementById("userDetailsForm").style.display =
"none";
        document.getElementById('benefiDetailsForm').style.display =
"block";
        document.getElementById("loginContainer").style.display =
"none";
    }

    function validatePasswords() {
        var password1 = document.getElementById("password1").value;
        var password2 = document.getElementById("password2").value;
    }

```

```

        if (password1 !== password2) {
            alert("Passwords do not match");
            return false;
        }
        return true;
    }

    function validatePasswordComplexity() {
        var password = document.getElementById("password1").value;
        var passwordPattern = /^(?=.*\d)(?=.*[a-zA-Z])(?=.*[!@#$%^&*]).{8,}$/;
        if (!passwordPattern.test(password)) {
            alert("Password must contain at least 8 characters with combinations of letters, numbers, and symbols");
            return false;
        }
        return true;
    }

    document.getElementById("password1").addEventListener("blur", validatePasswordComplexity);
    document.getElementById("password2").addEventListener("blur", validatePasswords);
</script>

</body>
</html>

```

geoLoc.html

```

<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Map with Geolocation</title>
    <style>
        #map {
            height: 400px;
            width: 100%;
        }
    </style>
</head>
<body>
    <div id="map"></div>

```



```

<script>
  // Replace 'YOUR_API_KEY' with your actual Google Maps API key
  const apiKey = 'AIzaSyDkaHR7AEGMvaLN26kcF7azLgfPVxnGxd8';
  let map;
  let marker;

  function initMap() {
    map = new google.maps.Map(document.getElementById('map'), {
      center: { lat: 0, lng: 0 }, // Default center (change as
per your preference)
      zoom: 10 // Default zoom level
    });

    // Add event listener to the map to handle clicks
    map.addListener('click', function(event) {
      placeMarker(event.latLng); // Place a marker at the
clicked location
    });
  }

  function placeMarker(location) {
    // Remove existing marker if any
    if (marker && marker.setMap) {
      marker.setMap(null);
    }

    // Place a new marker at the clicked location
    marker = new google.maps.Marker({
      position: location,
      map: map,
      draggable: true // Allow marker to be dragged
    });

    // Display latitude and longitude values
    document.getElementById('latitude').innerText = 'Latitude: '
+ location.lat();
    document.getElementById('longitude').innerText = 'Longitude: '
+ location.lng();

    // Call function to reverse geocode the coordinates
    reverseGeocode(location.lat(), location.lng());
  }

  function reverseGeocode(lat, lng) {
    const geocoder = new google.maps.Geocoder();
    const latLng = new google.maps.LatLng(lat, lng);

```

```

        geocoder.geocode({ 'location': latLng }, function (results,
status) {
            if (status === 'OK') {
                if (results[0]) {
                    const formattedAddress =
results[0].formatted_address;
                    console.log('Formatted Address: ' +
formattedAddress);

                    // Populate form input with the formatted address
                    document.getElementById('addressInput').value =
formattedAddress;

                    // Display formatted address
                    document.getElementById('formattedAddress').inner
Text = 'Formatted Address: ' + formattedAddress;
                } else {
                    console.log('No results found');
                }
            } else {
                console.log('Geocoder failed due to: ' + status);
            }
        });
    }
</script>

<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDkaHR7AEGMvaLN26kc
F7azLgfPVxnGxd8&libraries=places&callback=initMap" async defer></script>

<!-- Display latitude and longitude -->
<div id="latitude"></div>
<div id="longitude"></div>

<!-- Display formatted address -->
<div id="formattedAddress"></div>

<!-- Additional input field for formatted address -->
Formatted Address: <input type="text" id="addressInput" readonly>
</body>
</html>

```

home.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <link rel="stylesheet" href="HeaderFooter.css">
    <link rel="stylesheet" href="profile.css">
  </head>
  <body>
    <div class="header">
      <p class="title">OrphaConnect</p>
      <nav class="menu">
        <a href="#">Home</a>
        <a href="#">About</a>
        <a href="#">Profile</a>
        <a href="#">Logout</a>

      </nav>
      <div class="menu-toggle" onclick="toggleMenu()">≡</div>
    </div>

    <div class="profile-container">
      <div class="profile-header">
        <div class="profile-avatar">
          
          <svg id="svgAvatar" xmlns="http://www.w3.org/2000/svg"
height="90" width="90" viewBox="0 -960 960 960" style="display:none;">
            <path d="M240.924-268.307q51-37.846 111.115-
59.769Q412.154-349.999 480-349.999t127.961 21.923q60.115 21.923 111.115
59.769 37.308-41 59.116-94.923Q800-417.154 800-480q0-133-93.5-226.5T480-
800q-133 0-226.5 93.5T160-480q0 62.846 21.808 116.77 21.808 53.923 59.116
94.923ZM480-450.001q-54.769 0-92.384-37.615T350.001-580q0-54.769 37.615-
92.384T480-709.999q54.769 0 92.384 37.615T609.999-580q0 54.769-37.615
92.384T480-450.001Zm0 350q-79.154 0-148.499-29.77-69.346-29.769-120.654-
81.076-51.307-51.308-81.076-120.654-29.77-69.345-29.77-148.499t29.77-
148.499q29.769-69.346 81.076-120.654 51.308-51.307 120.654-81.076 69.345-
29.77 148.499-29.77t148.499 29.77q69.346 29.769 120.654 81.076 51.307
51.308 81.076 120.654 29.77 69.345 29.77 148.499t-29.77 148.499q-29.769
69.346-81.076 120.654-51.308 51.307-120.654 81.076-69.345 29.77-148.499
29.77Z"/>
          </svg>
        </div>
        <div class="profile-info">
```

```

        <h1>John Doe</h1>
        <p>Level 3 Donor</p>
    </div>
</div>
<div class="profile-progress">
    <div class="progress">
        <div class="progress-bar" style="width: 70%;">70%</div>
    </div>
    <p>Next Level: Donate 5 more to Level 4</p>
</div>
<div class="profile-stats">
    <div class="stat">
        <h2>Total Donations</h2>
        <p>17</p>
    </div>
    <div class="stat">
        <h2>Current Level</h2>
        <p>Level 3</p>
    </div>
    <div class="stat">
        <h2>Lifetime Impact</h2>
        <p>Helped 50 people</p>
    </div>
</div>
</div>

<footer>
    <div class="footer-content">
        <p>&copy; 2024 OrphaConnect Website. All rights
reserved.</p>
        <p>Contact: padhavangroups@gmail.com</p>
    </div>
</footer>

<script>
    function toggleMenu() {
        var menu = document.querySelector(".menu");
        menu.classList.toggle("show");
    }

</script>
</body>
</html>

```

profile.css

```
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
}

.profile-container {
  max-width: 600px;
  margin: 20px auto;
  padding: 20px;
  background-color: #f4f4f4;
  border-radius: 8px;
}

.profile-header {
  display: flex;
  align-items: center;
}

.profile-avatar {
  margin-right: 20px;
}

.profile-avatar img {
  width: 100px;
  height: 100px;
  border-radius: 50%;
}

.profile-avatar svg {
  fill: rgb(194, 194, 196);
}

.profile-info h1 {
  margin: 0;
  font-size: 24px;
}

.profile-info p {
  margin: 0;
  font-size: 16px;
}

.profile-progress {
  margin-top: 20px;
}
```

```

.progress {
  width: 100%;
  background-color: #ddd;
  border-radius: 4px;
  overflow: hidden;
}

.progress-bar {
  background-color: rgb(0, 128, 255);
  color: #fff;
  text-align: center;
  padding: 8px 0;
}

.profile-stats {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));
  gap: 20px;
  margin-top: 20px;
}

.stat {
  background-color: #fff;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

.stat h2 {
  margin-top: 0;
}

.stat p {
  margin-bottom: 0;
}

```

BeneficiaryHome.html

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Beneficiary UI</title>
  <style>

```

```

body {
  font-family: 'Arial', sans-serif;
  margin: 0;
  padding: 0;
  background-color: #f2f2f2;
}
.container {
  width: 200px; /* Fixed width for the container */
  height: 300px; /* Fixed height for the container */
  margin: 20px;
  background-color: #fff;
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
  padding: 20px;
  border-radius: 8px;
  position: relative;
  cursor: pointer;
  transition: all 0.3s ease;
  display: flex;
  flex-direction: column;
  float: left;
  overflow: hidden; /* Hide overflow for image */
}
.container:hover {
  transform: scale(1.05);
  z-index: 1;
}

.food-type {
  font-weight: bold;
  color: #3498db;
  margin-bottom: 10px;
}

.image-container {
  flex: 1;
  overflow: hidden;
}

.image-container img {
  width: 100%;
  height: 100%;
  object-fit: cover; /* Maintain aspect ratio */
}

.location {
  margin-bottom: 5px;
  cursor: pointer; /* Change cursor to pointer when hovering
over location */
}

.sub-container {

```

```

        display: none;
        position: absolute;
        top: calc(55% + 5px);
        left: 75px;
        width: 150px;
        background-color: #fff;
        border: 1px solid #ddd;
        border-radius: 5px;
        box-shadow: 0 2px 5px rgba(0, 0, 0, 0.2);
        z-index: 2;
    }
    .sub-container ul {
        list-style-type: none;
        padding: 0;
        margin: 0;
    }
    .sub-container li {
        padding: 10px;
        cursor: pointer;
    }
    .sub-container li:hover {
        background-color: #f2f2f2;
    }
    .delivery-mode {
        margin-top: 5px;
    }
    .contact-details p {
        margin-top: 5px;
        cursor: help; /* Change cursor style to help */
    }
    .acknowledge-btn {
        background-color: #3498db;
        color: #fff;
        border: none;
        padding: 10px 20px;
        border-radius: 5px;
        cursor: pointer;
        font-size: 16px;
        width: 100%;
        margin-top: 5px; /* Aligns the button to the bottom */
    }
</style>
</head>
<body>

<script>
    function fetchDataAndCreateContainers() {
        fetch('data.json')

```



```

.then(response => response.json())
.then(data => {
  data.forEach(item => {
    var container = document.createElement('div');
    container.className = 'container';

    var foodTypeSpan = document.createElement('span');
    foodTypeSpan.className = 'food-type';
    foodTypeSpan.textContent = item.foodType;
    container.appendChild(foodTypeSpan);

    var imageContainer = document.createElement('div');
    imageContainer.className = 'image-container';
    var image = document.createElement('img');
    var imagePath = item.image || 'images/Food.jpg'; //
Adjust default image path here
    image.src = imagePath;
    image.alt = 'Food Image';
    imageContainer.appendChild(image);
    container.appendChild(imageContainer);

    var locationPara = document.createElement('p');
    var locationWrapper = document.createElement('div');
// Wrap location and sub-container
    locationPara.className = 'location';
    locationPara.innerHTML = '<b>Location: </b>' +
item.location;
    locationPara.addEventListener('mouseover',
showSubContainer);
    locationPara.addEventListener('mouseout',
hideSubContainer);
    locationWrapper.appendChild(locationPara);

    var subContainer = document.createElement('div');
    subContainer.className = 'sub-container';
    subContainer.addEventListener('mouseover',
showSubContainer);
    subContainer.addEventListener('mouseout',
hideSubContainer);
    subContainer.innerHTML = `
      <ul>
        <li
onclick="copyLocation('${item.location}')">Copy Location</li>
        <li
onclick="redirectToMap('${item.location}')">Redirect to Map</li>
      </ul>
    `;
    locationWrapper.appendChild(subContainer);

```

```

        container.appendChild(locationWrapper);

        var deliveryPara = document.createElement('p');
        deliveryPara.className = 'delivery-mode';
        deliveryPara.innerHTML = '<b>Delivery:</b>'
'+item.delivery;
        container.appendChild(deliveryPara);

        var contactDetails = document.createElement('div');
        contactDetails.className = 'contact-details';
        var contactPara = document.createElement('p');
        contactPara.title = 'Click to copy';
        contactPara.innerHTML = '<b>Contact:</b> <em
onclick="copyToClipboard(this)">' + item.contact + '</em>';
        contactDetails.appendChild(contactPara);
        var acknowledgeBtn =
document.createElement('button');
        acknowledgeBtn.className = 'acknowledge-btn';
        acknowledgeBtn.textContent = "I'm Available";
        acknowledgeBtn.addEventListener('click', function() {
            alert("Your acknowledgement has been sent to the
donor!");
        });
        contactDetails.appendChild(acknowledgeBtn);
        container.appendChild(contactDetails);

        document.body.appendChild(container);
    });
})
.catch(error => {
    console.error('Error fetching JSON:', error);
});
}

function copyLocation(location) {
    navigator.clipboard.writeText(location);
    alert('Location copied to clipboard: ' + location);
}

function copyToClipboard(element) {
    var contact = element.textContent;
    const el = document.createElement('textarea');
    el.value = contact;
    document.body.appendChild(el);

```

```

        el.select();
        document.execCommand('copy');
        document.body.removeChild(el);
        alert('Contact copied to clipboard: ' + contact);
    }

    function redirectToMap(location) {
        alert('Redirecting to map for location: ' + location);
    }

    function showSubContainer(event) {
        var subContainer =
event.currentTarget.parentElement.querySelector('.sub-container');
        subContainer.style.display = "block";
    }

    function hideSubContainer(event) {
        var subContainer =
event.currentTarget.parentElement.querySelector('.sub-container');
        subContainer.style.display = "none";
    }

    fetchDataAndCreateContainers();
</script>

</body>
</html>

```

dbConnect.py

```

from flask import Flask, render_template, request, redirect, url_for
from pymongo import MongoClient
from werkzeug.security import generate_password_hash,
check_password_hash

app = Flask(__name__)

client = MongoClient('mongodb://localhost:27017/')
db = client['donor_beneficiary']
donor_collection = db['donors']
beneficiary_collection = db['beneficiaries']
login_collection = db['login']

@app.route('/')
def index():
    return render_template('login.html')

@app.route('/login.html', methods=['POST'])

```

```

def login():
    if request.method == 'POST':
        phone = request.form['phone']
        password = request.form['password']

        # Check login credentials
        user = login_collection.find_one({'phone': phone})
        if user and check_password_hash(user['password'], password):
            # Determine user type
            user_type = user['user_type']
            if user_type == 'donor':
                # Redirect to donor profile
                return redirect(url_for('donor_profile'))
            elif user_type == 'beneficiary':
                # Redirect to beneficiary profile
                return redirect(url_for('beneficiary_profile'))
        else:
            # Login failed
            return "Invalid login credentials"

def insert_login_credentials(phone, password, user_type):
    hashed_password = generate_password_hash(password)
    login_collection.insert_one({'phone': phone, 'password':
hashed_password, 'user_type': user_type})

@app.route('/signup/donor', methods=['POST'])
def signup_donor():
    if request.method == 'POST':
        name = request.form['name']
        phone = request.form['phone']
        email = request.form['email']
        aadhar = request.files['aadhar']
        password = request.form['password']

        donor_collection.insert_one({'name': name, 'phone': phone,
'email': email, 'aadhar': aadhar.read()})

        insert_login_credentials(phone, password, 'donor')

        return redirect(url_for('index'))

@app.route('/signup/beneficiary', methods=['POST'])
def signup_beneficiary():
    if request.method == 'POST':
        name = request.form['name']
        phone = request.form['phone']
        email = request.form['email']
        certificate = request.files['certificate']
        address = request.form['address']
        password = request.form['password']

        beneficiary_collection.insert_one(
            {'name': name, 'phone': phone, 'email': email,
'certificate': certificate.read(), 'address': address})

        insert_login_credentials(phone, password, 'beneficiary')

```

```

        return redirect(url_for('index'))

@app.route('/donor_profile')
def donor_profile():
    return "This is the donor profile page"

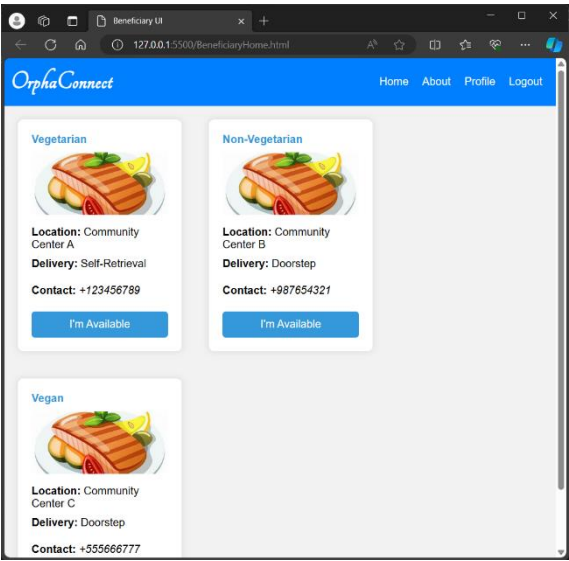
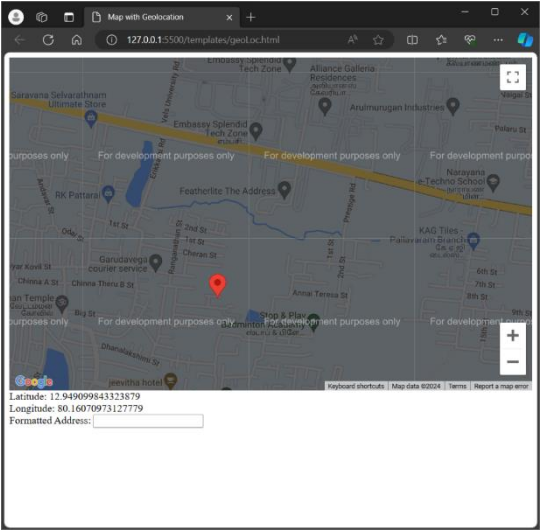
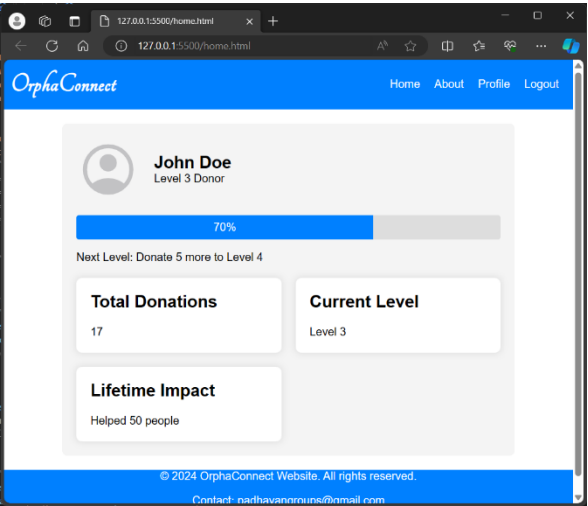
@app.route('/beneficiary_profile')
def beneficiary_profile():
    return "This is the beneficiary profile page"

if __name__ == '__main__':
    app.run(debug=True)

```

OUTPUT:

The image displays four screenshots of a web application interface, arranged in a 2x2 grid. The top-left screenshot shows a login form with fields for Phone Number and Password, a Login button, and a Forgot Password? link. The top-right screenshot shows a 'Choose Account Type' screen with Donor and Beneficiary buttons. The bottom-left screenshot shows a 'Sign Up' form with fields for Name, Phone Number, Email, Aadhar Card (JPG), Password, and Confirm Password, along with a Sign Up button. The bottom-right screenshot shows a 'Sign Up' form with fields for Name, Phone Number, Email, Orphanage Certificate (JPG), Address, Password, and Confirm Password, along with a Sign Up button.



Donor UI

127.0.0.1:5500/UserHome.html

OrphaConnect

HomeAboutProfileLogout

Food Charity

Donate to help

need.

Food Charity

Donate to help

aritable

Other Ch

Donate to sup

Register for Food Charity Donation

Food type:

Vegetarian

Upload Food Image:

Choose File

No file chosen

Location:

Enter your location

Food type:

Drop down

Submit

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