A MINOR PROJECT PROPOSAL REPORT ON

Social Welfare for Orphanages and Old Age Homes Management System at Local Level

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Submitted in Partial Fulfillment of the Requirements for

Bachelor of Engineering in Computer Engineering

Under **United Technical College**

Submitted to:

Department of Computer Engineering

UNITED TECHNICAL COLLEGE

(Affiliated to Pokhara University)

Bharatpur-11, Bhojad, Chitwan

[Subject Code: CMP-390]

May, 2023

Abstract

The Social Welfare Management System is a transformative project that aims to revolutionize the social welfare sector by leveraging technology to streamline operations, enhance connectivity. It is a groundbreaking web project designed to cater to the needs of social welfare organizations, such as orphanages, old age homes. This user-friendly platform enables organizations to create accounts, communicate needs, and seek financial support from a wider audience. Potential donors can easily browse registered organizations and contribute to causes they resonate with. The system ensures transparency and accountability through a secure donation mechanism. This report includes quantitative and qualitative data, success stories, and testimonials, providing transparency and accountability to donors and sponsors. This feature promotes awareness, encourages others to get involved, and expands the reach of the social welfare organizations. By offering sponsorship packages, businesses and individuals can contribute to a cause and receive recognition and visibility in return. [Group study]

Keywords: Social Welfare, Social Service, Charitable, Security, Seamless Integration.

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List of Abbreviation and Acronym

API: Application Programming Interface

CSS: Cascading Style Sheets (Web page styling language)

DBMS: Database Management System

HTML: Hypertext Markup Language (Web page coding language)

JS: JavaScript (Web page scripting language)

PHP: Hypertext Preprocessor (Server-side scripting language)

SQL: Structured Query Language (Database language)

SWOMS: Social Welfare for Orphanages and Old Age Home management System

UX: User Experience

Chapter 1: Introduction

1.1 Background

Social welfare organizations encompass a wide range of services, including orphanages and old age homes. Orphanages are residential institutions or group homes that provide care for children who cannot be cared for by their biological families due to various reasons such as death, absence, abuse, or parental unwillingness. These institutions offer essential support, education, and emotional nurturing to orphaned children, creating a stable and nurturing environment for their overall development. [1] On the other hand, old age homes cater to the needs of elderly individuals who lack familial support or are unable to live independently. These homes offer a safe and comfortable living environment where the elderly receive food, shelter, clothing, and medical assistance. Dedicated staff members ensure the well-being of the elderly residents, fostering a sense of community and facilitating social interactions. [2]

The websites of social welfare organizations play a vital role in highlighting the work they do to ensure the rights and dignity of orphaned children and elderly individuals. These platforms serve as powerful advocacy tools, showcasing the organization's efforts in promoting well-being and protecting vulnerable individuals. They provide information on policies, practices, and initiatives aimed at improving the lives of these individuals and encourage visitors to get involved as volunteers or caregivers. Additionally, these websites serve as a platform to connect with professionals and experts in the field, fostering collaboration and knowledge-sharing to enhance the quality of care and support provided. Despite the challenges faced, social welfare organization websites serve as a powerful resource to engage and inspire individuals to join the mission of creating a more compassionate and inclusive society. [3]

1.2 Statement of Problem

Problems faced by an orphanage and old age home can be significant. Some common challenges include limited reach, communication barriers, inefficient processes, and difficulty in resource mobilization. These organizations struggle to connect with potential donors, volunteers, and families seeking their services. It has become harder

to raise awareness about their mission, showcase success stories, and attract support. In addition, communication among team members and stakeholders is slower and less efficient, hindering collaboration and decision-making. Without online channels for donations and applications, the process can be cumbersome, requiring physical paperwork and manual processing. Moreover, they face the limited ability to access a broader range of resources, such as fundraising platforms and training materials, which hinder the growth and development of the organization.

By leveraging the capabilities of this project, social welfare organizations can overcome these challenges and work towards creating a positive and lasting impact on the communities they serve. [4]

1.3 Objectives

This project has different purposes that helps different organizations in various ways:

1. To connect social organizations with donors, sponsors, volunteers or any other common individuals.
2. To provide information about the organization's mission, vision & objectives and highlight the social issues they address and the services they offer.

1.4 Application

The website for the Social Welfare Management System has various applications, including:

1. Donations and Sponsorships:

The website allows individuals and corporations to make donations and sponsorships, providing a convenient and secure platform for supporting social welfare organizations financially.

2. Volunteer Engagement:

The website enables organizations to recruit and engage volunteers by advertising volunteer opportunities, coordinating schedules.

3. Resource Management:

The website provides tools for social welfare organizations to manage their resources effectively, including tracking donations, allocating funds, and coordinating the distribution of resources to maximize their impact.

4. Collaboration and Networking:

The website brings up collaboration among social welfare organizations, enabling them to share resources, best practices, and collaborate on joint initiatives, ultimately strengthening the overall social welfare sector.

5. Impact Reporting:

The website can generate impact reports for social welfare organizations, showcasing their achievements, outcomes, and success stories to donors, sponsors, and the wider community, increasing transparency and accountability.

6. Awareness and Advocacy:

The website serves as a platform for raising awareness about social welfare stories, and advocating for policy changes or social reforms to address the underlying challenges faced by vulnerable individuals and communities.

Chapter 2: Literature Review

2.1 Introduction

Social Welfare Management System project assists to enhance support by offering a comprehensive website platform. It enables social welfare organizations to connect with donors, engage volunteers, optimize resource allocation, foster collaboration (partnership), generate impact reports, raise awareness, and serve as an information hub. [5] [6]

2.2 Review of literature

Orphanages and old age homes face challenges of limited reach, communication barriers, inefficient processes, and resource mobilization without an online presence. Establishing an online system overcome these challenges. It expands reach by sharing information globally, showcases success stories, and engages potential donors, volunteers, and families. Online communication channels enable faster and interactive communication, enhancing engagement. Streamlined processes for donations and applications simplify procedures, making it convenient for individuals to contribute and get involved. Access to online fundraising platforms broadens donor base and resources, supporting the organization's growth and development. Overall, an online system enables efficient operations, wider engagement, and access to valuable resources. [7]

2.3 Case Study

1. Nepal Orphans Home

It is a platform which organize various event for old age people and orphans. The main objective of organization is to assist people in any manner they can and quickly solve their problems. There can be emergencies in some of the circumstances. When there are cries for assistance, Team Hami Nepal responds quickly and gets to work. But it does not feature an online portal for individuals to create accounts. [7]

2. Orphan's lifeline international

An organization with an online presence that supports orphaned children through sponsorships, educational programs, and community outreach. This website provides services for orphanages only. [6]

3. GoFund Me

It provides fast and effective support to people impacted by disaster, and fund education and other charitable initiatives. It works to provide transparent, tax-deductible donation opportunities to support both individuals and nonprofits with urgent needs and long-standing causes. [8]

4. Charity Navigator

Charity Navigator helps millions of people take action and support the causes they care about by connecting them to the best charities that align with their passions and values. [9]

5. HelpAge International

HelpAge International is the secretariat to a global network of organizations promoting the right of all older people to lead dignified, healthy and secure lives. It promotes the wellbeing and inclusion of older women and men, and reduce poverty and discrimination in later life. However, it does not feature an online system for individuals for donations. [10]

Chapter 3: Methodology

3.1 Database Management

3.1.1 SDLC

The Waterfall methodology, also known as the Waterfall model, is a sequential development process that flows like a waterfall through all phases of a project (analysis, design, development, and testing), with each phase completely wrapping up before the next phase begins. [11]
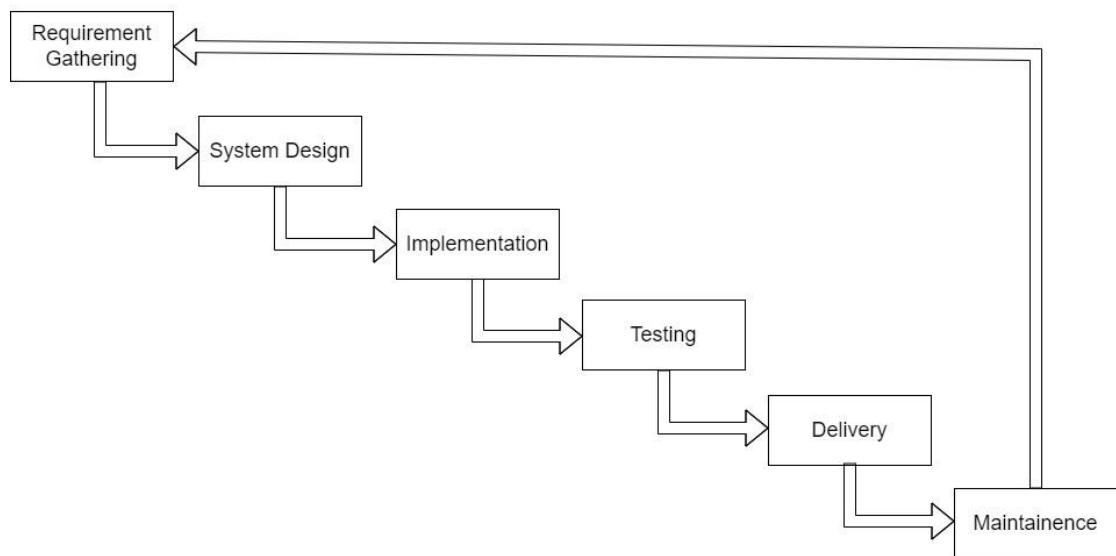

Figure 1: Different states of the Waterfall Model (Modified from [13])

3.1 Database Management System (DBMS):

Database management system (DBMS) is a software package designed to store, retrieve, query and manage data. User interfaces (UIs) allows data to be created, read, updated and deleted by authorized entities.

Database management systems are important because they provides programmers, database administrators and end users with a centralized view of data and free applications and end users from having to understand where data is physically located. APIs handle requests and responses for specific types of data over the internet. [12]
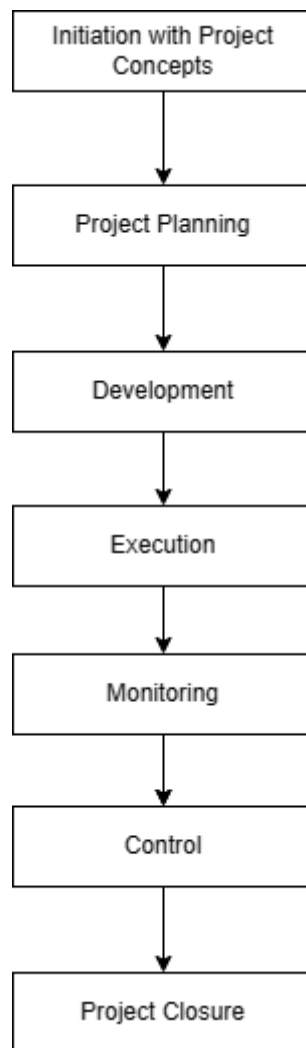
3.1.2 Flow Diagram of Project

Figure 2: Project flow diagram (Modified from [13])

This project flow diagram begins with concept, research and planning. It then progresses to coding and logic development, followed by execution. The monitoring and after it, controlling phase ensures meticulous oversight. After thorough checks and finalization, the project is elegantly closed, embodying a remarkable journey. Throughout this process, creativity intertwines with strategic thinking, resulting in a seamlessly executed project.
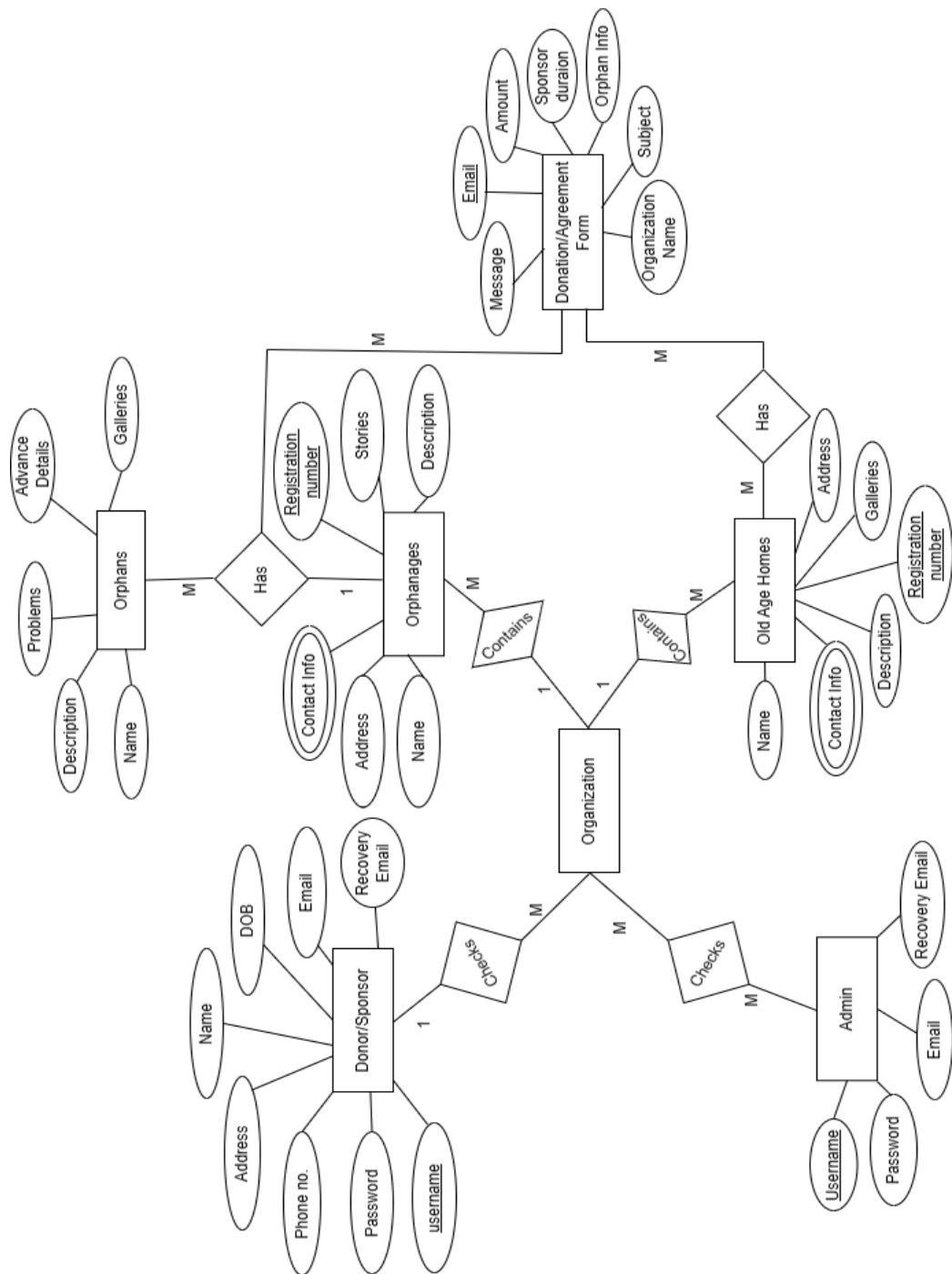
3.1.3 ER Diagram

Figure 3: ER Diagram [Group Study]
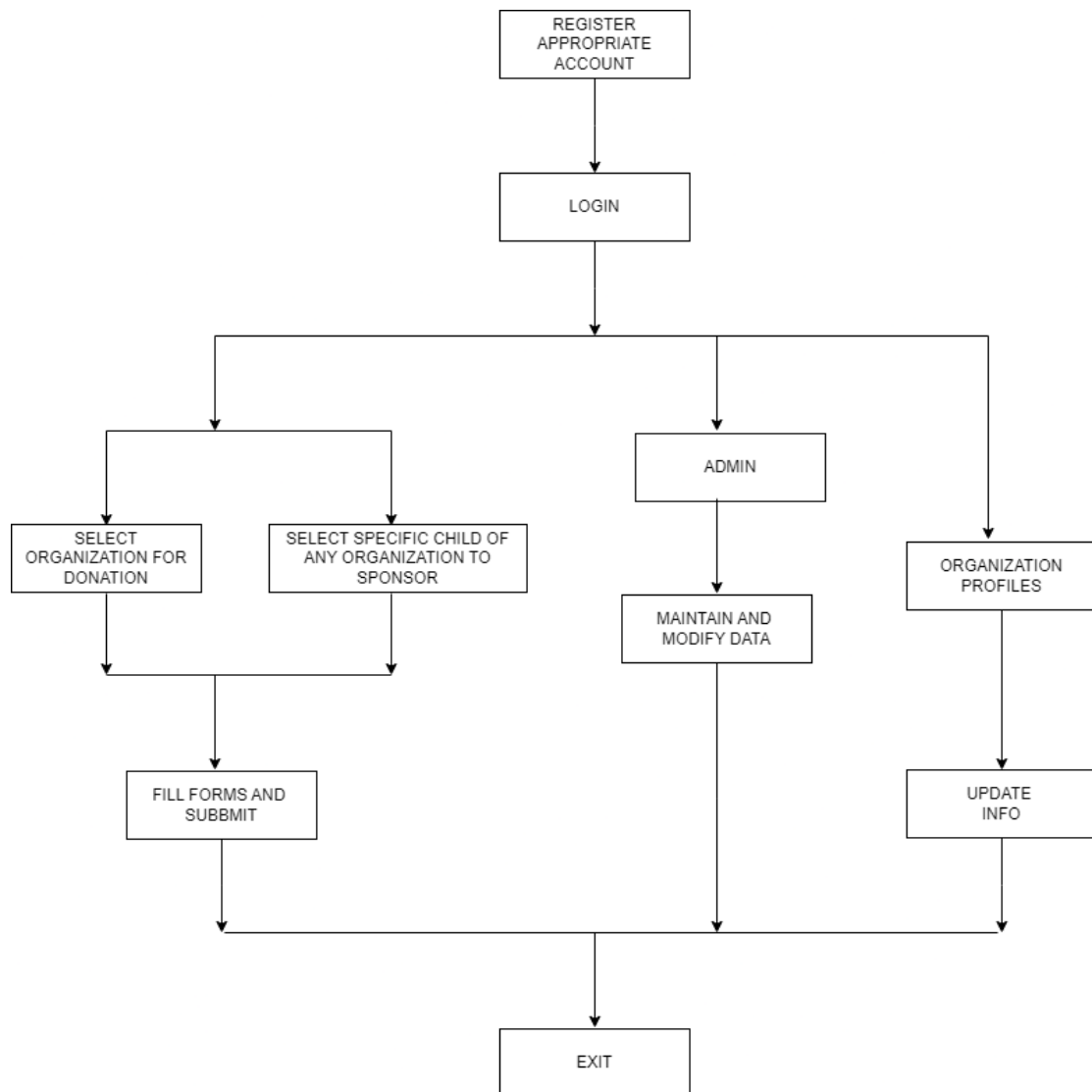
3.1.4 System Flow Diagram

Figure 4: System Flow Diagram (Modified from [13])

The system flow diagram begins with the registration process, where users can create appropriate accounts, such as an organization account or a donor account. Following registration, users can log in to access the system. The flow then branches into four processes. First, users can select an organization for donation, allowing them to contribute to a chosen cause. Second, users can choose a specific child to sponsor, enabling them to provide support for a particular child's needs. The third process involves the admin modifying user's data. Lastly, organizations can update their own data, ensuring their information remains accurate and up to date. The flow concludes with an exit point, allowing users to gracefully exit the system.

3.1.5 Data Flow Diagram

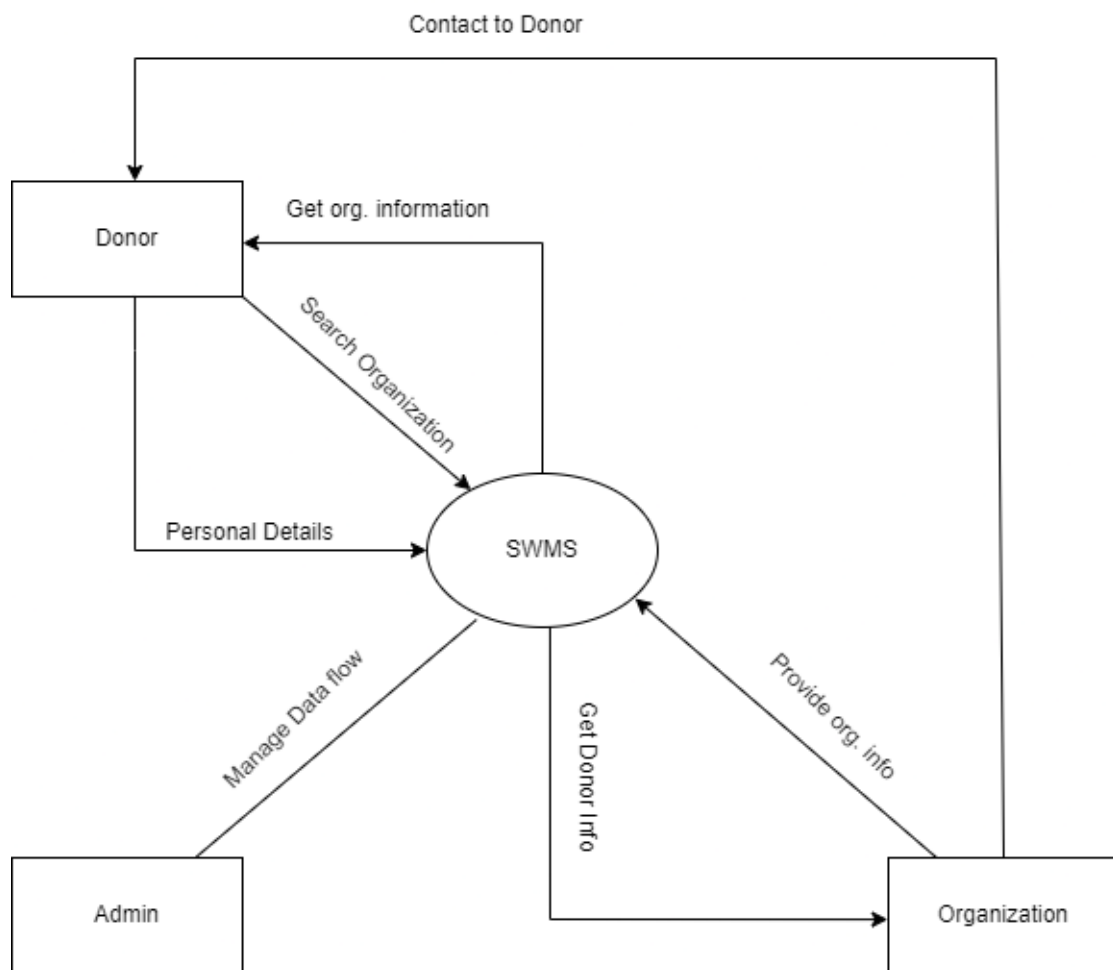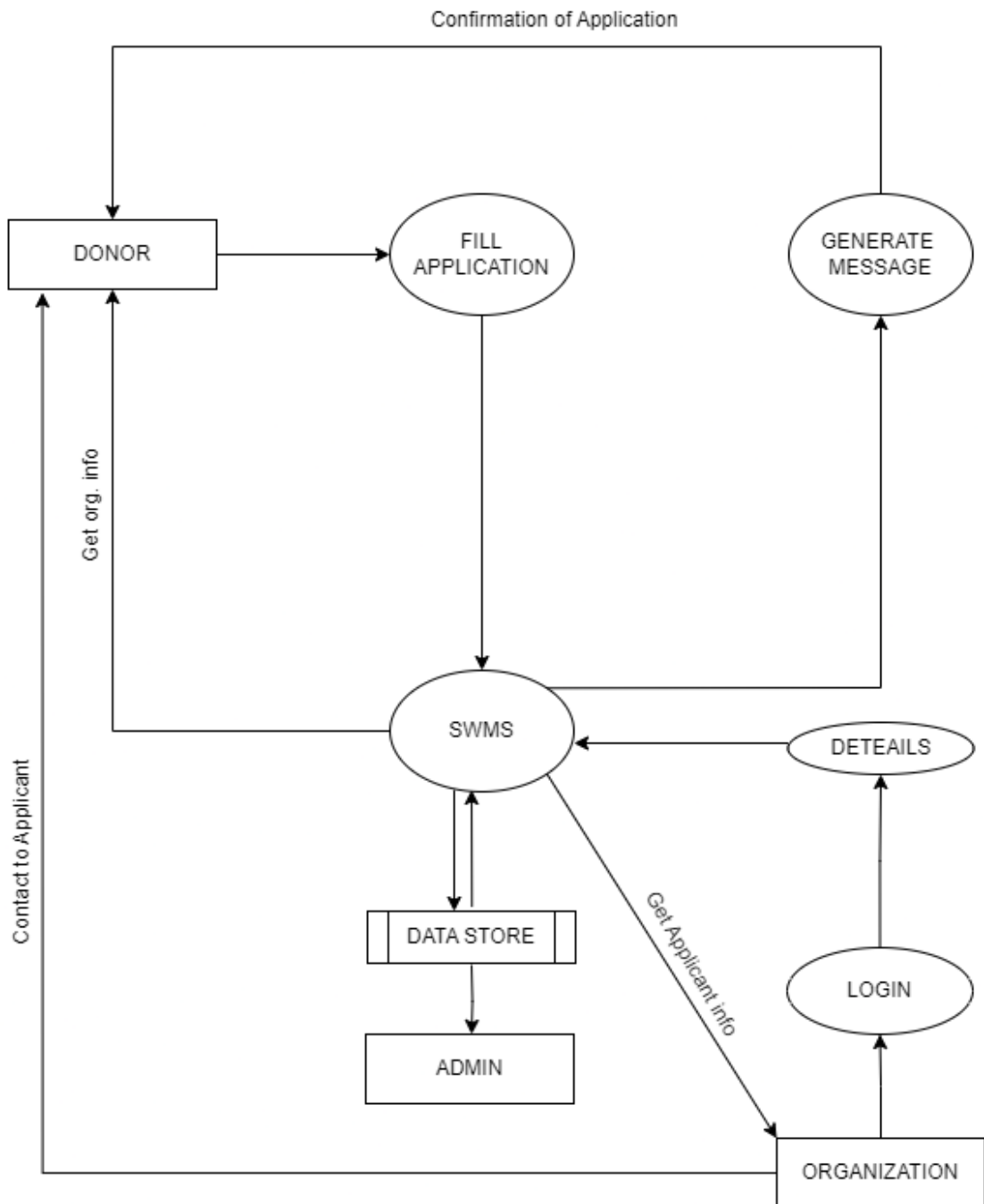

Figure 5: Zero Level Data Flow Diagram [Group Study]

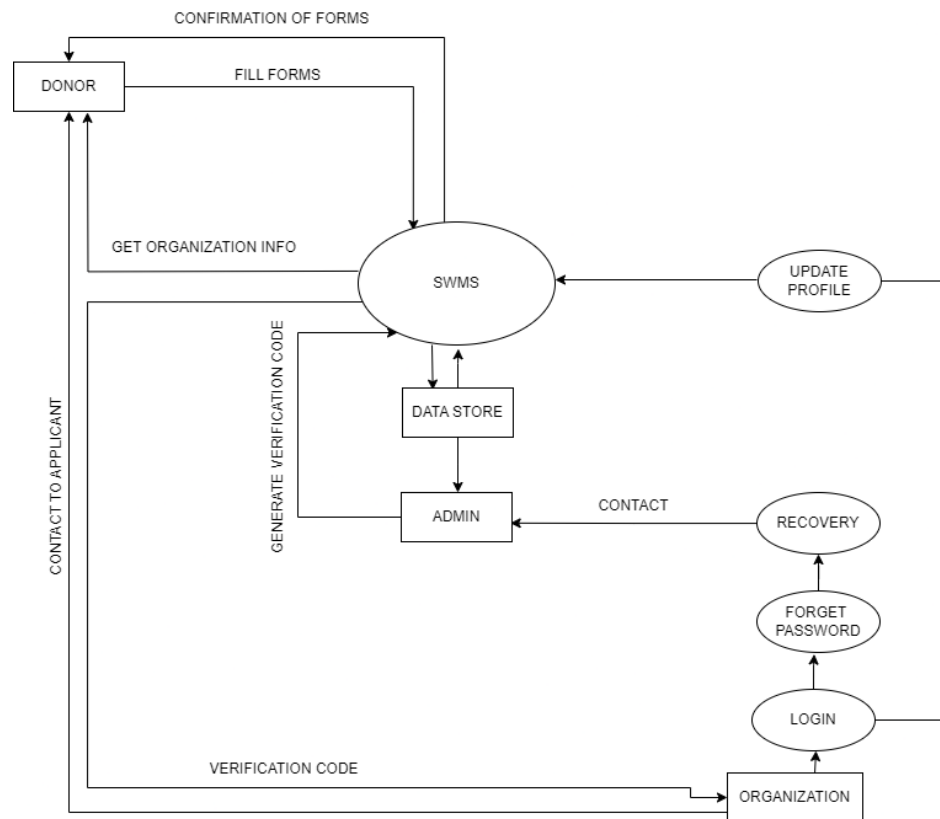**Figure 6: Level One Data Flow Diagram [Group Study]**

Figure 7: Level Two Data Flow Diagram [Group Study]
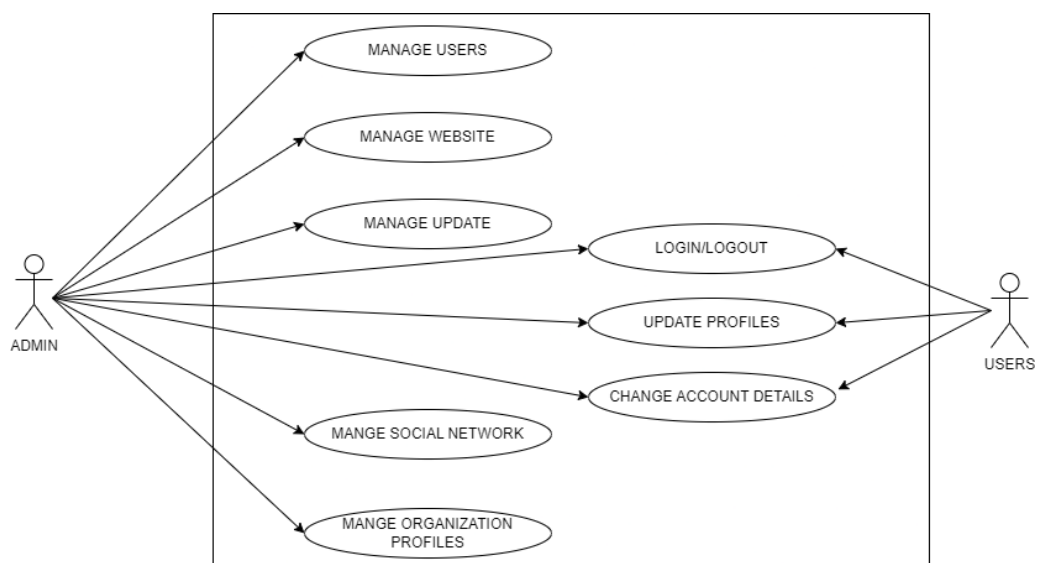
3.1.6 Use Case Diagram

Figure 8: Use Case Diagram [Group Study]

3.2 Software Used

3.2.1 VS Code (Visual Studio Code)

Visual Studio Code is a free, portable, yet powerful source code editor that can be used online and runs on Windows, MacOS, Linux, and Raspberry Pi OS. It features a strong ecosystem of extensions for various programming languages, runtime environments, and clouds, including C++, C#, Java, Python, PHP, and Go. It also has native support for JavaScript, TypeScript, and Node.js. [14] The main features of this software are:

The Integrated CLI (Command Line Interface): To save switching between windows, VS Code offers an integrated terminal or CLI. Simply, press CTRL + ' or CMD + ' to open it up, and the same command to close it. It will automatically open in the directory you have open in VS Code, which saves the navigation step required for operations in a standard terminal. [14]

Multi-Cursor Shortcuts: The ability to edit with multiple cursors can be a huge time saver. To use this most effectively requires memorization of a handful of commands, but they'll soon become second nature. [14]

Emmet Abbreviations: These useful shortcuts come built-in to VS Code, and they make writing HTML (and CSS) a lot faster. [14]

Text Wrap: There aren't many cases where I'd prefer my text to run off the screen, forcing me to use the dreaded horizontal scroll. To toggle wrapping on or off on a per-file basis, simply press ALT + Z [14]

3.2.2 Development

1. HTML

HTML stands for Hypertext Markup Language. It is a widely used markup language for making web pages. It permits the creation and organization of sections, paragraphs, and links using HTML elements like tags and attributes. HTML is not viewed as a programming language since it cannot offer dynamic capability. It is considered an accepted web standard at this time. The World Wide Web Consortium (W3C) creates and updates the HTML standards often. [15]

2. CSS

CSS, or cascading style sheets, is an acronym. It is the language used to describe how Web pages are presented, including their colors, layout, and fonts, making them more appealing to users. The purpose of CSS is to create style sheets for the web. It may be used with any XML-based markup language and is not dependent on HTML. [16]

3. JavaScript

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities. [17]

4. PHP

PHP is a well-known general-purpose open-source programming language that is excellent for web development and can be included into HTML. The acronym PHP stands for Hypertext Preprocessor. Instead of having several instructions to create HTML (like in C or Perl), PHP pages include embedded code that does "something" (in this case, output "Hi, I'm a PHP script!"). It is possible to enter and leave "PHP mode" by using the special start and end processing instructions? php and?> that surround the PHP code. [18]

5. MySQL

MySQL is the most popular open source database in use today. According to DB-Engines, MySQL is the second most used database, trailing only Oracle Database. MySQL is the engine behind many of the most well-known applications, including Facebook, Twitter, Netflix, Uber, Airbnb, Shopify, and Booking.com. Due to MySQL's open source nature, many of its features were developed over the course of more than 25 years in close consultation with users. Therefore, it is extremely possible that MySQL Database supports your preferred application or programming language. [19]

3.2.3 XAMPP

XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). XAMPP is one of the widely used cross-platform web servers, which helps developers to create and test their programs on a local webserver. It was developed by the Apache Friends, and its native source code can be revised or modified by the audience. It consists of Apache HTTP Server, MariaDB, and interpreter for the different programming languages like PHP and Perl. It is available in 11 languages and supported by different platforms such as the IA-32 package of Windows & x64 package of macOS and Linux. [20]

Chapter 4: Expected Outcome

The development of this project will provide a comprehensive and user-friendly platform for individuals, organizations, and administrators to engage in social welfare activities. Users will be able to easily create accounts, access information, and participate in donation and sponsorship activities. The platform will facilitate seamless communication and collaboration among various users in the social welfare sector.

The project aims to promote transparency, efficiency, and accountability in social welfare operations. By digitizing processes such as donation management, sponsorship requests, and user interactions, the system will streamline operations and reduce administrative burdens. This will enable organizations to focus more on their core mission of providing assistance to those in need. The increased transparency and accountability will foster trust among users, as they will have access to real-time information on donation utilization, impact assessment, and progress updates.

[Group Study]

Chapter 5: Time Estimation

Before getting started with any project we have to prepare a working schedule consisting of several topics that we would be working on throughout the project development phase. We will try to balance between learning how code works and by researching necessary details about this project.

- Week 1-3: At the beginning of the project development, we will begin with research on different programming tools and make our documentation ready and that will be used throughout the project.

- Week 4-6: After fourth week of project, we will have to focus on coding and designing. We will also keep debugging phase with us at this period of time.

- Week 7-10: At this phase, we will have to focus on final project. At the end of 10th week, we will have completed this project.
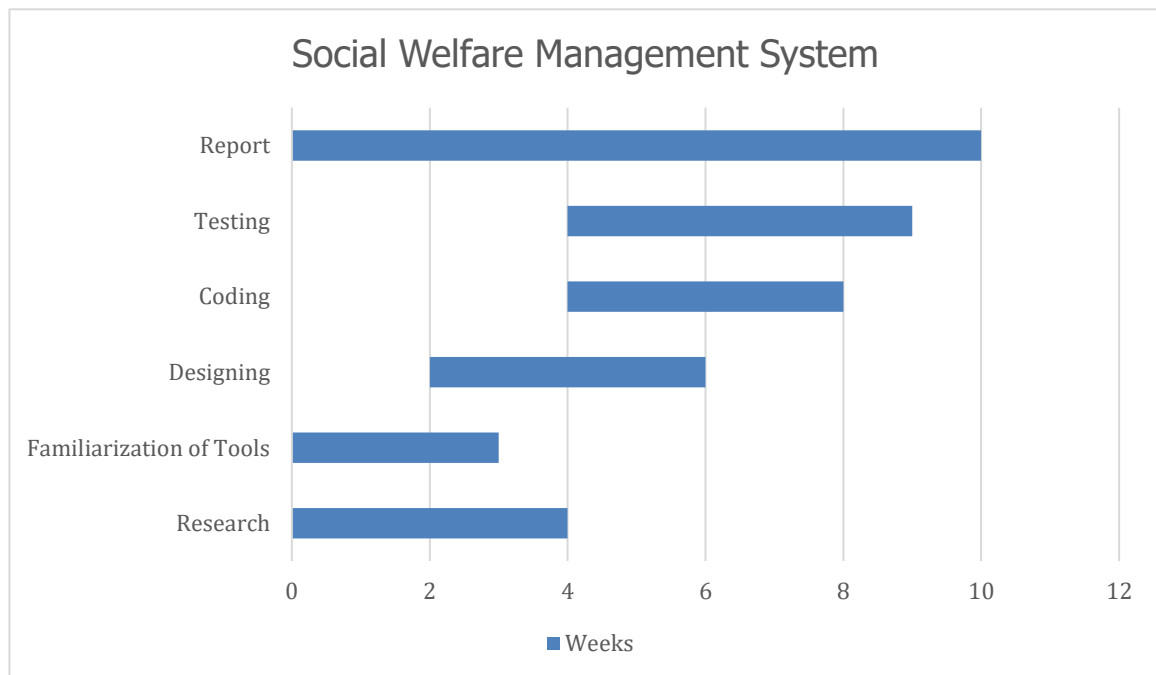

Figure 9: Gantt chart [Group Study]

Chapter 6: Cost Estimation

Table 1: Cost Estimation Table

Development Activities	Status	Estimated Days	Estimated Hours	Estimated Budget
Requirement Analysis	Complete	7	45	Rs. 1000
Correction	Complete	5	10	Rs 500
Domain	In Progress	-	-	-
Hosting	In Progress	-	-	-
DB Designing	In Progress	7	30	-
UI/UX Design	In Progress	6	20	-
Testing	In Progress	5	15	-
Report	In Progress	10	10	Rs. 240
Total:		40	130	Rs. 1740

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