

# INTRODUCTION

## **1.1 OBJECTIVE OF THE PROJECT**

Charity Management System project which helps to raise funds online, Online appointment feature for some activities or any other events, Online Children adaption service and many more. Even if any food item remains in any function people can send request to charity. Charity employees can check all kinds of reports after the login. This provide and support efficient and effective fundraising activities. This project will help management to find donors easily. Over all this project will build an efficient management system for charity to manage resources and donations. They can register and login. Admin can approve or reject the registered clients, volunteers and donors. Charity employees can check all kinds of reports after the login.

This project helps charities to increase operational efficiencies and reduce costs by eliminating much manual paperwork. Donors and charity Managements can see donor names, donation amounts, payment date time and transaction details. Donors or public visitors can view all the information about charity through online. The admin will approve or decline the request from the donors for charity. Volunteer management is a critical aspect of running a charitable institution. Simplified administration capabilities injected in this module and provide a quick and easy management of volunteers. This module provides a portal for volunteers to have instant access to their information. The gallery provides all the information about the charity with photos it is more informative section.

The main objectives of the systems are:

- Fundraising.
- Ease of use.
- Volunteer coordination.
- Program management.
- Financial reporting.

# SYSTEM ANALYSIS

## 2.1 INTRODUCTION

System analysis is the process of gathering data and facts diagnosing problem to the system. In the development of software structural analysis is required. During this analysis, information is collected in the form of answers to the question for collecting information from existing documents. Analysis specifies what the system should do.

Problem definition deals with defining the actual problem involved in the existing system or the system to be developed. Studies on various areas covered by the existing system are classified into various divisions and the actual task to be performed in the new system is determined. The project will be able to demonstrate the ideas of a website which helps the patients. The website is trying to revitalize and simplify the various functions and activities and make them more people friendly. We dedicated to provide better and speedy services to the patients.

System analysis is the detailed study of various operations and their relationship within and outside the system. It is the first in the developing and managing systems. System analysis is concerned with becoming aware of the problem, identifying the relevant and most decisional variables, analysing and synthesizing the various factors and determining an optimal or at least as at is factory solution or program of action. A preliminary study was conducted in details and several fact-finding techniques like record searching, observation, comparison etc. were used to reach a better decision. The current system for this each activity was deeply studied and analysed. All the forms and other printed or non-printed formats for data collection were checked accurately and findings were compared. Observation was done to great extend to see the difficulties of the process and time delay in findings the results. Accurate study was conducted to know the system in a much better manner.

The objectives of the system analysis are:

- Identifying the need.
- Analysing the existing and proposed system.
- Evaluating the feasibility study.
- Perform economic and technical analysis.
- Identifying the hardware and software requirements.
- Allocating functions to the hardware and software.

## **2.2 IDENTIFICATION OF NEED**

System analysis is the reduction of the entire system by studying various operations and their relationships with the system and the requirements of its successor. A system can be defined as an orderly grouping of interdependent components linked together according to plan to achieve a specific objective. The idea of the system has become most practical and necessary in conceptualizing the interrelationships and integrations of operations especially when using computers. Organizing consists of several inter related and interacting components. Analysis is the detailed study of various operations performed by the system and their relations within and outside the system. During analysis, data are connected on the available files, decision points and is handled by the present system.

## **2.3 EXISTING SYSTEM**

The existing system is a common and ordinary site. The current system is a web that contains only certain registrations and views. So that we have created a website for different types of donation activities such as blood donation, organ donation, for education, etc.

## **2.4 PROPOSED SYSTEM**

Proposed system helps charities increase operational efficiencies and reduce costs by eliminating much manual paperwork. The built-in functionality of audit trails, authorisation mechanism and internal check and control makes the donation process secure and conforms to audit requirement. The user's details are maintained confidential because it maintains a separate account for each user. This project consists of four modules. They are,

1. Admin.
2. Clients.
3. Donors.
4. Volunteers.

## **2.4.1 BENEFITS OF THE PROPOSED SYSTEM**

- Not much manual work included.
- User friendly system.
- Optimize processing time.

## **2.5 FEASIBILITY STUDY**

During the system analysis study of the proposed system is carried out to see whether it is carried out to see whether it is beneficial to the organization. It is both needed and prudent to evaluate the feasibility of a project at the earliest time and minimum expenditure. Feasibility study is a test of system proposal access, its workability, impact on the organization, ability to meet the user needs, and effective use of resources. The different steps involved in feasibility analysis are.

- Formation of a project team
- Preparing the system flow chart
- Enumerating the potential candidate system
- Identifying the candidate system

The proposed system will help to solving the problem more efficiently and accurately. The reports obtained after feasibility studies are given below, they are:

- Economic Feasibility
- Technical Feasibility
- Operational Feasibility

### **Economic Feasibility**

It will reduce expenditure and improve the quality of service. A system can develop technically and that will used if the installed must still be a good investment for the organization. Financial benefits must exceed the cost. In the case of proposed system, performance of the system is effective of its accuracy, faster response and user friendly in nature. The campus-wide community for events and placements reduce unnecessary expenses and wastage of many hours by its capabilities of fast operation.

## **Technical Feasibility**

Technical Feasibility checks the work for the project be done with current equipment, existing software technology and available personal. And if technology is required, what is the likelihood that it can develop. Also checks whether the proposed system guarantees accuracy, reliability, data security and ease of access. All the resources or implementing this software is available in this project. So, we can say it is technically feasibility.

## **Operational Feasibility**

People are inherently to change, and computers have been known to facilitate change. An estimate should be made about the reaction of the user, staff towards the development of a computerized system. Computer installations have something to do with turnover, transfer and changes in job status. Proposed projects are beneficial only if that can be turned in to information system that will meet the organizations operating requirements. In-operational feasibility study the management and users were found to have interest for a change. Since the system is user friendly and training is less needed.

## **2.6 SYSTEM SPECIFICATION**

The software requirements specification (SRS) is a means of translating the ideas in the minds of clients into a formal documentation. This document forms the development and software validation. The basic reason for the difficulty in software requirement specification comes from the fact that there are three interested parties- the clients, the end users and the software developer. The requirements document has to be such that the client and the user can understand easily and the developers can use it as a basis for software development. Due to the diverse parties involved in software requirement specification, a communication gap exists. This gap arises when the client does not understand software or the software development processor when the developer does not understand the client's problem and application area. SRS bridges this communication gap.

Problem analysis is done to obtain a clear understanding of the needs of the clients and the users, and what exactly is desired from the software. Analysis leads to the actual specification. People performing the analysis called analysts, are also responsible for specifying the requirements.

## **2.6.1 HARDWARE SPECIFICATION**

Processor: Intel core i3 and above

RAM: Minimum 4 GB RAM

Hard Disk Space: 100 GB

Input Devices: Mouse, Keyboard

Output Devices: Monitor

## **2.6.2 SOFTWARE SPECIFICATION**

Operating System: Windows 7 or higher versions

Front End: HTML, JavaScript, CSS

Back End: Python, MySQL

Framework: Django

Web Browser: Google Chrome/Microsoft Edge/Opera

Web Server: Wamp Server

### **Hypertext Mark-up Language (HTML)**

It is the standard mark-up language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links quotes and other items. HTML elements are delineated by *tags*, written using angle brackets . Tags



such as `<img />` and `<input />` directly introduce content into the page. Other tags such as `<p>`

surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages. Inclusion of CSS defines the look and layout of content.

### **JavaScript:**

It is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. It is a prototype-based, multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles.

JavaScript runs on the client side of the web, which can be used to design/program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behaviour.

JavaScript can function as both a procedural and an object oriented language. Objects are created programmatically in JavaScript, by attaching methods and Properties to otherwise empty objects at run time, as opposed to the syntactic class definitions common in compiled languages like C++ and Java. Once an object has been constructed it can be used as a blueprint (or prototype) for creating similar objects.

### **Cascading Style Sheets (CSS):**

It is a style sheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, Math or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

## **ABOUT THE BACK END**

### **MYSQL:**

MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing.

MySQL is an important component of an opensource enterprise stack called LAMP. LAMP is a web development platform that uses Linux as the operating system, Apache as the web server, and MySQL as the relational database management system and PHP as the object-oriented scripting language. (Sometimes Perl or Python is used instead of PHP.)

Originally conceived by the Swedish company MySQL AB, MySQL was acquired by Sun Microsystems in 2008 and then by Oracle when it bought Sun in 2010. Developers can use MySQL under the GNU General Public License (GPL), but enterprises must obtain a commercial license from Oracle.

Today, MySQL is the RDBMS behind many of the top websites in the world and countless corporate and consumer-facing web-based applications, including Facebook, Twitter and YouTube.

- MySQL is the database management system, or a database server.

### **How MySQL Works:**

MySQL is based on a client-server model. The core of MySQL is MySQL server, which handles all of the database instructions (or commands). MySQL server is available as a separate program for use in a client-server networked environment and as a library that can be embedded (or linked) into separate applications.

MySQL operates along with several utility programs which support the administration of MySQL databases. Commands are sent to MySQL Server via the MySQL client, which is installed on a computer. MySQL was originally developed to

handle large databases quickly. Although MySQL is typically installed on only one machine, it is able to send the database to multiple locations, as users are able to access it via different MySQL client interfaces. These interfaces send SQL statements to the server and then display the results.

## MySQL Features:

- **Relational Database Management System (RDBMS):** MySQL is a relational database management system.
- **Easy to use:** MySQL is easy to use. You have to get only the basic knowledge of SQL. You can build and interact with MySQL with only a few simple SQL statements.
- **It is secure:** MySQL consist of a solid data security layer that protects sensitive data from intruders. Passwords are encrypted in MySQL.
- **Client/ Server Architecture:** MySQL follows a client /server architecture. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they query data, save changes, etc.
- **Free to download:** MySQL is free to use and you can download it from MySQL official website.
- **It is scalable:** MySQL can handle almost any amount of data, up to as much as 50 million rows or more. The default file size limit is about 4 GB. However, you can increase this number to a theoretical limit of 8 TB of data.
- **Compatible on many operating systems:** MySQL is compatible to run on many operating systems, like Novell NetWare, Windows, Linux, many varieties of UNIX (such as Sun, Solaris, AIX, and DEC UNIX), OS/2, FreeBSD, and others. MySQL also provides a facility that the clients can run on the same computer as the server or on another computer (communication via a local network or the Internet).
- **Allows roll-back:** MySQL allows transactions to be rolled back, commit and crash recovery.
- **High Performance:** MySQL is faster, more reliable and cheaper because of its unique storage engine architecture.
- **High Flexibility:** MySQL supports a large number of embedded applications which makes MySQL very flexible.
- **High Productivity:** MySQL uses Triggers, Stored procedures and views which allows the developer to give a higher productivity.

## **Core MySQL Features:**

MySQL enables data to be stored and accessed across multiple storage engines, including InnoDB, CSV, and NDB. MySQL is also capable of replicating data and partitioning tables for better performance and durability. MySQL users aren't required to learn new commands; they can access their data using standard SQL commands.

Before 2016, the main difference between MySQL and SQL was that the former could be used on multiple platforms, whereas the latter could only be used on Windows. Microsoft has since expanded SQL to support Linux, a change which went into effect in 2017.

MySQL also allows users to choose the most effective storage engine for any given table, as the program is able to utilize multiple storage engines for individual tables. One of MySQL's engines is InnoDB. InnoDB was designed for high availability. Because of this, it is not as quick as other engines. SQL uses its own storage system, but it does maintain multiple safeguards against loss of data. Both systems are able to run in clusters for high availability.

SQL Server offers a wide variety of data analysis and reporting tools. SQL Server Reporting Services is the most popular one and is available as a free download. There are similar analysis tools for MySQL available from third-party software companies, such as Crystal Reports XI and Actuate BIRT.

## **phpMyAdmin**

phpMyAdmin is a (web application) client for MySQL. MySQL is server where your commands get executed and returns you data, it manages all about data while

PhpMyAdmin is a web Application, with user friendly, easy to use GUI makes it easy to handle database, which is difficult to use on command line. phpMyAdmin is the web application written primarily in PHP. It's used for managing MySQL database. To be more specific, here is the detailed definition:

MySQL is the world's most popular open-source database. With its proven performance, reliability, and ease-of-use, MySQL has become the leading database choice for web-based applications, used by high profile web properties including Facebook, Twitter, YouTube, and all five of the top five websites. Additionally, it is

an extremely popular choice as embedded database, distributed by thousands of ISVs and OEMs.

phpMyAdmin is a free and open-source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it is one of the most popular MySQL administration tools, especially for web hosting services.

## **Python**

Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language. It was created by Guido van Rossum during 1985- 1990. Like

Perl, Python source code is also available under the GNU General Public License (GPL). This tutorial gives enough understanding on Python programming language. Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation, and it has fewer syntactical constructions than other languages. Python is a MUST for students and working professionals to become a great Software Engineer especially when they are working in Web Development Domain. I will list down some of the key advantages of learning Python. Python was developed by Guido van Rossum in the late eighties and early nineties at the National Research Institute for Mathematics and Computer Science in the Netherlands. Python is derived from many other languages, including ABC, Modula-3, C, C++, Algol-68, Smalltalk, and UNIX shell and other scripting languages. Python is copyrighted. Like Perl, Python source code is now available under the GNU General Public License (GPL). Python is

now maintained by a core development team at the institute, although Guido van Rossum still holds a vital role in directing its progress. Python is dynamically typed and garbage-collected. It supports multiple programming paradigms, including procedural, object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library. Python was conceived in the late 1980s as a successor to the ABC language. Python 2.0, released in 2000, introduced features like list comprehensions and a garbage collection system capable of collecting reference cycles. Python 3.0, released in 2008, was a major revision of the language that is not completely backward-compatible, and

much Python 2 code does not run unmodified on Python 3. The Python 2 language, i.e., Python 2.7.x, was officially discontinued on 1 January 2020 (first planned for 2015) after which security patches and other improvements will not be released for it. With Python 2's end-of-life, only Python 3.5.x and later are supported. Python interpreters are available for many operating systems. A global community of programmers develops and maintains Python, an open-source reference implementation. A non-profit organization, the Python Software Foundation, manages and directs resources for Python and Python development. Rather than having all of its functionality built into its core, Python was designed to be highly extensible. This compact modularity has made it particularly popular as a means of adding programmable interfaces to existing applications. Van Rossum's vision of a small core language with a large standard library and easily extensible interpreter stemmed from his frustrations with ABC, which espoused the opposite approach. Python strives for a simpler, less-cluttered syntax and grammar while giving developers a choice in their coding methodology. In contrast to Perl's

"there is more than one way to do it" motto, Python embraces a "there should be one—and preferably only one—obvious way to do it" design philosophy. Alex Martello, a Fellow at the Python Software Foundation and Python book author, writes that "To describe something as 'clever' is not considered a compliment in the Python culture." Python's developers strive to avoid premature optimization, and reject patches to non-critical parts of the Python reference implementation that would offer marginal increases in speed at the cost of clarity. When speed is important, a Python programmer can move time-critical functions to extension modules written in languages such as C, or use PyPy, a just-in-time compiler. Python is also available, which translates a Python script into C and makes direct C-level API calls into the Python interpreter.

## **Features of Language**

### **1) Easy to Learn and Use**

Python is easy to learn and use. It is developer-friendly and high-level programming language.

### **2) Expressive Language**

Python language is more expressive means that it is more understandable and readable.

### 3) Interpreted Language

Python is an interpreted language i.e.; interpreter executes the code line by line at a time.

This makes debugging easy and thus suitable for beginners.

### 4) Cross-platform Language

Python can run equally on different platforms such as Windows, Linux, UNIX and Macintosh etc. So, we can say that Python is a portable language.

### 5) Free and Open Source

Python language is freely available at official web address. The source-code is also available. Therefore, it is open source.

### 6) Object-Oriented Language

Python supports object-oriented language and concepts of classes and objects come into existence.

### 7) Extensible

It implies that other languages such as C/C++ can be used to compile the code and thus it can be used further in our python code.

### 8) Large Standard Library

Python has a large and broad library and provides rich set of module and functions for rapid application development.

### 9) GUI Programming Support

Graphical user interfaces can be developed using Python.

### 10) Integrated

It can be easily integrated with languages like C, C++, JAVA etc.

## **Django**

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Django's primary goal is to ease the creation of complex, database-driven websites. The framework emphasizes reusability and "pluggability" of components, less code, low coupling, rapid development, and the principle of don't repeat yourself. Python is used throughout, even for settings, files, and data models.

Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via

admin models. Built by experienced developers, it takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.

The core features of Django are:

- Ridiculously fast.

Django was designed to help developers take applications from concept to completion as quickly as possible.

- Fully loaded.

Django includes dozens of extras you can use to handle common web development tasks. Django takes care of user authentication, content administration, site maps, RSS feeds, and many more tasks — right out of the box.

- Reassuringly secure.

Django takes security seriously and helps developers avoid many common security mistakes.

- Exceedingly scalable.

Some of the busiest sites on the web leverage Django's ability to quickly and flexibly scale.

- Incredibly versatile.

Companies, organizations and governments have used Django to build all sorts of things

— from content management systems to social networks to scientific computing platforms.

## **What is Windows 10?**

Windows 10 professional integrates the strengths of windows 2008 professional such as standards-based security, manageability, and reliability, with the best business features of windows 98 and windows Millennium Edition, such as plug and play, simplified user interface, and innovative support services. This combination creates the best desktop operating system for business.

Whether your business deploys windows XP professional on a single computer or throughout a worldwide network, this new operating system increases your computing power while lowering cost of ownership for desktop computers. Some of the features



in XP are as follows:

The Microsoft website provides tutorials that you can use to learn about and deploy the Windows XP operating system. This technical walk-through provides step-by-step instructions and illustrations for installing and configuring key features of Windows XP server. It is the most flexible and powerful operating system developed by Microsoft team. It is more users friendly and a stable operating system equipped with much more added features. The operating system supports new technologies such as digital video disks, multiple monitors etc. along with plug and play and multi display features. It has a graphical user interface operating environment. Faster computing, easy access to remote information and control remote computers are some added features. Following are the common features of Windows 10.

Faster computing, easy access to remote information and control remote computers.  
Built-in networking and messaging facility.

- Easier to set up, add or remove.
- Increase system security and control.
- Support advanced networking and communication.

## **2.7 DATAFLOW DIAGRAM**

Data flow diagram (DFD) is a graphical representation of the “flow” of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into great detail, which can later be elaborated. A DFD shows what kind of information will be input to

and output from the system, how the data will advance through the system, and where the data will be stored.

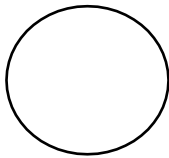
DFD is a designing tool used in the top-down approach to system Design. This context level DFD is next “exploded “, to produce a Level 1 DFD that shows some of the detail of the system being modelled. The Level 1 DFD shows how the system is divided into sub-systems (processes), each of which deals with one or more of the data flows to or from an external agent, and which together provide all of the functionality of the system as a whole. It also identifies internal data stores that must be present in order for the system to do its job, and shows the flow of data between the various parts of the system.

- Function- An activity or a function that is performed for some specific reason; can be manual or computerized; ultimately each process should perform only one activity.
- Data Store- collection of data that is permanently stored.
- External Entity- A person, organization or system that is external to the system but interact with it.
- Data Flow- Single piece of data or logical collection of information like a bill.

The following are some DFD symbols used in the project



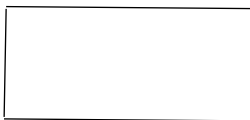
Rectangle: - It defines a source or destination of system data.



Circle: - It represents a process that transforms incoming data flow into outgoing data flow.



Arrow: - It defines data flow. It is a pipeline through which information flows.



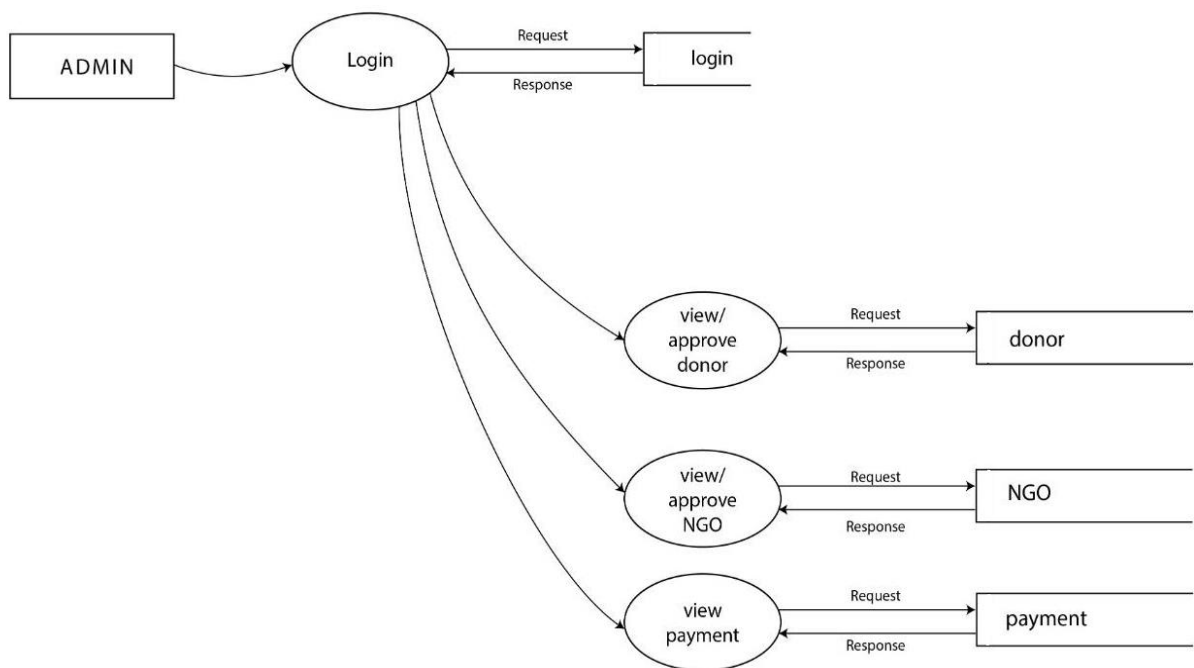
Open rectangle: - It is used to store data or a temporary repository of data.

### 2.7.1 LEVEL 0

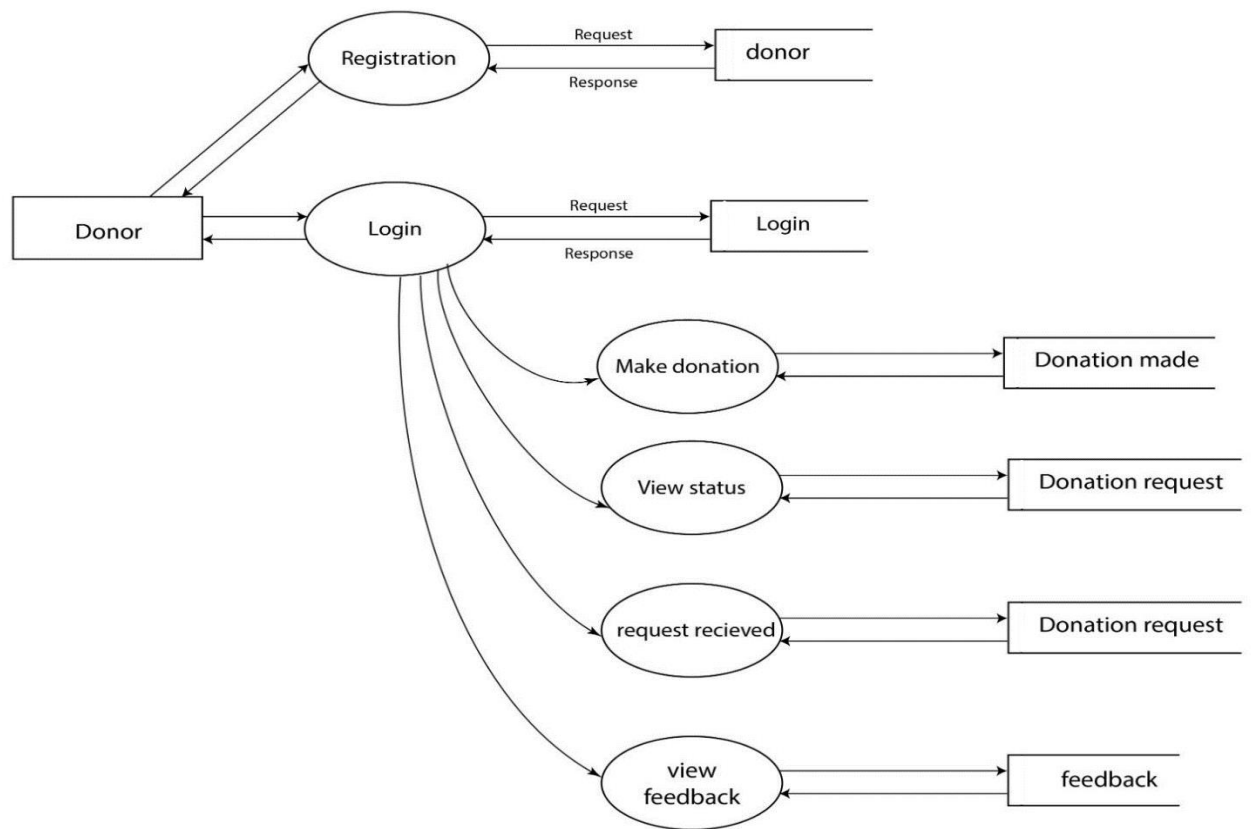


### 2.7.2 LEVEL 1

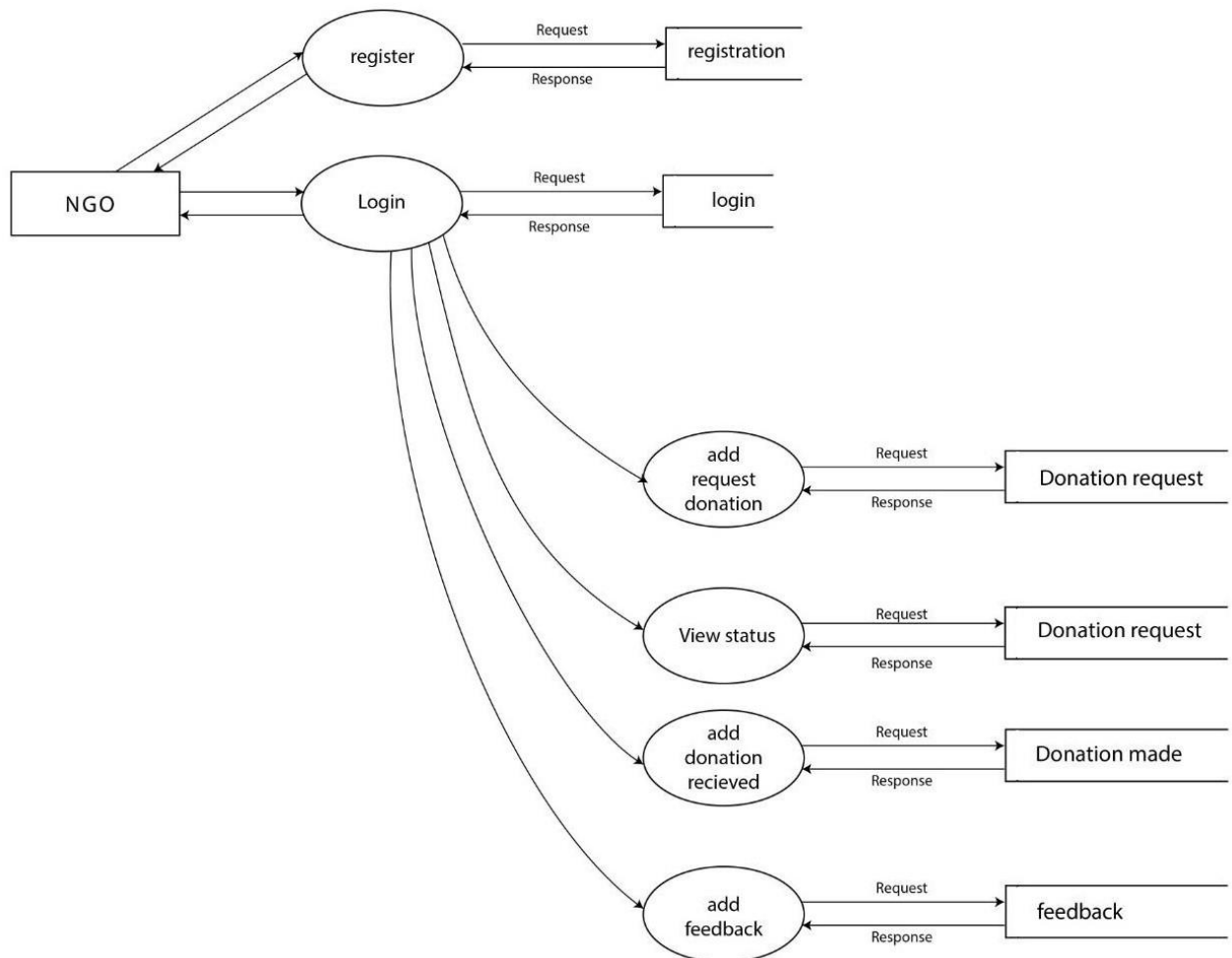
#### ADMIN



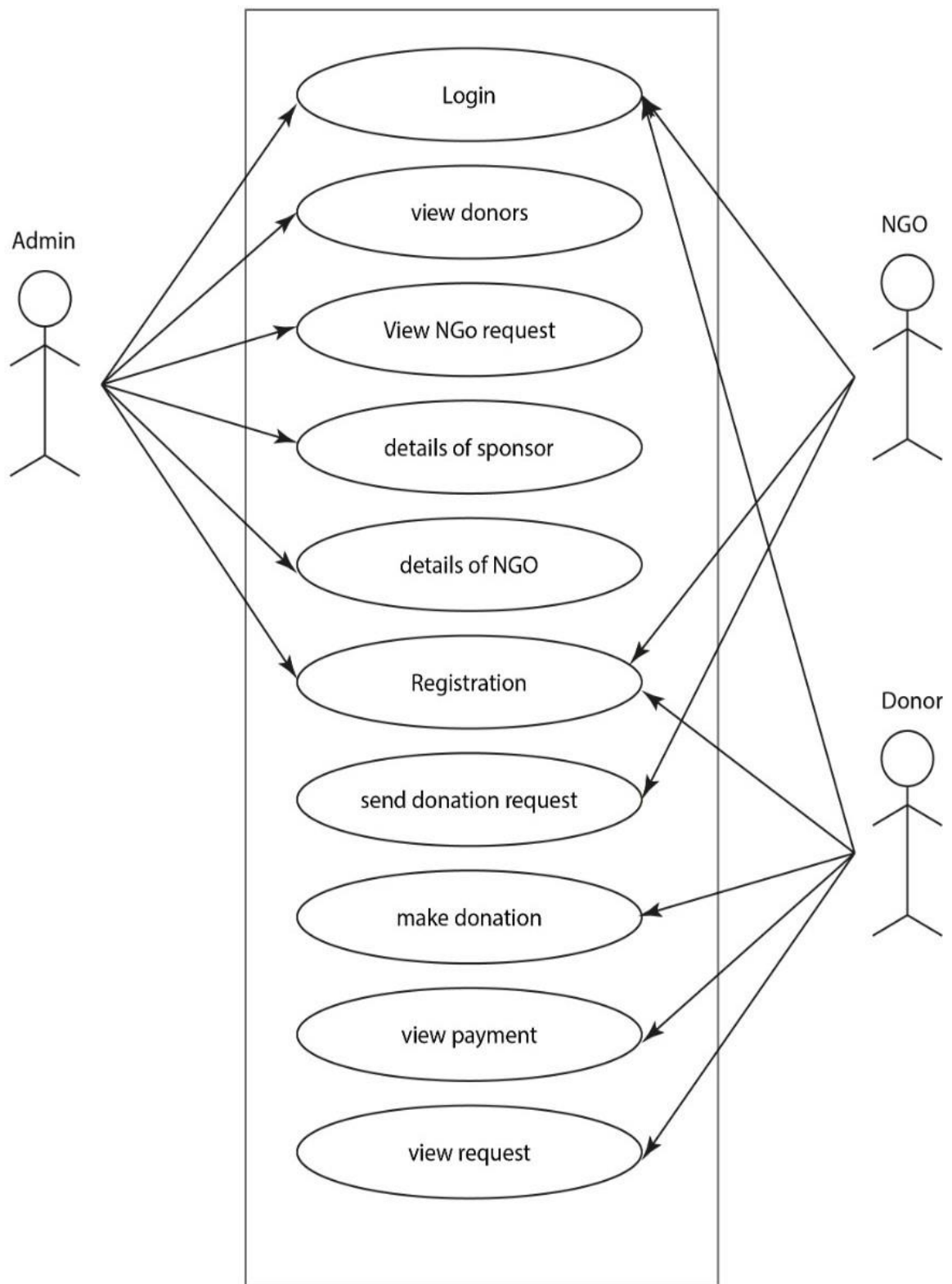
## DONOR



## VOLUNTEER



## 2.8 USECASE DIAGRAM



# SYSTEM DESIGN

## **3.1 INTRODUCTION**

System design is the process of defining the Architecture, modules, interfaces, and data for a system to satisfy specified requirements. System design could be seen as the application of systems theory to product development. There is some overlap with the disciplines of system analysis, systems architecture and systems engineering.

## **TYPES OF SYSTEM DESIGN**

### **Logical Design**

Logical design pertains to an abstract representation of the data flow, inputs and outputs of the system. It describes the inputs (source), outputs (destinations), databases (data stores), procedures (data flows) all in a format that meets the user requirements.

### **Physical Design**

Physical design relates to the actual input and outputs processes of the system. It focuses on how data is entered into a system, verified, processed and displayed as output.

### **Architectural Design**

It is also known as high level design that focuses on the design of system architecture. It describes the structure and behaviour of the system. It defines the structure and relationship between various modules of system development process.

### **Conceptual Data Modelling**

It is representation of organization data which includes all the major entities and relationship. System analysis develop a conceptual data model for the current system that supports the scope and requirement for the proposed system.



## **3.2 INPUT DESIGN**

Input design is a part of the overall design. The input methods can be broadly classified. Internal controls must be established for monitoring the number of inputs and for ensuring that the data are valid. The basic steps involved in input design are:

- Review input requirements.
- Decide how the input data flow will be implemented.
- Decide the source document.
- Prototype on line input screens.
- Design the input screens

The quality of the system input determines the quality of the system output. Input specifications describe the manner in which data enter the system for processing. Input design features can ensure the reliability of the system and produce result.

## **3.3 OUTPUT DESIGN**

A quality is one, which meets the requirements of end user and present the information clearly. In any system results of processing are communicated to the user and to the other system through outputs. In the outputs design it is determined how the information is to be displayed for immediate need.

It is the most important and direct source information is to user. Efficient and intelligent output design improves the system's relationships with the user and helps in decision making. The objectives of the output design is to convey the information of all the past activities, current status and to emphasis important events. The output generally refers to the results and information that is generated from the system. Outputs from computes are required primarily to communicate the result of processing to the users.

Two phases of the output design are:

1. Output Definitions
2. Output Specification

Output definitions takes into account the type of outputs contents, its frequency and its volume, the appropriate outputs media is determined for output. Once the media is chosen, the details specification of output documents are carried out. The nature of output required from the proposed system is determined during logical design stage. It takes the outline of the output from the logical design and produces output as specified during the logical design phase. In a project, when designing the output, the system must accomplish the following:

- Determine the information to present.
- Decide whether to display, speak the information and select the output medium.
- Arrange the information in acceptable format.

Thus, by following the above specification, a high-quality output can be generated. Outputs from compute system are required primarily to communicate the result of processing to users. Computer output is the most important and direct source of information to the user. Efficiency, intelligible output should improve the system's relationship with the user and help in decision making. The output devices to consider depend on factors as compatibility of the device with the system, response time requirements, expected print quality, number of copies needed etc.

### **3.4 DATA BASE DESIGN**

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for users. The general theme behind a database is to integrate all information. Database design is recognized as a standard of management information system and is available virtually for every computer system. In database design several specific objectives are considered:

- Ease of learning and use
- Controlled redundancy
- Data independence
- More information at low cost
- Accuracy and integrity
- Recovery from failure
- Privacy and security

## NORMALIZATION

Designing a database is complete task and the normalization theory is a useful aid in the design process. The process of normalization is concerned with transformation of conceptual schema into computer representation form. There will be need for most databases to grow by adding new attributes and new relations. The data will be used new ways. Tuple will be added and deleted. Information stored may undergo updating also. New association may also be added. In such situation the performance of a database is entirely depend upon its design. A bad database design may lead to certain undesirable things like:

1. Repetition of information
2. Inability to represent certain information
3. Loss of information

To minimize these anomalies, normalization may be used. If the database is in a normalized form, the data can be growing without, in most cases, forcing the rewriting application programs. This is important because of the excessive and growing cost of maintaining an organization's application programs and its data from the disrupting effects of database growth. As the quality of application programs increase, the cost of maintaining the without normalization will rise to prohibitive levels, A normalized database can also encompass many related activities of an organization thereby minimizing the need for rewriting the applications of programs. Thus, normalization helps one attain a good database design and there by ensures continued efficiency of database.

We can define the procedure as the successive reduction of a given collection of relations to some more desirable form. This procedure is reversible. That is, it is always possible to take the output from the procedure and convert them back into input. In this process, no information is lost. So, it is also called "no lose decomposition".

**First normal form:** A relation is first normal form (1NF) if and all its attributes are based on single domain. The objective of normalization a table is to remove its repeating groups and ensure that all entries of the resulting table have at most single value.

**Second normal form:** A table is said to be second normal form (2NF), when it is in 1NF and every attribute in the record is functionally dependent upon the whole key, and not just a part of the key.

**Third normal form:** A table is in third normal form (3NF). When it is in 2NF and every non-key attribute is functionally dependent on just the primary key.

# SYSTEM DEVELOPMENT

## 4.1 SOURCE CODE

### Index.html

```
{% load static %}
{% csrf_token %}
<!DOCTYPE html>
<html lang="zxx">
<head>
    <title>CHARMS</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <meta charset="utf-8" />
    <meta name="keywords" content="Teens Hub Responsive web template, Bootstrap Web
Templates, Flat Web Templates, Android Compatible web template,
SmartPhone Compatible web template, free WebDesigns for Nokia, Samsung, LG, Sony
Ericsson, Motorola web design" />
    <script>
        addEventListener("load", function () {
            setTimeout(hideURLbar, 0);
        }, false);
        function hideURLbar() {
            window.scrollTo(0, 1);
        }
    </script>
    <!-- Custom Theme files -->
    <link href="{% static 'css/bootstrap.css' %}" type="text/css" rel="stylesheet" media="all">
    <link href="{% static 'css/style.css' %}" type="text/css" rel="stylesheet" media="all">
    <!-- font-awesome icons -->
    <link href="{% static 'css/font-awesome.min.css' %}" rel="stylesheet">
    <!-- //Custom Theme files -->
    <!-- online-fonts -->
    <link href="{% static
'//fonts.googleapis.com/css?family=Poppins:100,100i,200,200i,300,300i,400,400i,500,500i,600,6
00i,700,700i,800,800i,900,900i' %}"
```

```

rel="stylesheet">
  <!-- //online-fonts -->
</head>
<body>
  <!-- banner -->
  <section class="banner d-flex flex-column justify-content-center align-items-center">
    <!-- header -->
    <header>
      <nav class="navbar navbar-expand-lg navbar-light bg-gradient-secondary">
        <h1>
          <a class="navbar-brand" >
            CHARMS
          </a>
        </h1>
        <button class="navbar-toggler ml-md-auto" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent"
          aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle
navigation">
          <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarSupportedContent">
          <ul class="navbar-nav ml-lg-auto text-center">
            <li class="nav-item active mr-lg-3 mt-lg-0 mt-3">
              <a class="nav-link" href="..\index\">Home
                <span class="sr-only">(current)</span>
              </a>
            </li>
            <li class="nav-item mr-lg-3 mt-lg-0 mt-3">
              <a class="nav-link" href="..\about\">about</a>
            </li>
            <!-- <li class="nav-item mr-lg-3 mt-lg-0 mt-3">
              <a class="nav-link" href="..\register\">Register</a>
            </li>
            <li class="nav-item mr-lg-3 mt-lg-0 mt-3">
              <a class="nav-link" href="..\login\">Login</a>

```

```

        </li> -->
        <li class="nav-item dropdown mr-lg-3 mt-lg-0 mt-3">
            <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown"
role="button" data-toggle="dropdown"
                aria-haspopup="true" aria-expanded="false">
                Account
            </a>
            <div class="dropdown-menu" aria-labelledby="navbarDropdown">
                <a class="dropdown-item" href="..\userregister\">User Registration</a>
                <a class="dropdown-item" href="..\donorregister\">Donor registration</a>
                <a class="dropdown-item" href="..\Register\">Volunteer registration</a>
                <div class="dropdown-divider"></div>
                <a class="dropdown-item" href="..\login">Login</a>
            </div>
        </li>
        <!-- <li class="nav-item mr-lg-3 mt-lg-0 mt-3">
            <a class="nav-link" href="..\contact\">Contact</a>
        </li> -->
    </ul>
</div>
</nav>
</header>
<!-- //header -->
<!-- banner text -->
<div class="container">
    <div class="banner_text_wthree_pvt text-center">
        <h3 class="home-banner-w3">Connecting Hearts, Making a Difference </h3>
        <div class="d-sm-flex justify-content-center">
            <button type="button" class="btn w3ls-btn bg-theme" data-toggle="modal" aria-
pressed="false"
                ><a href="..\login\">Login</a>
            </button>
            <button type="button" class="btn ml-2 w3ls-btn" data-toggle="modal" ><a
href="..\userregister">Register</a></button>
        </div>
    </div>

```



```
</div>
  </div>
  <!-- //banner text -->
</section>
<!-- //banner -->
<!-- about-->
<section class="single_grid_w3_main align-w3" id="about">
  <div class="container">
    <div class="wthree_pvt_title text-center">
      <h4 class="w3pvt-title">CHARMS mission
    </h4>
  </div>
  <div class="row pt-md-4">
    <div class="col-lg-6">
      <div class="single_grid_w3 single_grid_w3">
      </div>
    </div>
    <div class="col-lg-6">
      <div class="single_grid_text">
        <h5>Health and Wellness
        <span class="wthree-line"></span>
        </h5>
        <p> We strive to improve the physical and mental well-being of communities in
        need. From medical camps and awareness campaigns to providing access to clean water and
        nutrition, Charms is dedicated to promoting holistic wellness.</p>
        <!-- <a class="btn bg-theme mt-4 wthree-link-bnr" href="..\about\">view more
        </a> -->
      </div>
    </div>
  </div>
  <div class="row flex-row-reverse sec-space">
    <div class="col-lg-6">
      <div class="single_grid_w3 single_grid_w31">
      </div>
    </div>
  </div>
</div class="col-lg-6">
```

```

<div class="single_grid_text">
  <h5>Community Development
    <span class="wthree-line"></span>
  </h5>
  <p> Charms is deeply rooted in communities. We collaborate with local partners
to implement sustainable development projects that address specific needs, from infrastructure
enhancement to vocational training.</p>
  <!-- <a class="btn bg-theme mt-4 wthree-link-bnr" href="..\about\">view more
  </a> -->
</div>
</div>
</div>
<div class="row">
  <div class="col-lg-6">
    <div class="single_grid_w3 single_grid_w32">
      </div>
    </div>
    <div class="col-lg-6">
      <div class="single_grid_text">
        <h5>Education and Empowerment
          <span class="wthree-line"></span>
        </h5>
        <p> We believe that education is the key to unlocking potential. Through
scholarships, mentorship programs, and skill-building workshops, we empower individuals to
break barriers and build a brighter future.</p>
        <!-- <a class="btn bg-theme mt-4 wthree-link-bnr" href="..\about\">view more
        </a> -->
      </div>
    </div>
  </div>
</div>
</div>
</section>
<!-- //about -->
<!-- explore-->
<div class="banner-section" id="explore">

<div class="container-fluid">

```

```
<div class="row">
  <div class="slider-container col-lg-12 mx-auto">
    <div class="w3ls-about-banner">
      <div class="callbacks_container">
        <ul class="rslides callbacks callbacks1 slider3">
          <li>
            <div class="slide-img slide-img1">
              <div class="banner-info">
                <h3>CHARMS</h3>
              </div>
            </div>
          </li>
          <li>
            <div class="slide-img slide-img2">
              <div class="banner-info">
                <h3>CHARMS</h3>
              </div>
            </div>
          </li>
          <li>
            <div class="slide-img slide-img3">
              <div class="banner-info">
                <h3>CHARMS</h3>
              </div>
            </div>
          </li>
        </ul>
      </div>
      <div class="slider-right">
        <h3 class="title">Our mission is to empower and uplift underserved
communities</h3>
        <p>Through education, healthcare, and sustainable development, fostering a
brighter future for all</p>
      </div>
    </div>
  </div>
</div>
```

```

        </div>
    </div>
</div>
</div>
<!--//explore-->
<!--services-->
<div class="wthree_pvtits-services align-w3" id="services">
    <div class="container">
        <div class="wthree_pvt_title text-center">
            <h4 class="w3pvt-title">services
            </h4>
            <span class="sub-title">add your caption here</span>
        </div>
        <div class="wthree_pvtits-services-row row">
            <div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">
                <span class="fa fa-ravelry p-sm-4 p-2"></span>
                <h4 class="my-3">Education and Empowerment </h4>
            </div>
            <div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">
                <span class="fa fa-wpexplorer p-sm-4 p-2"></span>
                <h4 class="my-3"> Health and Wellness </h4>
            </div>
            <div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">
                <span class="fa fa-diamond p-sm-4 p-2"></span>
                <h4 class="my-3">Community Development</h4>
            </div>
            <div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">
                <span class="fa fa-bell-o p-sm-4 p-2"></span>
                <h4 class="my-3"> Emergency Relief </h4>
            </div>
            <!-- <div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">
                <span class="fa fa fa-smile-o p-sm-4 p-2"></span>
                <h4 class="my-3">magna aliquyam erat</h4>
            </div>

<div class="col-lg-4 col-md-6 wthree_sgrid py-sm-5 py-4">

```

```

        <span class="fa fa-plus-square-o p-sm-4 p-2"></span>
        <h4 class="my-3">At vero eos et accusam</h4>
    </div> -->
</div>
</div>
</div>
<!-- //services-->
<!-- slide -->
<section class="slide-banner d-flex flex-column justify-content-center align-items-center my-
lg-5">
    <h5 class="text-center">Connecting Hearts, Making a Difference</h5>
    <!-- <a href="..\gallery\" class="btn btn-primary mt-4 wthree-link-bnr">view more</a> -->
</section>
<!-- //slide -->
<!-- blog -->
<section class="blog_w3ls align-w3" id="posts">
    <div class="container">
        <div class="wthree_pvt_title text-center">
            <h4 class="w3pvt-title">blog posts
            </h4>
            <span class="sub-title">Charms</span>
        </div>
        <div class="row space-sec">
            <!-- blog grid -->
            <div class="col-lg-4 col-md-6 mt-sm-0 mt-5">
                <div class="card" style="height: 700px;">
                    <div class="card-header p-0 position-relative">
                        <a data-toggle="modal" aria-pressed="false" data-target="#exampleModal2"
role="button">
                            
                            <span class="post-icon bg-theme1">blog post</span>
                        </a>
                    </div>

                    <div class="card-body">
                        <h5 class="blog-title card-title font-weight-bold">

```

```

        <a data-toggle="modal" aria-pressed="false" data-target="#exampleModal2"
            role="button" class="text-theme1">Wellness Warriors: Nurturing Health
and Happiness in Marginalized Areas </a>

    </h5>

    <p>Charms' initiatives to improve health and wellness in disadvantaged
communities. From organizing medical camps to raising awareness about hygiene and nutrition,
we showcase how Charms is making a tangible difference in people's lives. Through
heartwarming testimonials and insightful interviews, we illustrate the significance of addressing
physical and mental well-being as a crucial component of social change. Explore how Charms'
commitment to holistic wellness is bringing smiles and hope to those in need.</p>

    <!-- <button type="button" class="btn blog-btn wthree-bnr-btn mt-3 w3_pvt-
link-bnr" data-toggle="modal"

        aria-pressed="false" data-target="#exampleModal2">

        Read more

    </button> -->

</div>

</div>

</div>

<!-- //blog grid -->

<!-- blog grid -->

<div class="col-lg-4 col-md-6 mt-md-0 mt-5">

    <div class="card" style="height: 700px;">

        <div class="card-header p-0 position-relative">

            <a data-toggle="modal" aria-pressed="false" data-target="#exampleModal3"
                role="button">

            <span class="post-icon bg-theme1">blog post</span>

        </a>

    </div>

    <div class="card-body">

        <h5 class="blog-title card-title font-weight-bold">

            <a data-toggle="modal" aria-pressed="false" data-target="#exampleModal3"
                role="button" class="text-theme2">Rising Together: Community
Development and Sustainable Change</a>

        </h5>

        <p>Charms' community development projects that are driving positive change
from the ground up. From infrastructure improvements that enhance daily lives to vocational

```

training programs that empower individuals with valuable skills, we showcase how collaboration and dedication are shaping the future of underserved communities. Through captivating stories and before-and-after snapshots, we highlight the collective efforts that are fostering resilience and self-sufficiency.</p>

```
<!-- <button type="button" class="btn blog-btn wthree-bnr-btn mt-3 w3_pvt-link-bnr" data-toggle="modal"
aria-pressed="false" data-target="#exampleModal3">
Read more
</button> -->
</div>
</div>
</div>
<!-- //blog grid -->
<!-- blog grid -->
<div class="col-lg-4 col-md-6 mt-lg-0 mt-4 mx-auto blog-end">
<div class="card" style="height: 700px;">
<div class="card-header p-0 position-relative">
<a data-toggle="modal" aria-pressed="false" data-target="#exampleModal4"
role="button">

<span class="post-icon bg-theme1">blog post</span>
</a>
</div>
<div class="card-body">
<h5 class="blog-title card-title font-weight-bold">
<a data-toggle="modal" aria-pressed="false" data-target="#exampleModal4"
role="button" class="text-theme3">Empowering Dreams: The Impact of
Education on Vulnerable Communities</a>
</h5>
<p>we delve into the transformative power of education in underserved
communities. We explore real-life stories of individuals whose lives have been changed by access
to education, thanks to Charms' dedicated efforts. From scholarship recipients pursuing their
dreams to mentorship programs that guide young minds, we highlight how education serves as a
stepping stone toward a brighter future. Join us as we celebrate the incredible impact education
can have on breaking the cycle of poverty and fostering empowerment</p>
<!-- <button type="button" class="btn blog-btn wthree-bnr-btn mt-3 w3_pvt-link-bnr" data-toggle="modal"
```

```

        aria-pressed="false" data-target="#exampleModal4">
        Read more
    </button> -->
</div>
</div>
</div>
<!-- //blog grid -->
</div>
</div>
</section>
<!-- //blog -->
<!-- footer -->
<footer class="footer py-md-5 pt-md-3 pb-sm-5">
    <div class="container-fluid">
        <div class="row p-sm-4 px-3 py-5">
            <div class="col-lg-4 col-md-6 footer-top mt-md-0 mt-sm-5">
                <h2>
                    <a class="navbar-brand" href="..\index\">
                        CHARMS
                    </a>
                </h2>
                <p class="my-3 text-white">Charms was born from a collective dream to address the
pressing challenges faced by vulnerable communities and individuals.</p>
                <p class="text-white">
                    Our journey began with a group of passionate individuals who wanted to channel
their resources, skills, and energy towards a common goal - to create a better tomorrow for those
in need. Since our inception, we have been driven by the belief that even the smallest acts of
kindness can create ripples of change that extend far beyond our immediate reach.
                </p>
            </div>
            <div class="col-lg-2 col-md-6 mt-md-0 mt-5">
                <div class="footerv2-w3ls">
                    <!-- <h3 class="mb-3 w3f_title">Navigation</h3> -->

                </div>
            </div>
        </div>
    </div>
<!-- <hr> -->
    <!-- <ul class="list-w3pvtits">
        <li>

```



```

        <a href="..\index\">
            Home
        </a>
    </li>
    <li class="my-2">
        <a href="..\about\">
            About Us
        </a>
    </li>
    <li class="my-2">
        <a href="..\gallery\">
            Gallery
        </a>
    </li>
    <li class="mb-2">
        <a href="#services" class="scroll">
            Services
        </a>
    </li>
    <li>
        <a href="..\contact\">
            Contact Us
        </a>
    </li>
</ul> -->
</div>
</div>
<div class="col-lg-3 col-md-6 mt-lg-0 mt-5">
    <div class="footerv2-w3ls">
        <!-- <h3 class="mb-3 w3f_title">Links</h3>
        <hr> -->
        <!-- <ul class="list-w3pvtits">

<li>
    <a href="#about" class="scroll">
        Our Mission

```

```

        </a>
    </li>
    <li class="my-2">
        <a href="#posts" class="scroll">
            Latest posts
        </a>
    </li>
    <li class="my-2">
        <a href="#explore" class="scroll">
            Explore
        </a>
    </li>
    <li class="mb-2">
        <a href="..\contact\">
            Find us
        </a>
    </li>
    <li>
        <a href="..\index\">
            Privacy Policy
        </a>
    </li>
</ul> -->
</div>
</div>
<div class="col-lg-3 col-md-6 mt-lg-0 mt-5">
    <div class="footerv2-w3ls">
        <h3 class="mb-3 w3f_title">Contact Us</h3>
        <hr>
        <div class="fv3-contact">
            <p>
                <a href="mailto:example@email.com">info@example.com</a>
            </p>
        </div>
    </div>
</div>
<div class="fv3-contact my-2">
```

```

        <p>+456 123 7890</p>
    </div>
    <div class="fv3-contact">
        <p>+90 nsequursu dsdesdc,
            <br>xxx Street State 34789.</p>
    </div>
</div>
</div>
</div>
</div>
</div>
<!-- //footer bottom -->
</footer>
<!-- //footer -->
<!-- copyright -->
<div class="cpy-right text-center bg-theme">
    <p class="text-white">©CHARMS</a>
    </p>
</div>
<!-- //copyright -->
<!-- blog modal -->
<div class="modal fade" id="exampleModal2" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel2"
aria-hidden="true">
    <div class="modal-dialog modal-dialog-centered" role="document">
        <div class="modal-content">
            <div class="modal-header">
                <h5 class="modal-title textwhite" id="exampleModalLabel2">This is a standard
post.</h5>
                <button type="button" class="close" data-dismiss="modal" aria-label="Close">
                    <span aria-hidden="true">&times;</span>
                </button>
            </div>

<div class="modal-body text-center">
    
    <p class="text-left my-4">

```

```

    Quisque velit nisi, pretium ut lacinia in, elementum id enim. Curabitur non nulla
sit amet
    nisl
    tempus convallis quis ac
    lectus. Cras ultricies ligula sed magna dictum porta.
    </p>
  </div>
</div>
</div>
</div>
<!-- //blog modal1 -->
<!-- blog modal2 -->
<div class="modal fade" id="exampleModal3" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel3"
  aria-hidden="true">
  <div class="modal-dialog modal-dialog-centered" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title text-white" id="exampleModalLabel3">This is a standard
post.</h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
<span aria-hidden="true">&times;</span>
      </button>
    </div>
    <div class="modal-body text-center">
      
      <p class="text-left my-4 text-white">
        Quisque velit nisi, pretium ut lacinia in, elementum id enim. Curabitur non nulla
sit amet
        nisl
        tempus convallis quis ac
        lectus. Cras ultricies ligula sed magna dictum porta.
      </p>
    </div>
  </div>
</div>
</div>
```

```

</div>

<!-- //blog modal2 -->

<!-- blog modal3 -->

<div class="modal fade" id="exampleModal4" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel4"
    aria-hidden="true">
    <div class="modal-dialog modal-dialog-centered" role="document">
        <div class="modal-content">
            <div class="modal-header">
                <h5 class="modal-title text-white" id="exampleModalLabel4">This is a standard
post.</h5>
                <button type="button" class="close" data-dismiss="modal" aria-label="Close">
                    <span aria-hidden="true">&times;</span>
                </button>
            </div>
            <div class="modal-body text-center">
                
                <p class="text-left my-4 text-white">
                    Quisque velit nisi, pretium ut lacinia in, elementum id enim. Curabitur non nulla
sit amet
nisl

                    tempus convallis quis ac
                    lectus. Cras ultricies ligula sed magna dictum porta.
                </p>
            </div>
        </div>
    </div>
</div>

<!-- //blog modal3-->

<!-- login -->

<div class="modal fade" id="exampleModal" tabindex="-1" role="dialog" aria-
labelledby="exampleModalLabel"
    aria-hidden="true">

<div class="modal-dialog modal-dialog-centered" role="document">
    <div class="modal-content">
        <div class="modal-header">

```

```

<h5 class="modal-title text-white" id="exampleModalLabel">Login</h5>
    <button type="button" class="close" data-dismiss="modal" aria-label="Close">
        <span aria-hidden="true">&times;</span>
    </button>
</div>
<div class="modal-body">
    <form action="#" method="post" class="p-3">
        {% csrf_token %}
        <div class="form-group">
            <label for="recipient-email" class="col-form-label">Email</label>
            <input type="email" class="form-control" placeholder=" " name="email"
id="recipient-email"
                required="">
        </div>
        <div class="form-group">
            <label for="password" class="col-form-label">Password</label>
            <input type="password" class="form-control" placeholder=" "
name="password" id="password"
                required="">
        </div>
        <div class="right-w3l">
            <button class="form-control bg-theme1"><a
href="\login?id={{ data.id }}">Login</a></button>
        </div>
        <div class="row sub-w3l my-3">
            <div class="col sub-w3layouts_hub">
                <input type="checkbox" id="brand1" value="">
                <label for="brand1" class="text-white">
                    <span></span>Remember me?</label>
            </div>
            <div class="col forgot-w3l text-sm-right">
                <a href="#" class="text-white">Forgot Password?</a>
            </div>
        </div>
    </div>
    <p class="text-center dont-do text-white">Don't have an account?
    <a href="#" data-toggle="modal" data-target="#exampleModal1" class="text-dark">

```

Register Now</a>

</p>

</form>

</div>

</div>

</div>

</div>

<!-- //login -->

<!-- register -->

<div class="modal fade" id="exampleModal1" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel1"

aria-hidden="true">

<div class="modal-dialog modal-dialog-centered" role="document">

<div class="modal-content">

<div class="modal-header">

<h5 class="modal-title" id="exampleModalLabel1">Register</h5>

<button type="button" class="close" data-dismiss="modal" aria-label="Close">

<span aria-hidden="true">&times;</span>

</button>

</div>

<div class="modal-body">

<form action="#" method="post" class="p-3">

<div class="form-group">

<label for="recipient-name" class="col-form-label">Username</label>

<input type="text" class="form-control" placeholder=" " name="Name" id="recipient-rname"

required="">

</div>

<div class="form-group">

<label for="recipient-email" class="col-form-label">Email</label>

<input type="email" class="form-control" placeholder=" " name="Email" id="recipient-email"

required="">

</div>

<div class="form-group">

<label for="recipient-phone" class="col-form-label">Phone

Number&lt;/label&gt;

```
required="">
```

<div class="form-group">

&lt;label for="recipient-alt" class="col-form-label"&gt;Alternate Number&lt;/label&gt;

```
required="">
```

</div>

<div class="form-group">

&lt;label for="recipient-place" class="col-form-label"&gt;Place&lt;/label&gt;

```
required="">
```

<div class="form-group">

&lt;label for="recipient-aadhar" class="col-form-label"&gt;Aadhar Number&lt;/label&gt;

```
required="">
```

</div>

<div class="form-group">

&lt;label for="recipient-blood" class="col-form-label"&gt;Blood Group&lt;/label&gt;

```
required="">
```

</div>

</div>

<div class="form-group" style="margin-top: 5px;">

<label  
for="recipient-address" class="col-form-label">Address</label><center>

```
<textarea class="form-control" placeholder=" " name="address" id="recipient-address"
```

```
required="" style="width: 430px;" ></textarea></center>
```

<div class="form-group">



```
<!-- Password Form -->
<form class="form">
    <div class="form-group">
        <label for="password1" class="col-form-label">Password</label><center>
            <input type="password" class="form-control" placeholder="" 
name="Password" id="password1"
                required="" style="width: 430px;"></center>
        </div>
        <div class="form-group">
            &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
            <label for="password2" class="col-form-label">Confirm Password</label><center>
                <input type="password" class="form-control" placeholder="" name="Confirm
Password" id="password2"
                    required="" style="width: 430px;"></center>
            </div>
            <div class="sub-w3l">
                <div class="sub-w3layouts_hub">
                    <input type="checkbox" id="brand2" value="" style="margin-left:
30px;">
                        <label for="brand2" class="mb-3 text-white">
                            <span></span>I Accept to the Terms & Conditions</label>
                        </div>
                    </div>
                    <div class="right-w3l"><center>
                        <button class="form-control bg-theme1" style="width: 430px;"><a
href="\register?id={{ data.id }}">Register</a></button></center>
                    </div>
                </form>
            </div>
        </div>
    </div>
</div>
<!-- // register -->
<!-- js -->
```

```
<script src="{% static 'js/jquery-2.2.3.min.js' %}"></script>
<!-- //js -->
<!-- explore responsive slider -->
<script src="{% static 'js/responsiveslides.min.js' %}"></script>
```

```

<script>
// You can also use "$(window).load(function() {"
    $(function () {
        // Slideshow 4
        $(".slider3").responsiveSlides({
            auto: true,
            pager: true,
            nav:false,
            speed: 500,
            namespace: "callbacks",
            before: function () {
                $('<li>before event fired.</li>");
            },
            after: function () {
                $('<li>after event fired.</li>");
            }
        });
    });
</script>

<!-- script for password match -->
<script>
    window.onload = function () {
        document.getElementById("password1").onchange = validatePassword;
        document.getElementById("password2").onchange = validatePassword;
    }
    function validatePassword() {
        var pass2 = document.getElementById("password2").value;
        var pass1 = document.getElementById("password1").value;
        if (pass1 != pass2)
            document.getElementById("password2").setCustomValidity("Passwords Don't
Match");

    else
        document.getElementById("password2").setCustomValidity("");
        //empty string means no validation error
    }

```

```

</script>
<!-- script for password match -->
<!-- start-smooth-scrolling -->
<script src="{ % static 'js/move-top.js' % }"></script>
<script src="{ % static 'js/easing.js' % }"></script>
<script>
    jQuery(document).ready(function ($) {
        $(".scroll").click(function (event) {
            event.preventDefault();
            $('html,body').animate({
                scrollTop: $(this.hash).offset().top
            }, 1000);
        });
    });
</script>
<!-- //end-smooth-scrolling -->
<!-- smooth-scrolling-of-move-up -->
<script>
    $(document).ready(function () {
        /*
        var defaults = {
            containerID: 'toTop', // fading element id
            containerHoverID: 'toTopHover', // fading element hover id
            scrollSpeed: 1200,
            easingType: 'linear'
        };
        */
        $.UtoTop({
            easingType: 'easeOutQuart'
        });
    });

</script>
<script src="{ % static 'js/SmoothScroll.min.js' % }"></script>
<!-- //smooth-scrolling-of-move-up -->
<!-- Bootstrap core JavaScript

```

===== -->

<!-- Placed at the end of the document so the pages load faster -->

<script src="{ % static 'js/bootstrap.js' % }"></script>

</body>

</html>

# **SYSTEM IMPLEMENTATION**

## **5.1 TESTING**

The term software testing is defined as to find for the errors in the application that might lead to fault or failure of the whole application. There are testing conditions that the system must pass to say that it is tested and working properly. The quality and reliability is also attained by going through the process of testing.

### **UNIT TESTING**

Unit testing is a level of a software testing where individual units/components of software are tested. The purpose is to validate that each unit of the software performs as designed. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output. In procedural programming, a unit may be an individual program, function, procedure, etc. In object-oriented programming, the smallest unit is a method, which may belong to a base/ super class, abstract class or derived/ child class.(some treat a module of an application as a unit. This is to be discouraged as there will probably be many individual units within that module.) Unit testing frameworks, drivers, stubs, and mock/ fake objects are used to assist in unit testing.

### **INTEGRATION TESTING**

Integration testing is a level of software testing where individual units are combined and tested as a group. The purpose of the level of testing is to expose faults in the interaction between integrated units. The purpose of this level of testing is to expose faults in the intersection between integrated units. The drivers and test stubs are used to assist in Integration Testing.

### **SYSTEMS TESTING**

System testing is a level of software testing where complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements.

## ACCEPTANCE TESTING

Acceptance testing is performed to ensure that the functional, behavioural, and performance requirements of the software are met. IEEE defines acceptance testing as a 'formal testing with respect to user needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system. During acceptance testing, the software is tested and evaluated by a group of users either at the developer's site or user's site. This enables the users to test the software themselves and analyse whether it is meeting their requirements. To perform acceptance testing, a predetermined set of data is given to the software as input. It is important to know the expected output before performing acceptance testing so that outputs produced by the software as a result of testing can be compared with them. Based on the results of tests, users decide whether to accept or reject the software is considered to be correct and is accepted; otherwise, it is rejected.

## REGRESSION TESTING

Regression testing is the retesting of a software system to confirm that changes made to few parts of the codes has not any side effects on existing system functionalities. It is to ensure that old codes are still working as they were before introduction of the new change. The ideal process would be to create an extensive test suite and run it after each and every change.

## 5.2 VALIDATION CHECKS

A validation check ascertains that the value (or data) input into a computer is valid. Validation checks are performed automatically by computer to ensure that entered data is correct and reasonable. Validation means check the input submitted by the user. There are two types of validation are available in PHP. They are as follows:

- **Client-Side Validation** – Validation is performed on the client machine web browsers.
- **Server-Side Validation** – After submitted by data, The data has sent to a server and perform validation checks in server machine.

## Server-Side Validation

In the Server-Side Validation, the input submitted by the user is being sent to the server and validated using one of server-side scripting languages such as ASP.Net, PHP etc. After the validation process on the Server Side, the feedback is sent back to the client by a new dynamically generated web page. It is better to validate user input on Server Side because you can protect against the malicious users, who can easily bypass your Client-Side scripting language and submit dangerous input to the server.

## Client-Side Validation

In the Client-Side Validation, you can provide a better user experience by responding quickly at the browser level. When you perform a Client-Side Validation, all the user inputs validated in the user's browser itself. Client-Side validation does not require a round trip to the server, so the network traffic which will help your server perform better. This type of validation is done on the browser side using script languages such as JavaScript, VBScript or HTML5 attributes.

## 5.3 IMPLEMENTATION

Implementation includes placing the system into operation and providing the users and operation personnel with the necessary documentation to use and maintain the new system. Implementation includes all those activities that take place to convert from the old system. Proper implementation is essential to provide a reliable system to meet the organizational requirements. Successful implementation may not guarantee improvement in the organization using the new system, as well as, improper installation will prevent. There are four methods:

- **Parallel approach:** The old system is operated with the new system.
- **Direct cut over method:** The old system is replaced with the new system.
- **Pilot approach:** Working version of the system is implemented in one part of the organization based on the feedback, changes are made and the system is installed in the rest of the organization by one of the other methods.
- **Phase-in-method:** Gradually implements the system across all users.



## 5.4 SECURITY

The protection of computer-based resources that includes hardware, software, data, procedures and against unauthorized use or natural.

- Security
- Integrity
- Privacy
- Disaster is known as system security
- System security can be divided into four related issues
- Confidentiality

**Data security** is the protection of data from loss, disclosure, modification and destruction.

**System Integrity** refers to the proper functioning of hardware and programs, appropriate physical security and safety against external threats such as eavesdropping and wiretapping.

## **FUTURE SCOPE OF PROJECT**

## **6.1 SYSTEM MAINTENANCE**

Maintenance means restoring something to its original conditions. Enhancement means adding, modifying the code to support the changes in the user specification. System maintenance conforms the system to its original requirements and enhancement adds to system capability by incorporating new requirements. Thus, maintenance changes the existing system, enhancement adds features to the existing system, and development replaces the existing system. It is an important part of system development that includes the activities which corrects errors in system design and implementation, updates the documents, and tests the data.

### **Maintenance Types**

System maintenance can be classified into four types:

- Corrective Maintenance
- Adaptive Maintenance
- Perfective Maintenance
- Preventive Maintenance

### **Corrective Maintenance**

Corrective Maintenance deals with the repair of faults or defects found in day- today system functions. A defect can result due to errors in software design, logic and coding. Design errors occur when changes made to the software are incorrect, incomplete, wrongly communicated, or the change request is misunderstood. Logical errors result from invalid tests and conclusions, incorrect implementation of design specifications, faulty logic flow, or incomplete implementation of design specifications, faulty logic flow, or incomplete test of data. All these errors, referred to as residual errors, prevent the software from conforming to its agreed specifications. Note that the need for corrective maintenance is usually initiated by bug reports drawn by the users.

## **Adaptive Maintenance**

Adaptive Maintenance is the implementation of changes in a part of the system, which has been affected by a change that occurred in some other part of the system.

Adaptive

Maintenance consists of adapting software to changes in the environment such as the hardware or the operating system. The term environment in this context refers to the conditions and the influences which act (from outside) on the system. For example, business rules, work patterns and government policies have a significant impact on the software system.

## **Perfective Maintenance**

Perfective Maintenance mainly deals with implementing new or changed user requirements. Perfective Maintenance involves making functional enhancements to the system in addition to the activities to increase the system's performance even when the changes have not been suggested by faults. This includes enhancing both the function and efficiency of the code and changing the functionalities of the system as per the user's changing needs.

## **Preventive Maintenance**

Preventive Maintenance involves performing activities to prevent the occurrence of errors. It tends to reduce the software complexity thereby improving program understand ability and increasing software maintainability. It comprises documentation updating, code optimization and code restructuring. Documentation updating involves modifying the documents affected by the changes in order to correspond to the present state of the system. Code optimization involves modifying the programs for faster execution or efficient use of storage space. Code restructuring involves transforming the program structure for reducing the complexity in source code and making it easier to understand.

## 6.2 FUTURE ENHANCEMENT

I have tried our best to present the information effectively, yet there can be further enhancement in the application. I have taken care of all the critical aspects, which were needed to be taken care of. Because of fast changes in the world of programming this system will gradually get outdated and less effective. For the time being it's possible to overcome problems by amendments and minor modifications to acknowledge the need of fundamental design. But any modification will not affect the normal working

of the system. The development system is very interactive, coded in such a way to ensure maximum user friendliness and also allows flexibility for future. In a nutshell, it can be summarized that the future scope of the project circles around maintaining information regarding:

- The provision to remember the username and password for the user in case confusion arises.
- In Login Process Confirmation Message.
- Online help (FAQ) can be attached to the system to make the system more user- friendly.
- This will be developed as an application for like social media.
- Track volunteers.

The above-mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Future enhancement can be extended in such a way to improve the security and the performance. In the last I would like to thank all the persons involved in the development of the system directly or indirectly. I hope that the project will serve its purpose for which it is develop there by underlining success of process.

# APPENDIX

## 7.1 TABLE DESIGN

The design of the tables in the database is done according to the rules specified for database. In the proposed project, 6 tables are used and some of them are connected using keys. Insertion and retrieval of values are easy by designing the database in this way.

### 1. Table Name: clientdonation

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
name	[varchar]	NULL
date	[varchar]	NULL
description	[varchar]	NULL
phoneno	[bigint]	NULL
hospitalName	[varchar]	NULL
dist	[varchar]	NULL
bloodGroup	[varchar]	NULL
donationType	[varchar]	NULL
status	[varchar]	NULL
user_id	[tinyint]	NULL
certificate	[varchar]	NULL
idproof	[varchar]	NULL
amount	[varchar]	NULL
donor_id	[varchar]	NULL

2. Table Name: donation

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
amount	[smallint]	NULL
donation_id	[tinyint]	NULL

3. Table Name: donor

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
name	[varchar]	NULL
email	[varchar]	NULL
phoneno	[bigint]	NULL
address	[varchar]	NULL
password	[varchar]	NULL
place	[varchar]	NULL
district	[varchar]	NULL
aadhar	[bigint]	NULL
blood	[varchar]	NULL
alt	[bigint]	NULL
idproof	[varchar]	NULL
user_id	[tinyint]	NULL

4. Table Name: entry

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
event_id	[tinyint]	NULL
volunteer_id	[tinyint]	NULL
status	[varchar]	NULL



5. Table Name: event

Column Name	Data Type	Constraints
id	[tinyint]	PrimaryKey
name	[varchar]	NULL
venue	[varchar]	NULL
date	[varchar]	NULL
criteria	[varchar]	NULL
description	[varchar]	NULL
estimate	[smallint]	NULL
type	[varchar]	NULL
volunteercount	[tinyint]	NULL
volunteers	[tinyint]	NULL
district	[varchar]	NULL
regfee	[smallint]	NULL

6. Table Name: gallery

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
image	[varchar]	NULL
event_id_id	[tinyint]	NULL

7. Table Name: participate

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
paymentstatus	[varchar]	NULL
event_id	[tinyint]	NULL
user_id	[tinyint]	NULL
qty	[tinyint]	NULL
total	[smallint]	NULL

8. Table Name: register

Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
name	[varchar]	NULL
email	[varchar]	NULL
phoneno	[bigint]	NULL
address	[varchar]	NULL
password	[varchar]	NULL
place	[varchar]	NULL
district	[varchar]	NULL
aadhar	[bigint]	NULL
blood	[varchar]	NULL
alt	[bigint]	NULL
user_id	[tinyint]	NULL
idproof	[varchar]	NULL

9. Table Name: account

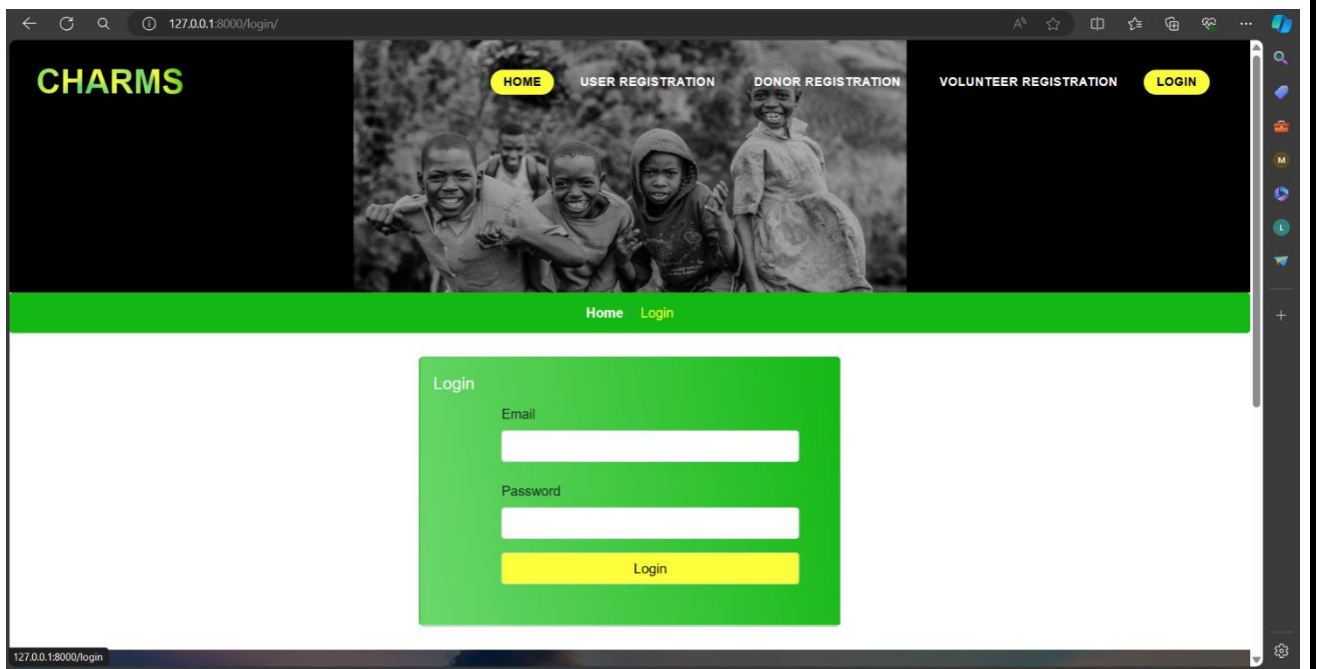
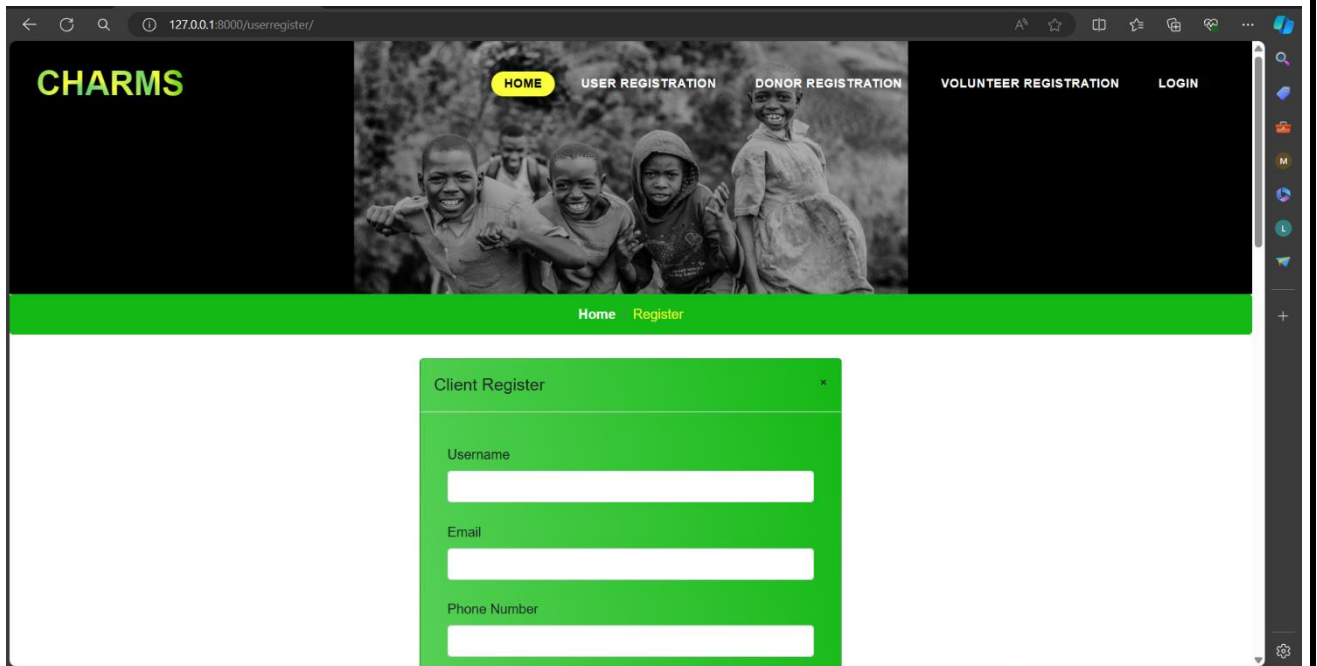
Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
entry_id	[varchar]	NULL
event_id	[tinyint]	NULL
collection	[varchar]	NULL
remaining	[smallint]	NULL
spend	[smallint]	NULL
total	[varchar]	NULL
amount	[smallint]	NULL

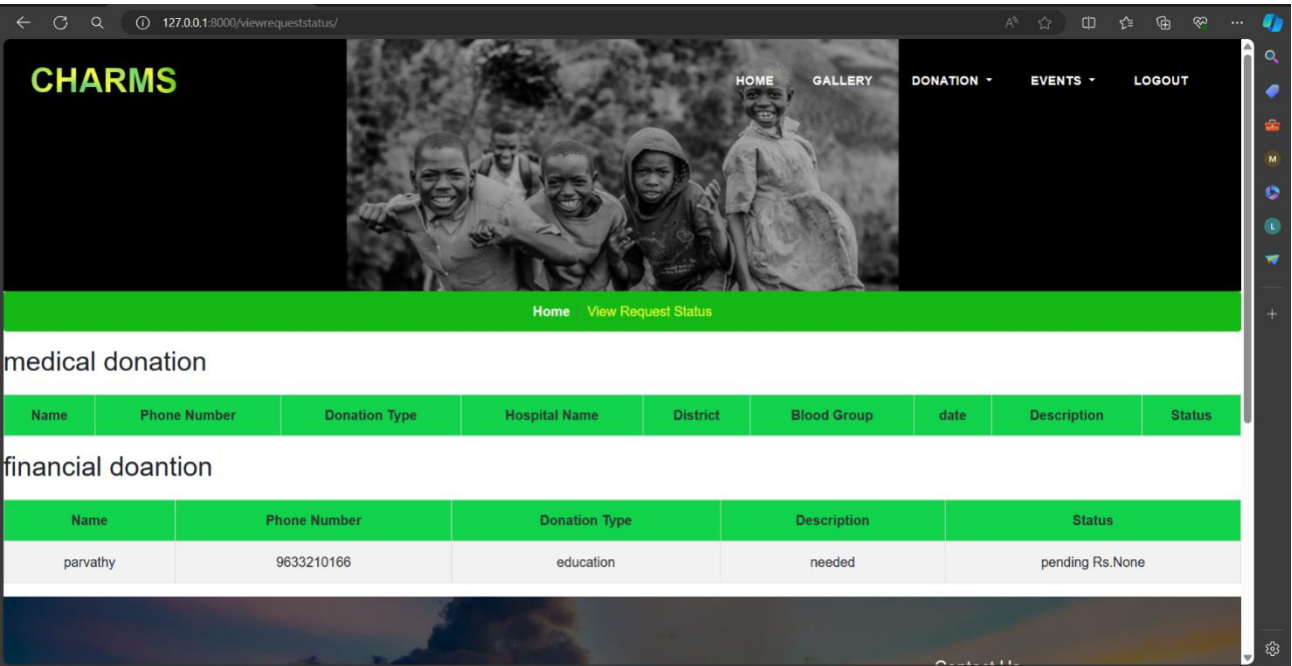
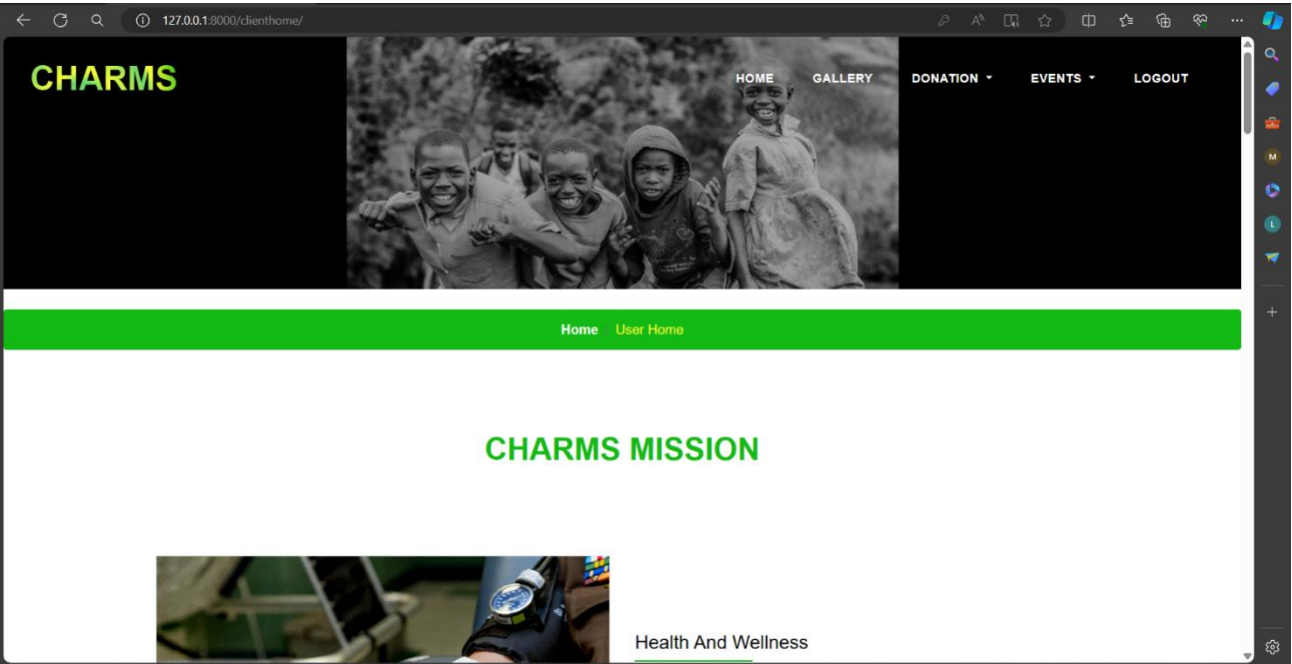
## 10. Table Name: user

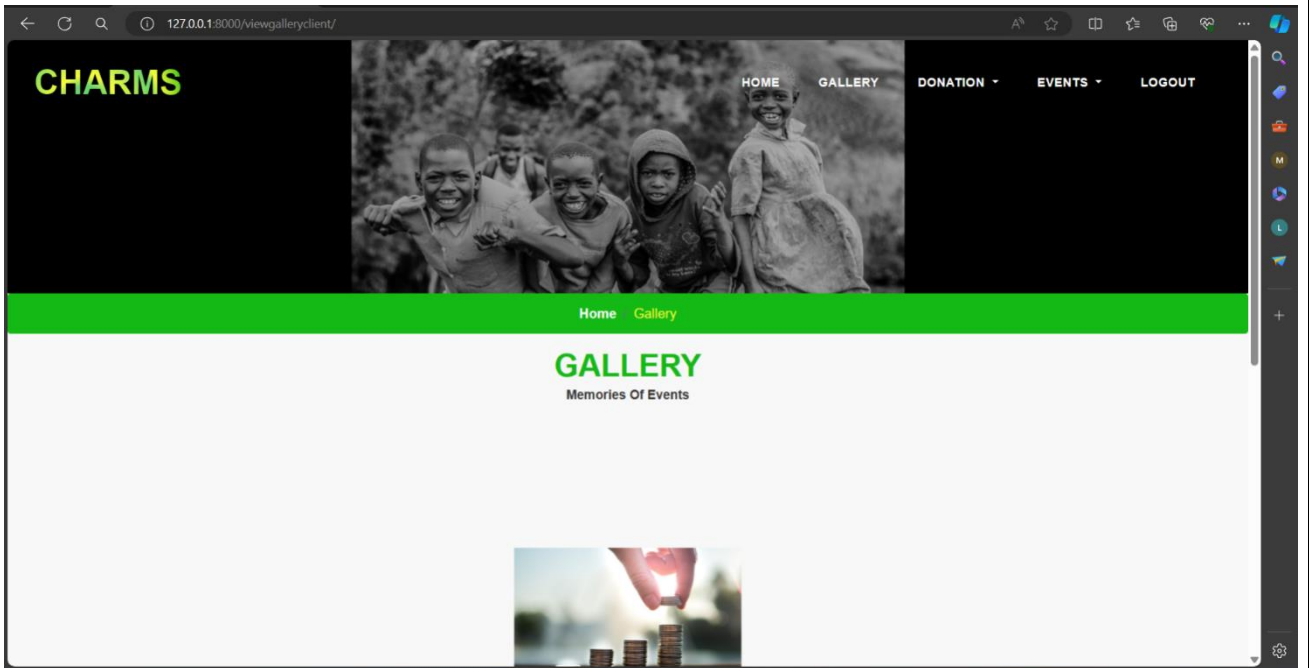
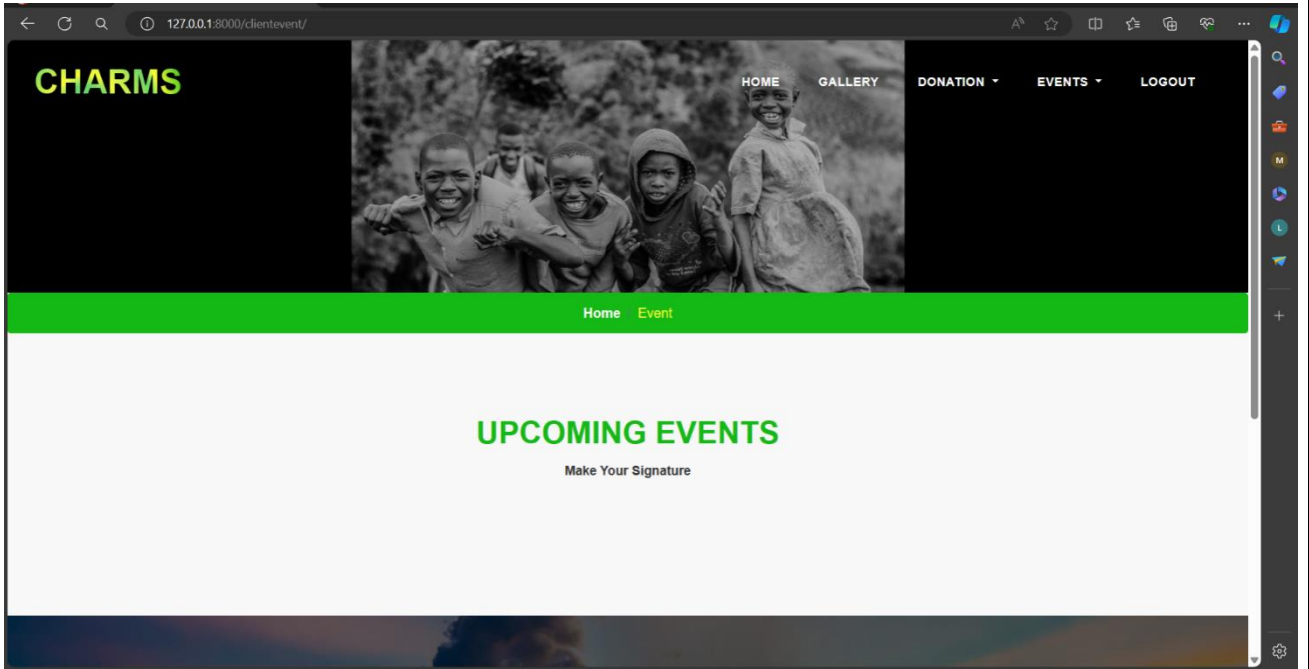
Column Name	Data Type	Constraints
id	[tinyint]	Primary Key
name	[varchar]	NULL
email	[varchar]	NULL
phoneno	[bigint]	NULL
address	[varchar]	NULL
password	[varchar(11)]	NULL
place	[varchar]	NULL
district	[varchar]	NULL
aadhar	[bigint]	NULL
blood	[varchar]	NULL
alt	[bigint]	NULL
user_id	[tinyint]	NULL

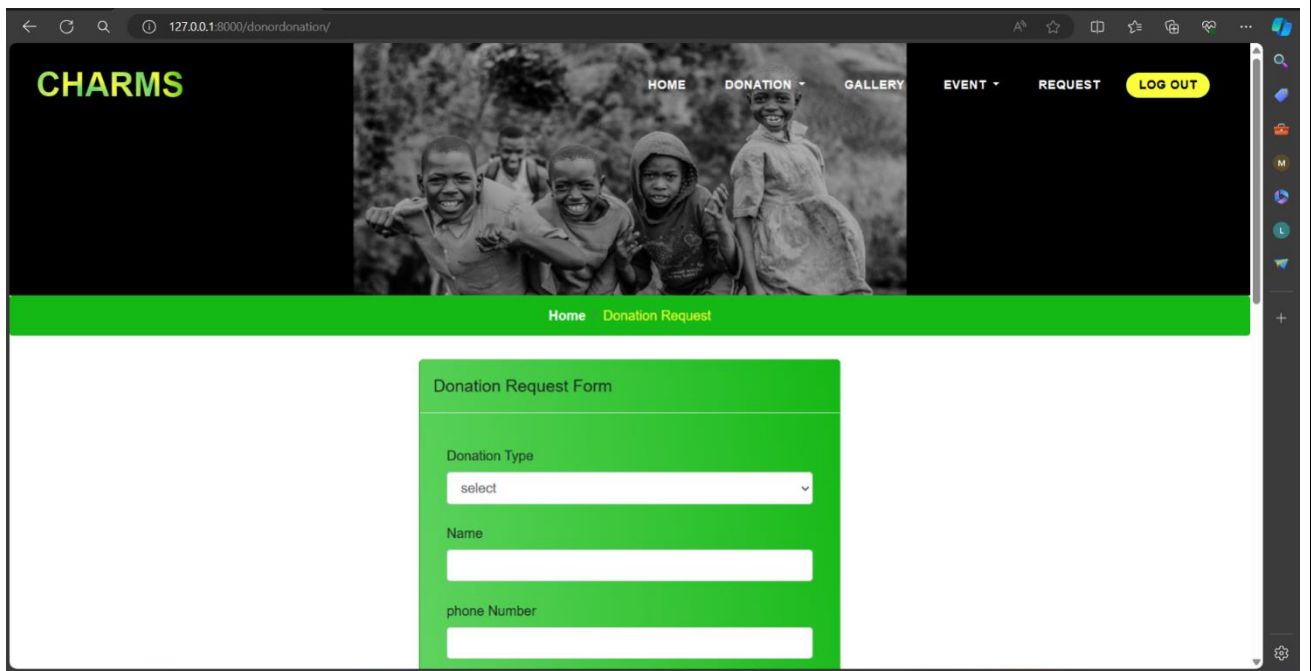
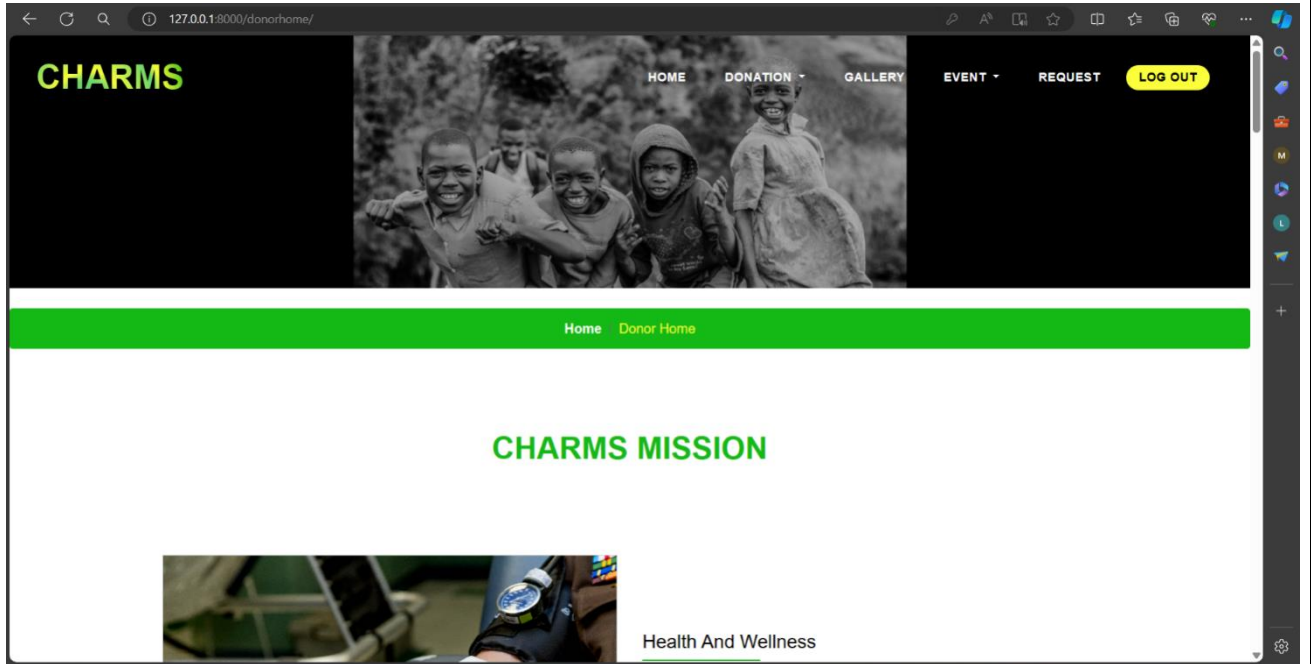
## 7.2 SAMPLE INPUT SCREENS













CHARMS

HOME DONATION GALLERY EVENT REQUEST LOG OUT

Home View Request Status

medical donation

Name	Phone Number	Donation Type	Hospital Name	District	Blood Group	date	Description	Status
financial doantion								
Name	Phone Number	Donation Type	Description	Status				
07736249164	9645327623	disaster	thevarkkad	pending Rs.None				

CHARMS

HOME VIEW GALLERY ACCOUNT DONATION REQUEST EVENT LOGOUT

Home Donor

View Donors

Name	Email	Phone Number	Adress	Place	district	Aadhar	Blood Group	Alternate number	Idproof	Action
Danush	danush@gmail.com	9383445972	hh house	maradu	Ernakulam	886578686876	AB+	9834658346	download	Reject
Seetha	seetha@gmail.com	9847643875	kakaa	kecheri	Thrissur	688748359834	AB+	7994756384	download	Reject
jimmy	jimmy@gmail.com	8767868768	kkk	aluva	Ernakulam	548777832479	AB+	9433646576	download	Reject
siya	siya@gmail.com	9409745735	lpk	edapally	Ernakulam	886578686876	O+	8987346573	download	Reject



CHARMS

HOME
VIEW
GALLERY
ACCOUNT
DONATION REQUEST
EVENT
LOGOUT

HomeView Users

View Users

Name	Email	Phone Number	Adress	Place	district	Aadhar	Blood Group	Alternate number	Action
Femi	femikf21@gmail.com	9383445972	Kakkassery (H) P.O Aloor	aloor	Ernakulam	896793876973	B+	9068754870	<a href="#">Reject</a>
thankan	thankan@gmail.com	9543546354	thankan house	maradu	Ernakulam	565465454646	AB+	7516546456	<a href="#">Reject</a>
parvarthy	paru12@gmail.com	9633210166	padinjare madavana	kottuvally	Alappuzha	435657687898	A+	9633808236	<a href="#">Reject</a>

CHARMS

HOME
VIEW
GALLERY
ACCOUNT
DONATION REQUEST
EVENT
LOGOUT

HomeAccount

Balance Sheet

Event Name	Credit			Debit			Balance
	Expenditure	Collection	Profit	Donation Type	Username	Amount	
food festival	500	2500	2000				
food festival	1000	1500	500				
charity	1999	None	None				
				education	jeeva	2000	
				education	jeeva	500	
Total			2500			2500	0

CHARMS

HOMEVIEWGALLERYACCOUNTDONATION REQUESTEVENTLOGOUT

HomeView Request

medical donation

Name	Phone Number	Donation Type	Hospital Name	District	Blood Group	date	Description	Idproof	Relevant Document	Donor
jinu	8347863847	organ	lissy	Ernakulam	B+	Aug. 22, 2023, 11:30 a.m.	kidney	<a href="#">download</a>	<a href="#">download</a>	rejected
sinu	9348765873	blood	lissy	Ernakulam	AB+	Aug. 21, 2023, 10:30 a.m.	urgent for heart surgery	<a href="#">download</a>	<a href="#">download</a>	donor confirm

CHARMS

HOMEGALLERYEVENTLOG OUT

HomeEvent

charity

auditorium

March 24, 2024, 10 a.m.

Entry criteria: 18-25

Description: welcome all

No of volunteers confirmed: 0

No of volunteers needed: 10

CONFIRM

CHARMS

Contact Us

## CONCLUSION

## CONCLUSION

The implementation of a charity management system offers numerous benefits, including improved transparency, efficiency, and donor engagement. By leveraging technology to streamline operations, track donations, and communicate impact, charities can enhance their effectiveness in fulfilling their missions. However, it's essential to prioritize data security, user accessibility, and ongoing support to ensure the success and sustainability of the system. Overall, embracing a well-designed charity management system can empower organizations to make a greater positive impact on their communities and beyond. Although I have put my full efforts to develop this project still some things may have been left which can be upgraded later on.

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[www.tutorialspoint.com](http://www.tutorialspoint.com)

[www.google.com](http://www.google.com)

### **BOOK OF STUDY:**

Software Engineering (3rd ed.) By K.K. Aggarwal & Yogesh Singh

