VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM-590014

A DBMS Mini-Project Report

on

"CHARITY MANAGEMENT SYSTEM"

A Mini-project report submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in **Computer Science and Engineering** of Visvesvaraya Technological University, Belgaum.

Submitted by:

CHARAN G N(1DT20CS033)

HEMANTH KUMAR V (1DT20CS054)

VEDANT DAVE (1DT20CS038)

Under the Guidance of:

PROF. SHYLAJA B, Assistant Professor, Department of CSE

Department of Computer Science and Engineering

DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT

Opp. Art of Living, Udayapura, Kanakapura Road, Bangalore-560 082

(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE, New Delhi) CE, CSE, ECE, EEE, ISE, ME Courses Accredited by NBA, New Delhi, NAAC A+

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the Mini-Project on Database Management System (DBMS) entitled **"CHARITY MANAGEMENT SYSTEM"** has been successfully carried out by **CHARAN G N(1DT20CS033), HEMANTH KUMAR V(1DT20CS054) and VEDANT DAVE (1DT20CS038)** bonafide students of **Dayananda Sagar Academy of Technology and Management** in partial fulfillment of the requirements for the award of degree in **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University, Belgaum** during academic year 2022-23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The mini project report has been approved as it satisfies the academic requirements in respect of project work for the said degree.

Guide Prof. SHYLAJA B (Asst. Prof. Dept of CSE)	HOD Dr. KAVITHA C (Head of CSE Dept.)
Examiner 1	Examiner 2

ACKNOWLEDGEMENT

It gives us immense pleasure to present before you our project titled "**CHARITY MANAGEMENT SYSTEM USING HTML, CSS, BOOTSTRAP, JAVASCRIPT and PHP**". The joy and satisfaction accompanying the successful completion of any task would be incomplete without mentioning those who made it possible. We are glad to express our gratitude towards our prestigious institution **DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT** for providing us with utmost knowledge, encouragement and the maximum facilities in undertaking this project.

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We sincerely acknowledge the guidance and constant encouragement of our mini-project guide, **Ms Shylaja B,** Asst.Professor, Dept of Computer Science**.**

CHARAN G N(1DT20CS033)

HEMANTH KUMAR V (1DT20CS054)

VEDANT DAVE (1DT20CS038)

ABSTARCT

NGO Management is a web application that is using HTML,CSS,BOOTSTRAP, JAVASCRIPT and MYSQL to manage the backend of the application. NGO Management Project is using MVC architecture and maven tool to manage the dependencies.

The main aim of NGO Management is to manage the activity of an NGO organization. The application will help to manage the NGO members, Donors, and NGO campaigns. The whole idea behind the application is to manage the Campaigns and transections details of the donors or Fundraiser.

“NGO MANAGEMENT SYSTEM” is a web-based application developed for managing various activities in the NGO. This particular project deals with taking donations and arranging fundraising events so that people could donate effectively and easily. A non-profit organization that operates independently of any government, typically one whose purpose is to address a social or political issue.

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CHAPTER 1

INTRODUCTION

As we all know, charity giving is the demonstration of giving cash, products or time to the grievous, either straightforwardly or by methods for a magnanimous trust or other admirable motivation. Altruistic giving as a strict demonstration or obligation is alluded to as almsgiving or contributions. The name originates from the clearest articulation of the ideals of noble cause; giving the beneficiaries of it the methods they need to endure. The devastated, especially those bereaved or stranded, and the feeble or harmed, are for the most part viewed as the appropriate beneficiaries of good cause.

The main aims and objectives of this project is to design a web-based application that helps the Donors and The NGO's Ease their work. Specifically, the aims are to: Design and integrate an automated system to improve the services and decrease the time spent calling and searching for services offered in the donation. Configure a gateway system for online payment to enable individual's ease of payment from their mobile devices. Design and implement users register page, login and online appointment booking.

Therefore, we propose to build a charity management system for the distribution of donations between charities, giving people the ability to notify about the surplus, and to inform about the poor who need help. It's main objectives are, development of income resources (donation), management and distribution of contributions to all the needy and low income families, optimum provision and utilization of operational, physical, and human resources. Organization and maintenance of facilities and family's data to allow the ease of their access. Speeding up the practical procedures and helping decision Makers in their strategic action plans.

CHAPTER 2

REQUIREMENT SPECIFICATION

The requirement analysis specifies the requirements needed to develop a graphic project. In this phase, we collect the requirements needed for designing the project. The requirements collected are then analysed and carried to the next phase.

SOFTWARE REQUIREMENTS

- Operating System: Windows operating system (windows 10).
- Processor – Intel ® Core™ i3-2370 CPU @2.40GHz or above.
- IDE: Visual Studio Code (for coding).
- Database: SQLite.
- Programming Language: JavaScript.
- Front-end Development: HTML, CSS, JavaScript.
- Back-end Development: PHP, MySQL.

HARDWARE REQUIREMENTS

- Processor – Pentium IV or above.
- RAM – 2 GB or more.
- Hard disk – 3 GB or more.

CHAPTER 3

SYSTEM ANALYSIS AND DESIGN

An Entity – Relationship model (ER model) describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.

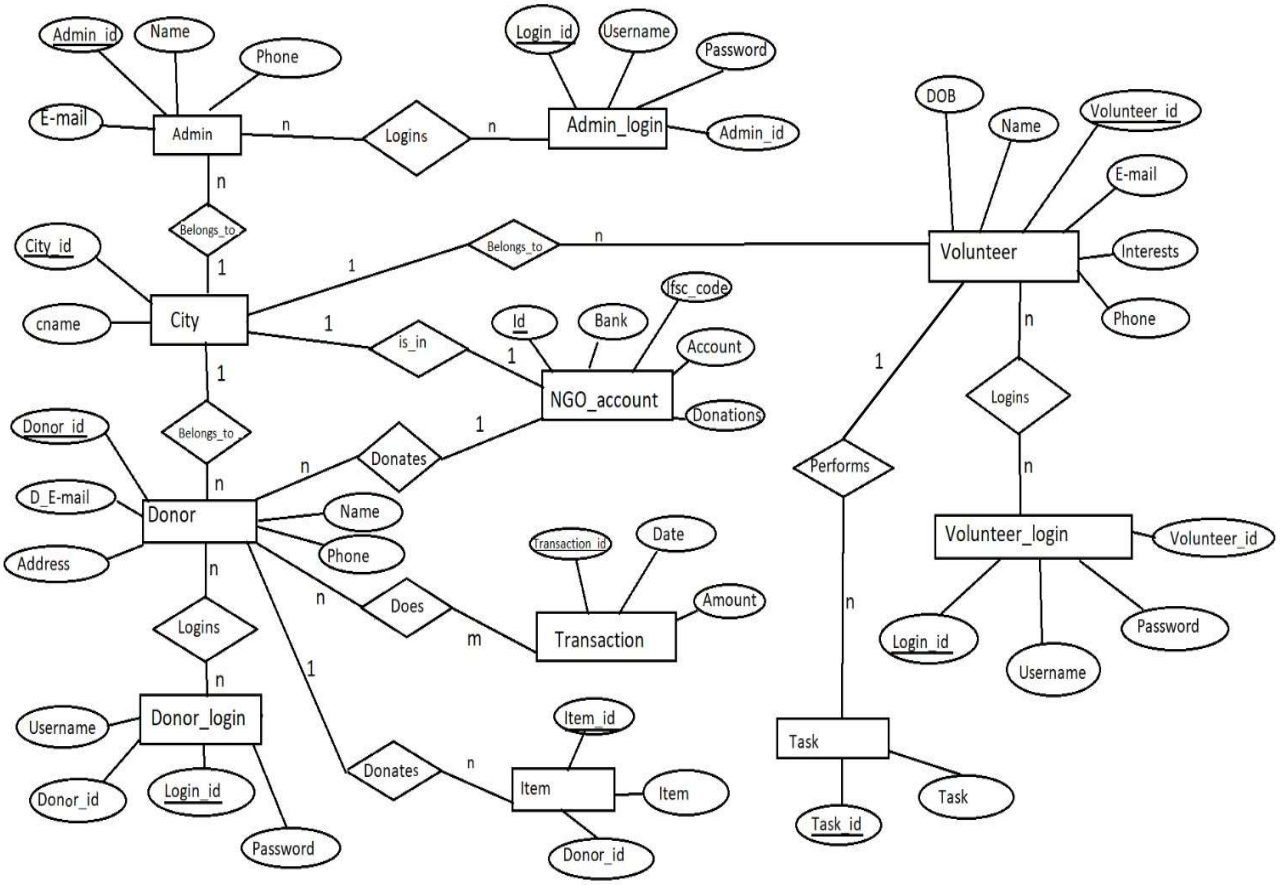


Figure 3.1: Entity – Relational Diagram of Charity Management System

The ER Diagram above shows all the entities, their attributes and the relation between them. Gives the relation between a Donor, Receiver, and organization. These entities describe various attributes which serve as data for the database.

3.3 SCHEMA DIAGRAM

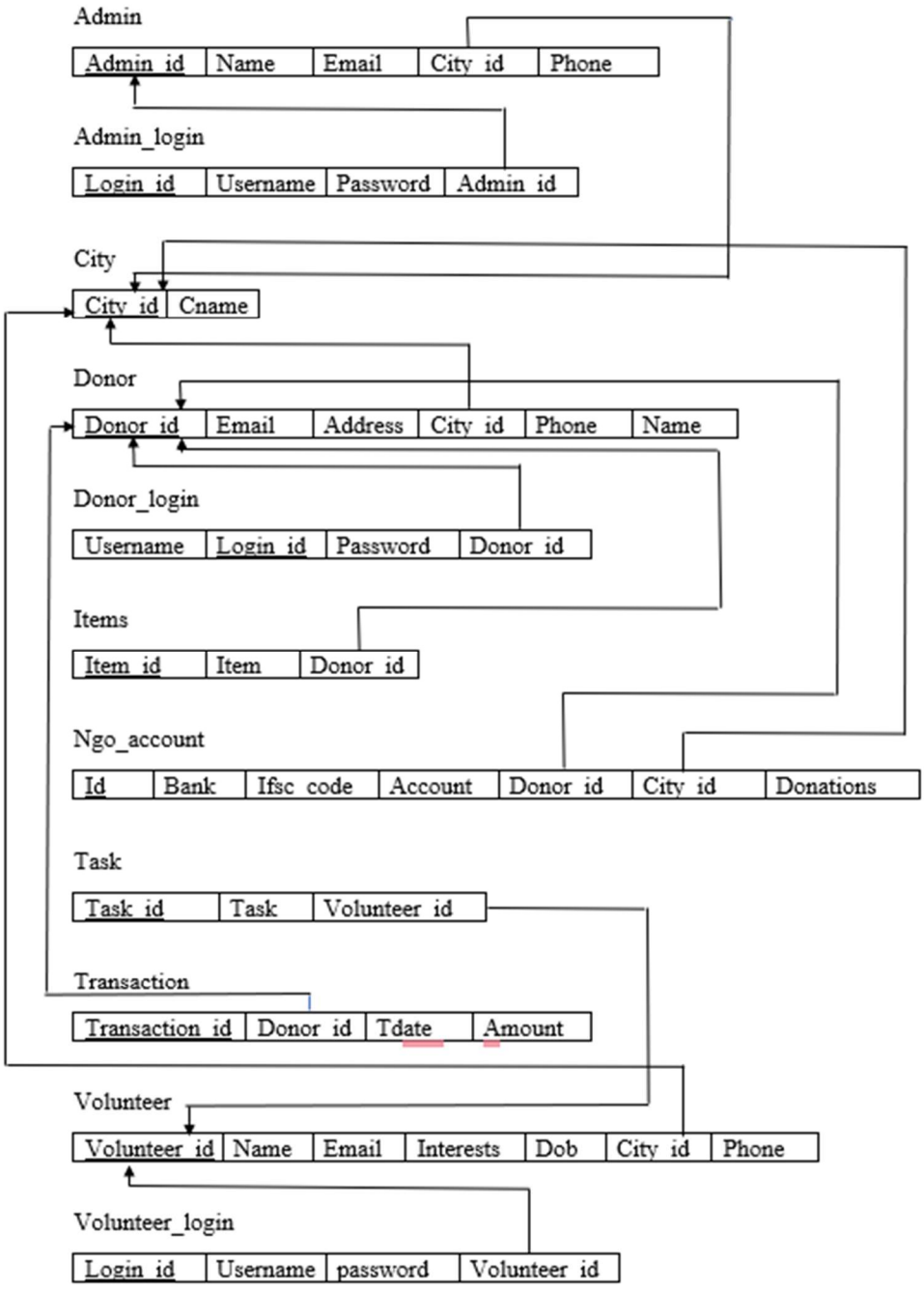


Figure 3.2: Relational Schema Diagram of Charity Management System

The term "schema" refers to the organization of data as a blueprint of how the database is constructed (divided into database tables in the case of relational databases). A schema diagram is a diagram which contains entities, say admin and the attributes of that entity such

as Admin_id, Admin_Name, Admin_Pass will define that schema. A schema diagram only shows us the database design. It does not show the actual data of the database.

3.3 USE CASE DIAGRAM

Figure 3.3: Use Case Diagram of Charity Management System

A use case diagram depicts the interaction between the users and the system. It shows the functions of the system from the user ’s point of view and the various actions of the user, who in this case is a donor carries out actions such as registering to the website, logging in to the site, donating amount or items.

3.2.4 DATA TABLES

It contains the description of all the tables in the database

Table	Action	Rows
admin	Browse Structure Search Insert Empty Drop	3
admin_login	Browse Structure Search Insert Empty Drop	3
city	Browse Structure Search Insert Empty Drop	6
donor	Browse Structure Search Insert Empty Drop	5
donor_login	Browse Structure Search Insert Empty Drop	5
items	Browse Structure Search Insert Empty Drop	6
ngo_account	Browse Structure Search Insert Empty Drop	5
task	Browse Structure Search Insert Empty Drop	5
transaction	Browse Structure Search Insert Empty Drop	5
volunteer	Browse Structure Search Insert Empty Drop	5
volunteer_login	Browse Structure Search Insert Empty Drop	5
11 tables	Sum	53

Table 3.1 PMS database

admin_id	name	email	city_id	phone
3	Hemanth Kumar V	Hemanth@gmail.com	100	777777777
4	Charan G N	Charan@gmail.com	200	8888888888
5	Vedant Dave	Vedant@gmail.com	300	9999999999

Table 3.2 Admin

login_id	username	password	admin_id
3	Hemanth Kumar V	Hemanth Kumar V	3
4	Charan G N	Charan G N	4
5	Vedant Dave	Vedant Dave	5

Table 3.3 Admin_login

city_id	cname
100	Bangalore
200	Mysore
300	Mangalore
400	Mumbai
500	Pune
600	Kolar

Table 3.4 City

donor_id	email	address	city_id	phone	name
2	Rakshith@gmail.com	RR Nagar	100	111111111	Rakshith
4	Ajay@gmail.com	JP Nagar	200	9999977777	Ajay
5	Vijay@gmail.com	MG Road	300	7777799999	Vijay
6	Ramesh@gmail.com	Jayanagar	400	7777788888	Ramesh
7	Suresh@gmail.com	Banashankari	500	8888866666	Suresh

Table 3.5 Donor

username	login_id	password	donor_id
Rakshith	2	Rakshith	2
Ajay	4	Ajay	4
Vijay	5	Vijay	5
Ramesh	6	Ramesh	6
Suresh	7	Suresh	7

Table 3.6 Donor_login

Item_id	item	donor_id
5	Medication	4
6	Clothes	2
7	Hygiene Essentials	5
8	Books	6
9	Ration	7
10	Winter Clothing	7

Table 3.7 Item

id	bank	ifsc_code	acount	donor_id	city_id	donationS
3	State Bank Of India	SBI00123	9876543210	4	200	10000
4	Canara Bank	CNRB003047	99887745612	2	100	5000
5	Bank of Baroda	BOB00023146	404578182161	5	300	18000
6	HDFC Bank	HDFCB03214	80457457125	6	400	150000
7	ICICI Bank	ICICI126540	30271548245	7	500	25000

Table 3.8 NGO_account

task_id	task	volunteer_id
6	Campaigning	7
10	Donation awareness	8
11	Item Collection	9
12	Fundraising	10
13	Personnel and Human Resource	11

Table 3.9 Task

id	donor_id	tdate	amount
5	4	2023-01-29 18:16:53	10000
7	2	2023-01-29 18:22:34	5000
8	5	2023-01-29 19:01:50	18000
9	6	2023-01-29 19:04:25	150000
10	7	2023-01-29 19:07:20	25000

Table 3.10 Transaction

volunteer_id	name	email	intrests	dob	city_id	phone
7	Rohit	Rohit@gmail.com	Mumbai	2023-01-14	400	9999922222
8	Virat	Virat@gmail.com	Bangalore	2023-01-01	100	9999988888
9	Surya	Surya@gmail.com	Pune	2023-01-04	500	8888888888
10	Shreyas	Shreyas@gmail.com	Kolar	2023-02-03	600	9999911111
11	Gautham	Gautham@gmail.com	Pune	2023-01-18	500	9999955555

Table 3.11 Volunteer

login_id	username	password	volunteer_id
7	Rohit	Rohit	7
8	Virat	Virat	8
9	Surya	Surya	9
10	Shreyas	Shreyas	10
11	Gautham	Gautham	11

Table 3.12 Volunteer_login

CHAPTER 4

IMPLEMENTATION

4.1 INTRODUCTION TO FRONT END TOOL

Front End Development Tool is a software application which helps developers to build attractive website layouts and apps with ease.

4.1.1 HTML

HTML stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within a tag which defines the structure of web pages. HTML is used by the browser to manipulate text, images, and other content, in order to display it in the required format.

4.1.2 CSS

Cascading Style Sheets, fondly referred to as CSS, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page. CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document.

4.1.3 JavaScript

JavaScript is a lightweight, cross-platform, and interpreted scripting language. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for Client-side developments as well as Server-side developments. JavaScript contains a standard library of objects, like Array, Date, and Math, and a core set of language elements like operators, control structures, and statements.

4.1.4 Bootstrap

Bootstrap is an HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project.

4.2 INTRODUCTION TO BACK END TOOL

Backend Web Development is responsible for the appropriate functioning of the website. These tools are programming languages, frameworks, database management systems, web servers, testing & deployment tools, and various others.

4.2.1 PHP

The term PHP is an acronym for PHP: Hypertext Preprocessor. PHP is a server side scripting language designed specifically for web development. PHP can actually do anything related to server-side scripting or more popularly known as the backend of a website. For example, PHP can receive data from forms, generate dynamic page content, can work with databases, create sessions, send and receive cookies, send emails etc. There are also many hash functions available in PHP to encrypt user's data that makes PHP secure and reliable to be used as a server-side scripting language.

4.3 DATABASE CONCEPT USED

A database is an organized collection of structured information, or data, typically stored electronically in a computer. A database is usually controlled by a database management system (DBMS).

4.3.1 MySQL

MySQL is a Relational Database Management System. RDBMS means R--DB--MS. DB stands for Database, a repository for the information store. The data in a database is organized into tables, and each table is organized into rows and columns. Each row in a table is called a record. A record may contain several pieces of information, and each column in a table is known as a field. MS stands for Management System, the software that allows you to insert, retrieve, modify, or delete records. R stands for Relational, indicating a particular kind of DBMS that is good at relating information stored in one table to information stored in another table by looking for elements common to each of them.

4.3.2. DATABASES USED

In this project we use databases, namely,

1. donor.db

2. donor_login .db

3. admin_login.db

4. volunteer_login.db

5. ngo_account.db

6.transaction.db

4.4 CONNECTIVITY OF THE DATABASE

A database connection is a facility in computer science that allows client software to talk to database server software, whether on the same machine or not. A connection is required to send commands and receive answers, usually in the form of a result set.

4.4.1 PHP Connectivity

With PHP, you can connect to and manipulate databases. MySQL is the most popular database system used with PHP. In PHP, we can connect to the database using the XAMPP web server. Start XAMPP server by starting Apache and MySQL. Write a PHP script for connecting to XAMPP. Run it in the local browser. Database is successfully created which is based on the PHP code.

SOURCE CODE

```php
<?php

session_start();
require_once "./pdo.php";
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CHARITY INDEX</title>

    <?php include("bootstrap.php"); ?>
    <link rel="stylesheet" href="bootstrap/css/style.css">
</head>
<body>
<?php

if(isset($_SESSION['volunteer_id'])){
        require_once "volunteerIndex.php";
}
else if(isset($_SESSION['admin_id'])){
    require_once "./adminIndex2.php";

}
else if(isset($_SESSION['donor_id'])){
    require_once "donorIndex.php";
}
else {
    require_once "./navbar.php";
    require_once "./carousel.php";
}
```

Index Code

```php
<?php
$pdo = new PDO('mysql:host=127.0.0.1;port=3306;dbname=ngo','root', '');
```

Delete Code

```php
<link rel="stylesheet" href="../bootstrap/css/bootstrap.min.css">
<script src="../bootstrap/js/jquery.min.js"></script>
<script src="../bootstrap/js/popper.min.js"></script>
<script src="../bootstrap/js/bootstrap.min.js"></script>
<link rel="shortcut icon" href="..images/index/logo2.png" type="image/x-icon">
<link rel="stylesheet" href="../bootstrap/css/style.css">
```

Bootstrap Code

```
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";


/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;


CREATE TABLE `admin` (
  `admin_id` int(11) NOT NULL,
  `name` varchar(255) NOT NULL,
  `email` varchar(255) NOT NULL,
  `city_id` int(11) NOT NULL,
  `phone` bigint(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

-- --------------------------------------------------------

--
-- Table structure for table `admin_login`
--

CREATE TABLE `admin_login` (
  `login_id` int(11) NOT NULL,
  `username` varchar(15) NOT NULL,
  `password` varchar(25) NOT NULL,
  `admin_id` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

-- --------------------------------------------------------

--
-- Table structure for table `city`
--

CREATE TABLE `city` (
  `city_id` int(11) NOT NULL,
  `cname` varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

-- --------------------------------------------------------
```

SQL Code

```
<link rel="stylesheet" href="../bootstrap/css/bootstrap.min.css">
<script src="../bootstrap/js/jquery.min.js"></script>
<script src="../bootstrap/js/popper.min.js"></script>
<script src="../bootstrap/js/bootstrap.min.js"></script>
<link rel="shortcut icon" href="..images/index/logo2.png" type="image/x-icon">
<link rel="stylesheet" href="../bootstrap/css/style.css">


<nav class="navbar navbar-expand-lg navbar-dark bg-dark shadow-lg p-3 mb-5 ">
  <a class="navbar-brand" href="index.php">CHARITY</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
   data-target="index.php" aria-controls="navbarNav" aria-expanded="false"
    aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarNav">
    <ul class="navbar-nav">
      <li class="nav-item active">
        <a class="nav-link" href="#">Admin<span class="sr-only">(current)</span>
      </li>
      <li class="nav-item ">
        <a class="nav-link" href="logout.php">
        <?php
          $stmt3 = $pdo->query("SELECT `name` FROM `admin` WHERE
                               `admin_id` =".$_SESSION['admin_id']);
          $rows2 = $stmt3->fetchAll(PDO::FETCH_ASSOC);
          echo $rows2[0]['name'];
        ?>
        <span class="sr-only">(current)</span></a>
      </li>
      <li class="nav-item ">
        <a class="nav-link" href="update/adminUpdate.php">Edit Profile<span
                  class="sr-only">(current)</span></a>
      </li>
      <li class="nav-item ">
        <a class="nav-link" href="adminVolunteer.php">Volunteers<span
              class="sr-only">(current)</span></a>
      </li>
```

Admin Index Code

```
<?php
session_start();
session_destroy();
header('Location: index.php');
return;
?>
```

Log out Code

CHAPTER 5

5.1 TESTING

Testing is the process of executing a program to find the errors. A good test has the high probability of finding a yet undiscovered error. A test is vital to the success of the system. System test makes a logical assumption that if all parts of the system are correct, then the goal will be successfully achieved.

TYPES OF TESTING

5.1.1 Module Testing.

5.1.2 Integration Testing.

5.1.1 Module Testing

Module testing is the testing of complete code objects as produced by the compiler when built from source. A library may be composed of a single compiled object or several compiled objects. There is only a slight difference between unit testing and module testing. Modules are fully formed chunks of coherent source code that can typically be tested by driving a few function signatures with various stimuli. On the other hand, unit testing (which is considered as part of the implementation phase for this software development process) may involve testing one small part of a function that will never formally implement any function interface. As a result of modules being more self-contained, module testing will likely require less testing infrastructure such as test harness and test stubs. The testing of modules could perhaps even be automated so that they can be included in regression test suites or acceptance test suites.

5.1.2 Integration Testing

Integration testing (sometimes called integration and testing, abbreviated I&T) is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing. Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

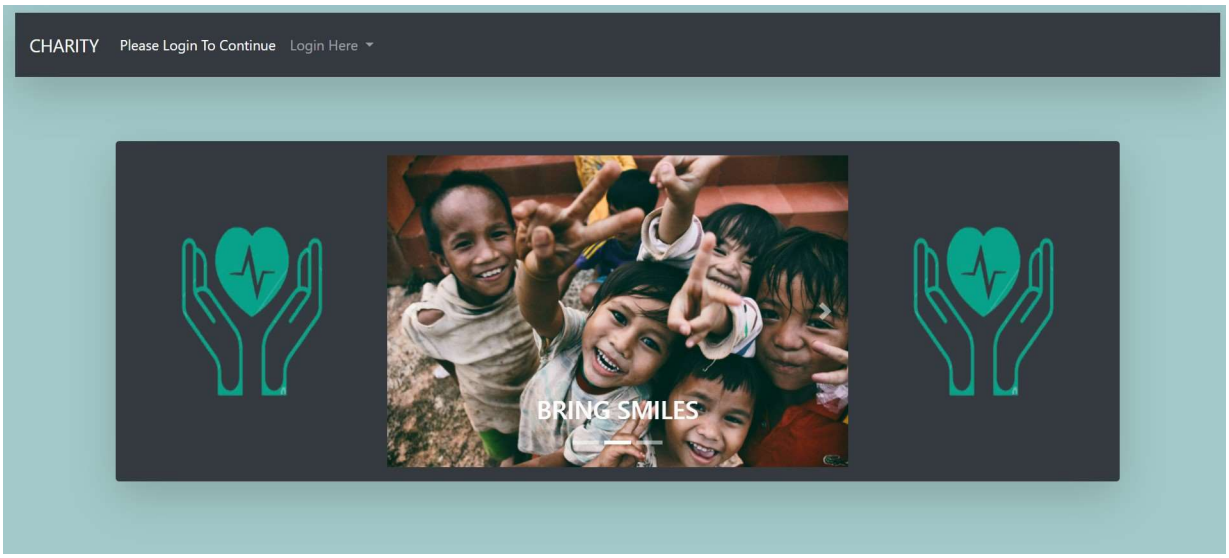
Test Case Number	Functionality	Description	status
1.	Login	Method to login based on email address and password in SQL server.	Pass
2.	Sign up Page	Method to register the donor based on email address, password, full name, state in SQL server.	Pass
3.	Donate	Method to donate items or amount to the particular cause.	pass
4.	Transaction Page	Method to check the donation details, total amount collected by admin.	pass

The table describes the test cases measuring functionality across a set of actions or conditions to verify the expected result. Test case scenario is a description of an objective a user might face when using the program.

CHAPTER 6

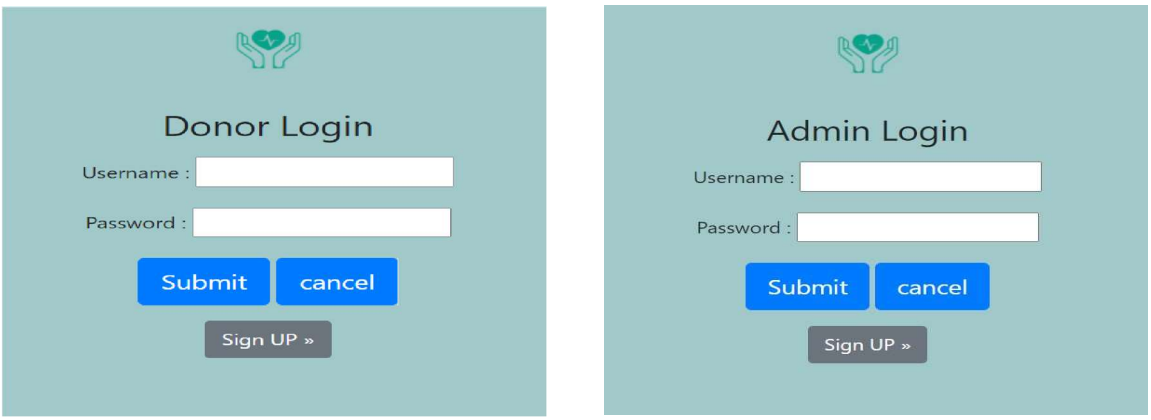
RESULT ANALYSIS AND SCREENSHOTS

SNAPSHOTS



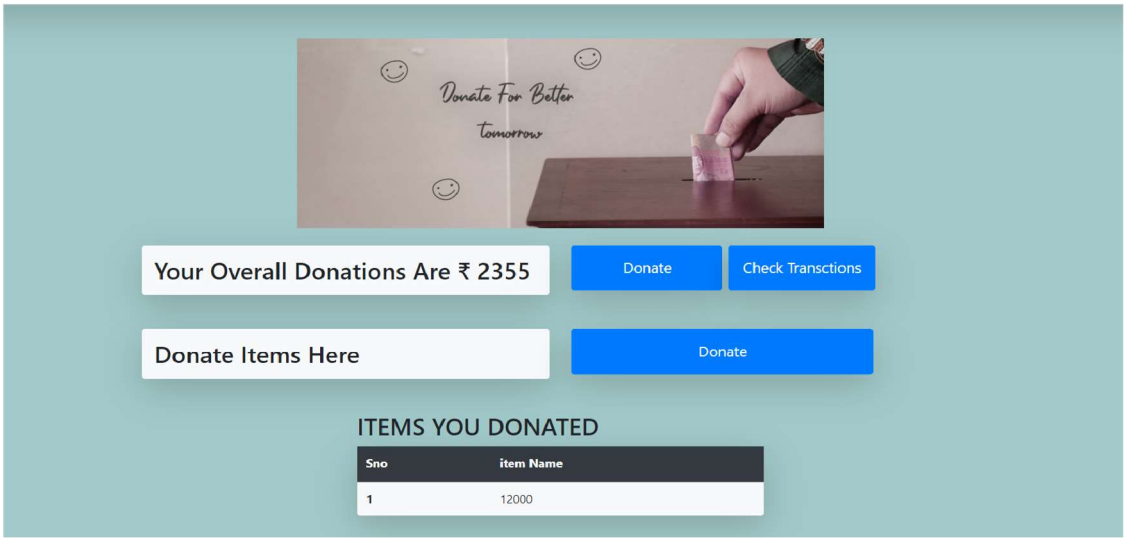
Snapshot 6.1: "Home Page"

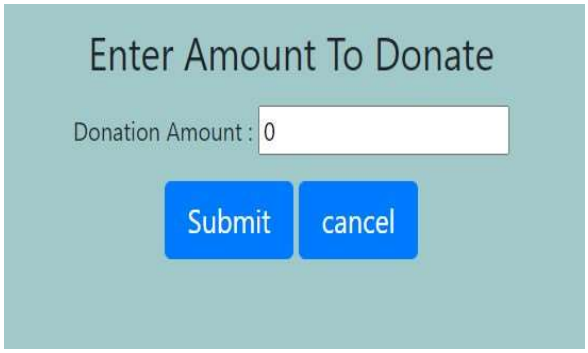
Carousels enable more than one piece of content to occupy the same piece of prime real estate on the homepage, which can help diffuse any infighting about the content.



Snapshot 6.2: "Login Page"

A login page is a web page or an entry page to a website that requires user identification and authentication, regularly performed by entering a username and password combination.



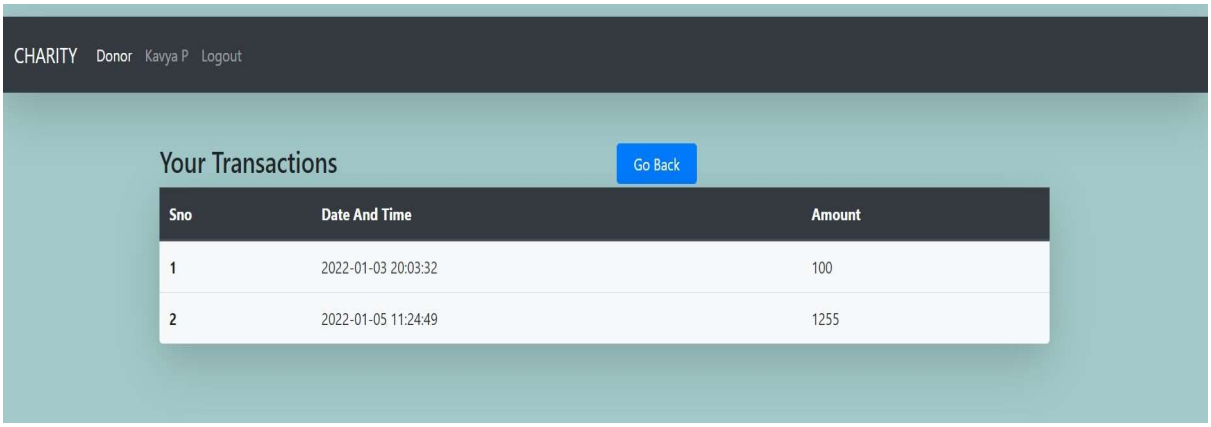


Snapshot 6.3: "Donation Page"

Donation page plays a major role in your fundraising. This page enables users to Donate amounts or items and to check the overall donation done by the user.

Snapshot 6.4: "User Account details"

This page takes the input of the user's bank details like, bank name, IFSC code and Account number, initial amount donation.



Snapshot 6.5: "Transaction Page"

This page shows a history of transactions for the user's account. It includes the amount of the transaction as well as date and time of the transaction.

CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENTS

To conclude the description about the project: The project developed using HTML, CSS, JavaScript, jQuery, PHP and MySQL on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement.

The following features listed below will be added to the application as enhancements in the future, the use of google maps to pinpoint the user's location instead of asking the user to enter their location and the donor will be able to deploying the database to Azure MySQL service as well as the application will be able to have a virtual 24/7 chat service.

This system is developed mainly to target a charity group and its end-users but with just a few changes the system can also be utilized in many real world applications. For our stakeholders the system has delivered its requirements but there are lots of improvements that can be done. One of those improvements is to add multiple payment methods for the donors. The system can also provide more privileges for members to make comments on an article. Many nonprofits advertise their web contents to other websites or clients using RSS (Really Simple Syndication). Our website can also be improved to implement RSS to provide newsfeed to those websites interested in promoting non-profit works. The system can also be improved to add forums and videos to attract more donors on the website.

REFERENCES

1) www.google.com
2) http://www.charitynavigator.org.
3) https://www.geeksforgeeks.org/
4) https://www.w3schools.com/python/
5) https://stackoverflow.com/