### 1. Abstract

The Blood Bank Management System (BBMS) is a web-based application designed to facilitate the process of blood donation and transfusion. It connects donors with recipients, allowing users to search for blood donors based on their city and blood type. The system includes functionalities for user registration, donor search, and tracking blood donations, ensuring that donors do not donate blood more frequently than medically recommended.

The primary objectives of this project are to ensure the timely availability of blood to patients in need, reduce wastage through optimized inventory management, and maintain the highest standards of safety and compliance. Key features include donor registration, blood type classification, inventory monitoring, compatibility testing, and alert notifications for low stock levels. Additionally, the system supports reporting and analytics, which provide valuable insights for decision-making and strategic planning.

Implementing the BBMS can significantly improve the operational efficiency of blood banks, enhance the reliability of blood supply chains, and ultimately save lives by ensuring that the right type of blood is available when and where it is needed.

## 2. Introduction

Blood donation is a critical activity that saves countless lives. However, managing and coordinating blood donation can be a complex task. The blood bank management system aims to streamline this process by providing an efficient and user-friendly platform for donors and recipients. This document details the system's development, functionalities, and the methodology employed in its creation.

The Blood Bank Management System (BBMS) is a specialized software designed to improve the efficiency and reliability of blood banks. It helps manage the processes of blood donation, storage, and distribution, ensuring that blood is available when needed and that it is safe to use.

With BBMS, blood banks can easily register donors, track blood inventory, test for compatibility, and manage recipient information. The system reduces paperwork, minimizes errors, and provides quick access to important information. By automating these tasks, the BBMS ensures that blood banks operate smoothly, maintain accurate records, and are able to respond quickly to emergencies, ultimately saving more lives.

# 3. Aim and Objective

To create a comprehensive and accessible platform that efficiently manages blood donations, inventory, and distribution processes. This system seeks to ensure accurate tracking of blood supplies, enhance the safety and compatibility of transfusions, facilitate easy access to real-time information, and improve the responsiveness of blood banks in meeting patient needs, all while reducing administrative overhead and increasing operational efficiency.

- Facilitate Blood Donation: Simplify the process for donors to register and donate blood.
- Streamline Donor Search: Allow recipients to search for donors based on city and blood type.
- **Ensure Compliance**: Track donation dates to ensure donors adhere to the minimum interval between donations.
- User Management: Enable users to update profiles, change passwords, and delete accounts.

# 4. Software and Hardware Requirements

# > Hardware Requirements :-

- Windows 10 or Higher
- Processor i3
- RAM(8.00GB)
- Keyboard : Standard
- Hard disk: 16gb or more

# > Software Requirements :-

- 1. HTML
- 2. Bootstrap
- 3. jquery Ajax
- 4. PHP
- 5. MySQL

## 5. FRONT END TECHNOLOGIES

## **5.1 HTML**

#### Introduction

HTML stands for Hyper Text Markup Language. It is used to design web pages using a markup language. HTML is an abbreviation of Hypertext and Markup language. Hypertext defines the link between the web pages. The markup language is used to define the text document within the tag which defines the structure of web pages. HTML 5 is the fifth and current version of HTML. It has improved the markup available for documents and has introduced application programming interfaces (API) and Document Object Model (DOM).

### **5.2 CSS**

What Is CSS?

CSS stands for Cascading Style Sheets language and is used to stylize elements written in a markup language such as HTML. It separates the content from the visual representation of the site. The relation between HTML and CSS is strongly tied together since HTML is the very foundation of a site and CSS is all of the aesthetics of an entire website.

How Does CSS Work?

CSS uses a simple English based syntax with a set of rules that govern it. Like we've mentioned before, HTML was never intended to use style elements, only the markup of the page. It was created to merely describe the content. For example: This is a paragraph.

But how do you style the paragraph? The CSS syntax structure is pretty simple. It has a selector and a declaration block. You select an element and then declare what you want to do with it. Pretty straightforward, right?

However, there are rules you have to remember. The structure rules are pretty simple, so don't worry.

The selector points to the HTML elements you want to style. The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon. A CSS declaration always ends with a semicolon, and declaration blocks are surrounded by curly braces.

Let's look at an example: All of the elements will be colored blue and bolded.

```
<style>
p {
color: blue;
text-weight: bold;
}
<style>
```

Internal, External and Inline CSS Styles

We'll go over each style briefly, for an in-depth explanation of each method, there will be a link below the overview.

Let's start by talking about the Internal style. CSS styles done this way are loaded each time an entire website is refreshed, which may increase loading time. Additionally, you won't be able to use the same CSS style on multiple pages as it's contained within a single page. However, this also comes with benefits. Having everything on one page makes it easier to share the template for a preview.

The External method might be the most convenient one. Everything is done externally on a .css file. This means you can do all the styling on a separate file and apply the CSS to any page you want. The External style might also

improve loading times.

Lastly, we will talk about the Inline style of CSS. Inline works with specific elements that have the <style> tag. Each component has to be stylized, so it might not be the best or fastest way to handle CSS. But it can come in handy. For example, if you want to change a single element, quickly preview changes, or maybe you don't have access to the CSS files.

## **5.3 BOOSTRAP**

What is Bootstrap?

Bootstrap is one of the popular front-end frameworks which has a nice set of predefined CSS code. The updated version of Bootstrap5 was officially released on 16 June 2020. Bootstrap is a CSS framework that makes mobile-friendly web development and provides responsiveness.

The framework is available for free and can be utilized in two ways either by downloading the zip files and incorporating Bootstrap libraries/modules into the project or by directly including the Bootstrap URL and using the online version.

# 5.4 jQuery

jQuery is a small, light-weight and fast JavaScript library. It is cross-platform and supports different types of browsers. It is also referred as? write less do more? because it takes a lot of common tasks that requires many lines of JavaScript code to accomplish, and binds them into methods that can be called with a single line of code whenever needed. It is also very useful to simplify a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

## 6. BACK END TECHNOLOGIES

## My SQL

First things first, you have to know how to pronounce it: MY-ES-KYOO-EL' [maiˌɛsˌkjuːˈɛl]. Sometimes people call it "my sequel" or other names, but at least you know the official pronunciation. A Swedish company called MySQL AB originally developed MySQL in 1994. The US tech company Sun Microsystems then took full ownership when they bought MySQL AB in 2008. US tech giant Oracle in 2010 acquired Sun Microsystems itself, and MySQL has been practically owned by Oracle since.

In regard to the general definition, MySQL is an open source relational database management system (RDBMS) with a client-server model. RDBMS is a software or service used to create and manage databases based on a relational model

Be aware that MySQL is one of the most popular RDBMS software's brand names, which implements a client-server model. So, how do the client and server communicate in an RDBMS environment? They use a domain-specific language – Structured Query Language (SQL).

If you ever encounter other names that have SQL in them, like PostgreSQL and Microsoft SQL server, they are most likely brands which also use Structured Query Language syntax. RDBMS software is often written in other programming languages, but always use SQL as their primary language to interact with the database. MySQL itself is written in C and C++.

### PHP

#### Introduction

PHP is a server-side and general-purpose scripting language that is especially suited for web development.

PHP originally stood for Personal home page. However, now, it stands

for Hypertext Markup Language. It's a recursive acronym because the first word itself is also an acronym.

PHP was created Rasmus Lardorf in 1994. It's currently maintained by the PHP DEVELOPMENT TEAM.

#### PHP is a server-side language

When you open a website on your web browser, for example, https://www.phptutorial.net The web browser sends an HTTP request to a web server where phptutorial.net locates. The web server receives the request and responds with an HTML document.

In this example, the web browser is a client while the web server is the server. The client requests for a page, and the server serves the request.

PHP runs on the web server, processes the request, and returns the HTML document.

#### PHP is a general-purpose language

When it comes to the purpose of the programming languages, there are two main types: domain-specific and general-purpose languages.

The domain-specific languages are used within specific application domains. For example, SQL is a domain-specific language. It's used mainly for querying data from relational databases. And SQL cannot be used for other purposes.

On the other hand, PHP is a general-purpose language because PHP can develop various applications.

### PHP is a cross-platform language

PHP can run on all major operating systems, including Linux, Windows, and macOS.

You can use PHP with all leading web servers such as Nginx, OpenBSD, and Apache. Some cloud environments also support PHP like Microsoft Azure and Amazon AWS.

PHP is quite flexible. It's not just limited to processing HTML. PHP has built-in support for generating PDF, GIF, JPEG, and PNG images.

One notable feature of PHP is that it supports many databases, including MySQL, PostgreSQL, MS SQL, db2, Oracle Database, and MongoDB.

# 8.ER-Diagram & Databases

# 8.1 ER-Diagram

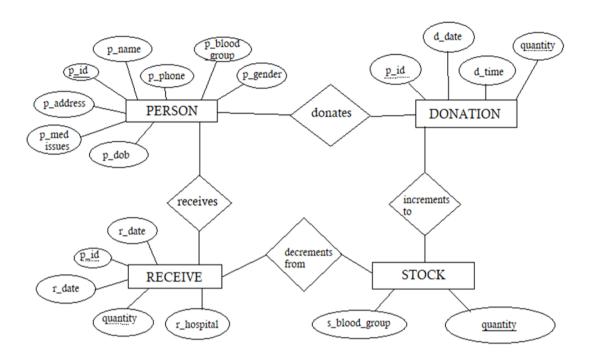


Fig 8.1.1 Entity Relationship Diagram

# **8.2 Databases**

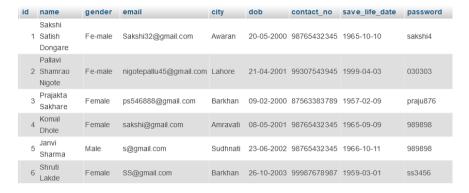


Table no 8.2.1(a) Registration

## 9. Source code

## Home page

```
Index.php
<?php
  //include header file
  include ('include/header.php');
?>
<div class="container-fluid header-img">
        <div class="row">
          <div class="col-md-6 offset-md-3">
            <div class="header">
              <h1 class="text-center">Donate the blood, save the life</h1>
            Donate the blood to help the others.
            </div>
            <h1 class="text-center">Search The Donors</h1>
            <hr class="white-bar text-center">
            <form action="search.php" method="get" class="form-inline text-center"
style="padding: 40px 0px 0px 5px;">
              <div class="form-group text-center justify-content-center">
        <select style="width: 220px; height: 45px;" name="city" id="city" class="form-control
demo-default" required>
  <option value="">-- Select --</option>
  <optgroup title="Maharashtra" label="&raquo;Maharashtra"></optgroup>
<option value=" Amravati " > Amravati </option><option value="Aurangabad"</pre>
>Aurangabad</option>
<option value=" Akkalkot " > Akkalkot option value="Akola" > Akola
<option value="Bhandara" > Bhandara </option><option value="Beed" > Beed</option>
<option value=" Buldhana" > Buldhana </option><option value="Chandrapur" > Chandrapur
</option>
<option value="Dhule " > Dhule </option><option value=" Gadchiroli" > Gadchiroli </option>
<option value=" Gondia" > Gondia </option><option value="Hingoli" > Hingoli </option>
<option value="Jalgaon " > Jalgaon </option><option value="Jalna " > Jalna </option>
<option value=" Kolhapur" > Kolhapur </option><option value=" Latur" > Latur </option>
<option value="Mumbai " > Mumbai </option><option value=" Nagpur" > Nagpur </option>
<option value="Nanded " > Nanded </option><option value="Nashik " > Nashik </option>
<option value="Osmanabad " > Osmanabad </option><option value=" Parbhani" > Parbhani
</option>
<option value="Pune" > Pune </option><option value=" Raigad" > Raigad </option>
<option value="Ratnagiri" > Ratnagiri </option><option value=" Sangali" > Sangali </option>
<option value="Satara " > Satara </option><option value="Sindhudurg " > Sindhudurg
</option>
<option value=" Solapur" > Solapur </option><option value=" Thane" >
Thane </option>
<option value=" Wardha" > Wardha </option><option value=" Washim" >
Washim </option>
<option value=" Yavatmal" > Yavatmal </option><option value=" Yeola" >
Yeola </option>
```

```
<optgroup title="Andhra Pradesh" label="&raquo;Andhra</pre>
Pradesh"></optgroup>
<option value="Adoni" > Adoni </option><option value="Akkarampalle" >
Akkarampalle </option>
<option value="Amalpuram" >Bagh</option><option value=" Amalpuram "</pre>
>Bhimber</option>
<option value="Avilala" > Avilala </option><option value="Amadalavalasa"</pre>
> Amadalavalasa </option>
<option value="Badvel" > Badvel </option><option value="Balaga" > Balaga
</option>
<option value="Banaganapalle" > Banaganapalle </option><option</pre>
value="Bobbili" > Bobbili </option>
<option value="Bowluvada" > Bowluvada </option><option value="Bapatla" >
Bapatla </option>
<option value="Bandarulanka" > Bandarulanka </option><option</pre>
value="Beemunipatnam" > Beemunipatnam </option>
<option value="Cherlopalle" > Cherlopalle </option><option</pre>
value="Chidiga" > Chidiga </option>
<option value="Chirala" > Chirala </option><option value="Chittoor" >
Chittoor </option>
<option value="Cumbum" > Cumbum </option><option value="Chodavaram" >
Chodavaram </option>
<option value="Dharamvaram" > Dharamvaram </option><option value="Dhone"</pre>
> Dhone </option>
<option value="Dommara Nandyala" > Dommara Nandyala 
value="Dowleswaram" > Dowleswaram </option>
<option value="Dwarakatirumala" > Dwarakatirumala </option><option</pre>
value="Eluru" > Eluru </option>
<option value="Gooty" > Gooty </option><option value="Gopavaram" >
Gopavaram </option>
<option value="Gudur" > Gudur </option><option value="Guntakal" >
Guntakal </option>
<option value="Hindapur" > Hindapur </option><option value="Hiramandalam"</pre>
> Hiramandalam </option>
<option value="Hukumpeta" > Hukumpeta </option><option</pre>
value="Ichchapuram" > Ichchapuram </option>
<option value="Jaggaiahpet" > Jaggaiahpet </option><option</pre>
value="Jarjapupeta" > Jarjapupeta </option>
<option value="Kadapa" > Kadapa </option><option value="Kadiri" > Kadiri
</option>
<option value="Kanktabamsuguda" > Kanktabamsuguda </option><option</pre>
value="Kothavalasa" > Kothavalasa </option>
<option value="L.A.Sagaram" > L.A.Sagaram </option><option</pre>
value="Macherla" > Macherla </option>
<option value="Machilipatnam" > Machilipatnam </option><option</pre>
value="Mamidalapadu" > Mamidalapadu </option>
<option value="Modameedipalle" > Modameedipalle </option><option</pre>
value="Moragudi" > Moragudi </option>
```

```
<option value="Mulaguntapadu" > Mulaguntapadu </option><option</pre>
value="Nadim Tiruvuru" > Nadim Tiruvuru </option>
<option value="Nagari" > Nagari </option><option value="Nagireddipalle" >
Nagireddipalle </option>
<option value="Nakkapalle" > Nakkapalle </option><option</pre>
value="Narasapur" > Narasapur </option>
<option value="Ongole" > Ongole </option><option value="Palacole" >
Palacole </option>
<option value="Payakaraopeta" > Payakaraopeta </option><option</pre>
value="Peddapuram" > Peddapuram </option>
<option value="Rajam" > Rajam </option><option value="Ramchandrapuram" >
Ramchandrapuram </option>
<option value="Samalkot" > Samalkot </option><option value="Sulluru" >
Sulluru </option>
<option value="Tadepalligudem" > Tadepalligudem </option><option</pre>
value="Thummalamenta" > Thummalamenta </option>
<option value="Tirupati NMA" > Tirupati NMA </option><option</pre>
value="Uravakonda" > Uravakonda </option>
<option value="Vaddeswaram" > Vaddeswaram </option><option</pre>
value="Vetapalem" > Vetapalem </option>
<option value="Vizianagaram" > Vizianagaram </option><option</pre>
value="Yelamanchilli" > Yelamanchilli </option>
<option value="Yenumalapalle" > Yenumalapalle </option><option</pre>
value="Yerraguntla" > Yerraguntla </option>
</select>
                             </div>
                             <div class="form-group center-aligned">
                                 <select name="blood_group"</pre>
id="blood group" style="padding: 0 20px; width: 220px; height: 45px;"
class="form-control demo-default text-center margin10px">
                                     <option value="A+">A+</option>
                                     <option value="A-">A-</option>
                                     <option value="B+">B+</option>
                                     <option value="B-">B-</option>
                                     <option value="AB+">AB+</option>
                                     <option value="AB-">AB-</option>
                                     <option value="0+">0+</option>
                                      <option value="0-">0-</option>
                                 </select>
                             </div>
                             <div class="form-group center-aligned">
                                 <button type="submit" class="btn btn-lg</pre>
btn-danger">Search</button>
                             </div>
                         </form>
                     </div>
                </div>
```

```
</div>
            <!-- header ends -->
            <!-- donate section -->
            <div class="container-fluid red-background">
               <div class="row">
                   <div class="col-md-12">
                       <h1 class="text-center" style="color: white;</pre>
font-weight: 700;padding: 10px 0 0 0;">Donate The Blood</h1>
                       <hr class="white-bar">
                       Welcome to Donate The Blood! We are a dedicated
platform committed to the lifesaving act of blood donation.
                        Our mission is to connect donors with those in
need, ensuring a steady and reliable supply of blood to
                         hospitals and patients In Maharashtra. At
Donate The Blood, Whether you're a first-time donor or a regular
contributor, your
                           generosity has the potential to save lives
and make a lasting difference. Through our user-friendly interface,
                           you can easily find blood donation centers in
your area, learn about eligibility requirements, and schedule
                           appointments at your convenience. We provide
resources and support every step of the way, making the donation
                           process simple, safe, and rewarding.
Join us in our lifesaving mission. Together, we can make a difference-one
donation at a time. Thank you for considering Donate The Blood.
                       <a href="#" class="btn btn-default btn-lg text-
center center-aligned">Become a Life Saver!</a>
                   </div>
               </div>
           </div>
           <!-- end doante section ---
            <div class="container">
               <div class="row">
                   <div class="col">
                       <div class="card">
                           <h3 class="text-center red">Our Vission</h3>
                               <img src="img/binoculars.png" alt="Our</pre>
Vission" class="img img-responsive" width="168" height="168">
                               Our vision is to create a world where
every individual has access to safe blood. We aim to foster
                               a culture where blood donation is a
fundamental act of compassion and responsibility.
                                                   </div>
                   </div>
```

```
<div class="col">
                        <div class="card">
                                <h3 class="text-center red">Our Goal</h3>
                                <img src="img/target.png" alt="Our</pre>
Vission" class="img img-responsive" width="168" height="168">
                                Our vision is a world where every person
has access to safe blood when needed. Through awareness
                                and collaboration, we aim to ensure a
sustainable and sufficient blood supply for all medical needs
                            </div>
                    </div>
                    <div class="col">
                        <div class="card">
                            <h3 class="text-center red">Our Mission</h3>
                                <img src="img/goal.png" alt="Our Vission"</pre>
class="img img-responsive" width="168" height="168">
                                "Our mission is to facilitate life-saving
blood donations by connecting donors with those in need.
                                We aim to cultivate a robust blood donor
community, ensuring lifesaving support for patients worldwide
                            </div>
                    </div>
            </div>
        </div>
            <!-- end aboutus section -->
<?php
//include footer file
include ('include/footer.php');
 ?>
Registration page
<?php
include 'include/header.php';
if (isset($ SESSION['user id']) && !empty($ SESSION['user id'])) {
 include 'include/sidebar.php';
 if ($_SERVER['REQUEST_METHOD'] == 'POST') {
   // Validate and sanitize inputs
   $errors = [];
```

```
// Validate name
    if (!empty($ POST['name']) && preg_match('/^[A-Za-z\s]+$/', $ POST['name'])) {
      $name = $ POST['name'];
    } else {
      $errors['nameError'] = 'Only letters and spaces are allowed';
    }
    // Validate gender
    if (!empty($ POST['gender'])) {
      $gender = $_POST['gender'];
      $errors['genderError'] = 'Please select your gender';
    }
    // Validate date of birth
    if (!empty($_POST['day']) && !empty($_POST['month']) && !empty($_POST['year'])) {
      $dob = $_POST['year'] . '-' . $_POST['month'] . '-' . $_POST['day'];
    } else {
      $errors['dobError'] = 'Please select a complete date of birth';
    }
    // Validate blood group
    if (!empty($ POST['blood group'])) {
      $blood group = $ POST['blood group'];
    } else {
      $errors['blood_groupError'] = 'Please select your blood group';
    // Validate city
    if (!empty($_POST['city']) && preg_match('/^[A-Za-z\s]+$/', $_POST['city'])) {
      $city = $_POST['city'];
    } else {
      $errors['cityError'] = 'Please enter a valid city name';
    }
    // Validate email
    if (!empty($_POST['email']) && filter_var($_POST['email'], FILTER_VALIDATE_EMAIL)) {
      $email = $ POST['email'];
      $check email = "SELECT email FROM donor WHERE email = '$email' AND ID != " .
$ SESSION['user id'];
      $result = mysqli_query($connection, $check_email);
      if (mysqli_num_rows($result) > 0) {
         $errors['emailError'] = 'Email already exists';
    } else {
      $errors['emailError'] = 'Please enter a valid email address';
    }
    // Validate contact number
    if (!empty($_POST['contact_no']) && preg_match('/^\d{11}$/', $_POST['contact_no'])) {
      $contact = $_POST['contact_no'];
    } else {
      $errors['contactError'] = 'Contact number should consist of 11 digits';
    }
    if (empty($errors)) {
      if ($connection) {
         $name = mysqli_real_escape_string($connection, $name);
```

```
$blood group = mysqli real escape string($connection, $blood group);
         $gender = mysqli real escape string($connection, $gender);
         $email = mysgli real escape string($connection, $email);
         $city = mysqli_real_escape_string($connection, $city);
        $contact = mysqli_real_escape_string($connection, $contact);
        $sql = "UPDATE donor SET name='$name', blood_group='$blood_group',
gender='$gender', email='$email', city='$city', contact no='$contact', dob='$dob' WHERE ID="
.$ SESSION['user id'];
        if (mysqli query($connection, $sql)) {
           echo '<div class="alert alert-success alert-dismissible fade show" role="alert">
               <strong>Data Updated</strong>
               <button type="button" class="close" data-dismiss="alert" aria-label="Close">
                 <span aria-hidden="true">&times;</span>
               </button>
             </div>';
        } else {
           echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
               <strong>Data update failed: '. mysqli_error($connection) . '</strong>
               <button type="button" class="close" data-dismiss="alert" aria-label="Close">
                 <span aria-hidden="true">&times;</span>
               </button>
             </div>';
        }
      }
    } else {
      foreach ($errors as $error) {
        echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
             <strong>' . $error . '</strong>
             <button type="button" class="close" data-dismiss="alert" aria-label="Close">
               <span aria-hidden="true">&times;</span>
             </button>
           </div>';
      }
    }
  $sql = "SELECT * FROM donor WHERE ID = " . $_SESSION['user_id'];
  $result = mysqli_query($connection, $sql);
  $user = mysqli_fetch_assoc($result);
  $userID = $user['ID'];
  $name = $user['name'];
  $blood_group = $user['blood_group'];
  $gender = $user['gender'];
  $email = $user['email'];
  $contact = $user['contact no'];
  $city = $user['city'];
  $dob = $user['dob'];
  $date = explode("-", $dob);
  $dbPassword = $user['password'];
  if (isset($_POST['update_pass'])) {
    $old_password = md5($_POST['old_password']);
    $new_password = $_POST['new_password'];
```

```
$c_password = $_POST['c_password']
    if ($old password == $dbPassword) {
      if (strlen($new password) >= 6) {
        if ($new password == $c password) {
           $password = md5($new_password);
           $sql = "UPDATE donor SET password = '$password' WHERE ID='$userID'";
           if (mysgli guery($connection, $sgl)) {
             echo '<div class="alert alert-success alert-dismissible fade show" role="alert">
                 <strong>Updated Password</strong>
                 <button type="button" class="close" data-dismiss="alert" aria-
label="Close">
                    <span aria-hidden="true">&times;</span>
                 </button>
               </div>';
             exit;
           } else {
             echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
                 <strong>Error updating record. Please try again later.</strong>
                 <button type="button" class="close" data-dismiss="alert" aria-
label="Close">
                    <span aria-hidden="true">&times;</span>
                 </button>
               </div>';
           }
        } else {
           echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
               <strong>Passwords do not match</strong>
               <button type="button" class="close" data-dismiss="alert" aria-label="Close">
                 <span aria-hidden="true">&times;</span>
               </button>
             </div>';
        }
      } else {
        echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
             <strong>Password should be at least 6 characters long</strong>
             <button type="button" class="close" data-dismiss="alert" aria-label="Close">
               <span aria-hidden="true">&times;</span>
             </button>
           </div>';
      }
    } else {
      echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
           <strong>Please enter valid password</strong>
           <button type="button" class="close" data-dismiss="alert" aria-label="Close">
             <span aria-hidden="true">&times;</span>
           </button>
        </div>';
    }
  if (isset($_POST['delete_account'])) {
    if (!empty($_POST['oldpassword'])) {
```

```
$delete_password = md5($_POST['oldpassword']);
    if ($delete_password == $dbPassword) {
      $sql = "DELETE FROM donor WHERE ID='$userID'";
      if (mysqli_query($connection, $sql)) {
        session_destroy();
         header("Location: index.php");
      } else {
        echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
             <strong>Error deleting account. Please try again later.</strong>
             <button type="button" class="close" data-dismiss="alert" aria-label="Close">
               <span aria-hidden="true">&times;</span>
             </button>
           </div>';
    } else {
      echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
           <strong>Please enter a valid password</strong>
           <button type="button" class="close" data-dismiss="alert" aria-label="Close">
             <span aria-hidden="true">&times;</span>
           </button>
        </div>';
    }
  } else {
    echo '<div class="alert alert-danger alert-dismissible fade show" role="alert">
        <strong>Please enter your password</strong>
         <button type="button" class="close" data-dismiss="alert" aria-label="Close">
           <span aria-hidden="true">&times;</span>
        </button>
      </div>';
  }
}
?>
<style>
  .form-container {
    margin: 30px;
    padding: 20px;
    border: 1px solid #ddd;
    border-radius: 10px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
  }
  .form-group {
    margin-bottom: 15px;
  }
  .btn {
    width: 100%;
  }
  label {
    font-weight: bold;
```

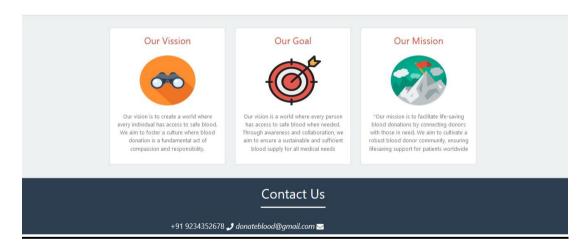
```
.alert {
      margin-top: 20px;
  </style>
  <div class="form-container">
    <form action="setting.php" method="POST" enctype="multipart/form-data">
      <h2 class="text-center">Edit Profile</h2>
      <div class="form-group">
         <label for="name">Full Name:</label>
         <input type="text" name="name" value="<?php echo $name; ?>" class="form-
control" placeholder="Full Name" required>
         <span class="text-danger"><?php if (isset($errors['nameError'])) echo</pre>
$errors['nameError']; ?></span>
      </div>
      <div class="form-group">
         <label for="gender">Gender:</label>
         <select name="gender" class="form-control" required>
           <option value="">Select Gender</option>
           <option value="Male" <?php if ($gender == 'Male') echo 'selected';</pre>
?>>Male</option>
           <option value="Female" <?php if ($gender == 'Female') echo 'selected';</pre>
?>>Female</option>
         </select>
         <span class="text-danger"><?php if (isset($errors['genderError'])) echo</pre>
$errors['genderError']; ?></span>
      </div>
      <div class="form-group">
         <label for="dob">Date of Birth:</label>
         <div class="d-flex">
           <select name="day" class="form-control" required>
             <option value="">Day</option>
             <?php for ($i = 1; $i <= 31; $i++) {</pre>
               echo "<option value='$i' " . ($date[2] == $i ? 'selected' : ") . ">$i</option>";
             } ?>
           </select>
           <select name="month" class="form-control" required>
             <option value="">Month</option>
             <?php for ($i = 1; $i <= 12; $i++) {
               echo "<option value='$i' " . ($date[1] == $i ? 'selected' : ") . ">$i</option>";
             } ?>
           </select>
           <select name="year" class="form-control" required>
             <option value="">Year</option>
             <?php for ($i = 1970; $i <= date('Y'); $i++) {
               echo "<option value='$i' " . ($date[0] == $i ? 'selected' : ") . ">$i</option>";
             }?>
           </select>
         </div>
```

```
<span class="text-danger"><?php if (isset($errors['dobError'])) echo</pre>
$errors['dobError']; ?></span>
      </div>
      <div class="form-group">
         <label for="blood_group">Blood Group:</label>
         <select name="blood_group" class="form-control" required>
           <option value="">Select Blood Group</option>
           <option value="A+" <?php if ($blood group == 'A+') echo 'selected';</pre>
?>>A+</option>
           <option value="A-" <?php if ($blood group == 'A-') echo 'selected'; ?>>A-</option>
           <option value="B+" <?php if ($blood group == 'B+') echo 'selected';</pre>
?>>B+</option>
           <option value="B-" <?php if ($blood group == 'B-') echo 'selected'; ?>>B-</option>
           <option value="AB+" <?php if ($blood group == 'AB+') echo 'selected';</pre>
?>>AB+</option>
           <option value="AB-" <?php if ($blood group == 'AB-') echo 'selected'; ?>>AB-
</option>
           <option value="O+" <?php if ($blood_group == 'O+') echo 'selected';</pre>
?>>O+</option>
           <option value="O-" <?php if ($blood group == 'O-') echo 'selected'; ?>>O-
</option>
         </select>
         <span class="text-danger"><?php if (isset($errors['blood_groupError'])) echo</pre>
$errors['blood_groupError']; ?></span>
       </div>
      <div class="form-group">
         <label for="city">City:</label>
         <input type="text" name="city" value="<?php echo $city; ?>" class="form-control"
placeholder="City" required>
         <span class="text-danger"><?php if (isset($errors['cityError'])) echo</pre>
$errors['cityError']; ?></span>
      </div>
      <div class="form-group">
         <label for="email">Email:</label>
         <input type="email" name="email" value="<?php echo $email; ?>" class="form-
control" placeholder="Email" required>
         <span class="text-danger"><?php if (isset($errors['emailError'])) echo</pre>
$errors['emailError']; ?></span>
      </div>
      <div class="form-group">
         <label for="contact_no">Contact No:</label>
         <input type="text" name="contact_no" value="<?php echo $contact; ?>"
class="form-control" placeholder="Contact No" required>
         <span class="text-danger"><?php if (isset($errors['contactError'])) echo</pre>
$errors['contactError']; ?></span>
      </div>
      <div class="form-group">
         <input type="submit" name="update" class="btn btn-success" value="Update">
      </div>
    </form>
```

```
<form action="setting.php" method="POST">
      <h2 class="text-center">Update Password</h2>
      <div class="form-group">
        <label for="old_password">Old Password:</label>
        <input type="password" name="old_password" class="form-control"
placeholder="Old Password" required>
      </div>
      <div class="form-group">
        <label for="new_password">New Password:</label>
        <input type="password" name="new_password" class="form-control"
placeholder="New Password" required>
      </div>
      <div class="form-group">
        <label for="c_password">Confirm Password:</label>
        <input type="password" name="c_password" class="form-control"
placeholder="Confirm Password" required>
      </div>
      <div class="form-group">
        <input type="submit" name="update_pass" class="btn btn-primary" value="Update
Password">
      </div>
    </form>
    <form action="setting.php" method="POST">
      <h2 class="text-center">Delete Account</h2>
      <div class="form-group">
        <label for="oldpassword">Password:</label>
        <input type="password" name="oldpassword" class="form-control"
placeholder="Password" required>
      </div>
      <div class="form-group">
        <input type="submit" name="delete_account" class="btn btn-danger" value="Delete
Account">
      </div>
    </form>
  </div>
  <?php
} else {
  header("Location: login.php");
include 'include/footer.php';
```

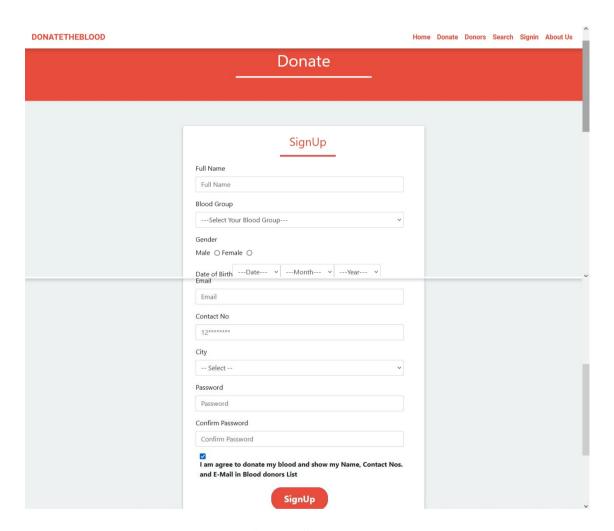
## **HomePage**





Screen shot: (a)

# Registration page



Screen Shot: (b)

## 11. Conclusion

The Blood Bank Management System addresses the challenges associated with manual blood donation management by providing an automated, user-friendly platform. It enhances the efficiency of finding donors, tracking donations, and ensuring compliance with medical guidelines. The system ultimately contributes to saving lives by making the blood donation process more reliable and accessible. This project was driven by the need to enhance the management of blood donations, ensure safe blood transfusions, and improve the overall efficiency of blood banks. By integrating comprehensive reporting and analytics tools, it supports informed decision-making and strategic planning for blood banks. Ultimately, the implementation of this web-based system contributes to saving lives by ensuring the timely and reliable availability of blood, thereby improving overall healthcare outcomes.

## 12. References

- 1) <a href="https://www.slideshare.net/slideshow/blood-bank-management-system-project-report/266895101">https://www.slideshare.net/slideshow/blood-bank-management-system-project-report/266895101</a>
- 2) https://www.scribd.com/document/491117488/Doc1
- 3) <a href="https://www.researchgate.net/publication/370602395\_Blood\_Ba">https://www.researchgate.net/publication/370602395\_Blood\_Ba</a>
  <a href="https://www.researchgate.net/publication/370602395\_Blood\_Ba">nk\_Management\_System</a>
- **4)** https://www.slideshare.net/slideshow/blood-bank-management-system-65695580/65695580