
“BLOOD BANK MANAGEMENT SYSTEM”

CSE3002 – INTERNET & WEB PROGRAMMING

J COMPONENT PROJECT DOCUMENT

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INDIVIDUAL PROJECT

1. 16BCE0451 NIVEDITA

UNDER THE GUIDENCE OF
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SCOPE

School of Computer Science and Engineering

DECLARATION

I/We hereby declare that the J Component project entitled “**BLOOD BANK MANAGEMENT SYSTEM**” submitted by me/us to the School of Computer Science and Engineering, VIT University, Vellore-14 in partial fulfillment of the requirements for the **Internet and Web Programming (CSE3002)** course, is a record of bonafide work carried out by me/us under the supervision of **Naveen Kumar N, Assistant Professor (Sr)**. I further declare that the work reported in this project has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma of this institute or of any other institute or university.

Reg.No:16BCE0451

Name : NIVEDITA

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List of Tables

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ABSTRACT

There is no other redeeming act than to save a human life. People may feel afraid or selfish when it comes to donating blood. But if everybody thinks that way, then doctors may be unable to save so many human lives. People who have never donated blood may themselves require blood at some point of their life. More awareness should be created about blood donation so that more and more people come forward to donate blood.

Aim of this project is to provide a user friendly and interactive service to create awareness among people to donate blood through blood bank camps and to facilitate easy maintenance of database for blood inventory. As soon as any updates occur in the blood bank database these changes are reflected in all the above mentioned interfaces.

The system is designed to overcome the drawbacks of existing system problem. The main objective is to improve the efficiency of data communication within the supply chain to reduce response time for each blood demand request. We also focused on managing blood inventory at each blood bank effectively. The results have shown that the proposed system helps enhancing the communication among blood partners within the supply chain network. The recipient can get blood in emergency case. This system helps us a lot in hospitals is the subject of an integrated blood regard to all tables and stakeholders. This is Project is helpful for an Hospital to manage all the things easily and a computerised system is simplifying the work. Reservation of Blood though maintaining the status of donors for future donations, gathering Volunteers for blood bank and hospitals are some of the functionalities of the project.

1. INTRODUCTION

Blood Bank Management System (BBMS) is a browser based system that is designed to store, retrieve information concerned with the administrative and inventory management within a blood bank. This project aims at maintaining all the information pertaining to blood donors and acceptors, different blood groups available and help to them manage in a better way. Aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle free and corruption free and make the system of blood bank management effective. We are creating a web application acting as the front end for the backend database to facilitate the co-ordination between supply and demand of blood. The main objective of this application is to automate the complete operations of the blood bank. They need maintain hundreds of thousands of records. Also searching should be very faster so they can find and match required details instantly. The system will provide the user the option to look at the details of the existing Donor List, Blood Group and to add a new Donor. The administrator can alter system data.

PROBLEM STATEMENT

At present, the public can only know about the blood donation events through conventional media means such as radio, newspaper or television advertisements. There is no information regarding the blood donation programs available on any of the portal. The current system that is using by the blood bank is manual system. With the manual system, there are problems in managing the donors' records. The records of the donor might not be kept safely and there might be missing of donor's records due to human error or disasters. Besides that, errors might occur when the staff keeps more than one record for the same donor. There is no centralized database of volunteer donors. So, it becomes really tedious for a person to search blood in case of emergency. The only option is to manually search and match donors and then make phone calls to every donor. There is also no centralized database used to keep the donors' records. Each bank is having their own records of donors. If a donor makes donation in different hospital, no previous records can be traced except if the donor brings along the donation certificate. Without an automated management system, there are also problems in keeping track of the actual amount of each and every blood type in the blood bank. In addition, there is also no alert available when the blood quantity is below its par level or when the blood in the bank has expired.

2. SYSTEM REQUIREMENTS

The front end will be an interface between the user and the back end. HTML and CSS along with a bit of JAVASCRIPT will be used for the front end designing.

The backend will contain the databases involved in the software; for instance, the donor and the acceptor databases.

They are created with the help of MySQL and the MySQL database will be connected to the front end with the help of PHP. XAMPP software will be used to access APACHE web server which connects to the client i.e., our browser.

3. SOLUTION FOR EXISTING PROBLEMS

ADMIN MODULE

The admin module is the welcome.php page which holds the links for ADD CAMPS, SHOW CAMPS, SHOW DONORS, SHOW REQUESTS and LOGOUT.

```
<header class="container red center" style="padding:350px 16px">
  <div class="display-middle" style="white-space:nowrap;">
    <span class="center padding-large black xxlarge wide animate-opacity">WELCOME <?php echo $login_session;
  ?> !</span><br><br>
    <a href="camp.php" class="button black padding-large large margin-top">ADD CAMPS
      <a href="camplist.php" class="button black padding-large large margin-top">SHOW CAMPS
    <a href="listda.php" class="button black padding-large large margin-top">SHOW DONORS
    <a href="listda2.php" class="button black padding-large large margin-top">SHOW REQUESTS
    <a href="logout.php" class="button black padding-large large margin-top">LOGOUT
  </div>
</header>
```

TO SHOW CAMP RECORDS:

```
<?php
$connect=mysqli_connect("localhost","root","","bloodbank");
if($connect==false)
{
  die("ERROR: Failed to Connect".mysqli_connect_error());
}
$result = mysqli_query($connect,"SELECT * FROM camps"); // selecting data through mysql_query()
```

```

echo '<table border=1px>'; // opening table tag
echo '<th>CITY</th><th>ADDRESS</th><th>CONTACT</th>'; //table headers
while($data = mysqli_fetch_array($result))
{
// we are running a while loop to print all the rows in a table
echo '<tr>'; // printing table row
echo '<td>'. $data['city']. '</td><td>'. $data['address']. '</td><td>'. $data['contact']. '</td>';
echo '</tr>'; // closing table row
}
echo '</table>'; //closing table tag
mysqli_close($connect);
?>

```

TO SHOW DONOR RECORDS:

```

<?php
$connect=mysqli_connect("localhost","root","","bloodbank");

if($connect==false)
{
die("ERROR: Failed to Connect".mysqli_connect_error());
}
$result = mysqli_query($connect,"SELECT * FROM donor"); // selecting data through mysql_query()
echo '<table border=1px>'; // opening table tag
echo '<th>NAME</th><th>EMAIL</th><th>GENDER</th><th>AGE</th><th>WEIGHT</th><th>BLOODTYPE</th><th>CONTACT</th><th>CITY</th>'; //table headers

while($data = mysqli_fetch_array($result))
{
// we are running a while loop to print all the rows in a table
echo '<tr>'; // printing table row
echo
'<td>'. $data['fname']. '</td><td>'. $data['email']. '</td><td>'. $data['gender']. '</td><td>'. $data['age']. '</td><td>'. $data['
weight']. '</td><td>'. $data['bloodtype']. '</td><td>'. $data['mobno']. '</td><td>'. $data['city']. '</td>'; // we are looping
all data to be printed till last row in the table
echo '</tr>'; // closing table row
}
echo '</table>'; //closing table tag
mysqli_close($connect);
?>

```

TO SHOW REQUEST RECORDS:

```

<?php
$connect=mysqli_connect("localhost","root","","bloodbank");
if($connect==false)
{
die("ERROR: Failed to Connect".mysqli_connect_error());
}
$result = mysqli_query($connect,"SELECT * FROM acceptor"); // selecting data through mysql_query()
echo '<table border=1px>'; // opening table tag
echo '<th>NAME</th><th>EMAIL</th><th>GENDER</th><th>BLOODTYPE</th><th>CONTACT</th><th>CI
TY</th>'; //table headers
while($data = mysqli_fetch_array($result))
{
// we are running a while loop to print all the rows in a table
echo '<tr>'; // printing table row

```



```

echo
'<td>'.$data['name'].'</td><td>'.$data['mail'].'</td><td>'.$data['rgender'].'</td><td>'.$data['rbloodtype'].'</td><td>'.
$data['mobilno'].'</td><td>'.$data['city'].'</td>';
echo'</tr>'; // closing table row
}
echo '</table>'; //closing table tag
mysqli_close($connect);
?>

```

TO LOGOUT OF THE ADMIN MODULE SESSION:

```

<?php
session_start();
if(session_destroy())
{
header("Location: admin.php");
}
?>

```

LOGIN MODULE

The Login module is accessed by the admin.php page.

LOGIN CREDENTIALS:

```

<form method="POST" action="">
    <span class="fa fa-user"></span>
    <input type="text" name="username" placeholder="Username...">
    <span class="fa fa-lock"></span>
    <input type="password" name="password" placeholder="Password...">
    <input type="submit" value="LOGIN">
</form>

```

VALIDATING LOGIN CREDENTIALS:

```

<?php
include("config.php");
$usernameErr = $passwordErr = $error="";
session_start();
if($_SERVER["REQUEST_METHOD"] ==
"POST")
{
if (empty($_POST["username"]))
{
$usernameErr = " Username is required";
}
if(empty($_POST["password"]))
{
$passwordErr = " Password is required";
}
// username and password sent from Form
$myusername=mysqli_real_escape_string($db,$_PO
ST['username']);
$mypassword=mysqli_real_escape_string($db,$_PO
ST['password']);
$sql="SELECT username FROM admin WHERE
username='$myusername' and
password='$mypassword'";

$result=mysqli_query($db,$sql);
$row=mysqli_fetch_array($result,MYSQLI_ASSOC)
;
$active=$row['active'];
$count=mysqli_num_rows($result);
// If result matched $myusername and $mypassword,
table row must be 1 row
if($count==1)
{
$_SESSION['login_user']=$myusername;
header("location: welcome.php");
}
else
{
if((!empty($_POST["username"]))and(!empty($_PO
ST["password"]))and($count!=1))
$error=" Your Login Name or Password is Invalid";
}
?

```

DONATE MODULE

The donate module is accessed by the donate.php page.

DONOR FORM:





















```
<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>">
Name: <input type="text" name="fname" placeholder="Your name...">
<span class="error">* <?php echo $fnameErr;?></span>
<br><br>
E-mail: <input type="text" name="email" placeholder="Your Email Address...">
<span class="error">* <?php echo $emailErr;?></span>
<br><br>
<label for="gender">Gender:</label><br><br>
<input type="radio" name="gender" value="Male">Male
<input type="radio" name="gender" value="Female">Female<br><br>
<span class="error">* <?php echo $genderErr;?></span>
<br><br>
Age: <input type="number" name="age" placeholder="Enter Your Age...">
<span class="error">* <?php echo $ageErr;?></span>
<br><br>
Weight (in kg): <input type="number" name="weight" placeholder="Enter Your Weight...">
<span class="error">* <?php echo $weightErr;?></span>
<br><br>
<label for="bloodtype">Blood Type</label><br>
<select id="bloodtype" name="bloodtype">
<option selected disabled hidden style='display: none' value=""></option>
<option value="A+">A+</option>
<option value="A-">A-</option>
<option value="B+">B+</option>
<option value="B-">B-</option>
<option value="O+">O+</option>
<option value="O-">O-</option>
<option value="AB+">AB+</option>
<option value="AB-">AB-</option>
</select>
<span class="error">* <?php echo $bloodtypeErr;?></span>
<br><br>
Mobile No.: <input type="number" name="mobno" placeholder="Enter Your Contact Number...">
<span class="error">* <?php echo $mobnoErr;?></span>
<br><br>
<label for="city">City</label><br>
<select id="city" name="city">
<option selected disabled hidden style='display: none' value=""></option>
<option value="BANGALORE">BANGALORE</option>
<option value="CHENNAI">CHENNAI</option>
<option value="GOA">GOA</option>
<option value="KOLKATA">KOLKATA</option>
<option value="HYDERABAD">HYDERABAD</option>
<option value="MUMBAI">MUMBAI</option>
<option value="NEW DELHI">NEW DELHI</option>
```

```

<option value="NOIDA">NOIDA</option>
<option value="PORT BLAIR">PORT BLAIR</option>
<option value="VISAKHAPATNAM">VISAKHAPATNAM</option>
</select>
<span class="error">*<?php echo $cityErr;?></span>
<br><br>
<input type="submit" style="font-size:18px;" value="ADD DONOR">
</form>

```

CONNECTING TO DATABASE AND INSERTING DATA:

<div>  Table structure  Relation view </div>									
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	fname	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 2	email	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 3	gender	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 4	age	int(25)			No	None			 Change 
<input type="checkbox"/> 5	weight	int(25)			No	None			 Change 
<input type="checkbox"/> 6	bloodtype	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 7	mobno	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 8	city	varchar(25)	latin1_swedish_ci		No	None			 Change 
<input type="checkbox"/> 9	organ	varchar(25)	latin1_swedish_ci		No	None			 Change 

```

<?php
$connect=mysqli_connect("localhost","root","","bloodbank
");

if($connect==false)
{
die("ERROR: Failed to Connect".mysqli_connect_error());
}
// define variables and set to empty values
$fnameErr = $emailErr = $genderErr=$ageErr =
$weightErr =$bloodtypeErr= $mobnoErr=$cityErr="";
$fname = $email = $gender = $age = $weight
=$bloodtype=$mobno=$city= "";

if ($_SERVER["REQUEST_METHOD"] == "POST")
{
if (empty($_POST["fname"])) {
$fnameErr = "Name is required";
} else {
$fname = ($_POST["fname"]);
// check if name only contains letters and whitespace
if (!preg_match("/^[a-zA-Z]*$/", $fname)) {
$fnameErr = "Only letters and white space allowed";
}
}
if (empty($_POST["email"])) {

```

```

$emailErr = "Email is required";
} else {
$email = ($_POST["email"]);
// check if e-mail address is well-formed
if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
$emailErr = "Invalid email format";
}
}
if (empty($_POST["gender"]))
{
$genderErr = "Gender is required";
}
else {
$gender = ($_POST["gender"]);
}
if(empty($_POST["age"]))
{
$ageErr = "Age is required";
}
else {
$age = ($_POST["age"]);
}
if(empty($_POST["weight"]))
{
$weightErr = "Weight is required";
}
}

```

```

else {
$weight = ($_POST["weight"]);
}
if(empty($_POST["bloodtype"]))
{
$bloodtypeErr = "BloodType is required";
}
else {
$bloodtype = ($_POST["bloodtype"]);
}
if(empty($_POST["mobno"]))
{
$mobnoErr = "Mobile no. is required";
}
else {
$mobno = ($_POST["mobno"]);
}
if(empty($_POST["city"]))
{
$cityErr = "City is required";
}
else {
$city = ($_POST["city"]);
}

$sql="INSERT INTO
donor(fname,email,gender,age,weight,bloodtype,mobno,cit
y) VALUES
('$fname','$email','$gender','$age','$weight','$bloodtype','$
mobno','$city)";
if(!mysqli_query($connect,$sql))
{
die('ERROR: Donor Not Added.' .mysqli_error($connect));
}
else
{
echo "DONOR ADDED!";
}

$result=mysqli_query($connect,$sql);
$count=mysqli_num_rows($result);
if($count==1)
{
header("location: acceptt.php");
}
}
mysqli_close($connect);
?>

```

REQUEST MODULE

REQUESTER FORM:

```

<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>">
Name: <input type="text" name="name" placeholder="Your name...">
<span class="error">* <?php echo $nameErr;?></span>
<br><br>
E-mail: <input type="text" name="mail" placeholder="Your Email Address...">
<span class="error">* <?php echo $mailErr;?></span>
<br><br>
<label for="rgender">Gender:</label><br><br>
<input type="radio" name="rgender" value="Male">Male
<input type="radio" name="rgender" value="Female">Female<br><br>
<span class="error">* <?php echo $rgenderErr;?></span>
<br><br>
<label for="rbloodtype">Requested Blood Type</label><br>
<select id="rbloodtype" name="rbloodtype">
<option selected disabled hidden style='display: none' value=""></option>
<option value="A+">A+</option>
<option value="A-">A-</option>
<option value="B+">B+</option>
<option value="B-">B-</option>
<option value="O+">O+</option>
<option value="O-">O-</option>
<option value="AB+">AB+</option>
<option value="AB-">AB-</option>
</select>
<span class="error">* <?php echo $rbloodtypeErr;?></span>
<br><br>
Mobile No.: <input type="number" name="mobilno" placeholder="Enter Your Contact Number...">
<span class="error">* <?php echo $mobilnoErr;?></span>
<br><br>

```

```

<label for="city">City</label><br>
<select id="city" name="city">
<option selected disabled hidden style='display: none' value=""></option>
<option value="BANGALORE">BANGALORE</option>
<option value="CHENNAI">CHENNAI</option>
<option value="GOA">GOA</option>
<option value="KOLKATA">KOLKATA</option>
<option value="HYDERABAD">HYDERABAD</option>
<option value="MUMBAI">MUMBAI</option>
<option value="NEW DELHI">NEW DELHI</option>
<option value="NOIDA">NOIDA</option>
<option value="PORT BLAIR">PORT BLAIR</option>
<option value="VISAKHAPATNAM">VISAKHAPATNAM</option>
</select>
<span class="error">* <?php echo $cityErr;?></span>
<br><br>
<input type="submit" style="font-size:18px;" value="ADD REQUEST">
</form>

```

CONNECTING TO DATABASE AND INSERTING DATA:





Table structure



Relation view

#	Name	Type	Collation	Attri
<input type="checkbox"/> 1	name	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 2	mail	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 3	rgender	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 4	rbloodtype	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 5	mobilen	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 6	city	varchar(25)	latin1_swedish_ci	
<input type="checkbox"/> 7	organs	varchar(25)	latin1_swedish_ci	

```

<?php
$connect=mysqli_connect("localhost","root","","bloo
dbank");
if($connect==false)
{
die("ERROR: Failed to
Connect".mysqli_connect_error());
}
// define variables and set to empty values
$nameErr = $mailErr = $rgenderErr
=$rbloodtypeErr= $mobilnoErr=$cityErr="";
$name = $mail = $rgender
=$rbloodtype=$mobilno=$city=$submit="";
if ($_SERVER["REQUEST_METHOD"] ==
"POST")

```

```

{
if (empty($_POST["name"])) {
$nameErr = "Name is required";
} else {
$name = ($_POST["name"]);
// check if name only contains letters and whitespace
if (!preg_match("/^[a-zA-Z ]*$/",$name)) {
$nameErr = "Only letters and white space allowed";
}
}
if (empty($_POST["mail"])) {
$mailErr = "Email is required";
} else {
$mail = ($_POST["mail"]);
// check if e-mail address is well-formed

```

```

if (!filter_var($mail,
FILTER_VALIDATE_EMAIL)) {
$mailErr = "Invalid email format";
}
}
if (empty($_POST["rgender"]))
{
$rgenderErr = "Gender is required";
}
else {
$rgender = ($_POST["rgender"]);
}
if(empty($_POST["rbloodtype"]))
{
$rbloodtypeErr = "BloodType is required";
}
else {
$rbloodtype = ($_POST["rbloodtype"]);
}
if(empty($_POST["mobilno"]))
{
$mobilnoErr = "Mobile no. is required";
}
else {
$mobilno = ($_POST["mobilno"]);
}
if(empty($_POST["city"]))
{
$cityErr = "City is required";
}

else {
$city = ($_POST["city"]);
}
$sql="INSERT INTO
acceptor(name,mail,rgender,rbloodtype,mobilno,city)
VALUES
('$name','$mail','$rgender','$rbloodtype','$mobilno','$
city')";

if(!mysqli_query($connect,$sql))
{

die('ERROR: Request Not Added.'
mysqli_error($connect));
}
else
{
echo "REQUEST ADDED!";
}

$result=mysqli_query($connect,$sql);
$count=mysqli_num_rows($result);
if($count==1)
{
header("location: acceptt.php");
}
}

mysqli_close($connect);
?>

```

DONOR SEARCH

Donor search is done to check availability of a blood group in donor records. It is implemented by search.php page.

SEARCH BOX:

```

<form method="post" action="ser.php?go" id="searchform">
  <input type="text" name="name">
  <input type="submit" name="submit" value="Search">
</form>

```

EXTRACT MATCHING RECORDS:

```

<?php
if(isset($_POST['submit'])) {
if(isset($_GET['go'])) {
if(preg_match("/^[ a-zA-Z]+/", $_POST['name'])) {
$name=$_POST['name'];
//connect to the database

$connect=mysqli_connect("localhost","root","","bloo
dbank");
if($connect==false)
{
die("ERROR: Failed to
Connect".mysqli_connect_error());
}

```

```

//query the database table
$sql="SELECT fname,bloodtype,mobno,city FROM
donor WHERE bloodtype LIKE ".$name." ";
//run the query against the mysql query function
$result=mysqli_query($connect,$sql);
//create while loop and loop through result set
echo '<table border=1px>';
echo '<th>NAME</th><th>BLOODTYPE</th><th>
CONTACT</th><th>CITY</th>';
while($row=mysqli_fetch_array($result)){
    $fname = $row['fname'];
    $bloodtype=$row['bloodtype'];
    $mobno = $row['mobno'];
    $city=$row['city'];
    //display the result of the array

    echo '<tr>'; // printing table row
    echo
    '<td>'.$row['fname'].'</td><td>'.$row['bloodtype'].'</
    td><td>'.$row['mobno'].'</td><td>'.$row['city'].'</td
    >'; // we are looping all data to be printed till last row
    in the table
    echo '</tr>';
    }
    }
    else{
    echo "<p>Please enter a search query</p>";
    }
    }
    }
    ?>

```

CAMPS

The camp information can be added by the admin through camp.php page.



ADD CAMP FORM:

```

<form method="post" action='<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>'>
<label for="city">City</label><br><br>
<select id="city" name="city">
<option selected disabled hidden style='display: none' value=""></option>
<option value="BANGALORE">BANGALORE</option>
<option value="CHENNAI">CHENNAI</option>
<option value="GOA">GOA</option>
<option value="KOLKATA">KOLKATA</option>
<option value="HYDERABAD">HYDERABAD</option>
<option value="MUMBAI">MUMBAI</option>
<option value="NEW DELHI">NEW DELHI</option>
<option value="NOIDA">NOIDA</option>
<option value="PORT BLAIR">PORT BLAIR</option>
<option value="VISAKHAPATNAM">VISAKHAPATNAM</option>
</select>
<span class="error">* <?php echo $cityErr;?></span>
<br><br>
<label for="address">Address</label>
<input type="text" id="address" name="address" placeholder="Address of the Camp...">
<span class="error">* <?php echo $addressErr;?></span>
<br><br>
<label for="contact">Contact</label>
<input type="number" id="contact" name="contact" placeholder="Enter Camp's Contact Number...">
<span class="error">* <?php echo $contactErr;?></span>
<br><br>
<input type="submit" style="font-size:18px;" value="ADD CAMP">
</form>

```

CONNECTING TO DATABASE AND INSERTING DATA:

 **Table structure**
 **Relation view**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	city	varchar(25)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/> 2	address	varchar(50)	latin1_swedish_ci		No	None			Change Drop More
<input type="checkbox"/> 3	contact	varchar(25)	latin1_swedish_ci		No	None			Change Drop More

```
<?php
$connect=mysqli_connect("localhost","root","","bloo
dbank");
if($connect==false)
{
die("ERROR: Failed to
Connect".mysqli_connect_error());
}
// define variables and set to empty values
$cityErr = $addressErr = $contactErr="";
$city = $address = $contact= "";
if ($_SERVER["REQUEST_METHOD"] ==
"POST")
{
if (empty($_POST["city"]))
{
$cityErr = "City name is required";
}
else {
$city = ($_POST["city"]);
}
if(empty($_POST["address"]))
{
$addressErr = "Address is required";
}
else {
$address = ($_POST["address"]);
}
if(empty($_POST["contact"]))
{
$contactErr = "Contact is required";
}
else {
$contact = ($_POST["contact"]);
}
$sql="INSERT INTO camps(city,address,contact)
VALUES ('$city','$address','$contact')";
if(!mysqli_query($connect,$sql))
{
die('ERROR: Camp Not Added.'
mysqli_error($connect));
}
```

```
else
{
echo "CAMP ADDED!";
}
$result=mysqli_query($connect,$sql);
$count=mysqli_num_rows($result);
if($count==1)
{
header("location: acceptt.php");
}
}
mysqli_close($connect);
?>
```


4. Recent Technology

4.1 AJAX

Ajax is a client-side script that communicates to and from a server/database without the need for a postback or a complete page refresh.

4.1.1 Importance of AJAX

There are 4 main benefits of using Ajax in web applications:

1. **Callbacks:** Ajax is used to perform a callback, making a quick round trip to and from the server to retrieve and/or save data without posting the entire page back to the server. By not performing a full postback and sending all form data to the server, network utilization is minimized and quicker operations occur. In sites and locations with restricted bandwidth, this can greatly improve network performance. Most of the time, the data being sent to and from the server is minimal. By using callbacks, the server is not required to process all form elements. By sending only the necessary data, there is limited processing on the server. There is no need to process all form elements, process the ViewState, send images back to the client, or send a full page back to the client.
2. **Making Asynchronous Calls:** Ajax allows us to make asynchronous calls to a web server. This allows the client browser to avoid waiting for all data to arrive before allowing the user to act once more.
3. **User-Friendly:** Because a page postback is being eliminated, Ajax enabled applications will always be more responsive, faster and more user-friendly.
4. **Increased Speed:** The main purpose of Ajax is to improve the speed, performance and usability of a web application.

4.1.2 Sample code

```
<?php
// Array with names

// get the q parameter from URL
$q = $_REQUEST["q"];

$hint = "";

// lookup all hints from array if $q is different from ""
if ($q !== "") {
    $q = strtolower($q);
    $len=strlen($q);
    foreach($a as $name) {
        if (stristr($q, substr($name, 0, $len))) {
            if ($hint === "") {
```

```

        $hint = $name;
    } else {
        $hint .= ", $name";
    }
}
}

// Output "no suggestion" if no hint was found or output correct values
echo $hint === "" ? "no suggestion" : $hint;
?>

```

4.1.3 Sample Screenshot

4.2 BOOTSTRAP

Bootstrap is a free and open-source front-end framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

4.2.1 Importance of technology

- Bootstrap's responsive CSS adjusts to phones, tablets, and desktops.
- Mobile-first styles are part of the framework.
- Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Safari, and Opera).

4.2.2 Sample code

```

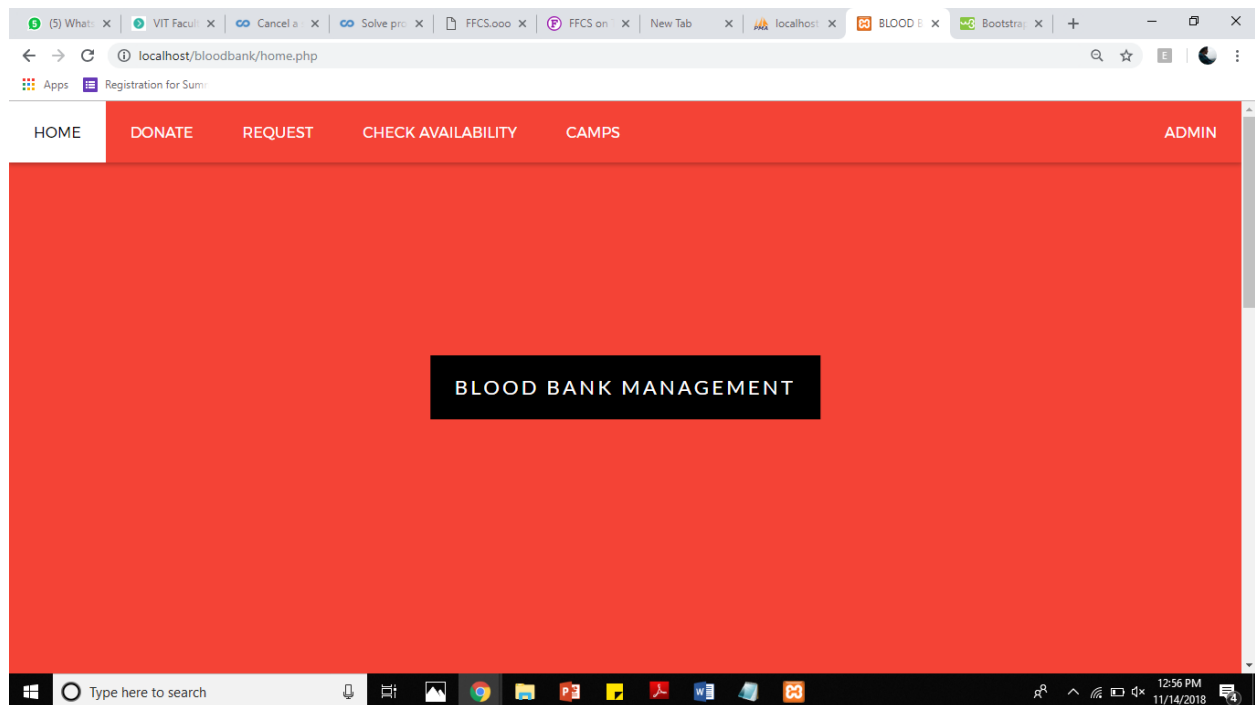
<button type="button" class="navbar-toggle" data-toggle="collapse"
datatarget=".navbar-ex1-collapse"> <span class="sr-
only">Chronicle</span>

```

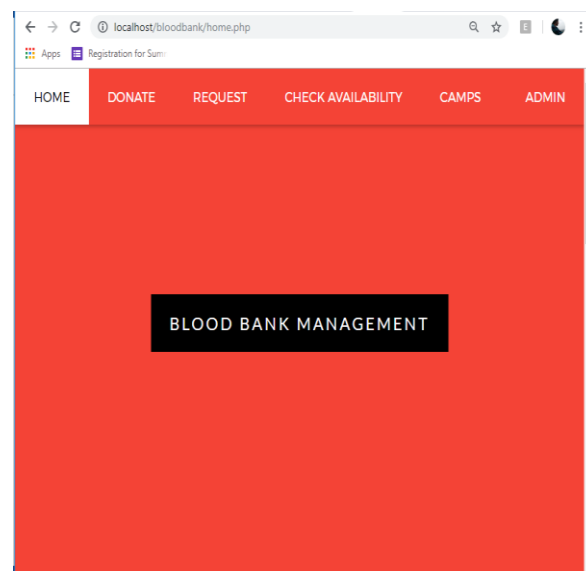
```
<span class="icon-bar"></span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
</button>
```

4.2.3 Sample Screenshot

Since the website is responsive it changes according to different screen size

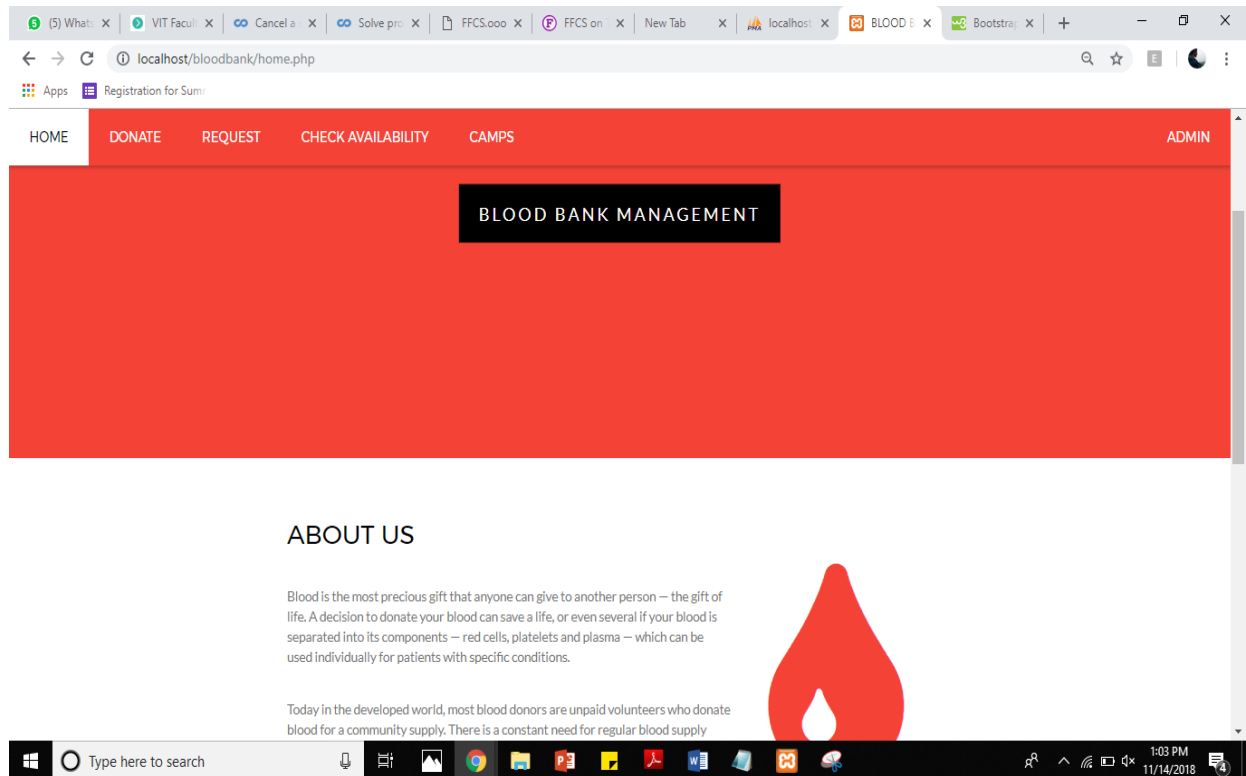


On changing screen size



5. Screenshots

Home page



HOME


DONATE

REQUEST

CHECK AVAILABILITY

CAMPS

ADMIN

 REGISTER AS A BLOOD DONOR

* required field.

Name:

Your name...

*

E-mail:

Your Email Address...

*

Gender:

☐ Male

☐ Female

*

Age:

Enter Your Age...

*

Weight (in kg):

Enter Your Weight...

*

Blood Type

*

Mobile No.:

Enter Your Contact Number...

*


City

*

Are you willing to donate an organ in the future? Please select organ, if yes.

ADD DONOR

HOME DONATE REQUEST CHECK AVAILABILITY CAMPS ADMIN

 REQUEST FOR BLOOD

* required field.

Name:

E-mail:

Gender:

☐ Male ☐ Female

Requested Blood Type


Mobile No.:

City

Do you require an organ? Please select organ, if yes.

ADD REQUEST

GO BACK

 ADD A CAMP

City

Address

Contact

ADD CAMP

LIST OF DONORS

NAME	EMAIL	GENDER	AGE	WEIGHT	BLOODTYPE	CONTACT	CITY
EDITH MARIN	edmarin@mail.com	Female	56	64	B-	766658991	PONDICHERRY
JAMES MILLER	jamesmiller@mail.com	Male	37	89	AB-	7724687873	KOLKATA
JANE DOE	jdoe@mail.com	Female	64	62	A+	8765754687	MUMBAI
AMELIA EARHART	amearhart@mail.com	Female	29	62	AB-	8767565476	NEW DELHI
RAY PENBER	rpen@mail.com	Male	37	90	A+	8798456973	BANGALORE
JOHN DOE	jd@email.com	Male	43	67	O-	8857727772	HYDERABAD
LAURA EMANNUEL	lauraem@mail.com	Female	59	64	B-	9865687676	GOA
ANDRAYA KADE	andikade@mail.com	Female	19	51	A+	9977711790	MUMBAI


LIST OF REQUESTS

NAME	EMAIL	GENDER	BLOODTYPE	CONTACT	CITY
ARUN MEHTA	arunm@email.com	Male	B-	7139879818	PORT BLAIR
KAYLA MILLER	kaylamill@mail.com	Female	B-	7658769769	GOA
SHANON BIRK	shanonbirk@mail.com	Female	O+	7676455879	NEW DELHI
JADEN SMITH	jadsmith@mail.com	Male	A-	8768545745	NOIDA
CHLOE ARNER	chloearner@mail.com	Female	O-	9785767961	PONDICHERRY
MAVERICK REYES	mavreyes@mail.com	Male	O-	9896565657	GOA

LIST OF BLOODBANK CAMPS

CITY	ADDRESS	CONTACT
BANGALORE	The Red Drop Organisation, Block A, Sector 27, Bangalore	7957497798
GOA	The Red Drop Organisation, Oleander Beach, Goa	9787348768
MUMBAI	The Red Drop Center, Takshila, Mumbai	7879878578
PORT BLAIR	The Red Drop Organisation, Blaise Apartments, Port Blaire	7887597689

INPUT

 SEARCH BY BLOOD GROUP

B-

Search

OUTPUT

LIST OF DONORS			
NAME	BLOODTYPE	CONTACT	CITY
EDITH MARIN	B-	766658991	PONDICHERRY
LAURA EMANNUEL	B-	9865687676	GOA

INPUT

Q

SEARCH BY ORGAN DONATED

EYES

Search

OUTPUT

LIST OF ORGAN DONORS			
NAME	ORGAN	CONTACT	CITY
AMELIA EARHART	EYES	8767565476	NEW DELHI
RAY PENBER	EYES	8798456973	BANGALORE

ADMINISTRATION LOGIN

user

....

LOGIN

6. CONCLUSION

Blood is a vital biological product that can only be procured by donation. This project successfully implements Blood Bank Management System for donors and requestors. It strives to create awareness among people by enabling provisions for blood donation camps in cities.

Against an annual requirement of 4 crores units of blood, India is able to collect only 40 lakhs units of blood of which only million units are from voluntary blood donors while the remaining are from family/replacement donors or suffer from non-availability of blood.

An online blood bank ensures that requesters get their requested blood types. Willing donors can access information about camps and visit them to donate blood. The timely delivery of the required amount of blood to the donor is critical to save the life of a patient. For blood banks to achieve 100% voluntary donations, online blood banks are a necessity.

FUTURE WORK

There are also few features which can be integrated with this system to make it more flexible. Below list shows the future points to be consider.

- Sending messages to donors and requesters to connect them
- Blood type compatibility testing
- Organ donation can be included for willing donors
- Billing of patients
- Video Conferencing facility for remote areas for treatments
- Hangout for different doctors and patients at different locations