1.INTRODUCTION

"THE LIFE GIVING BANK" is a website for a non profitable organization, which consists of basic information regarding organ donation. Donors can pledge their organs and hospitals can register themselves to the website and upon login, they can know the availability of organs based on basic matching specifications based upon patients conditions.

1.1 INTRODUCTION

This project is aimed to develop a website for a Non Governmental, Non Profitable Organisation, "THE LIFE GIVING BANK". Main objective is to perform timely transplantations and save lives.

The website includes hospital login, hospital registration, administrator login, donor pledge, different organs forms. New hospitals can register themselves by filling in their required details such as Hospital name, Hospital registered number, Contact details, Contact address, Username, Password and checking the terms and conditions. All of these details are validated before entering them into the database and then entered into database. The hospital login page enables to fill in their valid username and password to enter into the organs page. Donors can pledge their organs by filling in their required details such as Name, Contact Number, Occupation, Contact Address, Organs they wish to donate, Identity card details, Emergency Contact Details, etc. Administrators can login using predefined unique Username, Password and can update the database based upon the availability of organs. This project has been developed using XAMPP sever, HTML, CSS as frontend and MYSQL, PHP as backend. The interface is built to be user-friendly so that the data can be filled and retrieved easily.

HOME PAGE

It consists of basic information regarding organ donation, it tells

- What is organ donation?
- What are the types of organ donation?
- What are the organs that can be donated?

It consists of navigation bar which redirects into various pages of the website. It consists of quick links to donate organs, to be a registered hospital, to hospital login, to administrator login.

DONOR ZONE

Donor main page consists of information regarding

- What is the process of organ donation?
- What is the law governing organ donation in India?
- How to pledge organs and become an organ donor?

It consists of statistical and graphical analysis of organ donation in India during 2014-2019. Through this zone, a person who wishes to donate organs can pledge their organs by filling the pledge form.

HOSPITAL ZONE

Hospital main page consists of information regarding

How long can an organ survive outside the body of deceased donor?

Through this zone, hospitals can register themselves by filling the registration form, the registered hospitals can login, Once they login, it is redirected to the organs page, which consists of images of different organs. On selecting a particular organ, it redirects to organ specific form. By filing the form with the mentioned specifications based on requirement of type of organ, they can search for the availability organs.

This page also displays the list of hospitals registered up to that point of time.

ADMINISTRATION ZONE:

This zone consists of login form for an administrator.

Once an administrator login into the page, it is redirected to the organs page, which consists of images of different organs. On selecting a particular organ, it redirects to organ specific form. Administrators can keep track of organs by updating the database by filing the form with the specifications of organs available.

1.2 OBJECTIVE OF THE PROJECT

EXISTING SYSTEM

There exist many governmental and non-governmental websites of various organizations which supports promotes, collects organs from organ donors.

Few of them are

- o NOTTO (National Organ and Tissue Organ Transplantation) www.notto.gov.in
- o HRSA (Health Resources and Services Administration) www.orgondonor.gov
- o Mohan Foundation www.mohanfoundation.org.

Disadvantages

- Hospitals can't know the availability of organs in the bank easily.
- To know the availability based on patient's conditions, they need to contact the bank and specify patient's conditions, which is a time taking process

PROPOSED SYSTEM

The proposed "THE LIFE GIVING BANK" website helps in filling the time lapse in organ transplantations.

- ➤ Our website is for a Non-Governmental Organisation (NGO) that works for organ donation.
- ➤ It lets donors to pledge their organs. In addition to collection of organs, we let recognised hospitals to register to our site and the registered hospitals can know what all the organs currently available with us, by entering organ specific basic matching information and can contact NGO for seeking of organs.

Advantages

- It lets hospitals to know what all the organs available at an instance of time.
- It allows performing timely transplantations.
- It saves lot of time and effort for hospitals in search of organs.
- If we implement at a state or country level, the huge collection of organs can save many lives.
- User friendly and interactive interface with provisions for donor, hospital and administrator to view different respective zones.

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1.3 ORGANISATION OF THE REPORT

This is to follow up the next chapters' i.e., Chapter 2 contains the information about the system requirement specifications. It clearly explains the non-functional requirements offered by the system. It also mentions the specific requirements such as user interfaces, hardware interfaces, software interfaces and performance requirements. Software requirements and hardware requirements are also mentioned in the chapter.

The next chapter i.e. Chapter 3 deals with the design and implementation of the project. It covers about all the technologies that are used for the project i.e. HTML, CSS, JavaScript, PHP and the IDE XAMPP. It also contains the source code of the project and also the output screen shots of the project.

The last chapter i.e., Chapter 4 provides the concluding information of the project.

The report ends with the list of references that have been used.

2. SYSTEM SPECIFICATIONS

To be used efficiently, all computer software needs certain hardware components or other software resources to be present on a computer. These prerequisites are known as (computer) system requirements and are often used as a guideline as opposed to an absolute rule. Most software defines two sets of system requirements: minimum and recommended. With increasing demand for higher processing power and resources in newer versions of software, system requirements tend to increase over time. Industry analysts suggest that this trend plays a bigger part in driving upgrades to existing computer systems than technological advancements.

NON-FUNCTIONAL REQUIREMENTS

Nonfunctional requirements are the functions offered by the system. It includes time constraints and constraints on the development process and standards. The non-functional requirements are as follows:

- **Speed:** The system should process the given input into output within appropriate time.
- **Ease of use:** The software should be user friendly. Then the customers can use easily, so it doesn't require much training time.
- **Reliability:** The rate of failures should be less then only the system is more reliable
- **Portability**: It should be easy to implement in any system.

SPECIFIC REQUIREMENTS

The specific requirements are:

- User Interfaces: The external users are the clients. All the clients can use this software for indexing and searching.
- ❖ Hardware Interfaces: The external hardware interface used for indexing and searching is personal computers of the clients. The PC's may be laptops with wireless LAN as the internet connections provided will be wireless.
- ❖ **Software Interfaces:** The Operating Systems can be any version of Windows.
- ❖ **Performance Requirements:** The PC's used must be at least Pentium 4 machines so that they can give optimum performance of the product.

2.1 SOFTWARE SPECIFICATIONS

Software requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application.

These requirements or prerequisites are generally not included in the software installation package and need to be installed separately before the software is installed.

The system should be able to interface with the existing system

- The system should be accurate
- The system should be better than the existing system

2.2 HARDWARE SPECIFICATIONS

The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware, A hardware requirements list is often accompanied by a hardware compatibility list, especially in case of operating systems. An HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements.

All computer operating systems are designed for particular computer architecture. Most software applications are limited to particular operating systems running on particular architectures. Although architecture-independent operating systems and applications exist, most need to be recompiled to run on a new architecture.

The power of the central processing unit (CPU) is a fundamental system requirement for any software. Most software running on x86architecture define processing power as the model and the clock speed of the CPU. Many other features of a CPU that influence its speed and power, like bus speed, cache, and MIPS are often ignored.

HARDWARE AND SOFTWARE REQUIREMENTS

HARDWARE REQUIREMENTS

RAM : 2GB

Processor : 1.9 gigahertz (GHz) x86- or x64-bit dual core processor

With SSE2 instruction set

Hard Disk : 10GB

Monitor : 1024 X 768 resolution

Keyboard : 101 keys

SOFTWARE REQUIREMENTS

Operating System : Windows 10

Web Technologies : HTML, JAVASCRIPT, CSS, PHP

Server package : XAMPP

Database Management: phpMyAdmin

3.DESIGN AND IMPLEMENTATION

3.1 INTRODUCTION

HTML

WebPages are written in HTML - a simple scripting language. HTML is short for Hyper Text Markup Language.

- **Hypertext** is simply a piece of text that works as a link
- Markup Language is a way of writing layout information within documents.

Basically, an HTML document is a plain text file that contains text and nothing else. When a browser opens an HTML file, the browser will look for HTML codes in the text and use them to change the layout, insert images, or create links to other pages. Since HTML documents are just text files, they can be written in even the simplest text editor

CSS

CSS is an abbreviation for Cascading Style Sheets. CSS works with HTML and other Markup Languages to control the way the content is presented. Cascading Style Sheets is a means to separate the appearance of a webpage from the content of a webpage. CSS is a recommendation of the World Wide Web Consortium. The W3C is a consortium of web stakeholders: universities, companies such as Microsoft, Netscape and Macromedia, and experts in many web related fields. The presentation is specified by styles, which are presented in a style sheet. If you're familiar with word processing programs like Microsoft Word, you have probably played around at least a little bit with styles. For example, when you want to make the headline text of your document big and bold, the hard way to do it would be to select the text, select a font face and weight, and select the color. The easier way to do it is to create a "rule", or style, for all the headlines in your document. Then all you have to do is to make one rule, and keep on applying that to all your headers. CSS in its most basic form works exactly like this. Instead of using tags over and over again to control little sections of your page, you can establish some rules to apply globally, to a single page or all the pages on your site. CSS is a great time saver.

PHP

PHP started out as a small open-source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

PHP is a MUST to become a great Software Engineer especially when they are working in Web Development Domain. I will list down some of the key advantages of learning PHP:

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor"
- PHP is a server-side scripting language that is embedded in HTML
- It is used to manage dynamic content, databases, session tracking, even build entire ecommerce sites
- It is integrated with a number of popular databases, including MySQL, PostgreSQL,
 Oracle, Sybase, Informix, and Microsoft SQL Server
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module
 on the UNIX side. The MySQL server, once started, executes even very complex queries
 with huge result sets in record-setting time
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP
- PHP4 added support for Java and distributed object architectures (COM and CORBA),
 making n-tier development a possibility for the first time
- PHP is forgiving: PHP language tries to be as forgiving as possible
- PHP Syntax is C-Like

JAVA SCRIPT

JavaScript is a programming language that gives motion and logics to the website. For example: A popup window alert or validation of the passwords. The vast majority of websites use it for client-side page behavior, and all major web browsers have a dedicated JavaScript engine to execute it. As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM). Although there are similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.

XAMPP

XAMPP is an abbreviation for cross-platform, Apache, MySQL, PHP and Perl, and it allows you to build Word Press site offline, on a local web server on your computer. This simple and lightweight solution works on Windows, Linux, and Mac – hence the "cross-platform" part.

Since Word Press isn't a stand-alone application, XAMPP provides two essential components for its installation – Apache, which is used to create the local server, and MySQL which you can use as a database for your website.

3.2 SOURCE CODE

I. Code for the main page of the website:

```
<html>
<head>
<link rel="icon" href="logo.png">
<title>THE LIFE GIVING BANK</title>
<link rel="stylesheet" href="styles.css" >
</head>
<body>
<header style="background-color: #0f3057;padding:20px;">
<img src="logo.png" alt="logo" width="70" height="70" style="float:right,vertical-</pre>
align:middle;">
             <h1 style="color:#e7e7de;"><strong>THE LIFE GIVING
BANK</strong></h1><br
</header>
      <nav><br>
\langle ul \rangle
                   <a href="homepage.html"> Home</a>&nbsp;
                   <a href="donarmain.html">Donar Zone</a>&nbsp;
                   <a href="hospitalmain.html">Hospital Zone</a>&nbsp;
</nav>
      <section style="padding:10px"><br>
      <div class="column">
      <h1><center>WHAT IS ORGAN DONATION?</center></h1>
      Organ donation is ....
```

```
<h1><center>WHAT ARE THE TYPES OF ORGAN
DONATION?</center></h1>
            There are two types of organ donations: Living Organ Donations
& Deceased Organ
            Donations.
            <h2>Living Organ Donation:</h2><br>
            <div class="insimg"><center><img src="livingdonation.png"height="150"</pre>
width="270"></center></div>
            This is when you ...
            <h2>Deceased Organ Donation:</h2><br>
            <div class="insimg"><center><img src="deaddonation.jpg" height="150"</pre>
width="270"></center></div>
            When we talk about pledging ...
            <h1><center>WHICH ORGANS CAN BE DONATED?</center></h1>
            Let us take a closer ..
            <01>
            <b>Kidneys:</b> Both kidneys ...
            <b>Liver:</b> The liver is an ...
            <b>Heart:</b> A heart is a ...
            <b>Lungs:</b> Single or double-lung.... 
            <b>Pancreas:</b> A deceased donor pancreas... 
            <b>Intestine:</b> After death,...
            </01>
            <br>
      </div>
<div style="width:20%; margin-left:3px; float:right; padding:15px; border:#008891;">
      <div class="image">
            <center>
            <img src="i10.png">
```

```
<h3>Want to become a donar?</h3>
             <div class="butto">
             <a href="pledge.php" style="padding-right:20px; z-index:1001;">Click
here</a>
             </div>
             </center>
      </div>
             <br><hr class="hrow"><br><br><!-- The same image class is used for</pre>
inserting in side bar-->
             Quick links 
ul>
             <a href="donarmain.html" style="text-decoration:none;color:black;">All</a>
about donors</a><br
             <a href="pledge.php" style="text-decoration:none;color:black;">Pledge</a>
your organs</a><br
             <a href="hospitalmain.html" style="text-decoration:none;color:black;">All</a>
about hospitals</a><br>
             <a href="hsignup.php" style="text-decoration:none;color:black;">Hospital</a>
registration</a><br
             <a href="hlogin.php" style="text-decoration:none;color:black;">Hospital</a>
login</a><br>
             <a href="administratormain.php" style="text-
decoration:none;color:black;">Administrator login</a>
             </div>
</section>
      <br>><br>>
      <div class="clgn">
             <img src="i5.jpg" alt="no img" width=100%>
</div>
      <footer style="padding:25px;background-color:#008891;">
```

```
<br>
       <div class="foot">
      <img src="logo.png" alt="logo" width="70" height="70"><br>
       <h3>THE LIFE GIVING BANK</h3><br>
       <address style="color:white;">
 3-97/b,baasaar street,<br>
       Hyderabad-517752<br>
       Contact us:<br/>br>Phone:999999999<br/>br>
       <a href="mailto: Mail id:thelifegivingbank@gmail.com" style="text-decoration:none;" |
color:white;">
        Mail id:thelifegivingbank@gmail.com</a>
      </address>
      </div>
      </footer>
<div class="last" >
      <br>&copy; Copyright THE LIFE GIVING BANK 2019.All Rights
Reserved.<br><br>
      </div>
</body>
</html>
```

II. The code for pledge page that is connected to database to store donors' details

```
<html>
<head>
<title>PLEDGE MY ORGANS</title>
<style>
section
```

```
{
             border: 5px ridge #0f3057;
             background-color:#e7e7de;
             width:75%;
  }
      #iii{
             background-color:#a2d0c1;
             color:#09015f;
       }
      form{text-align:left;padding:30px;}
  #col{
             width: 50%;
             float:left;
             height:flex;}
       button
        border-radius:20%;
        background-color:#0f3057;
      color:#e7e7de;
      cursor:pointer;
       }
       .req{color:red;}
</style>
</head>
<body>
<center><h1>PLEDGE TO BECOME AN ORGAN DONAR</h1>
<?php
```

```
include 'connection.php';
if(isset($_POST['sub']))
      $full_name=$_POST['FULL_NAME'];
      $mothers_or_fathers_name=$_POST['MOTHERS_OR_FATHERS_NAME'];
      $address=$_POST['CURRENT_ADDRESS'];
      $city=$_POST['CITY'];
      $district=$_POST['DISTRICT'];
      $state=$_POST['STATE'];
      $pincode=$_POST['PINCODE'];
      $email=$_POST['EMAIL_ID'];
      $contact_number=$_POST['CONTACT_NUMBER'];
      $occupation=$_POST['OCCUPATION'];
      $age=$_POST['AGE'];
      $gender=$_POST['GENDER'];
      $blood_group=$_POST['BLOOD_GROUP'];
      $emergency_contact_name=$_POST['EMERGENCY_CONTACT_NAME'];
      $emergency_contact_number=$_POST['EMERGENCY_CONTACT_NUMBER';
      $emergency_contact_address=$_POST['EMERGENCY_CONTACT_ADDRESS';
      $identity_card=$_POST['IDENTITY_CARD'];
      $identity_card_number=$_POST['IDENTITY_CARD_NUMBER'];
      $organs=$_POST['ORGANS'];
      $b=implode(',', $organs);
      $profile_link=$_POST['PROFILE_LINK'];
      $where_hear=$_POST['WHERE_HEAR'];
      $agree=$_POST['AGREE'];
$insertquery="insert into
pledge(FULL_NAME,MOTHERS_OR_FATHERS_NAME,CURRENT_ADDRESS,CITY,DI
```

STRICT,STATE,PINCODE,EMAIL_ID,CONTACT_NUMBER,OCCUPATION,AGE,GEND ER,BLOOD_GROUP,EMERGENCY_CONTACT_NAME,EMERGENCY_CONTACT_NU MBER,EMERGENCY_CONTACT_ADDRESS,IDENTITY_CARD,IDENTITY_CARD_NU MBER,ORGANS,PROFILE_LINK,WHERE_HEAR,AGREE)values('\$full_name','\$mothers_or_fathers_name','\$address','\$city','\$district','\$state','\$pincode','\$email','\$contact_number','\$occ upation','\$age','\$gender','\$blood_group','\$emergency_contact_name','\$emergency_contact_number','\$emergency_contact_address','\$identity_card','\$identity_card_number','\$b','\$profile_link','\$where_hear','\$agree')";

```
$res=mysqli_query($con,$insertquery);
      if($res)
      {?>
             <script>
             alert("data inserted properly");
             </script>
      <?php
      }else{
             ?>
             <script>
             alert("data not inserted properly");
             </script>
             <?php } }?>
<section>
<form action="" method="post">
<div id="col">
FULL_NAME <span class="req"><sup>*</sup></span><br>
<input type="text" name="FULL_NAME" size="30" id="ii" required><br><br>
MOTHER'S/FATHER'S NAME <span class="req"><sup>*</sup></span><br/>br>
<input type="text" name="MOTHERS_OR_FATHERS_NAME" size="30" id="ii"><br>><br>>
CURRENT ADDRESS <span class="req"><sup>*</sup></span><br>
<input type="text" name="CURRENT_ADDRESS" size="30" id="ii" required><br><br>
```

```
CITY <span class="req"><sup>*</sup></span><br>
<input type="text" name="CITY" size="30" id="ii" required><br><br>
DISTRICT <span class="req"><sup>*</sup></span><br>
<input type="text" name="DISTRICT" size="30" id="ii" required><br><br>
STATE <span class="req"><sup>*</span><br>
<input type="text" name="STATE" size="30" id="ii" required><br><br>
PINCODE <span class="req"><sup>*</sup></span><br
<input type="number" name="PINCODE" size="30" id="ii" required><br><br>
EMAIL ID <span class="req"><sup>*</sup></span><br>
<input type="email" name="EMAIL_ID" size="30" id="ii" required><br><br><br>
CONTACT NUMBER <span class="req"><sup>*</sup></span><br>
<input type="number" name="CONTACT_NUMBER" size="30" id="ii" required><br><br>
OCCUPATION <span class="req"><sup>*</sup></span>
<select name="OCCUPATION">
<option value="">--SELECT--</option>
<option value="student">STUDENT</option>
<option value="business">BUSINESS</option>
<option value="professional">PROFESSIONAL</option>
<option value="self_employed">SELF_EMPLOYED</option>
<option value="govt.employee">GOVT.EMPLOYEE</option>
<option value="armed_forces">ARMED_FROCES</option>
<option value="retired">RETIRED</option>
<option value="homemaker">HOMEMAKER</option>
<option value="other">OTHERS</option></select><br><br>
AGE <span class="req"><sup>*</sup></span><br
<input type="number" name="AGE" size="30" id="ii" required><br><br>
GENDER <span class="req"><sup>*</sup></span>
```

```
<select name="GENDER">
<option value="">--SELECT--</option>
<option value="male">MALE</option>
<option value="female">FEMALE</option>
<option value="other">OTHERS</option>
</select><br><br><br>
</div>
<div id="col">
BLOOD GROUP <span class="req"><sup>*</sup></span>
<select name="BLOOD_GROUP">
<option value="">--SELECT--</option>
<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="O+">O+</option>
<option value="O-">O-</option></select><br><br><br>
 EMERGENCY CONTACT NAME <span class="req"><sup>*</span><br>
<input type="text" name="EMERGENCY_CONTACT_NAME" size="30" id="ii"</pre>
required><br><br>
EMERGENCY CONTACT NUMBER <span class="req"><sup>*</sup></span><br>
<input type="number" name="EMERGENCY_CONTACT_NUMBER" size="30" id="ii"</pre>
required><br><br>
EMERGENCY CONTACT ADDRESS <span class="req"><sup>*</span><br>
<input type="text" name="EMERGENCY_CONTACT_ADDRESS" size="30" id="ii"</pre>
required><br><br>
```

```
CHOOSE IDENTITY CARD <span class="req"><sup>*</sup></span>
<select name="IDENTITY_CARD">
<option value="">--SELECT--</option>
<option value="PAN_Card">PAN_Card
<option value="Aadhar_Card">Aadhar_Card</option>
<option value="Driving_License">Driving_License
<option value="Voter_Id">Voter_Id</option>
</select><br><br><br>
ENTER IDENTITY CARD NUMBER <span class="req"><sup>*</sup></span><br>
<input type="number" name="IDENTITY_CARD_NUMBER" size="30" id="ii"</pre>
required><br><br><br>
ORGANS I WISH TO DONATE <span class="req"><sup>*</sup></span><br>
<input type="checkbox" name="ORGANS[]" id="organs" value="ALL_ORGANS">ALL
ORGANS<br>
<input type="checkbox" name="ORGANS[]" id="organs"</pre>
value="KIDNEYS">KIDNEYS<br>
<input type="checkbox" name="ORGANS[]" id="organs" value="HEART">HEART<br>
<input type="checkbox" name="ORGANS[]" id="organs" value="LUNGS">LUNGS<br>
<input type="checkbox" name="ORGANS[]" id="organs" value="LIVER">LIVER<br>
<input type="checkbox" name="ORGANS[]" id="organs"</pre>
value="PANCREAS">PANCREAS<br>
<input type="checkbox" name="ORGANS[]" id="organs"</pre>
value="INTESTINES">INTESTINES<br>
<input type="checkbox" name="ORGANS[]" id="organs" value="FACE">FACE<br>
<inputtype="checkbox" name="ORGANS[]" id="organs" value="HAND">HAND<br><br>
SOCIAL MEDIA PROFILE LINK<br>
WHERE DID YOU HEAR ABOUT US <span class="req"><sup>*</sup></span>
<select name="WHERE HEAR">
```

```
<option value="">--SELECT--</option>
<option value="SOCIAL_MEDIA">SOCIAL MEDIA</option>
<option value="AWARENESS_SESSION">AWARENESS SESSION</option>
<option value="FRIENDS_AND_FAMILY">FAMILY AND FRIENDS</option>
<option value="RADIO">RADIO</option>
<option value="MEDIA_REPORT">MEDIA REPORT</option>
<option value="MEDIA_REPORT">MEDIA REPORT</option>
<option value="OTHER">OTHER</option></select><br><dr><div><br/><div><br><dr><input type="checkbox" name="AGREE" >I AGREE TO THE PRIVATE POLOCY<br><br/><br/><br/><br/>button type="submit" name="sub" id="jj"><br/><br/><br/>/form>
</section>
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```

III. The code for Hospital registration along with validations

```
$rcheck= "SELECT * FROM hlogin WHERE
REGISTRATION NUMBER='$registration_number'";
if(mysqli_num_rows(mysqli_query($con,$ncheck))>0)
                  $nerr="Username already exists";
            else if(mysqli_num_rows(mysqli_query($con,$rcheck))>0)
                  $rerr="Hospital with the given register number, already registered";
            else if(strlen($password)<8)
                  $plen="Password must be atleast 8 characters";
            else
      $insertquery="insert into
      hlogin(NAME,ADDRESS,EMAIL,CONTACT_NUMBER,REGISTRATION_NUMB
      ER,USERNAME,PASSWORD)values('$name','$address','$email','$contact_number','$r
      egistration_number', '$username', '$password')";
      $res=mysqli_query($con,$insertquery);
      $tel="SELECT * FROM hlogin WHERE USERNAME='$username' LIMIT 1";
       header("location:hloginafter.php");
      }?>
      <center>
      <section>
      <div id="ii">
      <h2><br>>SIGN UP<br>><br></h2>
      <form action=<?php echo htmlspecialchars($_SERVER['PHP_SELF']); ?>
      method="post">
      <center>
      NAME :
      <input type="text" name="NAME" size="30" id="aa" required>
      ADDRESS :
      <input type="text" name="ADDRESS" size="30" id="aa">
      EMAIL :
      <input type="email" name="EMAIL" size="30" id="aa" required>
```

```
CONTACT_NUMBER :
<input type="text" name="CONTACT_NUMBER" size="30" id="aa"
required>
REGISTRATION_NUMBER :
<input type="number" name="REGISTRATION_NUMBER" size="30" id="aa"
required>
<div class="error"><?php echo $rerr; ?></div>
USERNAME :
<input type="text" name="USERNAME" size="30" id="aa" required>
<div class="error"><?php echo $nerr; ?></div>
PASSWORD :
<input type="password" name="PASSWORD" size="35" id="aa"
placeholder="Atleast 8 characters" required>
<div class="error"><?php echo $plen; ?></div>
<a href="">Terms and conditions</a><br>I_AGREE
<input type="checkbox" name="CHECK" value="yes" required>
<button type="submit" name="sub">Enter</button>
</center>
</form>
</section>
</center>
<br>><br>>
</body>
</html>
```

IV. The code for Hospital login along with validations

```
<html>
<head>
<title>HOSPITAL LOGIN</title>
link rel="stylesheet" href="styles.css" >
</head>
<body>
```

```
<?php
$error="":
include 'connection.php';
     if(isset($_POST['sub']))//to collect data from form with method post, we use this(form
      method can be post or get)
      {
            $username=$_POST['USERNAME'];
            $password=$_POST['PASSWORD'];
        $query="SELECT * FROM hlogin WHERE USERNAME='$username' AND
      PASSWORD='$password' ";
            $res=mysqli_query($con,$query);
           if(mysqli_num_rows($res)==0)
                  $error="Invalid username or password";
           else
                  header("Location:hloginafter.php");
      ?>
      <br><br><br>>
            <center>
            <section>
            <h3>LOGIN</h3>
            <form
                            method="post"
                                                   action=<?php
                                                                         echo
      htmlspecialchars($_SERVER['PHP_SELF']); ?>>
            <label>USERNAME</label>
             <input type="text" name="USERNAME" size="30" placeholder="Enter</pre>
      Username" required value="<?php if(isset($username)) echo "" ?>" ><br><br><br>
             <label>PASSWORD</label>
            <input type="password" name="PASSWORD" size="30" placeholder="Enter</pre>
      <button type="submit" name="sub">Enter</button>
             <?php echo $error; ?>
            </form>
            </section>
       </re>
       </body>
</html>
```

V. The code for displaying all the types of organs available and redirect to organ specific page

```
<html>
<head>
 <title>HOSPITAL Login</title>
 <link rel="stylesheet" href="styles.css" >
 </head>
 <body>
  <header style="background-color:#0f3057;padding:20px;">
    <div>
    <img src="logo.png" alt="logo" width="70" height="70" style="float:right,vertical-</pre>
align:middle;">
              <div class="log" style="float:right"><a</pre>
href="hospitalmain.html">LOGOUT</a></div><br><br>
              </div>
              <h1 style="color:#e7e7de;"><strong>THE LIFE GIVING
BANK</strong></h1>
              <br>
  </header>
       <h1>Searching for:</h1>
       <section style="paading:10px">
              <div class="col">
              <h3 style="padding-left:10px; color:green;">HEART</h3>
              <a href="hheart.php"><img src="loginafter/heart.png" height="200"
width="220"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">LUNGS</h3>
              <a href="hlung.php"><img src="loginafter/lungs.jpg" height="200"
width="220"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">KIDNEYS</h3>
              <a href="hkidney.php"><img src="loginafter/kidneys.jpg" height="200"
width="220"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">PANCEAS</h3>
              <a href="hpancreas.php"><img src="loginafter/pancreas.jpg"
height="200" width="220"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">INTESTINES</h3>
              <a href="hintestines.php"><img src="loginafter/intestines.jpg"
height="200" width="220"></a>
              </div>
              <div class="col">
```

```
<h3 style="padding-left:10px; color:green;">LIVER</h3>
              <a href="hliver.php"><img src="loginafter/liver.jpg" height="200"
width="250"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">HAND</h3>
              <a href="hhand.php"><img src="loginafter/hand.jpg" height="200"
width="250"></a>
              </div>
              <div class="col">
              <h3 style="padding-left:10px; color:green;">FACE</h3>
              <a href="hface.php"><img src="loginafter/face.png" height="200"
width="250"></a>
              </div>
      </section>
 </body>
</html>
```

VI. Code for entering organ specific details to retrieve from database

```
<html>
<head>
<title>Face</title>
<style>
     section
              border: 5px ridge #0f3057;
              background-color:#e7e7de;
              width:75%;
       #ii{
              background-color:#a2d0c1;
              color:#09015f;
       form{
              text-align:left;padding:30px;
       #col{
              width: 50%;
              float:left;
              height:flex;
       table,td,th
          {
```

```
border:2px solid #0f3057;
              border-collapse:collapse;
              padding:10px;
       th
       {
              background-color:#e7e7de;
              color: #0f3057;
       .error{color:red;}
       .log a:link, a:visited {
 background-color: white;
 color: black;
 border: 2px solid green;
 padding: 10px 20px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
.log a:hover, a:active {
 background-color: green;
 color: white;
</style>
</head>
<body style="padding:20px">
<header style="background-color:#0f3057;padding:20px;">
    <img src="logo.png" alt="logo" width="70" height="70" style="float:right,vertical-</pre>
align:middle;">
              <div class="log" style="float:right"><a</pre>
href="hospitalmain.html">LOGOUT</a></div><br>
              <h1 style="color:#e7e7de;"><strong>THE LIFE GIVING
BANK</strong></h1>
<br/>br></header><br><br><br
<center>
<section>
<div id="ii">
<h2><br>FACE<br><br></h2>
</div>
<form method="post" action="">
<div id="col">
AGE: <input type="number" name="AGE" size="30" id="aa" required>
```

```
<br><br><br><br><br><
BLOOD_TYPE:
<select type="text" name="BLOOD_TYPE" id="aa" required>
<option value="">None</option>
<option value="O+">O+</option>
<option value="O-">O-</option>
<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>
GENDER:<br><br>
<input type="radio" name="GENDER" value="female">Female
<input type="radio" name="GENDER" value="male">Male
PIGMENTATION:<span class="error">*</span>
<select type="text" name="PIGMENTATION" id="aa" required >
<option value="">None</option>
<option value="lightly">lightly</option>
<option value="intermediate">intermediate</option>
<option value="darkly">darkly</option>
</select><br><br><br>
</div>
<div id="col">
FACE_LENGTH:<span class="error">*</span>
<input type="number" name="FACE_LENGTH" size="30" id="aa" placeholder="Value"</pre>
in mm" required><br><br><br><br>
FACE WIDTH:
<input type="number" name="FACE_WIDTH" size="30" id="aa" placeholder="Value in</p>
mm">
<br><br><br><br><br><
JAW_WIDTH:
<input type="number" name="JAW_WIDTH" size="30" id="aa" placeholder="Value in
mm">
<br/>br><br><div>
<center>
<button type="submit" name="sub">Enter</button>
</center>
</form>
</section>
      <?php
            include "connection.php";
            if(isset($_POST['sub']))
```

```
{
               $pigmentation=$_POST['PIGMENTATION'];
               $face_length=$_POST['FACE_LENGTH'];
               age = POST['AGE'];
               $blood_type=$_POST['BLOOD_TYPE'];
               $query= "SELECT * FROM face WHERE
PIGMENTATION='$pigmentation' AND FACE_LENGTH='$face_length' AND
AGE='$age' AND BLOOD_TYPE='$blood_type' ";
     $query_run= mysqli_query($con,$query);
               if(mysqli_num_rows($query_run)==0)
               {?>
                    <h1><?php echo "No matches found";?></h1>
               <?php
               else
               {?>
            <h1>List of organs matched:</h1>
                    AGE
                BLOOD TYPE
                GENDER
                PIGMENTATION
                FACE_LENGTH
                FACE WIDTH
                JAW_WIDTH
            <br>
     <?php
     while($row=mysqli_fetch_array($query_run))
               { ?>
                     <?php echo $row['AGE'];?>
                          <?php echo $row['BLOOD TYPE'];?>
                          <?php echo $row['GENDER'];?>
                          echo
$row['PIGMENTATION'];?>
                          <?php echo $row['FACE LENGTH'];?>
                          <?php echo $row['FACE_WIDTH'];?>
                          <?php echo $row['JAW_WIDTH'];?>
                    <?php}}}?>
<br>><br>>
</center>
```

```
</body>
```

The code for other organs like heart, lungs, liver etc, is also similar with the above code by considering their specifications.

VII. Code for Administrator login

```
<html>
  <head>
 <title>Aministration zone</title>
 <link rel="stylesheet" href="styles.css" >
  </head>
 <body>
<h1 style="background-image:linear-gradient(to
right,#0f3057,skyblue);color:black;"><center>ADMINISTRATION ZONE</center></h1>
<?php
$error="";
include 'connection.php';
if(isset($_POST['sub']))//to collect data from form with method post, we use this(form method
can be post or get)
       $username=$_POST['USERNAME'];
       $password=$_POST['PASSWORD'];
  $query="SELECT * FROM administratorlogin WHERE USERNAME='$username' AND
PASSWORD='$password' ";
      $res=mysqli_query($con,$query);
      if(mysqli_num_rows($res)==0)
       {\$error="Invalid username or password";}
      else
       {header("Location:aloginafter.php");}
```

```
}
?> <br>
<center>
<section>
     <h3>LOGIN</h3>
<form method="post" action=<?php echo htmlspecialchars($_SERVER['PHP_SELF']); ?>>
     <label>USERNAME</label>
      <input type="text" name="USERNAME" size="30" placeholder="Enter Username"</pre>
<label>PASSWORD</label>
      <input type="password" name="PASSWORD" size="30" placeholder="Enter</pre>
<button type="submit" name="sub">Enter</button>
     <?php echo $error; ?>
     </form>
     </section>
 </re>
</body>
</html>
```

VIII. The code for displaying all the types of organs whose details can be entered and redirect to organ specific page

```
<html>
<head>
<title>ADMINISTRATOR Login</title>
link rel="stylesheet" href="styles.css" >
</head>
<body>
<header style="background-color:#0f3057;padding:20px;">
<div>
<ing src="logo.png" alt="logo" width="70" height="70" style="float:right,vertical-align:middle;">
```

```
<div class="log" style="float:right"><a</pre>
     href="administratormain.php">LOGOUT</a></div><br><br>
                   </div>
                   <h1 style="color:#e7e7de;"><strong>THE LIFE GIVING
     BANK</strong></h1><br>
        </header>
            <h1>Searching for:</h1>
<section style="paading:10px; background-color:white">
                    <div class="col">
                    <h3 style="padding-left:10px; color:green;">HEART</h3>
                   <a href="aheart.php"><img src="loginafter/heart.png" height="200"
     width="220"></a>
                   </div>
                    <div class="col">
                   <h3 style="padding-left:10px; color:green;">LUNGS</h3>
                    <a href="alung.php"><img src="loginafter/lungs.jpg" height="200"
     width="220"></a>
                   </div>
                    <div class="col">
                    <h3 style="padding-left:10px; color:green;">KIDNEYS</h3>
                    <a href="akidney.php"><img src="loginafter/kidneys.jpg" height="200"
     width="220"></a>
                   </div>
                    <div class="col">
                    <h3 style="padding-left:10px; color:green;">PANCEAS</h3>
                    <a href="apancreas.php"><img src="loginafter/pancreas.jpg"
     height="200" width="220"></a>
                   </div>
                    <div class="col">
                    <h3 style="padding-left:10px; color:green;">INTESTINES</h3>
                    <a href="aintestines.php"><img src="loginafter/intestines.jpg"
     height="200" width="220"></a>
                   </div>
                   <div class="col">
                    <h3 style="padding-left:10px; color:green;">LIVER</h3>
                    <a href="aliver.php"><img src="loginafter/liver.jpg" height="200"
     width="250"></a>
                   </div>
                   <div class="col">
                    <h3 style="padding-left:10px; color:green;">HAND</h3>
                    <a href="ahand.php"><img src="loginafter/hand.jpg" height="200"
     width="250"></a>
                   </div>
                   <div class="col">
                    <h3 style="padding-left:10px; color:green;">FACE</h3>
```

IX. The code for entering details of organs

```
<html>
<head>
<title>Face</title>
</head>
<body style="padding:20px">
<br><br><br>>
<?php
include 'connection.php';
$ageErr=$bloodtypeErr=$genderErr="";
if(isset($_POST['sub']))//to collect data from form with method post, we use this(form method
can be post or get)
      $age=$_POST['AGE'];
      $blood_type=$_POST['BLOOD_TYPE'];
      $gender=$ POST['GENDER'];
      $pigmentation=$_POST['PIGMENTATION'];
      $face length=$ POST['FACE LENGTH'];
      $face_width=$_POST['FACE_WIDTH'];
      $jaw_width=$_POST['JAW_WIDTH'];
  if(empty($age))
              $ageErr="Age is required";
       if(empty($blood_type))
              $bloodtypeErr="Blood Type is required";
       if(empty($gender))
              $genderErr="Gender is required";
```

\$insertquery="insert into

 $face (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_LENGTH, FACE_WIDTH, JACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_LENGTH, FACE_WIDTH, JACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_LENGTH, FACE_WIDTH, JACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, PIGMENTATION, FACE_REAR AND STREET (AGE, BLOOD_TYPE, GENDER, BLOOD_TYPE, GENDER, GENDER,$

```
W_WIDTH)values('\$age', '\$blood_type', '\$gender', '\$pigmentation', '\$face_length', '\$face_width', '\$j
aw_width')";
      $res=mysqli_query($con,$insertquery);
      }
?>
<center>
<section>
<div id="ii">
<h2><br>FACE<br><br></h2>
</div>
<form method="post" action="">
<div id="col">
AGE: <input type="number" name="AGE" size="30" id="aa">
<span class="error">*<?php echo $ageErr;?></span>
<br>
<br><br><br>>
BLOOD_TYPE:
<select type="text" name="BLOOD_TYPE" id="aa" required>
<option value="">None</option>
<option value="O+">O+</option>
<option value="O-">O-</option>
<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>
</select>
GENDER:<br>
<input type="radio" name="GENDER" value="female">Female
<input type="radio" name="GENDER" value="male">Male
<input type="radio" name="GENDER" value="other">Other
PIGMENTATION:
<select type="text" name="PIGMENTATION" id="aa" >
<option value="lightly">lightly</option>
<option value="intermediate">intermediate
<option value="darkly">darkly</option>
</select>
<br><br><br>>
</div>
<div id="col">
```

```
FACE LENGTH:
<input type="number" name="FACE LENGTH" size="30" id="aa" placeholder="Value in</pre>
mm"><br><br><br><br>
FACE WIDTH:
<input type="number" name="FACE WIDTH" size="30" id="aa" placeholder="Value in</pre>
mm"><br><br><br><br>
JAW WIDTH:
<input type="number" name="JAW WIDTH" size="30" id="aa" placeholder="Value in mm">
<br><br><br><br><br><
</div>
<center>
<button type="submit" name="sub">Enter</button>
</center>
</form>
</section>
</center>
</body>
</html>
```

The code for other organs like heart, lungs, liver etc, is also similar with the above code by considering their specifications.

XI. Style sheet

```
nav {background-color:white;
 nav ul{padding:10px;}
  nav ul li{
                         display:inline;
                         margin:5px;
                         font-size:20px;
                         background-color:#008891;
                         border-radius:55%;
                   padding:14px 25px;
                   text-align:center;
nav ul li a{text-decoration:none; color:black;}
nav ul li a:hover{color:skyblue;}
nav ul li a:active{color:red;}
.column {
      float: left;
      width: 75%;
      height:flex;
                  text-align:left;
```

```
background-color:#e7e7de;
      }
 .image img{
  border-radius:25%;
 .butto a:link, a:visited{
        background-image:linear-gradient(#0f3057,#e7e7de);
                   border-radius:50%;
                   color:white;
                   padding:14px 20px;
                   text-align:center;
                   text-decoration:none;
                   display:inline-block;
.log a:link, a:visited {
 background-color: white;
color: black;
 border: 2px solid green;
 padding: 10px 20px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
.log a:hover, a:active {
 background-color: green;
color: white;
}
 #aa{
   padding:20px;
  font-size:19px;
    h1{color:purple;}
    h2{padding:10px;color:#008891;}
    .insimg img {border-radius:35% 0% 35% 0%;}
   hr.dot{border-top:1 px dotted #0f3057;}
   hr.hrow{border :2px ridge gray;}
 .clgn{position:relative;color:#212F3D;}
 .text{position:absolute; left:2%;top:5%;}
 .stat img:hover {
 -ms-transform: scale(2); /* IE 9 */
 -webkit-transform: scale(1.5); /* Safari 3-8 */
```

3.2.1 OUTPUT SCREENS

Home page

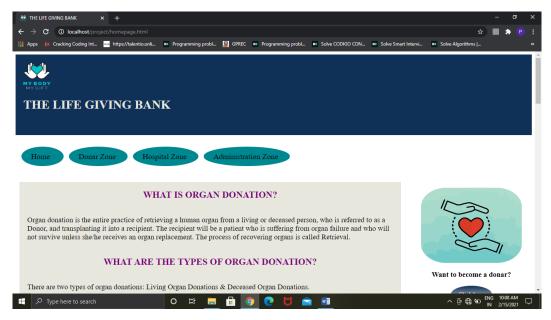


Fig: 3.2.1.1 Home page

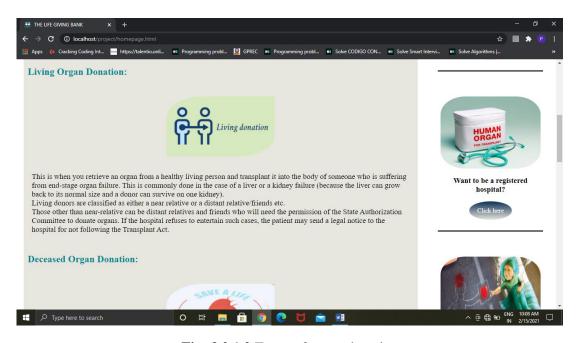


Fig: 3.2.1.2 Types of organ donation

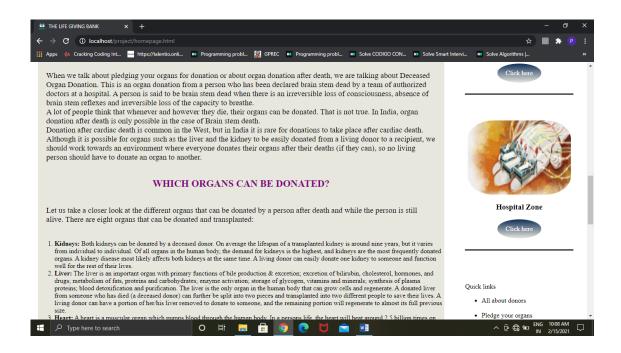


Fig: 3.2.1.3 Organs that can be donated

Donor Zone

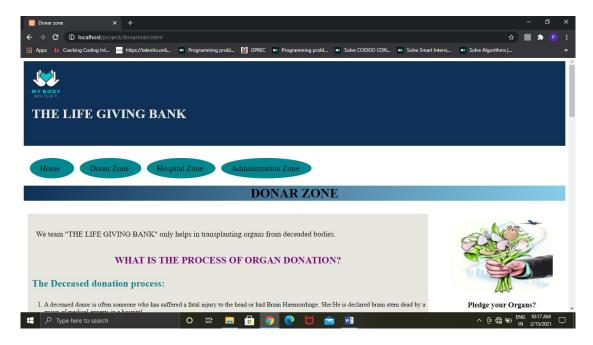


Fig: 3.2.1.4 Donor main page

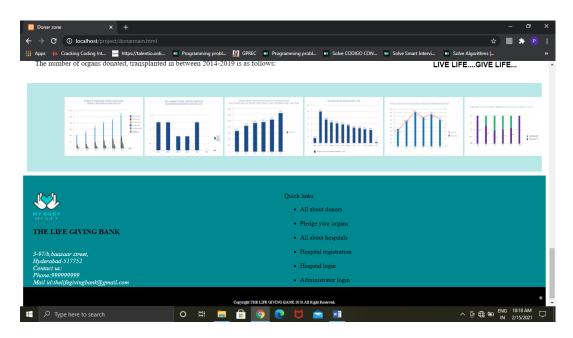


Fig: 3.2.1.5 Graphical analysis of organ donation

Pledge Form

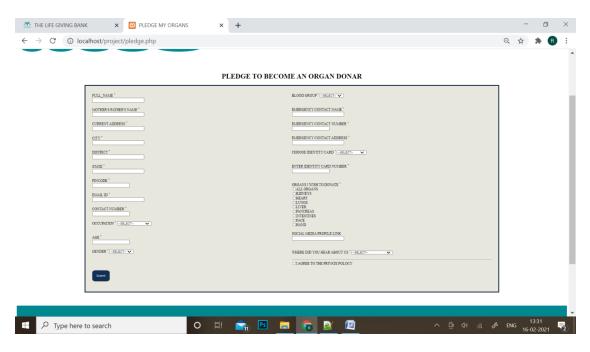


Fig: 3.2.1.6 Donor pledge form

Hospital zone

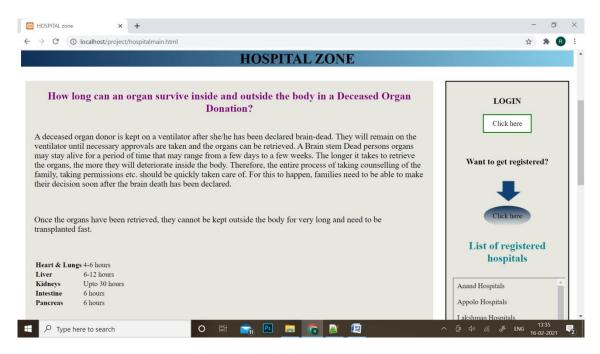


Fig: 3.2.1.7 Hospital main page

Hospital registration form

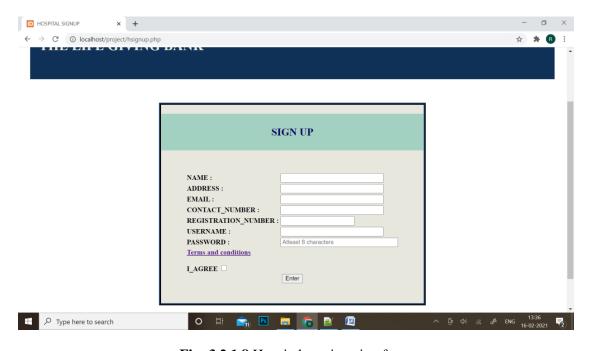


Fig: 3.2.1.8 Hospitals registration form

Hospital login form

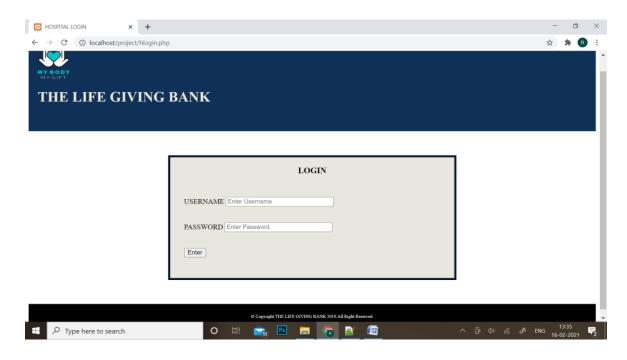


Fig: 3.2.1.9 Hospitals login form

Organs page

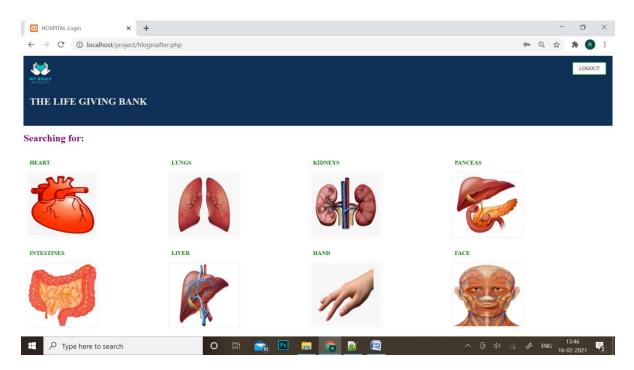


Fig: 3.2.1.10 Organs that are being collected by the bank and can be taken by the hospitals

Organ specific form

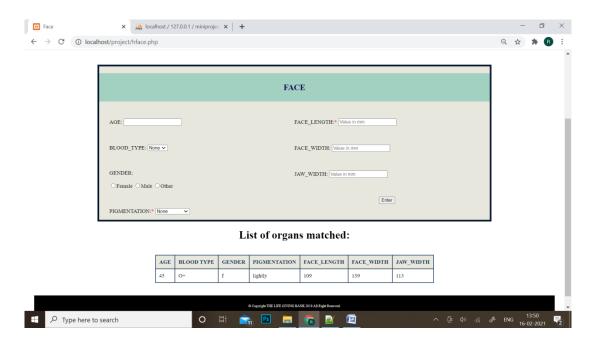


Fig: 3.2.1.11 Organ specific form - to know the availability of organs by the hospitals.

Administrator login

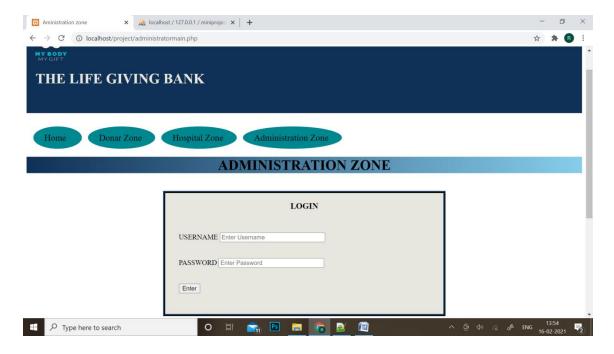


Fig: 3.2.1.12 Administrators login

Organs page

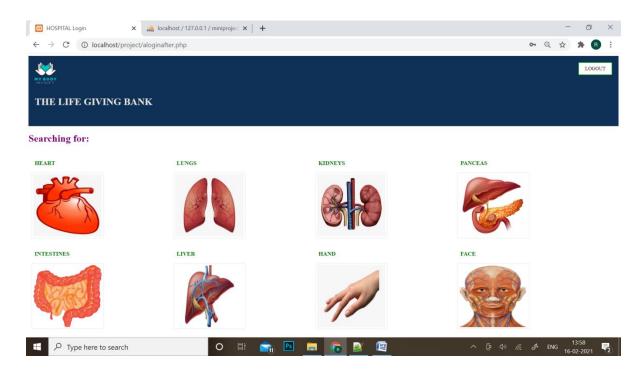


Fig: 3.2.1.13 Organs that are being collected by bank

Organs specific page

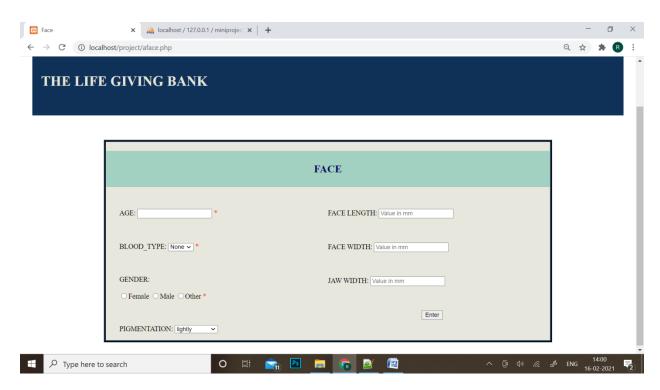


Fig: 3.2.1.14 Organ specifications entered into the database

DATA BASE SCREENSHOTS

Hospital login table

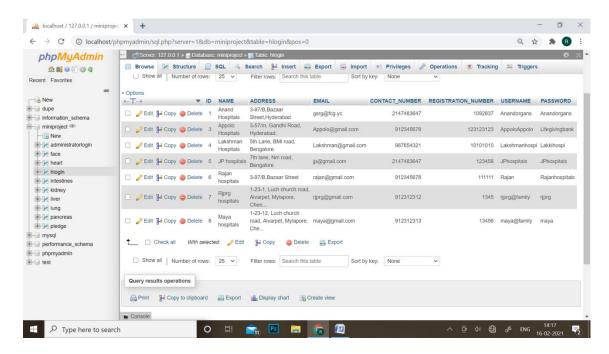


Fig: 3.2.1.15 List of hospitals registered

Face table

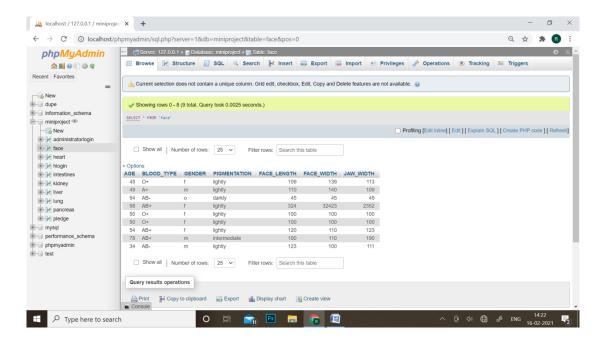


Fig: 3.2.1.16 Face table records

Pledge table

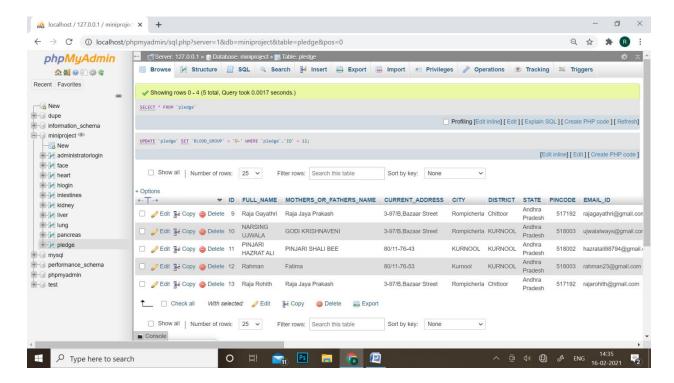


Fig: 3.2.1.17 Donors registered

3.3 TESTING AND VALIDATION

TESTING

Testing is a critical element which assures quality and effectiveness of the proposed system in (satisfying) meeting its objectives. Testing is done at various stages in the System designing and implementation process with an objective of developing a transparent, flexible and secured system. Testing is an integral part of software development. Testing process, in a way certifies, whether the product, that is developed, complies with the standards, that it was designed to. Testing process involves building of test cases, against which, the product has to be tested.

TEST OBJECTIVES

- Testing is a process of executing a program with the intent of finding an error.
- A good case is one that has a high probability of finding an undiscovered error.
- A successful test is one that uncovers a yet undiscovered error. If testing is conducted successfully (according to the objectives) it will uncover errors in the software. Testing can't show the absences of defects are present. It can only show that software defects are present.

TESTING PRINCIPLES

Before applying methods to design effective test cases, a software engineer must understand the basic principle that guides software testing. All the tests should be traceable to customer requirements.

TESTING DESIGN

Any engineering product can be tested in one of two ways:

WHITE BOX TESTING

This testing is also called as glass box testing. In this testing, by knowing the specified function that a product has been designed to perform test can be conducted that demonstrates

each function is fully operation at the same time searching for errors in each function.

It is a test case design method that uses the control structure of the procedural design to derive test cases.

BLACK BOX TESTING

In this testing by knowing the internal operation of a product, tests can be conducted to ensure that "all gears mesh", that is the internal operation performs according to specification and all internal components have been adequately exercised. It fundamentally focuses on the functional requirements of the software.

The steps involved in black box test case design are:

- Graph based testing methods
- Equivalence partitioning
- Boundary value analysis
- Comparison testing

TESTING STRATEGIES

A software testing strategy provides a road map for the software developer. Testing is a set of activities that can be planned in advanced and conducted systematically. For this reason a template for software testing a set of steps into which we can place specific test case design methods should be defined for software engineering process.

Any software testing strategy should have the following characteristics:

- a. Testing begins at the module level and works outward toward the integration of the entire computer-based system.
- b. Different testing techniques are appropriate at different points in time.
- c. The developer of the software and an independent test group conducts testing.
- d. Testing and debugging are different activities but debugging must be accommodated in any testing strategy.

VALIDATION TESTING

At the culmination of integration testing, software is completely assembled as a package; interfacing errors have been covered and corrected, and final series of software tests-validating testing may begin. Validation can be defined in many ways, but a simple definition is that validation succeeds when software functions in a manner that can be reasonably expected by customers. Reasonable expectation is defined in the software requirement specification- a document that describes all users-visible attributes of the software. The specification contains a section title "validation criteria". Information contained in that section forms the basis for validation testing approach.

4.CONCLUSION

4.1 CONCLUSION

This project has been developed successfully using HTML, CSS, PHP and JAVASCRIPT. In this a hospital can register and later login to the website to know the availability of specific organs based on patients' conditions and donors can pledge their organs. Thus, helping the hospitals to perform timely organ transplantations and save lives. The interface of this website has been made to be user-friendly. The user's details are safely entered into the database by validating the provided details.

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