

ONLINE BLOOD BANK MANAGEMENT SYSTEM

Major Project

Submitted by

Chelamannagari Alekya

Under the guidance of

V. Sravani

Project Guide

Department of Computer Science and Engineering



**Rajiv Gandhi University of Knowledge and Technologies (RGUKT),
R.K. Valley, Kadapa, Andhra Pradesh.**

DECLARATION

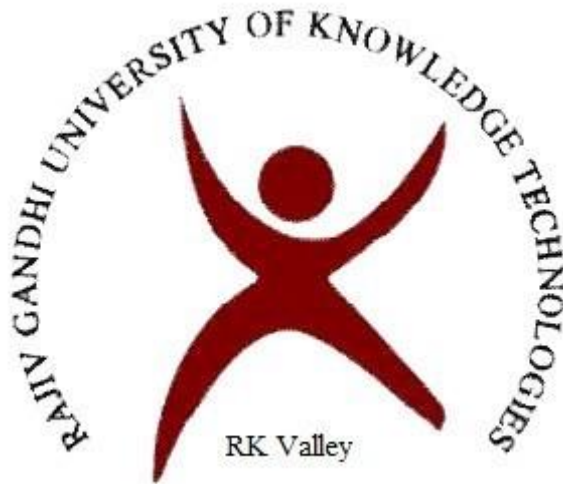
I, hereby declares that this report entitled “**Online Blood Bank Management System**” submitted by us under the guidance and supervision of **V. Sravani** Madam is a bonafide work. We also declare that it has not been submitted previously in part or in full to this university or other university or institution for the award of any degree or diploma.

We will be solely responsible if any kind of plagiarism is found.

Date:

Place: RK Valley

C.Alekya(R170271)



**Rajiv Gandhi University of Knowledge and Technologies (RGUKT), R.K. Valley,
Kadapa, Andhra Pradesh.**

CERTIFICATE

This is to certify that the project entitled **“Online Blood Bank Management System”** has been submitted to the Department of Computer Science and Engineering, Rajiv Gandhi University of Knowledge Technologies, RK-valley for the fulfilment of the requirement for the award of the degree of bachelor of technology in “Computer Science and Engineering” by following students of 4th year B-tech .

Student name and id number :

C.Alekya (R170271)

Project Guide:

V Sravani

Head of the Department

N. Satyanandaram

ACKNOWLEDGEMENT

I would like to express our sincere gratitude to my supervisors Santhosh Kumar Sir for providing their valuable guidance, comments and suggestions throughout the course of the project, Because of which a whole team was able to learn the minute aspects of a project work.

I am also thankful to everyone who supported us to complete this project successfully .

Thank you all

C.Alekya(R170271)

ABSTRACT

The purpose of this study was to develop a blood management information system to assist in the management of blood donor records and ease/or control the distribution of blood in various parts of the state basing on the hospital demands. The blood management information system offers functionalities to quick access to donor records collected from various parts of the state.

The proposed of Blood Bank Website helps the people who are in need of a blood by giving them all details of blood group availability or regarding the donors with the same blood group. They don't need to go anywhere to search the blood when they need. They just need to use this website then all the result will appear in just a second. Our life is so busy so we don't have time to spend going here and there, we can use technical way to search the blood by using the Blood Bank website we can find thousands of people who are donating the blood and also get the detail of that person that in which city he belongs to and what is the Blood group of that person. So this is the most useful website ever.

S.NO	INDEX	PAGE NUMBER
Chapter 1	INTRODUCTION	
1.1	Introduction	6
1.2	Aim	6
1.3	Existing system	6
1.4	Proposed syatem	7
Chapter 2	Software Requirement specification	
2.1	Hardware Requirements	7
2.2	Software Requirements	7
Chapter 3	Design and Planning	
3.1	SDLC	
3.1.1	Waterfall model	8
3.1.2	ER Diagram:	8
3.1.3	Context free diagram	9
3.1.4	Use case Diagram	10
3.1.5	<i>Activity diagram</i>	11
Chapter 4	<i>Implementation Details</i>	
4.1	<i>Front End</i>	
4.1.1	<i>html</i>	12
4.1.2	css	12
4.2	<i>Back End</i>	
4.2.1	<i>php</i>	13
4.2.2	<i>Mysql</i>	14
4.2.3	<i>js</i>	14
Chapter 5	<i>Testing</i>	
5.1	<i>Unit Testing,Integration Testing,system Testing</i>	15
Chapter 6	<i>Implimentation andoutput</i>	
Chapter 7	<i>conclusion</i>	
Chapter 8	<i>Refference</i>	31

Chapter 1: INTRODUCTION

1.1 : INTRODUCTION

The Website is an online blood bank management system that helps in managing various blood bank operations effectively. The project consists of a central repository containing various blood Donors available along with associated details, The project is an online system that allows to check whether required blood Donors of a particular group are available in the blood bank for blood emergency. These details include Donor name, contact information and Blood group. These details help in maintaining and monitoring the blood deposits. A blood bank is a center where gathered as a result of blood donation is stored and Preserved for later use in blood transfusion. Through this application any person who is interested in donating the blood can register himself in the same way if any organization wants to register itself with this site that can also register. More over if any general consumer wants to make requests Blood online he can also take the help of the site. Admin is the main authority who can do addition, Deletion and modification if required. This online system is developed on PHP scripting language And supported by an My-sql database to store the blood and users specific details.

1.2 :AIM

The main aim of developing this website is to provide blood to the people who are in need of blood. The number of persons who are in need of blood are increasing in large number day by day. Using this system user can search the blood group available in the city and he can also get details of the donor who has the same blood group. In order to help people who are in need of blood, this Online Blood Bank website can be used effectively for getting the details of available blood groups and user can also get details of the blood donors having the same blood group and within the same city.

1.3 :EXISTING SYSYTEM

The operation of the blood bank still now is maintained in the manual system. The operation is tedious, time consuming and space consuming. It creates room for errors as the data is entered manually by the persons. It includes the risk of the documents being lost over years and maintenance of the records is difficult. The data recorded during testing or while acquiring the details of different aspects of blood bank management system is not so accurate and precise. Maintaining the stock of blood and the daily transactions without computerisation also poses a challenge.

1.4 PROPOSED SYSTEM

The proposed system (Blood Bank Management System) is designed to help the Blood Bank administrator to meet the demand of Blood by sending and/or serving the request for Blood as and when required. The proposed system gives the procedural approach of how to bridge the gap between Receiver, Donor, and Blood Banks. This Application will provide a common ground for all the three parties (i.e. Receiver, Donor, and Blood Banks) and will ensure the fulfillment of demand for Blood requested by Receiver and/or Blood Bank. The features of proposed system are ease of data entry , system should provide user friendly interfaces , no need to maintain any manual register and form , immediate data retrieval and so on. The new system covers all the aspects of the existing system as well as enhanced features for the existing system For e.g. Bill provision

CHAPTER 2: SOFTWARE REQUIREMENTS SPECIFICATION

2.1 Hardware Requirements

Number	Description	Type
1	PROCESSOR	1.2 ghz or more
2	RAM	256mb
3	HARDDISK	20GB

2.2 Software Requirements

Number	Description	Type
1	Operating System	Windows
2	Language	PHP
3	Database	Mysql
4	Browser	Chrome

CHAPTER 3: DESIGN & PLANNING

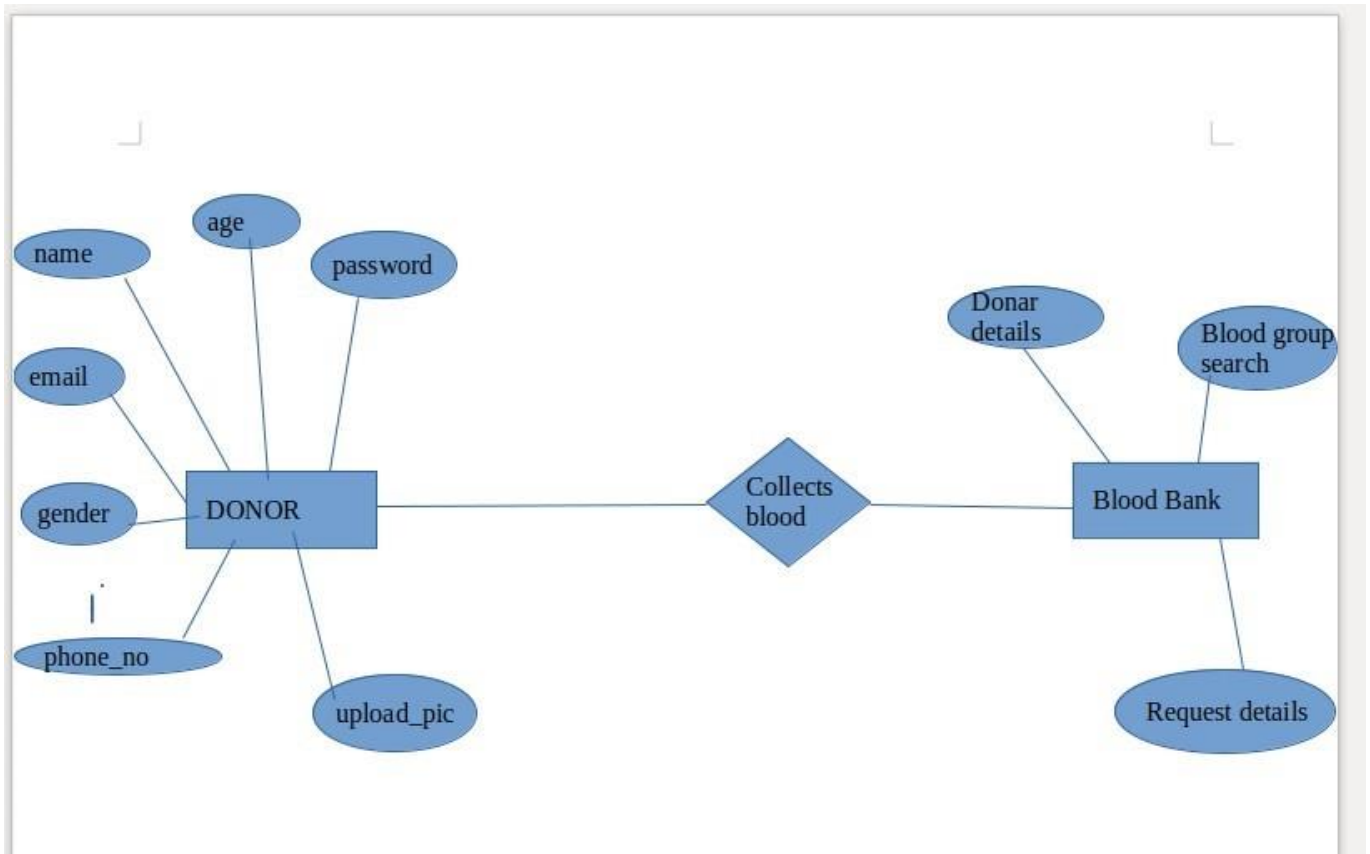
3.1 Software Development Life Cycle Model

3.1.1 Waterfall Model

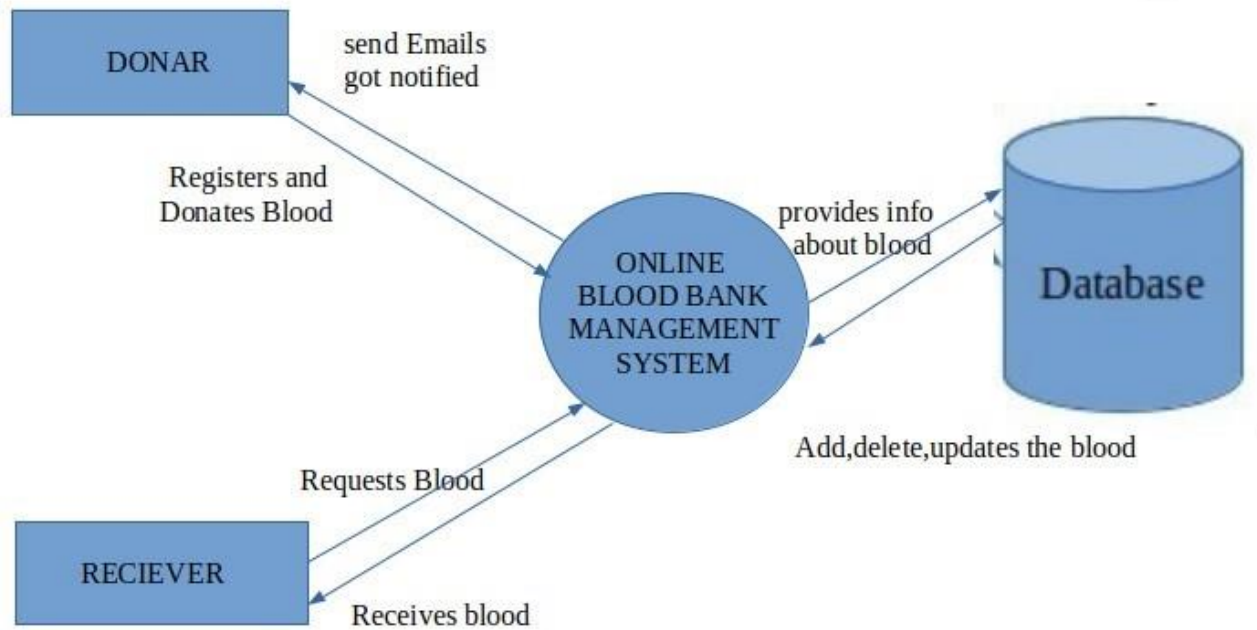
The waterfall model was selected as the SDLC model due to the following reasons:

Requirements were very well documented, clear and fixed. Technology was adequately understood. Simple and easy to understand and use. There were no ambiguous requirements. Easy to manage due to the rigidity of the model. Each phase has specific deliverables and are view process. Clearly defined stages .Well understood milestones. Easy to arrange tasks.

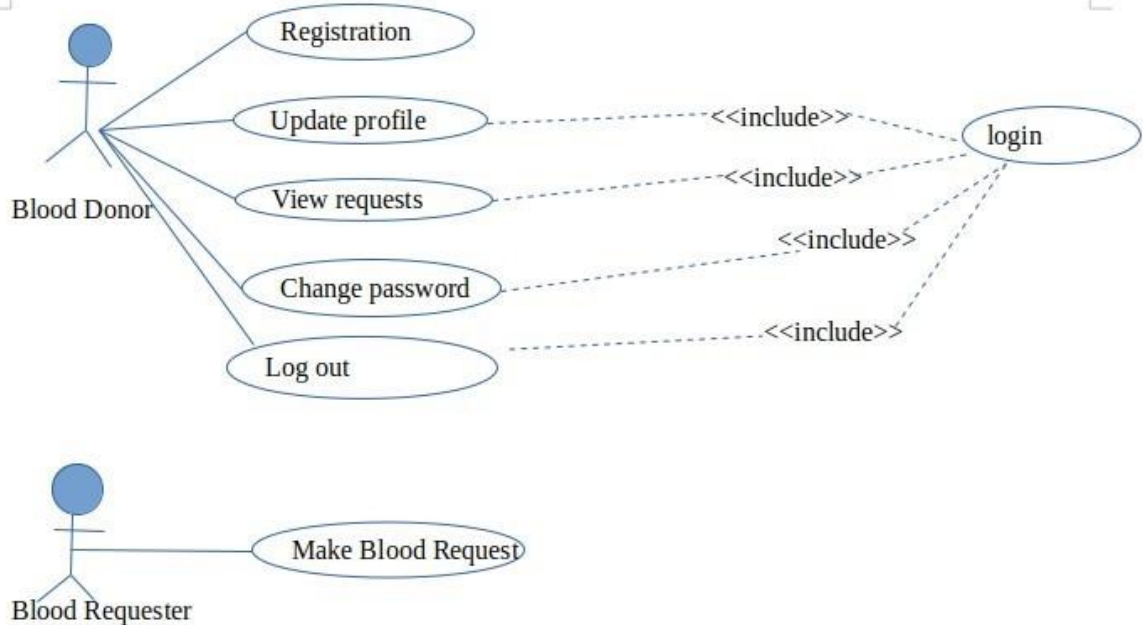
3.1.2 ER Diagram:



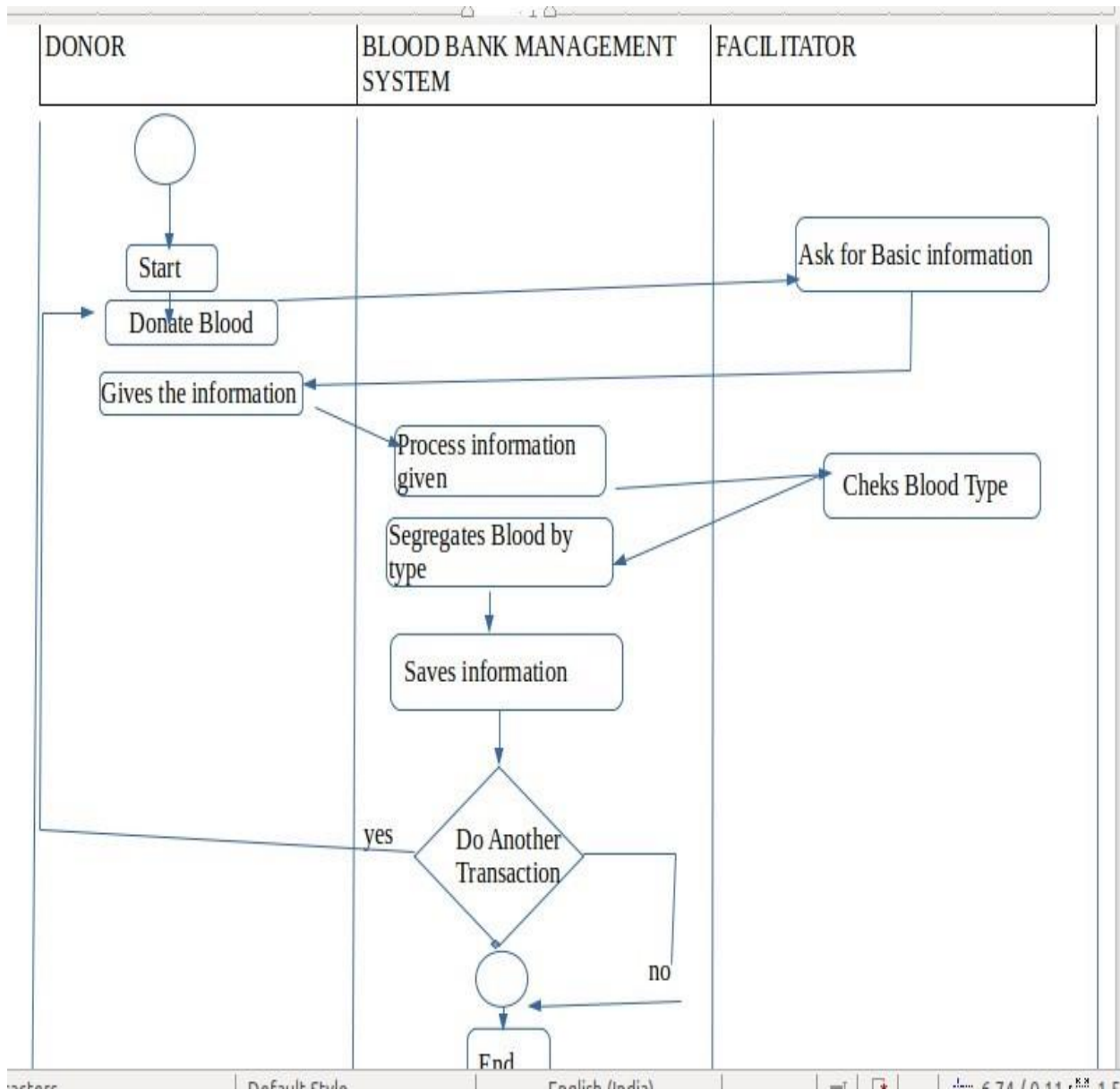
3.1.3 Context Free Diagram



USE CASE DIAGRAM :



ACTIVITY DIAGRAM



CHAPTER 4 : IMPLEMENTATION DETAILS

In this Section we will do Analysis of Technologies to use for implementing the project.

4.1 FRONT-END

4.1.1 HTML



Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document

4.1.2 CSS



Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

4.2.1 PHP



PHP is a server side scripting language that is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages. PHP scripts can only be interpreted on a server that has PHP installed. The client computers accessing the PHP scripts require a web browser only. A PHP file contains PHP tags and ends with the extension ".php".

PHP was originally created by Rasmus Lerdorf in 1994. PHP code may be executed with a command line interface (CLI), embedded into HTML code, or used in combination with various web template systems, web content management systems, and web frameworks.

4.2.2 MySql



MySQL is an open-source relational database management system (RDBMS) based on Structured Query Language (SQL). Its name is a combination of "My", the name of cofounder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

4.2.3 Javascript



JavaScript is a client scripting language which is used for creating web pages. It is a standalone language developed in Netscape. It is used when a webpage is to be made dynamic and add special effects on pages like rollover, roll out and many types of graphics.

CHAPTER 5 : TESTING

Tests help the developer to verify that the logic of a piece of the program is correct.

Having test coverage of your code helps developers to build new features without having to perform lots of manual testing.

5.1 Unit Testing:

A unit test is a piece of code written by a developer that executes a specific functionality in the code to be tested and asserts a certain behavior or state.

The percentage of code that is tested by unit tests is typically called test coverage.

A unit test targets a small unit of code, e.g., a method or a class.

5.2 Integration Testing:

Integration testing is an approach where modules are developed, and testing of modules always starts at the finest level of the programming hierarchy and continues towards the lower levels. It's the extension of unit testing. Integration testing takes a smaller unit of unit testing and tests their behavior as a whole.

Advantages:

1. Code Coverage is higher and easy to track.
2. Majorly helps to build real-time use cases during the end to end testing.
3. Easy to integrate

5.3 System Testing:

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black-box testing, and as such, should require no knowledge of the inner design of the code or logic. As a rule, system testing takes, as its input, all of the "integrated" software components that have passed integration testing and also the software system itself integrated with any applicable hardware system(s). The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together (called assemblages) or between any of the assemblages and the hardware. System testing is a more limited type of testing; it seeks to detect defects both within the "interassemblages" and also within the system as a whole.

Features:

- When a user want to enter into our site without entering data , it means editing the html code removing required option in the html code. For not to enter in that way we had designed a backend PHP code.
- When a donor wants to donate blood within 3 months before donation then our site won't allow then to donate blood
- We use MySQL injection Technique for password encryption.

CHAPTER 6: IMPLIMENTATION

```
Activities Text Editor Fri 10:21 PM
Open login.php Save ~Downloads

<?php session_start(); ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Blood bank Management System</title>
<link href="css/lightbox.css" rel="stylesheet" />
    <link href="StyleSheet.css" rel="stylesheet" type="text/css" />

    <link href='http://fonts.googleapis.com/css?family=Source+Sans+Pro' rel='stylesheet' type='text/css'>
<link href="css/style.css" rel="stylesheet" type="text/css" media="all" />
<!--slider-->
<link href="css/flexslider.css" rel="stylesheet" type="text/css" media="all" />
    <script src="js/jquery-1.11.0.min.js"></script>
    <script src="js/lightbox.min.js"></script>
<script src="js/jquery-1.7.1.min.js" type="text/javascript"></script>
<script src="js/jquery.flexslider.js" type="text/javascript"></script>

<script type="text/javascript">
$(function () {
    SyntaxHighlighter.all();
});
$(window).load(function () {
    $('flexslider').flexslider({
        animation: "slide",
        animationLoop: false,
        itemWidth: 210,
        itemMargin: 5,
        minItems: 2,
        maxItems: 4,
        start: function (slider) {
            $('body').removeClass('loading');
        }
    });
});
</script>
</head>

PHP Tab Width: 8 Ln 1, Col 1 INS
```




```
</body>
```

```
<?php include('admin/function.php'); ?>
```

```
<div class="h_bg">
```

```
<div class="wrap">
```

```
<div class="header">
```

```
<div class="logo">
```

```
<h1><a href="index.php"></a></h1>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="nav_bg">
```

```
<div class="wrap">
```

```
<?php require('header.php');?>
```

```
</div>
```

```
<div style="height:500px;">
```

```
<form method="post" enctype="multipart/form-data">
```

```
<table cellpadding="0" cellspacing="0" width="600px" height="300px" class="tableborder" style="margin:auto; margin-top:100px;" >
```

```
<tr><td>&nbsp;</td><td>&nbsp;</td></tr>
```

```
<tr><td colspan="2" align="center"></td></tr>
```

```
<tr><td colspan="2">&nbsp;</td></tr> <tr><td colspan="2">&nbsp;</td></tr>
```

```
<tr><td align="right"></td>
```

```
<td style="vertical-align:top"><table cellpadding="0" cellspacing="0" height="200px">
```

```
<tr><td class="lefttd">E-Mail</td><td><input type="email" name="t1" required="required" /></td></tr>
```

```
<tr><td class="lefttd">Password</td><td><input type="password" name="t2" required="required" pattern="[a-zA-Z0-9]{2,10}" title="please enter only character or numbers between 2 to 10 for password" /></td></tr>
```

```
<tr><td>&nbsp;</td><td><input type="submit" value="Log In" name="sbmt" style="border:0px; background:linear-gradient(#900,#050000); width:100px;
```

```
</td></tr>
```

character or numbers between 2 to 10 for password" /></td></tr>

```
<tr><td>&nbsp;</td><td><input type="submit" value="Log In" name="sbmt" style="border:0px; background:linear-gradient(#900,#050000); width:100px; height:30px; border-radius:10px 1px 10px 1px; box-shadow:1px 1px 5px black; color:white; font-weight:bold; font-size:14px; text-shadow:1px 1px 6px black; "></td></tr>
```

```
<tr><td style="font-size:14px">Not A DONOR.?<</td><td ><a href="index1.php" style="color:#C30">Click here</a> to REGISTER.</td></tr>
    <tr><td>&nbsp;</td><td>&nbsp;</td></tr>
```

```
</table>
</td></tr></table>
```

```
</form>
</div>
```

```

    <div class="clear"></div>
<div class="ftr-bg">
<div class="wrap">
<div class="footer">
    <div class="f_nav">
        <ul>
            <li class="active"><a href="index.php">Home</a></li>
            <li><a href="donar.php">Donor</a></li>
            <li><a href="login.php">log In</a></li>
            <li><a href="aboutus.php">About</a></li>
            <li><a href="contact.php">Contact Us</a></li>

        </ul>
    </div>
    <div class="copy">
        <p class="title">© All Rights Reserved </p>
    </div>
    <div class="clear"></div>
</div>
</div>
```

```
</div>
</div>
</div>
```

```
</div>
```

```
<?php
```

```
$_SESSION['donorstatus']="";
```

```
if(isset($_POST["sbmt"]))
```

```
{
```

```
    $cn=makeconnection();
```

```
    $s="select *from donarregistration where email='" . $_POST["t1"] . "' and pwd='" . $_POST["t2"] . "'";
```

```
    $q=mysqli_query($cn,$s);
```

```
    $r=mysqli_num_rows($q);
```

```
    mysqli_close($cn);
```

```
    if($r>0)
```

```
    {
```

```
        $_SESSION["email"]=$_POST["t1"];
```

```
        $_SESSION['donorstatus']="yes";
```

```
//header("location:donor/index.php");
```

```
echo "<script>location.replace('donor/index.php');</script>";
```

```
    }
```

```
    else
```

```
    {
```

```
        echo "<script>alert('Invalid User Name Or Password');</script>";
```

```
    }
```

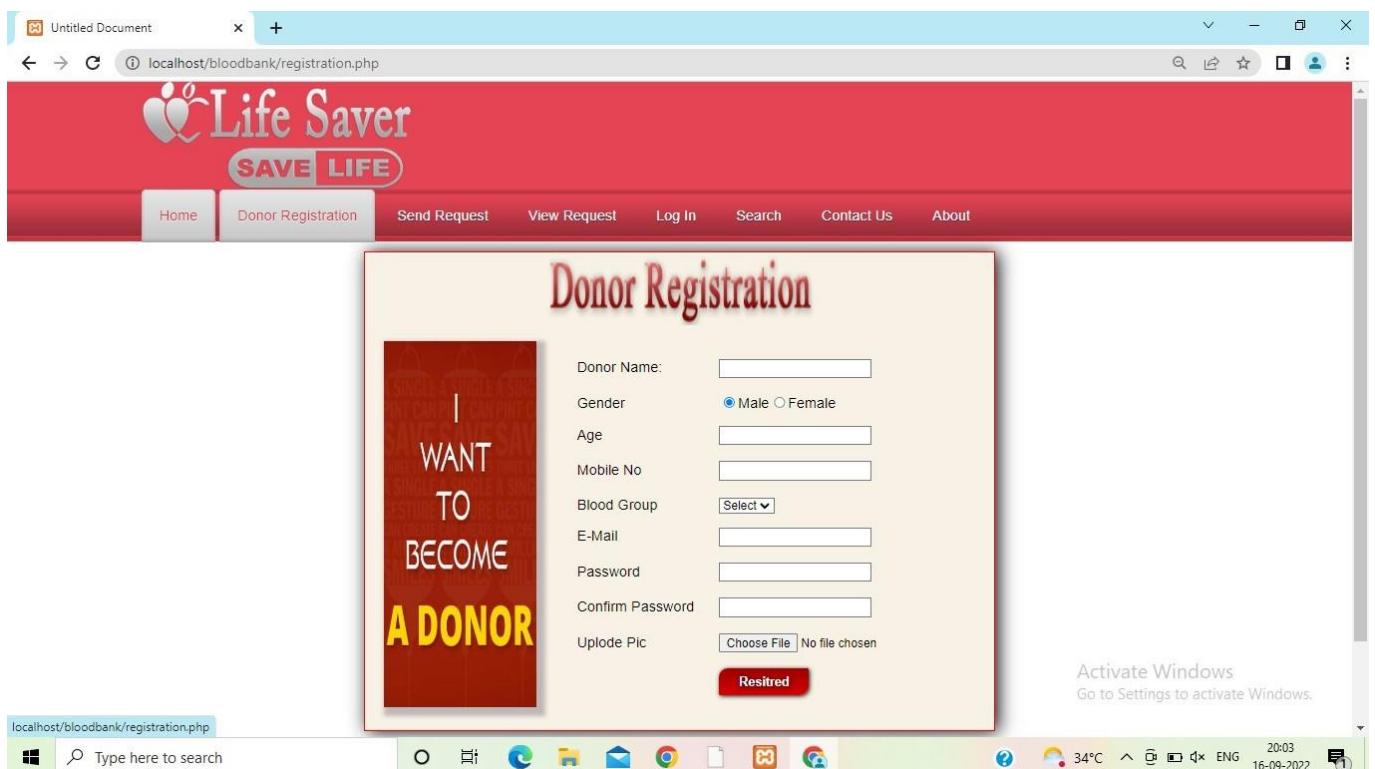
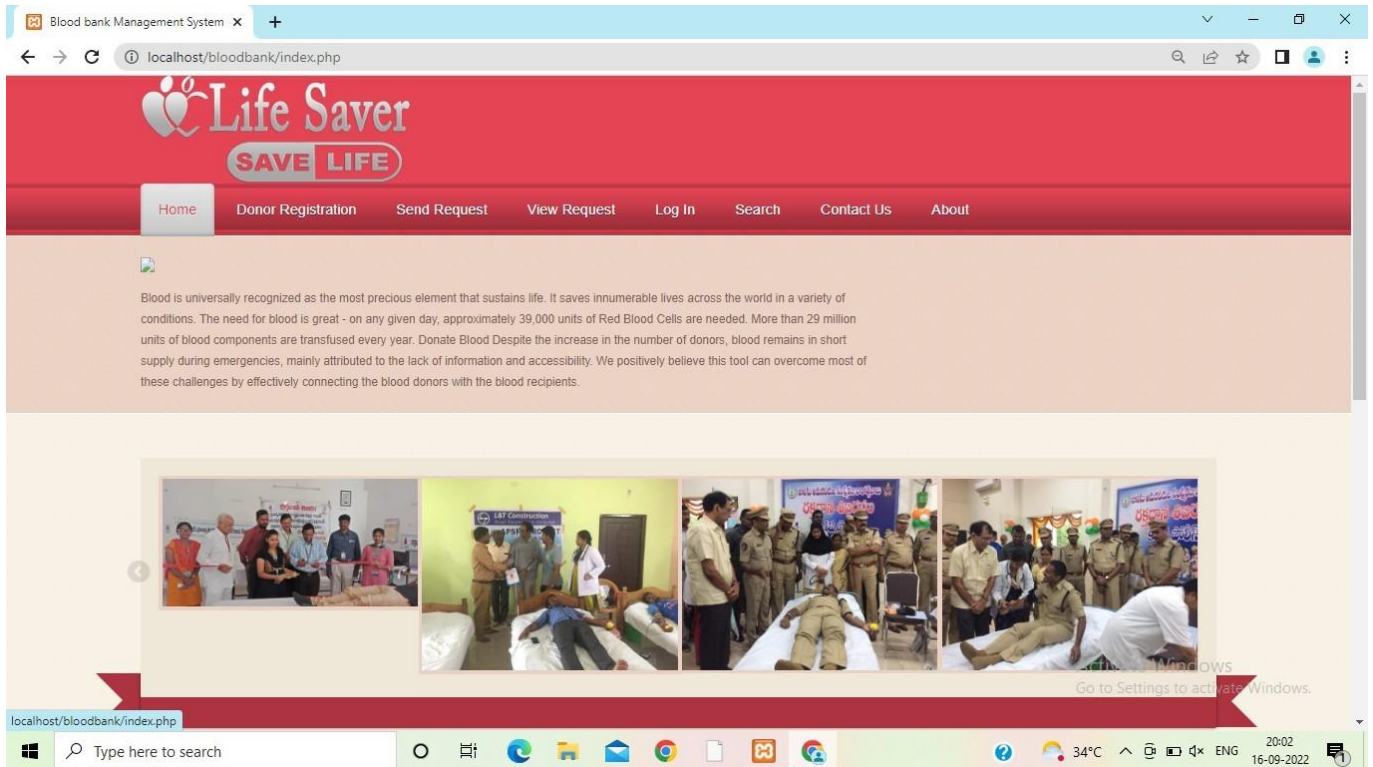
```
}
```

```
?>
```

```
</body>
```

```
</html>
```

OUTPUT:



Blood bank Management System

localhost/bloodbank/requests.php

Life Saver

SAVE LIFE

Home Donor Registration Send Request View Request Log In Search Contact Us About

Requests For Blood

Name:

Gender: ☒ Male ☐ Female

Age:

Mobile No:

Select Blood Group:

E-Mail:

Till Required Date:

Detail:

Submit

Activate Windows
Go to Settings to activate Windows.

localhost/bloodbank/requests.php

Type here to search

34°C 20:03 16-09-2022

Blood bank Management System

localhost/bloodbank/viewrequest.php

Life Saver

SAVE LIFE

Home Donor Registration Send Request View Request Log In Search Contact Us About

Requests For Blood

Blood Group	Name	Gender	Contact No	Mobile No	Email	Till Required Date
14	hkajhkf	male	67	7987987977	dskhfd@gmail.com	19
15	latha	male	20	123456789	latha2002@gmail.com	15
16	abcde	male	20	6304423823	latha@gmail.com	14

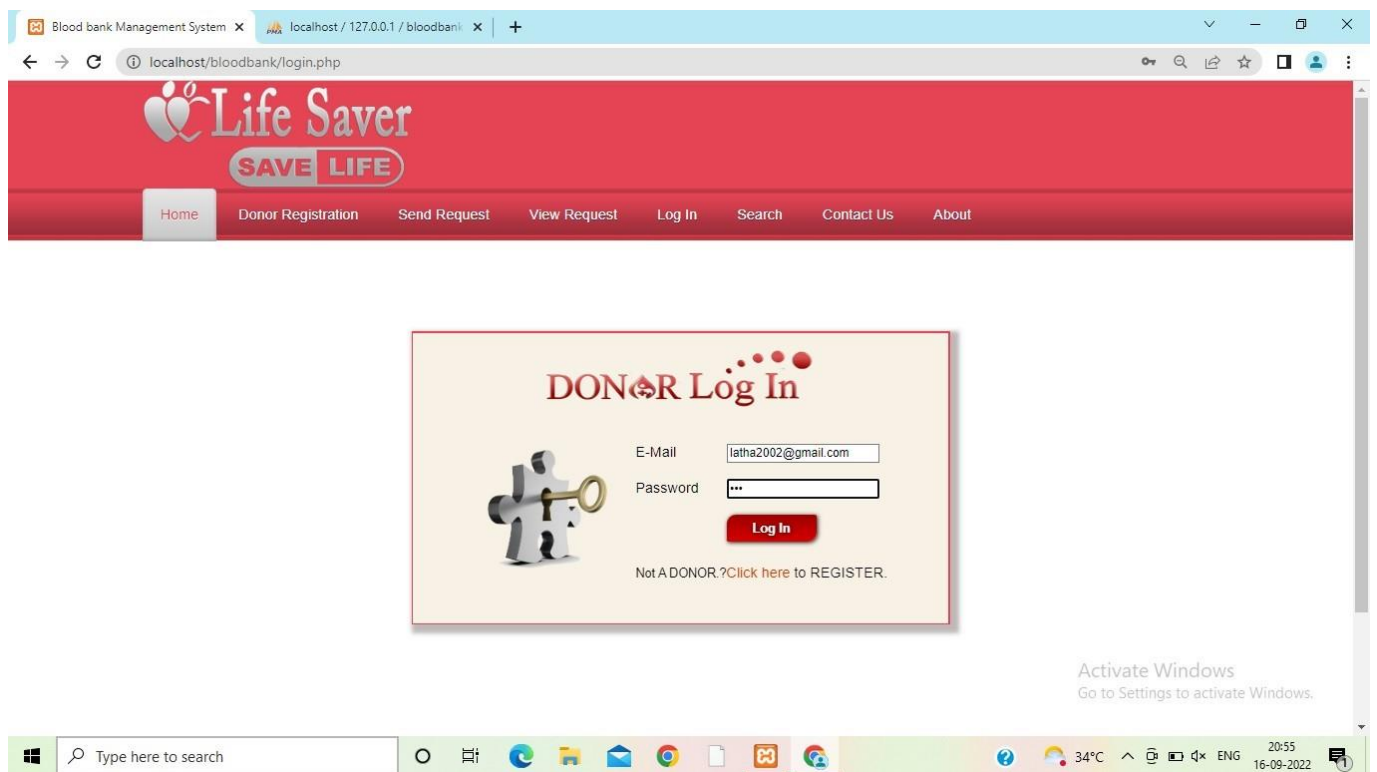
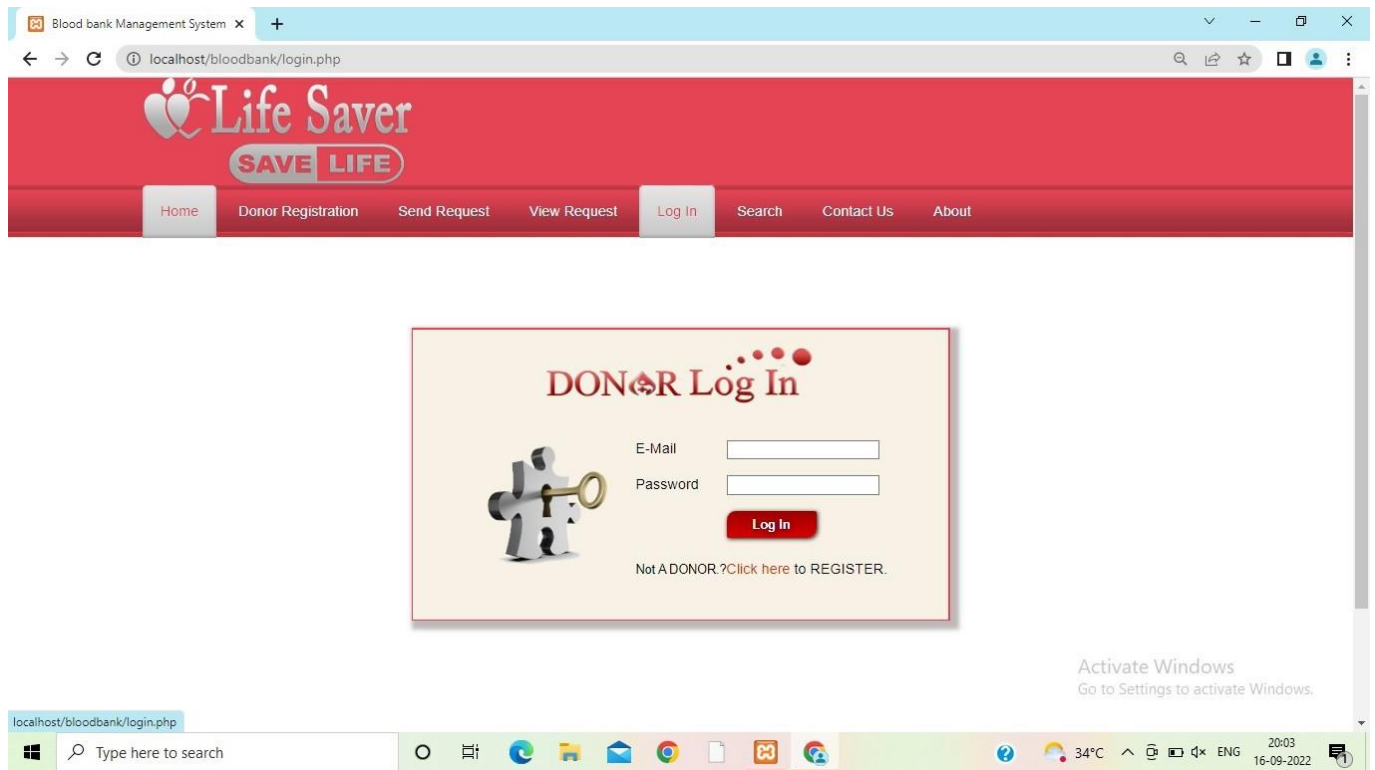
Home Donor log In About Contact Us

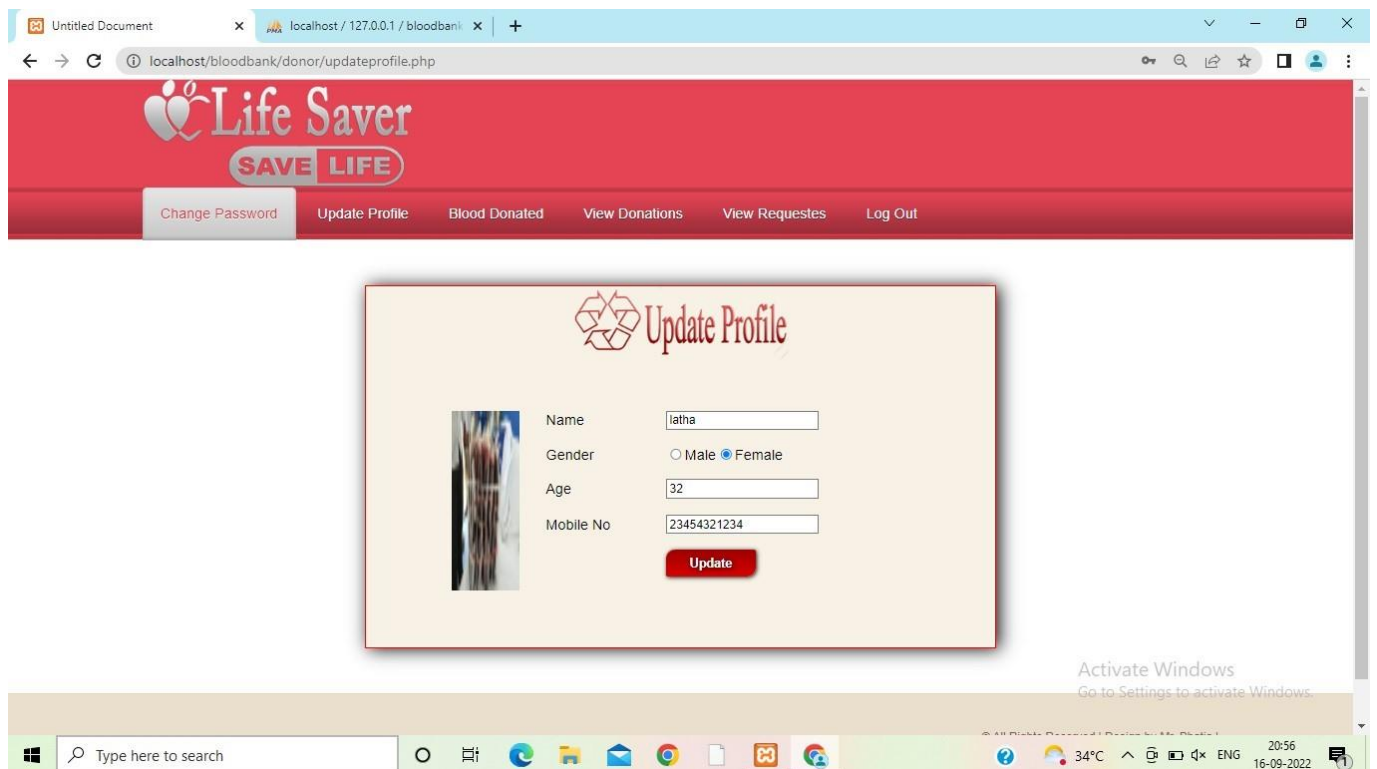
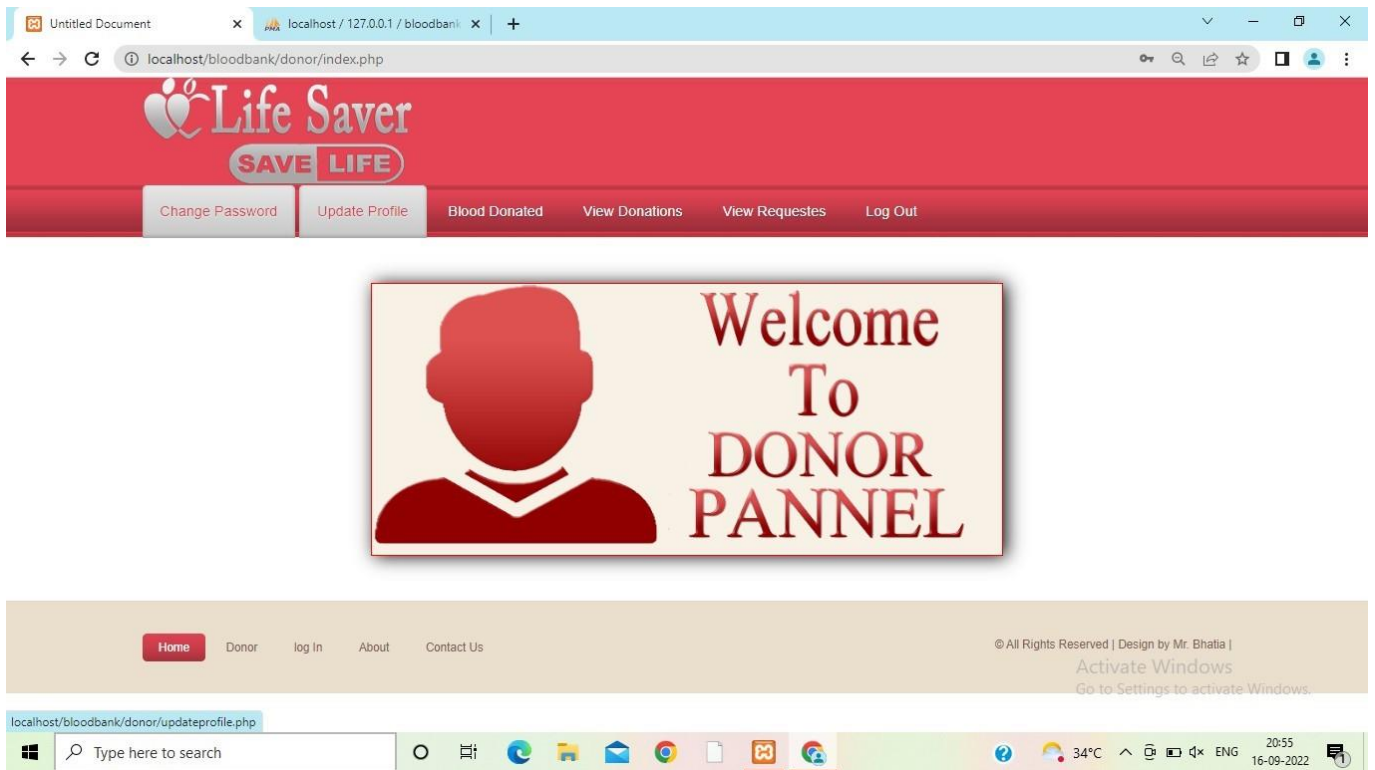
© All Rights Reserved
Activate Windows
Go to Settings to activate Windows.

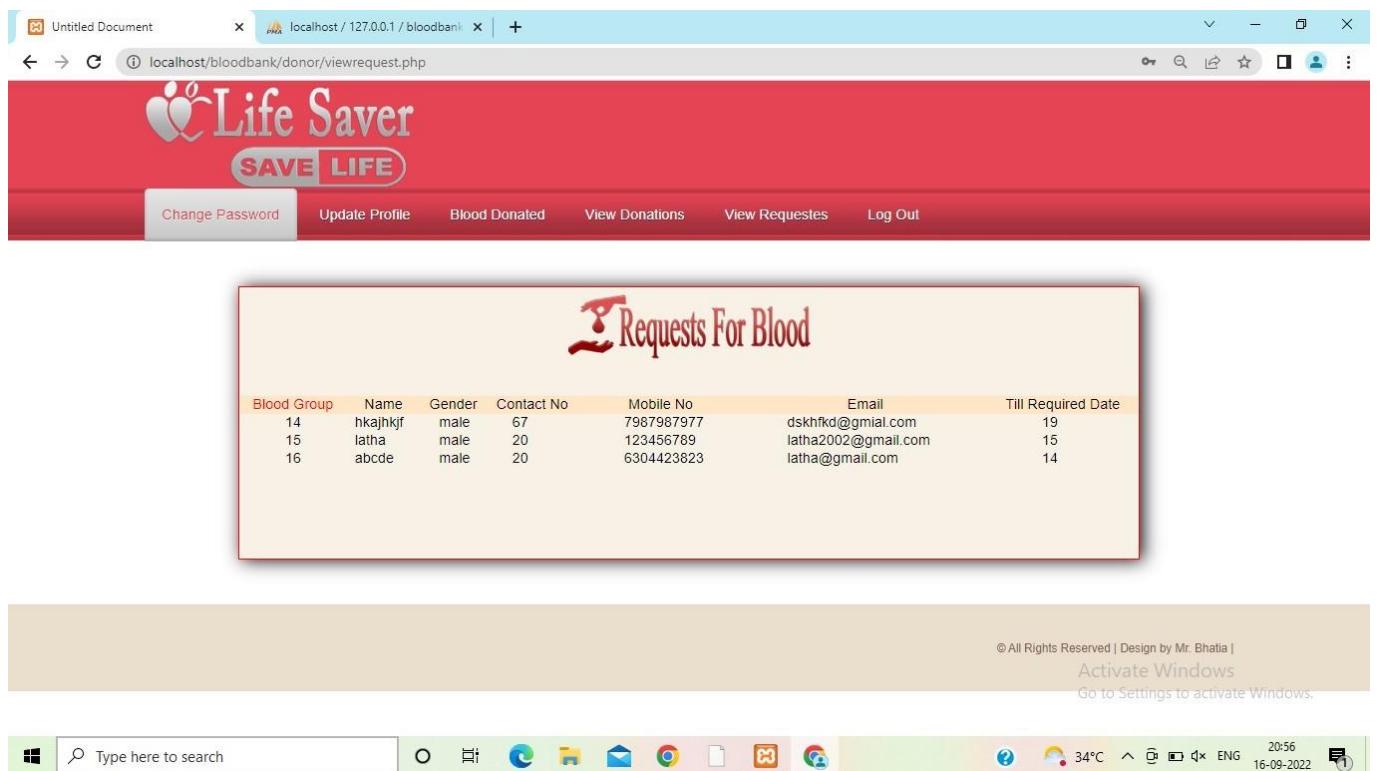
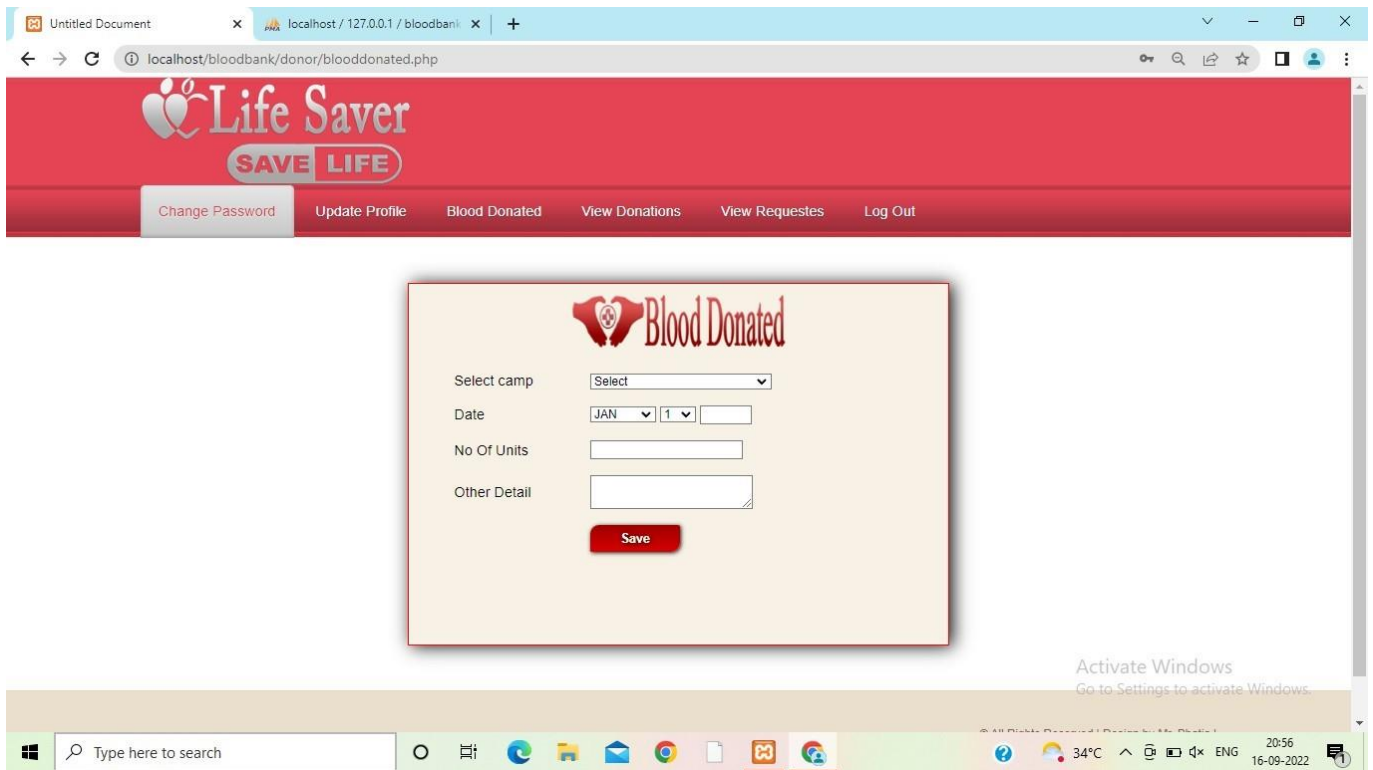
localhost/bloodbank/viewrequest.php

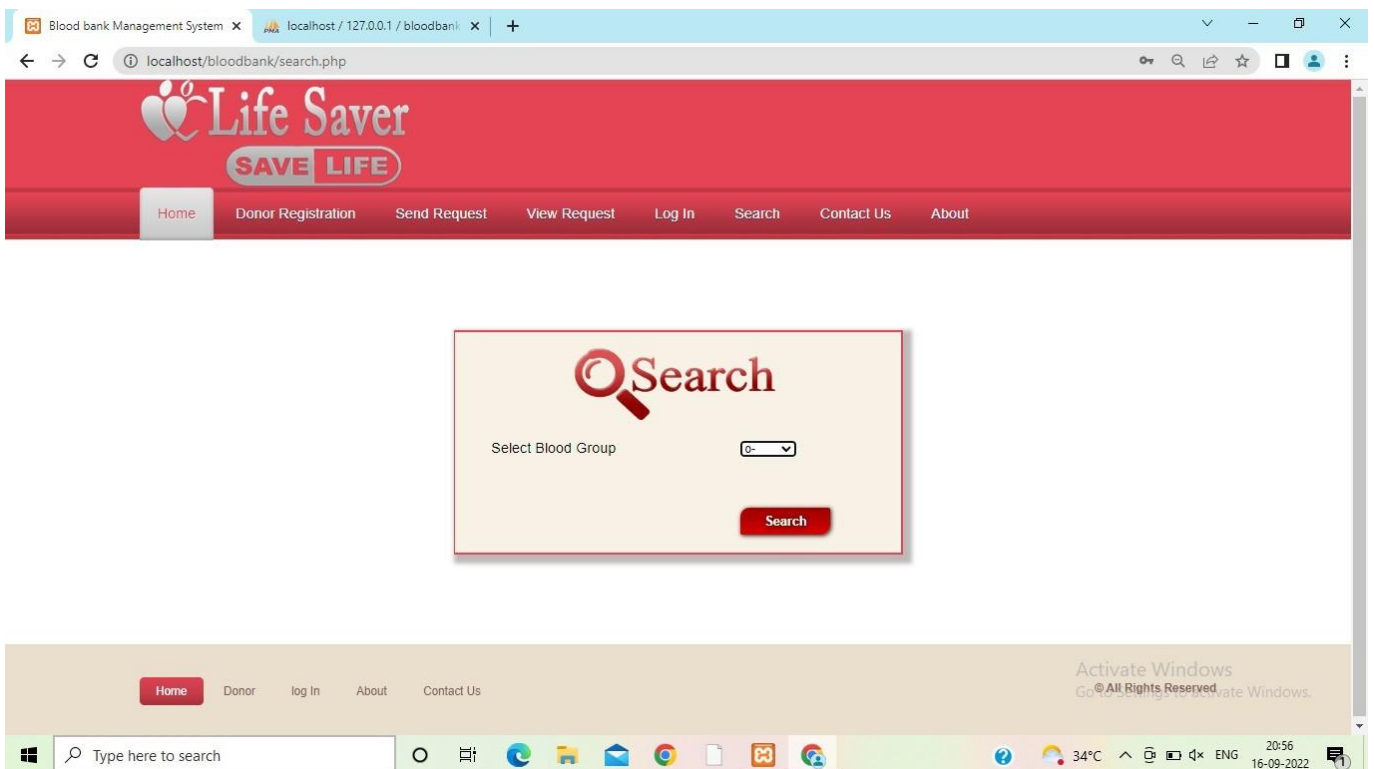
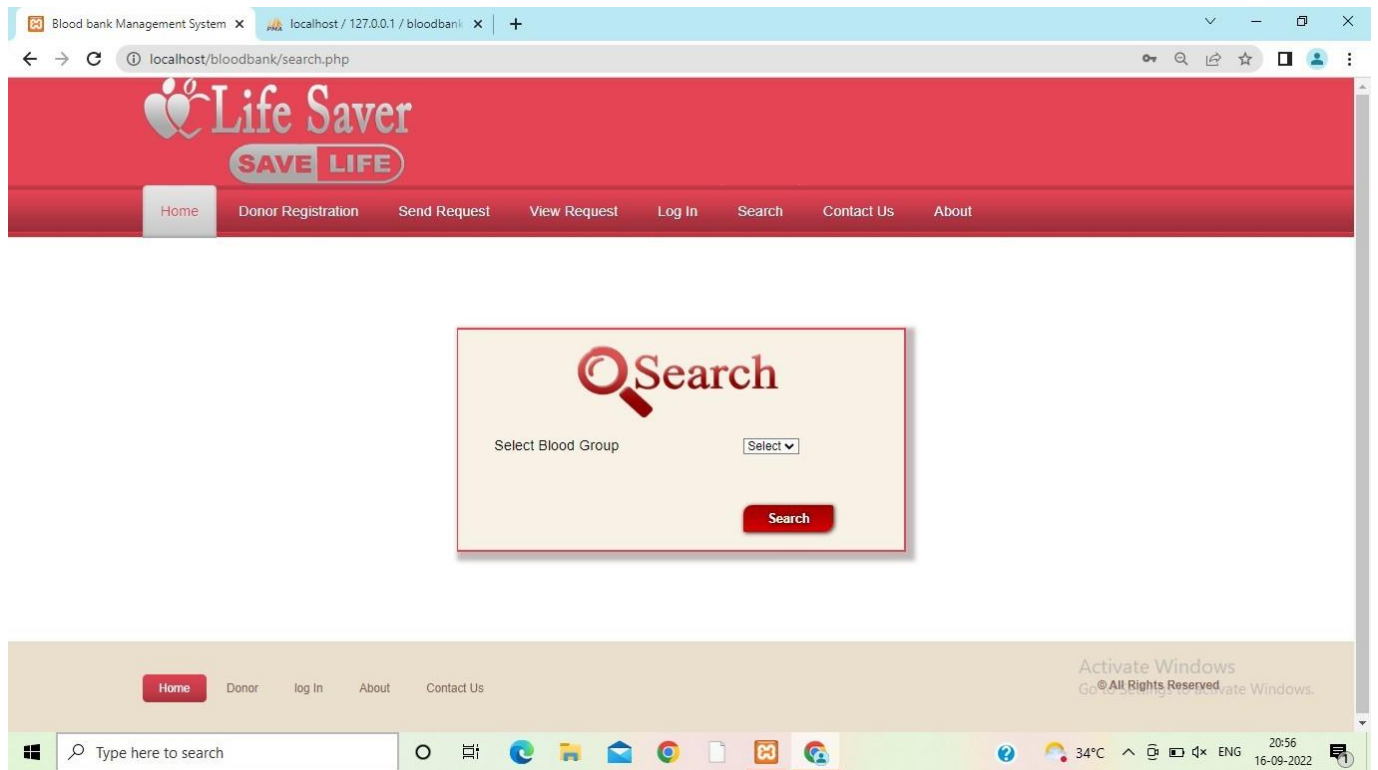
Type here to search

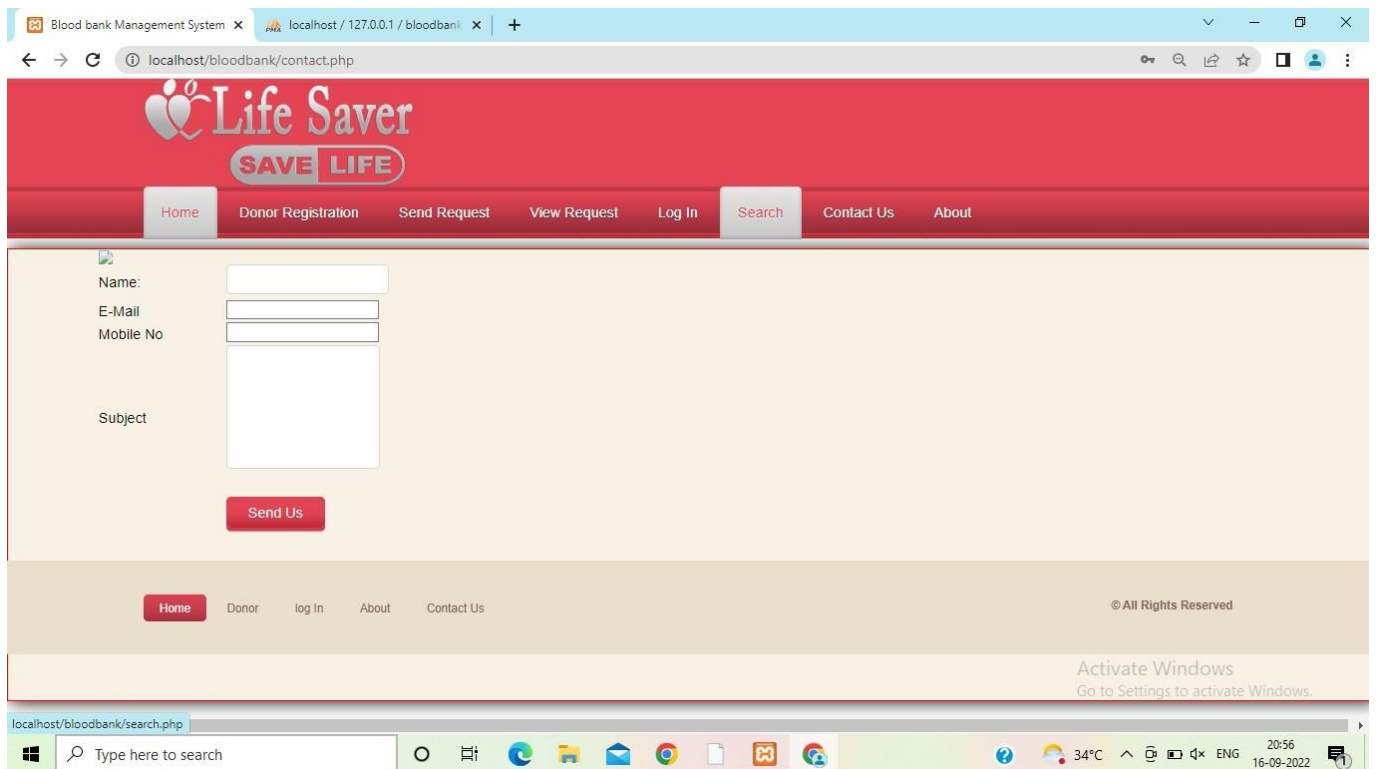
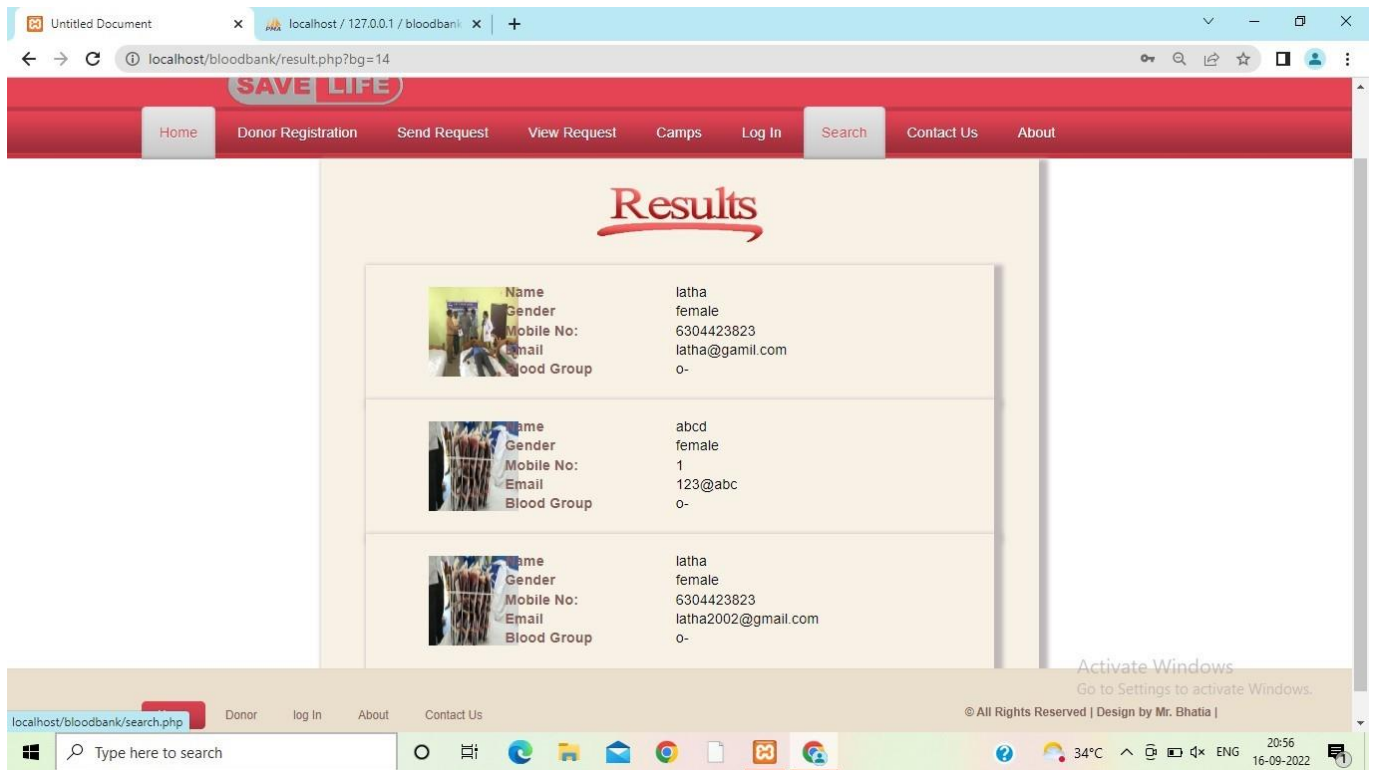
34°C 20:03 16-09-2022











Blood bank Management System

localhost / 127.0.0.1 / bloodbank

localhost/bloodbank/aboutus.php



[Home](#)
[Donor Registration](#)
[Send Request](#)
[View Request](#)
[Log In](#)
[Search](#)
[Contact Us](#)
[About](#)

About Us

A Drop Of Blood Can Save A Life!Don't Waste It And Donate Blood.



'Life Saver Blood Bank' is the first product resulted out of the community welfare initiative called 'People Project' from RGUKT UNIVERSITY. Universally, 'Blood' is recognized as the most precious element that sustains life. It saves innumerable lives across the world in a variety of conditions. Once in every 2-seconds, someone, somewhere is desperately in need of blood. The need for blood is great - on any given day, approximately 39,000 units of Red Blood Cells are needed.

Despite the increase in the number of donors, blood remains in short supply during emergencies, mainly attributed to the lack of information and accessibility. We positively believe this tool can overcome most of these challenges by effectively connecting the blood donors with the blood recipients. We remind every visitor that we have the empowerment to save lives and let's do that - right now, right here. If you are eligible for blood donation, please register yourself as a blood donor now!

We also take this opportunity to thank our whole team for all your ideas, commitment and hard-ship in making this dream a reality. We would also like to thank our friends and well-wishers for all your support and encouragement throughout this project. It is now reasonably safe to say that together we have made this society a slightly better and safer place to live.



You Don't Have To Be A Doctor To Save Lives

Type here to search



34°C ENG 20:57 16-09-2022

Blood bank Management System

localhost / 127.0.0.1 / bloodbank

localhost/bloodbank/aboutus.php



[Home](#)
[Donor Registration](#)
[Send Request](#)
[View Request](#)
[Log In](#)
[Search](#)
[Contact Us](#)
[About](#)

About Us

A Drop Of Blood Can Save A Life!Don't Waste It And Donate Blood.



'Life Saver Blood Bank' is the first product resulted out of the community welfare initiative called 'People Project' from RGUKT UNIVERSITY. Universally, 'Blood' is recognized as the most precious element that sustains life. It saves innumerable lives across the world in a variety of conditions. Once in every 2-seconds, someone, somewhere is desperately in need of blood. The need for blood is great - on any given day, approximately 39,000 units of Red Blood Cells are needed.

Despite the increase in the number of donors, blood remains in short supply during emergencies, mainly attributed to the lack of information and accessibility. We positively believe this tool can overcome most of these challenges by effectively connecting the blood donors with the blood recipients. We remind every visitor that we have the empowerment to save lives and let's do that - right now, right here. If you are eligible for blood donation, please register yourself as a blood donor now!

We also take this opportunity to thank our whole team for all your ideas, commitment and hard-ship in making this dream a reality. We would also like to thank our friends and well-wishers for all your support and encouragement throughout this project. It is now reasonably safe to say that together we have made this society a slightly better and safer place to live.

Thank you and Happy Blood donating!

S.sowbhagya
C.latha
S.Kalyani

Guided by
Santhosh Kumar Sir



You Don't Have To Be A Doctor To Save Lives

Just Donate Blood

Type here to search



34°C ENG 20:57 16-09-2022

CONCLUSION

This software is efficient in maintaining donors details and can easily perform operations on blood donations records. This software also reduces the work load of the blood Bank management to know how much blood is available and also of keep the records of how many patients get the blood from the blood bank.

In future this system can launch website for easy online Blood Banking System.

REFERENCES:

For HTML and CSS:

<https://www.javatpoint.com>

<https://www.3schools.com>

<https://youtu.be/a8W952NBZUE>

For PHP:

<https://www.3schools.com/php/default.asp>

<https://www.sitepoint.com/php/>

<https://www.php.net/>

For MYSQL

<https://www.mysql.com>

<http://www.mysqltutorial.org>

For XAMPP

<https://www.apachefriends.org/download.htm>