# **BLOOD BANK AND DONOR MANAGEMENT**

#### A PROJECT REPORT SUBMITTED

by

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Submitted in partial fulfillment of the Requirements for the Degree of

# **Master of Computer Application**

**Under the Supervision of** 

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**Submitted to** 

**Faculty of MCA** 

# DR. APJ ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

(Formerly Uttar Pradesh Technical University, Lucknow)
(AUGUST 2021)

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I hereby declare that the work presented in this report entitled Blood Bank and Donor Management, was carried out by me. I have not submitted the matter embodied in this report for the award of any other degree or diploma of any other University or Institute.

I have given due credit to the original authors/sources for all the words, ideas, diagrams, graphics, computer programs, experiments, results, that are not my original contribution. I have used quotation marks to identify verbatim sentences and given credit to the original authors/sources.

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## To whomsoever it may concern

This is to confirm that Madhav Mohan is doing his internship at Astrea IT Services Pvt Ltd from March 8th, 2021. The internship is on the Salesforce.com cloud computing development platform. It will be a six months internship, which will be completed on August 31st, 2021.

Sincerely

Naveen Gabrani

Prabrani

CEO, Astrea IT Services

Date:9th March, 2021

Registered Address: C3/3107, Vasant Kunj, New Delhi 110070, India

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Certified that Madhav Mohan (Roll No-1802914006) has carried out the project work presented

in this report entitled "Blood Bank and Donor Management "for the award of Master of

Computer Application from Dr. A.P.J. Abdul Kalam Technical University, Lucknow under my

supervision. The report embodies result of original work, and studies are carried out by the student

himself and the contents of the report do not form the basis for the award of any other degree to

the candidate or to anybody else from this or any other University.

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# **BLOOD BANK AND DONOR MANAGEMENT**

#### Madhay Mohan

## **ABSTRACT**

This project is a Web Application based resolve the user problem related to blood. The project objective is to find the solution of blood and provide the blood into web platform.

The process of managing the blood bag that is received from the blood donation events needs a proper and systematic management. The blood bag must be handled with care and treated thoroughly as it is related to someone's life.

The development of Web-based Blood Bank Management System (BBMS) is proposed to provide a management functional to the blood bank to handle the blood bag.

Other hospital may have different ways and approach of handling blood bag. The methodology used to build this system uses the Rational Unified Process (RUP). The technology platform in implementing this system uses Python, HTML, CSS, JavaScript, and SQLite database and available.

## **ACKNOWLEDGEMENT**

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, Dr. **Sangeeta Arora**, for providing me with the right guidance and advice at the crucial junctures and for showing me the right way. I extend my sincere thanks to our respected **Head of the department Mr. AJAY SHRIVASTAV**, for allowing us to use the facilities available. I would like to thank the other faculty members also, at this occasion. Last but not the least, I would like to thank my friends and family for the support and encouragement they have given me during our work.

MADHAV MOHAN 1802914006

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#### **CHAPTER 1**

#### INTRODUCTION

Blood Bank and Donor Management system is a web-based application on Python language and SQLite database. The purpose of this project was to develop a blood donor management information system to assist in the management of blood donor records and blood group records. And this project also helpful for searching blood donor according to location and blood group. This project includes mainly two modules i.e., admin and visitor.

The current system is manual, and it is time-consuming. It is also cost-ineffective, and the average return is low and diminishing.

## 1.1 Project Detail

The main goal of the Blood Bank and Donor Management System project is to monitor Blood Bank data, Blood cells, Blood stock, Donor List. It manages all the Blood Bank, Donor, Blood stock data. The project is entirely administrative and therefore access is guaranteed only to the administrator.

## 1.2 Purpose

- The purpose of the blood bank management system is to simplify and automate
  the process of searching for blood in case of emergency and maintain the
  records of blood donors, recipients, blood donation programs and blood stocks
  in the bank.
- The project is basically targeted at those people who would like online management software.
- To make a database that is consistent, reliable, and secure.
- To provide correct, complete, and ongoing information.
- To develop a well-organized information storage system.

• To make good documentation to facilitate possible future enhancements.

## 1.3 Objective

- An easy way to search the nearest blood banks to the accident site with the help of GPS.
- An effective way to find out the availability of the required blood groups in the blood banks.
- A proficient way to search the volunteer blood donors. 2 Providing tips regarding the necessary measures that are to be taken before the blood donation

## 1.4 Project Scope

The project has a wide scope, as it is not intended to a particular organization. This project is going to develop generic software, which can be applied by any business's organization. Moreover, it provides facility to its users. Also, the software is going to provide a huge amount of summary data.

## 1.5 Hardware and Software Requirements

## **1.5.1 Software Requirements:**

• Technology: Python Django

• IDE: PyCharm/Atom

• Client-Side Technologies: HTML, CSS, JavaScript, Bootstrap

• Server-Side Technologies: Python

• Data Base Server: SQLite

• Operating System: Microsoft Windows/Linux

## 1.5.2 Hardware Requirements:

• Processor: Pentium-III (or) Higher

• Ram: 64MB (or) Higher

• Hard disk: 80GB (or) Higher

#### Chapter 2

#### Literature Review

#### 2.1 What is Blood bank?

A blood bank is a center where blood gathered as a result of blood donation is stored and preserved for later use in blood transfusion. The term "blood bank" typically refers to a division of a hospital where the storage of blood product occurs and where proper testing is performed (to reduce the risk of transfusion related adverse events). However, it sometimes refers to a collection center, and some hospitals also perform collection. Blood banking includes tasks related to blood collection, processing, testing, separation, and storage.

Despite the immense technological advancement, blood bank systems are either manual or valuable data is easily retrievable. Consequently, one of the major issues in blood bank systems, as talked about in many research papers and articles, is the lack of data security. People always doubt whether their personal information and medical records are safely stored and secured. Therefore, our project aims to develop an online blood donation system applying the concepts of database security and encryption. The following is what our project aims to achieve: Any person who is willing to donate blood will have to register first, even if the user is a new donor, or the user can directly login if he/she has an account already. Whenever they want to donate blood, a form will have to be filled. In the user account, the user will be able to view all the details and records of all earlier donations as well as information about upcoming blood donation events. There will be a link provided to find blood donors in the region of the users' choice. All this is related to the blood bank system. Apart from this, we will be using concepts of database encryption to make sure that the users' information is kept secure and confidential. This will help us keep their donation records protected from any threats from individuals with potentially malicious intentions, or any unforeseen hazards to the security of the data [1].

The process of managing the blood bag that is received from the blood donation events needs a proper and systematic management. The blood bag must be handled with care and treated thoroughly as it is related to someone's life. The development of Web-based Blood Bank Management System (BBMS) is proposed to provide a management functional to the blood bank

to handle the blood bag. In Kuala Terengganu, East Peninsular Coast of Malaysia has only one government hospital that handles blood bank currently is using a standalone system. This webbased management system was developed to meet the requirements for Sultana Nur Sahirah Hospital (HSNZ). Other hospital may have different ways and approach of handling blood bag. The methodology used to build this system uses the Rational Unified Process (RUP). The technology platform in implementing this system uses J2EE programming environment with Python and, SQL Lite database and HTML5, CSS and JavaScript for web development [2].

The objective of this paper is to develop mobile blood donation management system application. This paper an android based application development technique by using ERP model database management system. The techniques involve using of mobile development IDEs and adequate APIs to have desired functionalities. There are two main mobile developing platforms present in the world iOS and Android. We have developed our application on Android OS. Different applications were surveyed and used to explore the present available features to the end user. After trials and research, the outline was made to what extent should go and developed [3].

The major concern for hospitals and blood center today is patient safety, minimal wastage of blood products and minimization of blood transfusion errors. The traditional blood-handling process in many hospitals involves several manual steps with high probability of human mistakes. To ensure absolute quality of services, more and more hospitals and blood banks now require modern and advanced solutions to provide high levels of accuracy, automation, and reliability [4].

In today's world several online blood bank databases are available, however none of them offers the capability for the direct contact between the donor and the recipient. This is a major drawback particularly in cases where there is an urgent need of blood. Our work aims to overcome this communication barrier. By creating a blood bank database that contains entire details and collected from various sources like Blood banks, NSS, NGO's, hospitals and through web interface [5].

#### 2.2 Features of Blood and Donor Management

- Ensures hospitals have good supply or inventories of blood bags.
- List the availability of blood bags at any given time.
- Ability to manage the information of its blood donor.
- Alerts for blood requirement from registered donors.
- Auto-check if the person donated blood in the last 3 months.
- Allows good documentation about the donor and their blood donation activities.
- Support fast searching to find match blood bags for the right person
- Effectively manage blood camps.

A blood bank plays an important role in a hospital as well as in a country, ensuring safe and timely blood transfusions. However, there are several challenges faced by blood banks around the world, specifically when securing the blood supply chain. Reducing the supply-demand imbalance, protecting the data privacy of donors as well as receivers, are some of them. Therefore, there is a timely requirement for an effective and secure management system for the blood bank [6].

Looking for an online centralized web-portal where blood banks and hospitals can look for donors in their nearby area who will be available in quick time [7].

It provides the unique identification number at the time of blood donation camp which helps him for the future correspondence. MIS gives the unique user id and password for those donors who are applying online. They can edit their information time to time. This feature helps administrator to collect the information of all the donor area wise and blood group wise. Donors can view the blood donation camp organizing at the different places. As it is a web-based application, its index page encourages the donor to donate the blood. Donor can also check his blood group medical status whether it is healthy or unhealthy. Donor can check the status of the blood group just on one click sitting at home [8].

Modernization of the world needs smart service in each sector. Health management is a great issue in today's scenario. Smart health service requires many changes. In this article, the authors try to develop a multi-agent system for blood bank priority utilization. in the first stage the multi-agent system is developed. Next to it variety patients those who need blood in emergency are considered. Though the accidental cases are most important, in focus, patients suffering from cardiac disease and needs surgery is detected using fuzzy rule-based system. Finally, the developed intelligent system id linked with the blood bank to mitigate the problem for emergency patients. The result shows the management system performs well and can be properly utilized [9].

This paper focuses on the data mining and the current trends associated with it. It presents an overview of data mining system and clarifies how data mining and knowledge discovery in databases are related both to each other and to related fields. Data Mining is a technology used to describe knowledge discovery and to search for significant relationships such as patterns, association, and changes among variables in databases. This enables users to search, collect and donate blood to the patients who are waiting for the last drop of the blood and are nearby to death. We have also tried to identify the research area in data mining where further work can be continued [10].

#### 2.3 Scope of Blood Bank and Donor Management

The purpose of the blood bank management system is to simplify and automate the process of searching for blood in case of emergency and maintain the records of blood donors, recipients, blood donation programs and blood stocks in the bank.

This effort derived a mathematical programming model, which is a hybrid from set covering model of discrete location approaches and center of gravity method of continuous location models, for location of blood banks among hospitals or clinics, rather than blood bank layout in health care institutions. It is initially unknown the number of blood banks will be located within capacity, their geographical locations, and their covering area. The solution of the model enlightens the initial darkness in a Multi objective view. The objectives, which are handled via binary nonlinear goal programming, are minimization of total fixed cost of location blood banks, total traveled distance between the blood banks and hospitals and an inequality index as a fairness mechanism for the distances [11].

The misunderstanding of the input content and unrealistic carrying out the assessment input is the current problem of blood bank management inspection input. Based on the GB/T19001-2008 standards and work practice, the paper summarized seven aspects in which the management inspection input should be included. The paper also suggested that blood banks should focus on the quality management system implementation results to achieve good results to the management inspection to truly enter the full complete and accurate information to enable good effect of management inspection [12].

This article describes a computerized inventory control system for controlling blood distribution between the blood bank and its client hospitals. The system has been operative since October 1964 and has excelled the blood utilization efficiency of previous procedures. Significantly, appropriately processed information of daily blood status by a centralized computer has led to a 60 per cent reduction in outdating together with an inventory reduction at the blood bank averaging 30 per cent. Incorporation of the new system into current hospital and blood bank management is evaluated in terms of psychological, labor, and economic implications [13].

Any software development cannot be possible without software engineering. In this paper researcher discuss the various models used in the software engineering. Researcher has used the Linear Sequential Model for the development of the Management Information System of blood bank, this model is also known as waterfall model. Researcher also discuss the various phases used in the model and the implementation of these phases in the development of blood bank management information system [14].

Blood is a vital constituent in human body that is indispensable for human life, it supplies nutrient and oxygen to all body cells, because of this essential role, blood bank was introduced in this paper. Manual systems as compared to computerized systems are time consuming, costly, and human errors. A computerized central blood bank management system was developed to assist in managing donor records, monitoring blood screening, and storing, moreover provide secure medical reports to improve medical service delivery. The system was designed and implemented as a web-based using My SQL data base, PHP programming language and a bar-code technique. The outcome was obtained as screens that made the recording process of donor's data and blood easer to ensure the efficiency of transfusion process [15].

#### **CHAPTER 3**

#### FEASIBILITY STUDY

The feasibility study is performed to determine whether the proposed system is viable considering the Technical, Operational and Economical factors. After going through feasibility Study, we can have a clear-cut view of the system's benefits and drawbacks.

#### Why Do I Need a Feasibility Study?

Feasibility studies are important for a communications service provider to determine whether your broadband project will succeed or not. It should be the first action taken when wanting to begin a new project. It is one, if not the most important factor in determining whether the project can and should move forward. Also, if you are applying for broadband loans and grants, a feasibility study is normally required.

#### 3.1 Technical Feasibility

Technical feasibility evaluates the technical complexity of the expert system and often involves determining whether the expert system can be implemented with state-of-the-art techniques and tools. In the case of expert systems, an important aspect of technical feasibility is determining the shell in which the system will be developed. The shell used to develop an expert system can be an important determinant to its quality and makes it vital to the system's success. Although the desirable characteristics of an expert system shell will depend on the task and domain requirements, the shell must be flexible enough to build expert reasoning into the system effectively. It must also be easily integrated with existing computer-based systems. Furthermore, a shell providing a user-friendly interface encourages end users to use the system more frequently.

#### 3.2 ECONOMICAL FEASIBILITY

It deals with question related to the economy. It comprises of the following questions: -

- Are there sufficient benefits in creating the system to make the cost acceptable?
- Are the costs of not creating the system so great that the project must be undertaken?

Development of this application is highly economically feasible. The organization needed not spend much money for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. Even after the development, the organization will not be in condition to invest more in the organization.

#### 3.3 OPERATIONAL FEASIBILITY

The operational feasibility consists of the following activity: -

• Will the system be useful if it is developed & implemented?

#### 3.4 SOCIAL AND BEHAVIORAL FEASIBILITY

It deals with the various issues related to the human behavior like: -

- Whether the user be able to adapt a new change or not?
- Whether the ambiance we are providing suits the user or not?

#### 3.5 LEGAL FEASIBILITY

It deals with the question related to the legal issues. It comprises of the following questions:

- Contract Signing
- Software License agreement
- Issues related to cyber laws.

• Legal issues relating to the manpower contract.

#### 3.6 Technology Description

#### **3.6.1 Python**

Python is a widely used general-purpose, high level programming language. It was initially designed by Guido van Rossum in 1991 and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code.

Python is a programming language that lets you work quickly and integrate systems more efficiently.

Python is dynamically typed, and garbage collected. It supports multiple programming paradigms, including procedural, object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library.

#### 3.6.2 HTML

HTML (Hypertext Markup Language) is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup tells the Web browser how to display a Web page's words and images for the user. Each individual markup code is referred to as an element (but many people also refer to it as a tag). Some elements come in pairs that indicate when some display effect is to begin and when it is to end.

#### 3.6.3 CASCADING STYLE SHEET (CSS)

Cascading Style Sheets (CSS) are a collection of rules we use to define and modify web pages. CSS are like styles in Word. CSS allow Web designers to have much more control over their pages look and layout. For instance, you could create a style that defines the body text to be Verdana, 10 points. Later, you may easily change the body text to Times New Roman, 12 points by just changing the rule in the CSS. Instead of having to change the font on each page of your website, all you need to do is redefine the style on the style sheet, and it will instantly change on all the pages that the style sheet has been applied to. With HTML styles, the font change would be applied to each instance of that font and must be changed in each spot.

CSS can control the placement of text and objects on your pages as well as the look of those objects.

HTML information creates the objects (or gives objects meaning), but styles describe how the objects should appear. The HTML gives your page structure, while the CSS creates the

"presentation". An external CSS is just a text file with a .CSS extension. These files can be created with Dreamweaver, a CSS editor, or even Notepad.

## 3.6.4 JavaScript

JavaScript is a programming language commonly used in web development. It was originally developed by Netscape to add dynamic and interactive elements to websites. While JavaScript is influenced by Java, the syntax is more like C and is based on ECMAScript, a scripting language developed by Sun Microsystems.

JavaScript is a client-side scripting language, which means the source code is processed by the client's web browser rather than on the web server. This means JavaScript functions can run after a webpage has loaded without COMMUNICATING with the server. For example, a JavaScript function may check a web form before it is submitted to make sure all the required fields have been filled out. The JavaScript code can produce an error message before any information is transmitted to the server.

Like server-side scripting languages, such as PHP and ASP, JavaScript code can be inserted anywhere within the HTML of a webpage. However, only the output of server-side code is displayed in the HTML, while JavaScript code remains fully visible in the source of the webpage. It can also be referenced in a separate .JS file, which may also be viewed in a browser.

## 3.5 Django

Django is a web application framework written in Python programming language. It is based on MVT (Model View Template) design pattern. The Django is very demanding due to its rapid development feature. It takes less time to build application after collecting client requirement.

#### **CHAPTER 4**

#### **BACKEND DESIGN**

## 4.1 Use Case Diagram

- Use case diagram consists of use cases and actors and shows the interaction between them. The key points are:
- The main purpose is to show the interaction between the use cases and the actor.
- To represent the system requirement from user's perspective.
- The use cases are the functions that are to be performed in the module.

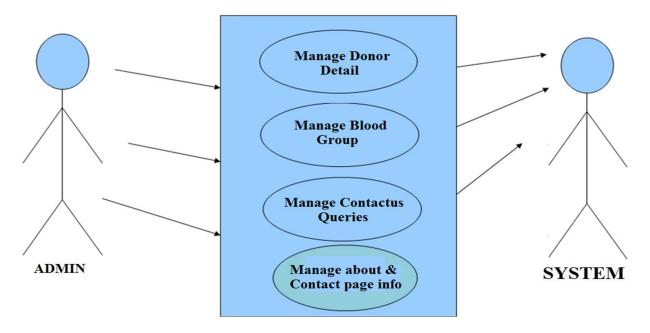


Fig. 4.1 Use Case Diagram b/w admin and system

## 4.2 Sequence Diagram for Administration

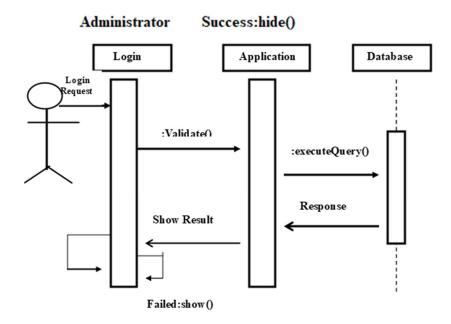


Fig 4.2 Sequence Diagram

## 4.3 Data Flow Diagram

A Data Flow Diagram (DFD) is a graphical representation of the "flow" of data through an Information System. A data flow diagram can also be used for the visualization of Data Processing. It is common practice for a designer to draw a context-level DFD first which shows the interaction between the system and outside entities. This context-level DFD is then "exploded" to show more detail of the system being modeled.

A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a function that transforms the input into desired output. A DFD shows movement of data through the different transformations or processes in the system.

Dataflow diagrams can be used to provide the end user with a physical idea of where the data they input ultimately influences the structure of the whole system from order to dispatch to restock how any system is developed can be determined through a dataflow diagram. The appropriate register saved in database and maintained by appropriate authorities.

#### 4.3.1 Zero Level DFD

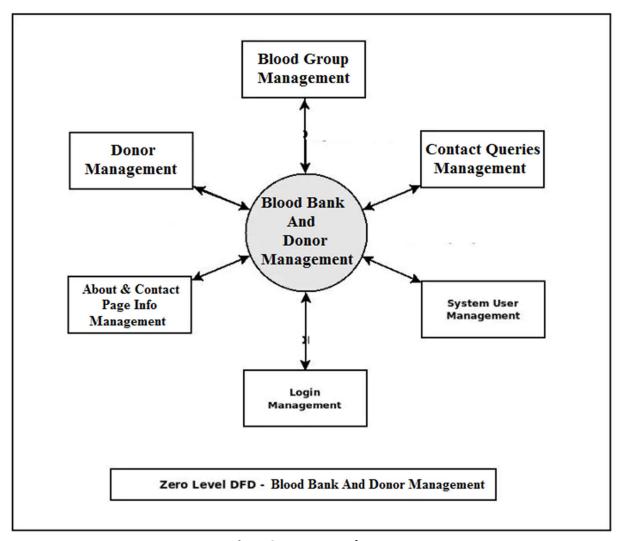


Fig 4.3 Zero Level DFD

#### 4.3.2 First Level DFD

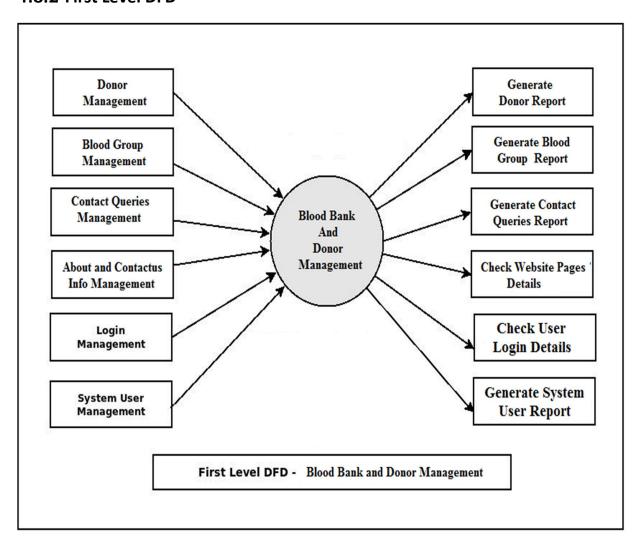


Fig 4.4 First Level DFD

# 4.4 ER Diagram

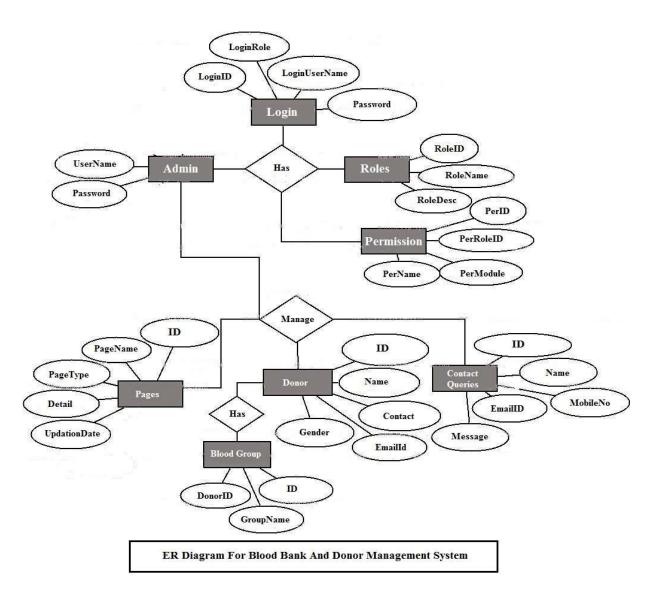


Fig 4.5 ER Diagram

## **CHAPTER 5**

## FRONTEND DESIGN

**HOME PAGE**: This is the starting page of the project and through this page we can go to different pages according to condition.



Fig 5.1 HOME PAGE

About us Page: In this page, detail about the Blood Bank and Donor Management project.

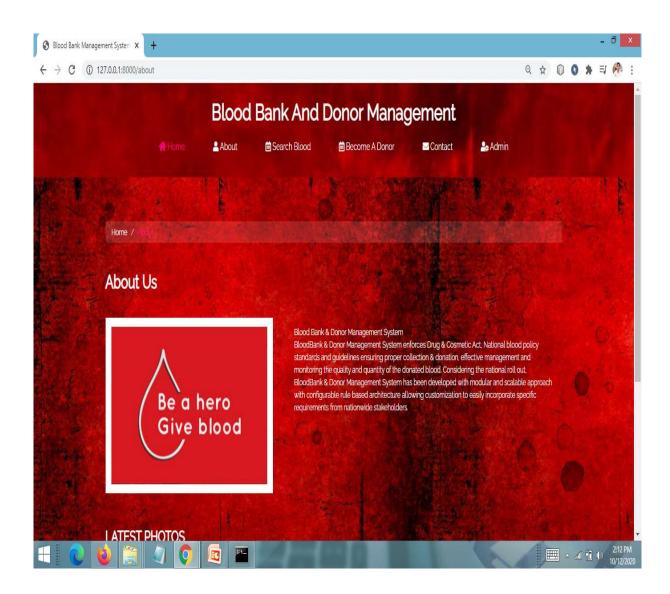


Fig 5.2 About us Page

**BECOME DONOR PAGE:** In this page, someone wants to donate the blood then they can fill all the detail after they can donate the blood.

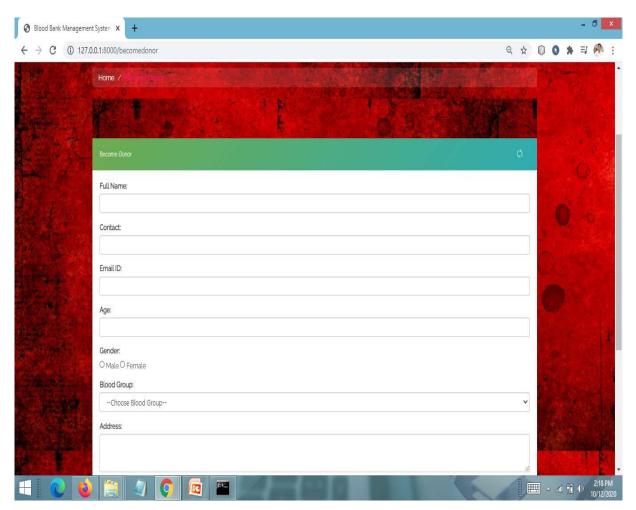


Fig 5.3 BECOME DONOR PAGE

**SEARCH DONAR PAGE:** When any one need blood then it will search that blood is available or not **in this project.** 

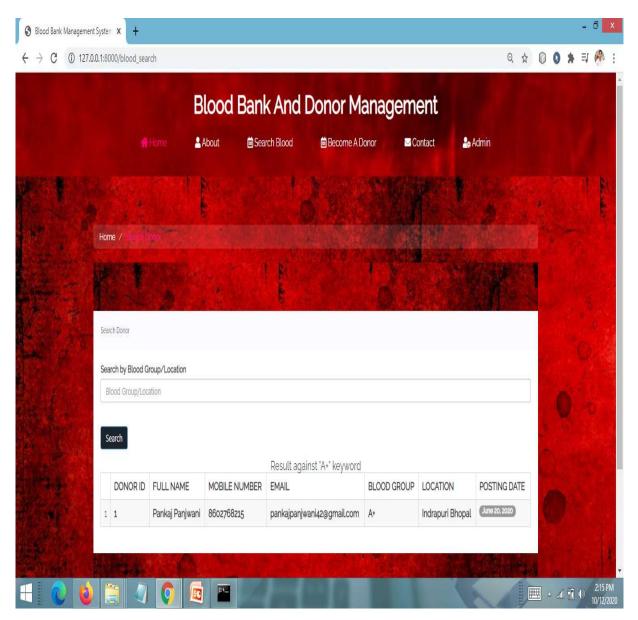


Fig 5.4 SEARCH DONAR PAGE

**CONTACT US PAGE:** When any one need for blood and it is not available in this project then they can fill all the details. So this a contact page.

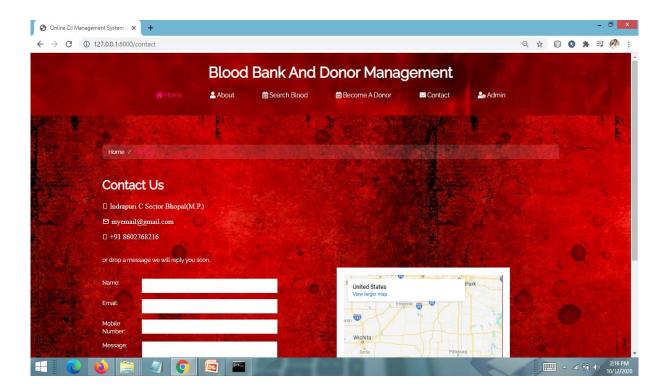


Fig 5.5 CONTACT US PAGE

**ADMIN LOGIN PAGE:** In this page, after login admin assess to monitor the user records so that they identify his/her application work perfectly or not.

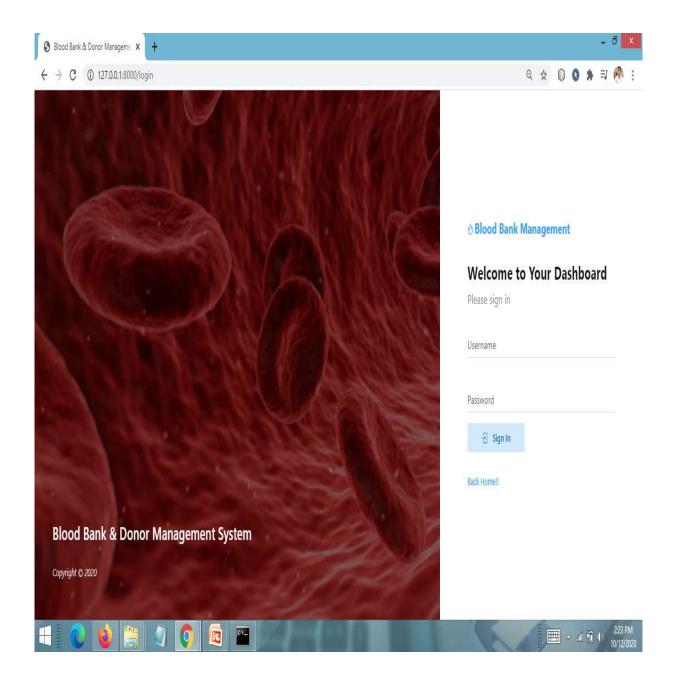


Fig 5.6 ADMIN LOGIN PAGE

**ADMIN DASHBOARDS PAGE**: In this page , show all the unread queries, read queries and total donors .

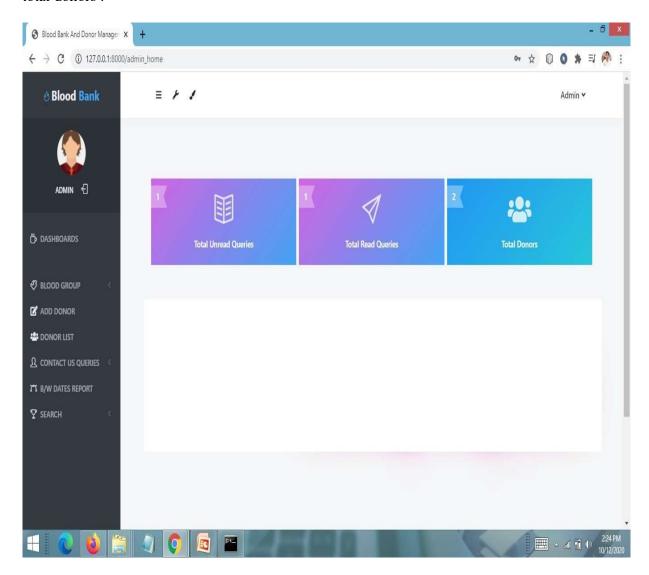


Fig 5.7 ADMIN DASHBOARD PAGE

**ADD BLOOD GROUP PAGE**: In this page, when user wants to donate the blood then user contact to admin and admin add blood group to this page

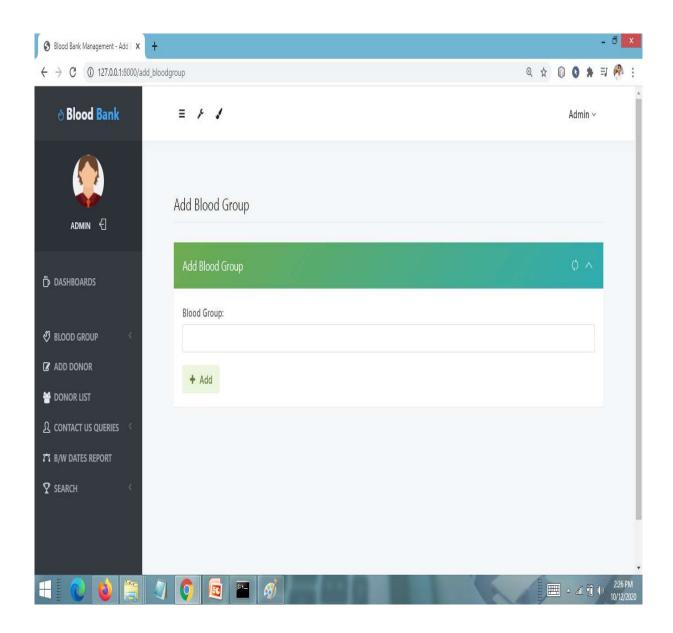


Fig 5.8 ADD BLOOD GROUP PAGE

**MANAGE BLOOD GROUP PAGE:** In this page, admin can see all the blood group details are available in this project.

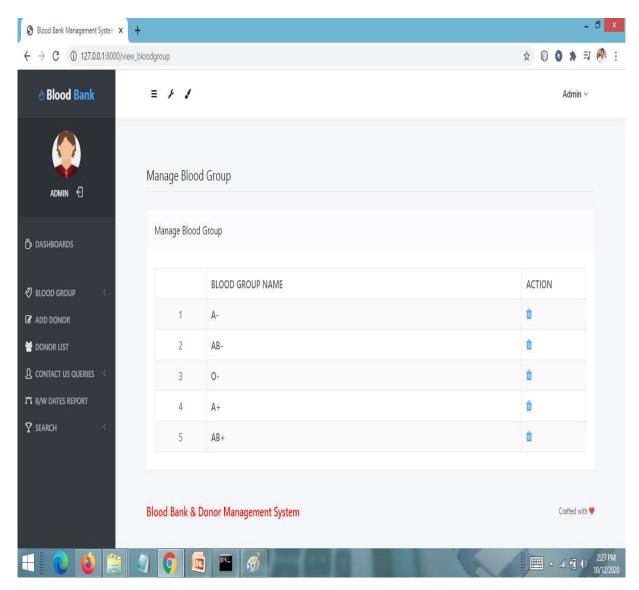


Fig 5.9 MANAGE BLOOD GROUP PAGE

**ADD DONOR PAGE:** In this page, when donater wants to donate the blood then donater contact to admin and then admin add Donor to this page

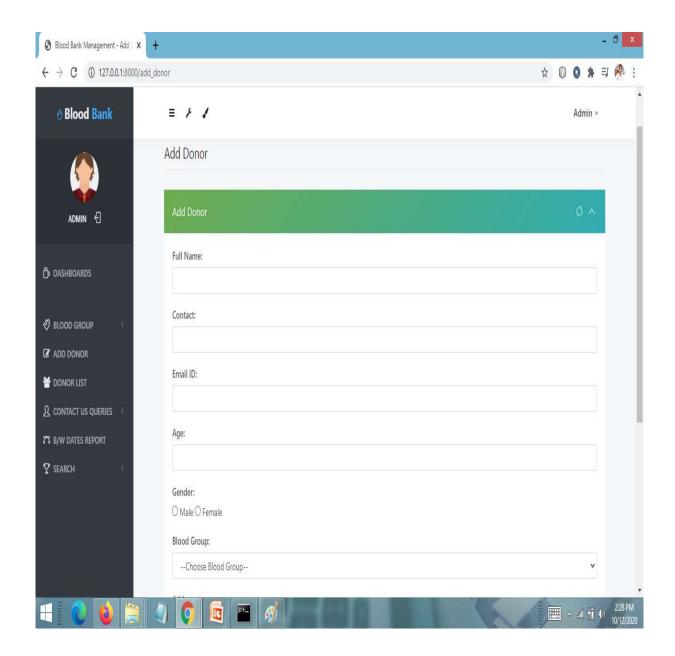


Fig 5.10 ADD DONOR PAGE

### **REPORT**

## **HOME PAGE CODING**

```
{% load static %}
{% block body %}
<html>
<head>
<title>Blood Bank And Donor Management ||Home Page</title>
<script src="{% static 'js/responsiveslides.min.js' %}"></script>
k href="{% static 'css/bootstrap.css' %}" rel='stylesheet' type='text/css' />
<script src="{% static 'js/jquery.min.js' %}"></script>
<!-- jQuery (Bootstrap's JavaScript plugins) -->
         type="application/x-javascript"> addEventListener("load",
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<!-- Custom Theme files -->
k rel="stylesheet" href="{% static 'css/style.css' %}" type="text/css" media="all">
link
            href='http://fonts.googleapis.com/css?family=Monoton'
                                                                         rel='stylesheet'
type='text/css'>
             href='http://fonts.googleapis.com/css?family=Raleway'
link
                                                                         rel='stylesheet'
type='text/css'>
</head>
<body>
{% include 'navigationbar.html' %}
<!--->
```

```
<script src="{% static 'js/responsiveslides.min.js' %}"></script>
 <script>
  // You can also use "$(window).load(function() {"
  $(function () {
   $("#slider").responsiveSlides({
      auto: true,
    manualControls: '#slider3-pager',
   });
 });
 </script>
<div class="content">
<div class="container">
 <div class="slider">
<!-- Slideshow 3 -->
ul class="rslides" id="slider">
 <img src="{% static 'images/7.jpg' %}" alt="">
<div class="caption">
<h1>"Bring a life back to power. Make blood donation your responsibility"</h1>
</div>
 <img src="{% static 'images/2.jpg' %}" alt="">
<div class="caption">
<h1>"Anybody can give blood"</h1>
</div>
 <img src="{% static 'images/10.jpg' %}" alt="">
<div class="caption">
<h1>"Donate your blood for a reason, let the reason to be life"</h1>
</div>
 <img src="{% static 'images/5.jpg' %}" alt="">
<div class="caption">
<h1>"Starve a vampire, donate blood"</h1>
</div>
 <img src="{% static 'images/8.jpg' %}" alt="">
<div class="caption">
<h1>"Don't let mosquitoes get your blood first"</h1>
</div>
 <img src="{% static 'images/1.jpg' %}" alt="">
```

```
<div class="caption">
<h1>"I have nothing to offer but blood, toil, tears and sweat."</h1>
</div>
 <img src="{% static 'images/13.jpg' %}" alt="">
<div class="caption">
<h1>"Never feel yourself weak, you have the ability to save a life. Just donate blood."</h1>
</div>
 <img src="{% static 'images/3.jpg' %}" alt="">
<div class="caption">
<h1>"You are Rock Star in someone's life, donate blood."</h1>
</div>
 <!-- Slideshow 3 Pager --></br>
ul id="slider3-pager">
 <a href="#"><img src="{% static 'images/77.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/22.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/1010.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/55.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/88.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/11.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/1313.jpg' %}" alt=""></a>
 <a href="#"><img src="{% static 'images/33.jpg' %}" alt=""></a>
<div class="clearfix"></div>
 </div>
</div>
{% include 'footer.html' %}
</div>
<!--->
<!--->
</body>
</html>
{% endblock %}
```

## SEARCH DONOR PAGE CODING

```
{% load static %}
{% block body %}
<html>
<head>
<title>Blood Bank Management System || Search Donor</title>
k rel="stylesheet" id="css-main" href="{% static 'adminassets/css/codebase.min.css'
k href="{% static 'css/bootstrap.css' %}" rel='stylesheet' type='text/css' />
<script src="{% static 'js/jquery.min.js' %}"></script>
k rel="stylesheet" href="{% static 'css/style.css' %}" type="text/css" media="all">
<!-- Custom Theme files -->
rel="stylesheet" href="{% static 'css/touchTouch.css' %}" type="text/css"
media="all"/>
<!-- Custom Theme files -->
         type="application/x-javascript"> addEventListener("load",
                                                                       function()
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<!--webfont-->
```

```
link
            href='http://fonts.googleapis.com/css?family=Monoton'
                                                                        rel='stylesheet'
type='text/css'>
            href='http://fonts.googleapis.com/css?family=Raleway'
                                                                        rel='stylesheet'
link
type='text/css'>
<!---/End-css-style-switecher---->
<script type="text/javascript" src="{% static 'js/jquery.fancybox.js' %}"></script>
k rel="stylesheet" type="text/css" href="{% static 'css/jquery.fancybox.css' %}"
media="screen" />
 <script type="text/javascript">
$(document).ready(function() {
* Simple image gallery. Uses default settings
*/
$('.fancybox').fancybox();
});
</script>
</head>
<body>
<!--->
{% include 'navigationbar.html' %}
<div class="about content">
<div class="container">

    class="breadcrumb">

 <a href="{% url 'home' %}">Home</a>
 Search Donor
</01>
     <!-- Main Container -->
      <main id="main-container">
        <!-- Page Content -->
        <div class="content">
           <!-- Dynamic Table Full Pagination -->
           <div class="block">
             <div class="block-header block-header-default">
               <h3 class="block-title">Search Donor</h3>
             <div class="block-content block-content-full">
               <!-- DataTables init on table by adding .js-dataTable-full-pagination class,
functionality initialized in js/pages/be tables datatables.js -->
               <form id="basic-form" method="post">
```

```
{% csrf_token %}
          <div class="form-group">
            <label>Search by Blood Group/Location</label>
                              type="text"
                  id="searchdata"
            <input
                                       name="searchblood"
required="true" class="form-control" placeholder="Blood Group/Location"></div>
          <hr>
          <button type="submit" class="btn btn-primary" name="search"</pre>
id="submit">Search</button>
         </form>
         {% ifequal terror "found" %}
<h4 align="center">Result against "{{ sd }}" keyword </h4>
         <table class="table table-bordered table-striped table-vcenter js-
dataTable-full-pagination">
          <thead>
            Donor ID
             Full Name
             Mobile Number
             Email
             Blood Group
             Location
             Posting Date
             </thead>
          {% for i in donor %}
             {{forloop.counter}}
             {{i.id}}
             {{i.fullname}}
             {{i.mobileno}}
             {{i.emailid}}
             {{i.group.bloodgroup}}
             {{i.address}}
             <span class="badge badge-primary">{{i.postingdate}}</span>
```

```
{% endfor %}
                {% else %}
  No record found against this search
 {% endifequal %}
              </div>
          </div>
          <!-- END Dynamic Table Full Pagination -->
         <!-- END Dynamic Table Simple -->
        </div>
        <!-- END Page Content -->
      </main>
      <!-- END Main Container -->
{% include 'footer.html' %}
</div>
</div>
<!--->
<!--->
</body>
</html>
{% ifequal error "no" %}
<script>
  alert('Record Saved Successfully');
</script>
{% endifequal %}
{% ifequal error "yes" %}
<script>
  alert('Something went wrong, Try Again');
</script>
{% endifequal %}
```

```
{% endblock %}
```

## DONAR REGISTRRATION PAGE CODING

```
{% load static %}
{% block body %}
<html>
<head>
<title>Blood Bank Management System || Become A Donor</title>
k rel="stylesheet" id="css-main" href="{% static 'adminassets/css/codebase.min.css'
%}">
k href="{% static 'css/bootstrap.css' %}" rel='stylesheet' type='text/css' />
<script src="{% static 'js/jquery.min.js' %}"></script>
type="text/css" media="all">
<!-- Custom Theme files -->
rel="stylesheet" href="{% static 'css/touchTouch.css' %}" type="text/css"
media="all"/>
<!-- Custom Theme files -->
         type="application/x-javascript">
                                          addEventListener("load",
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<!--webfont-->
           href='http://fonts.googleapis.com/css?family=Monoton'
link
                                                                    rel='stylesheet'
type='text/css'>
            href='http://fonts.googleapis.com/css?family=Raleway'
link
                                                                    rel='stylesheet'
type='text/css'>
<!---/End-css-style-switecher---->
<script type="text/javascript" src="{% static 'js/jquery.fancybox.js' %}"></script>
rel="stylesheet" type="text/css" href="{% static 'css/jquery.fancybox.css' %}"
media="screen" />
 <script type="text/javascript">
$(document).ready(function() {
```

```
* Simple image gallery. Uses default settings
*/
$('.fancybox').fancybox();
});
</script>
</head>
<body>
<!--->
{% include 'navigationbar.html' %}
<div class="about content">
<div class="container">

    class="breadcrumb">

 <a href="{% url 'home' %}">Home</a>
 Become Donor
<!-- Main Container -->
      <main id="main-container">
        <!-- Page Content -->
        <div class="content">
          <!-- Register Forms -->
          <div class="row">
             <div class="col-md-12">
               <!-- Bootstrap Register -->
               <div class="block block-themed">
                 <div class="block-header bg-gd-emerald">
                   <h3 class="block-title">Become Donor</h3>
                   <div class="block-options">
                                 type="button"
                                                   class="btn-block-option"
                     <button
                                                                               data-
toggle="block-option" data-action="state toggle" data-action-mode="demo">
                       <i class="si si-refresh"></i>
                     </button>
                                 type="button"
                                                   class="btn-block-option"
                     <button
                                                                               data-
toggle="block-option" data-action="content_toggle"></button>
                   </div>
                 </div>
                 <div class="block-content">
                   <form method="post">
                   {% csrf token %}
                     <div class="form-group row">
```

```
<label class="col-12" >Full Name:</label>
                        <div class="col-12">
                           <input type="text" class="form-control" name="fullname"
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Contact:</label>
                        <div class="col-12">
                          <input type="text" class="form-control" name="contact"</pre>
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <lase="col-12" >Email ID:</label>
                        <div class="col-12">
                          <input type="email" class="form-control" name="emailid"
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Age:</label>
                        <div class="col-12">
                          <input type="number" class="form-control" name="age"
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Gender:</label>
                        <div class="col-12">
                           <input type="radio" name="gender" value="male"> Male
                           <input type="radio" name="gender" value="male"> Female
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Blood Group:</label>
                        <div class="col-12">
                          <select type="text" class="form-control" name="bloodgroup"</pre>
required="true" >
      <option value="">--Choose Blood Group--</option>
```

```
{% for i in group %}
        <option value="{{i.bloodgroup}}">{{i.bloodgroup}}</option>
                 {% endfor %}
</select>
                        </div>
                      </div>
                     <div class="form-group row">
                        <label class="col-12" >Address:</label>
                        <div class="col-12">
                                          class="form-control"
                          <textarea
                                                                     name="address"
required='true'></textarea>
                        </div>
                     </div>
                      <div class="form-group row">
                        <label class="col-12" >Message:</label>
                        <div class="col-12">
                          <textarea
                                         class="form-control"
                                                                    name="message"
required='true'></textarea>
                        </div>
                     </div>
                      <div class="form-group row">
                        <div class="col-12">
                          <button
                                                        class="btn
                                     type="submit"
                                                                      btn-alt-success"
name="submit">
                            <i class="fa fa-plus mr-5"></i> Add
                          </button>
                        </div>
                     </div>
                   </form>
                 </div>
               </div>
               <!-- END Bootstrap Register -->
             </div>
            </div>
        </div>
        <!-- END Page Content -->
      </main>
      <!-- END Main Container -->
{% include 'footer.html' %}
```

```
</div>
</div>
<!--->
<!--->
</body>
</html>
{% ifequal error "no" %}
<script>
  alert('Record Saved Successfully');
</script>
{% endifequal %}
{% ifequal error "yes" %}
<script>
  alert('Something went wrong, Try Again');
</script>
{% endifequal %}
{% endblock %}
```

### ADMIN DASHBOARD PAGE CODING

```
{% load static %}
{% block body %}
<html lang="en" class="no-focus"> <!--<![endif]-->
<head>
<title>Blood Bank And Donor Management - Admin Dashboard</title>
k rel="stylesheet" id="css-main" href="{% static 'adminassets/css/codebase.min.css'
%}">
k rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.0/css/all.css"
   integrity="sha384-
IZN37f5QGtY3VHgisS14W3ExzMWZxybE1SJSEsQp9S+oqd12jhcu+A56Ebc1zFSJ"
   crossorigin="anonymous">
  <style>
.glow {
 font-size: 80px;
 color: #fff;
 text-align: center;
```

```
-webkit-animation: glow 1s ease-in-out infinite alternate;
 -moz-animation: glow 1s ease-in-out infinite alternate;
 animation: glow 1s ease-in-out infinite alternate;
@-webkit-keyframes glow {
 from {
  text-shadow: 0 0 10px #fff, 0 0 20px #fff, 0 0 30px #e60073, 0 0 40px #e60073, 0 0 50px
#e60073, 0 0 60px #e60073, 0 0 70px #e60073;
 to {
  text-shadow: 0 0 20px #fff, 0 0 30px #ff4da6, 0 0 40px #ff4da6, 0 0 50px #ff4da6, 0 0 60px
#ff4da6, 0 0 70px #ff4da6, 0 0 80px #ff4da6;
}
</style>
  </head>
  <body>
    <div id="page-container" class="sidebar-o sidebar-inverse side-scroll page-header-</pre>
fixed main-content-narrow">
       {% include 'sidebar.html' %}
       {% include 'admin nav.html' %}
       <!-- Main Container -->
       <br><br><br><br>>
       <main id="main-container">
         <!-- Page Content -->
         <div class="content">
           <div class="row gutters-tiny invisible" data-toggle="appear">
              <!-- Row #1 -->
              <div class="col-6 col-md-4 col-xl-4">
                <a class="block text-center" href="{% url 'unread queries' %}">
```

```
ribbon-left bg-gd-dusk">
                 <div class="ribbon-box">{{tuq}}</div>
                 <i class="si si-book-open fa-3x text-white-op"></i>
                 Total Unread Queries
               </div>
             </a>
           </div>
           <div class="col-6 col-md-4 col-xl-4">
             <a class="block text-center" href="{% url 'read_queries' %}">
               <div class="block-content ribbon ribbon-bookmark ribbon-crystal</pre>
ribbon-left bg-gd-dusk">
                 <div class="ribbon-box">{{trq}}</div>
                 <i class="si si-paper-plane fa-3x text-white-op"></i>
                 Total Read Queries
               </div>
             </a>
           </div>
           <div class="col-6 col-md-4 col-xl-4">
             <a class="block text-center" href="{% url 'donorlist' %}">
               <div class="block-content ribbon ribbon-bookmark ribbon-crystal</pre>
ribbon-left bg-gd-sea">
                 <div class="ribbon-box">{{td}}</div>
                 <i class="fa fa-users fa-3x text-white-op"></i>
                 Total Donors
               </div>
             </a>
           </div>
           <!-- END Row #1 -->
         </div>
       </div>
       <!-- END Page Content -->
```

<div class="block-content ribbon ribbon-bookmark ribbon-crystal</pre>

```
<br>><br>>
        <footer class="site-footer mt-5">
   <div class="container">
    <div class="row text-center">
     <div class="col-md-12">
      Copyright © <script>document.write(new Date().getFullYear()); </script> All
Rights Reserved <span style = "color : brown">|</span> <span style = "color :
#006400">This website is made with <i class="fas fa-heart icon-heart text-warning" aria-
hidden="true"></i> by </span><a class= "glow" href="#" target="_blank" >Pankaj
Panjwani</a>
      </n>
     </div>
    </div>
   </div>
  </footer>
      </main>
      <!-- END Main Container -->
       {% include 'adminfooter.html' %}
    </div>
    <!-- END Page Container -->
    <!-- Codebase Core JS -->
    <script src="{% static 'adminassets/js/core/jquery.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/popper.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/bootstrap.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.slimscroll.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.scrollLock.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.appear.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.countTo.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/js.cookie.min.js' %}"></script>
    <script src="{% static 'adminassets/js/codebase.js' %}"></script>
    <!-- Page JS Plugins -->
```

### ADD BLOOD GROUP PAGE CODING

```
{% load static %}
{% block body %}
<html lang="en" class="no-focus"> <!--<![endif]-->
<title>Blood Bank Management - Add Blood Group</title>
k rel="stylesheet" id="css-main" href="{% static 'adminassets/css/codebase.min.css'
%}">
</head>
  <body>
    <div id="page-container" class="sidebar-o sidebar-inverse side-scroll page-header-</p>
fixed main-content-narrow">
       {% include 'sidebar.html' %}
       {% include 'admin nav.html' %}
      <!-- Main Container -->
      <main id="main-container">
         <!-- Page Content -->
         <div class="content">
           <!-- Register Forms -->
           <h2 class="content-heading">Add Blood Group</h2>
```

<h3 class="block-title">Add Blood Group</h3>

<div class="row">

<div class="col-md-12">

<!-- Bootstrap Register -->

<div class="block block-themed">

<div class="block-options">

<div class="block-header bg-gd-emerald">

```
<button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="state toggle" data-action-mode="demo">
                         <i class="si si-refresh"></i>
                      </button>
                      <button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="content toggle"></button>
                    </div>
                  </div>
                  <div class="block-content">
                    <form method="post">
                    {% csrf token %}
                      <div class="form-group row">
                         <label class="col-12" >Blood Group:</label>
                         <div class="col-12">
                           <input type="text" class="form-control"
name="bloodgroup" value="" required='true'>
                         </div>
                      </div>
                      <div class="form-group row">
                         <div class="col-12">
                           <button type="submit" class="btn btn-alt-success"</pre>
name="submit">
                             <i class="fa fa-plus mr-5"></i> Add
                           </button>
                         </div>
                      </div>
                    </form>
                  </div>
                </div>
                <!-- END Bootstrap Register -->
             </div>
             </div>
         </div>
         <!-- END Page Content -->
       </main>
       <!-- END Main Container -->
     {% include 'adminfooter.html' %}
    </div>
    <!-- END Page Container -->
    <!-- Codebase Core JS -->
```

```
<script src="{% static 'adminassets/js/core/jquery.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/popper.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/bootstrap.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.slimscroll.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.scrollLock.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.appear.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.countTo.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/js.cookie.min.js' %}"></script>
    <script src="{% static 'adminassets/js/codebase.js' %}"></script>
  </body>
</html>
{% ifequal error "no" %}
<script>
  alert('Record Saved Successfully');
  window.location=('{% url 'view_bloodgroup' %}');
{% endifequal %}
{% ifequal error "yes" %}
<script>
  alert('Something went wrong, Try Again');
</script>
{% endifequal %}
{% endblock %}
```

#### ADD DONOR PAGE CODING

<body>

<div id="page-container" class="sidebar-o sidebar-inverse side-scroll page-header-fixed main-content-narrow">

```
{% include 'sidebar.html' %}
      {% include 'admin nav.html' %}
      <!-- Main Container -->
      <main id="main-container">
         <!-- Page Content -->
         <div class="content">
           <!-- Register Forms -->
           <h2 class="content-heading">Add Donor</h2>
           <div class="row">
             <div class="col-md-12">
               <!-- Bootstrap Register -->
               <div class="block block-themed">
                  <div class="block-header bg-gd-emerald">
                    <h3 class="block-title">Add Donor</h3>
                    <div class="block-options">
                      <button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="state toggle" data-action-mode="demo">
                         <i class="si si-refresh"></i>
                      </button>
                      <button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="content toggle"></button>
                    </div>
                  </div>
                  <div class="block-content">
                    <form method="post">
                    {% csrf token %}
                      <div class="form-group row">
                         <label class="col-12" >Full Name:</label>
                         <div class="col-12">
                           <input type="text" class="form-control" name="fullname"</pre>
value="" required='true'>
                         </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Contact:</label>
                         <div class="col-12">
                           <input type="text" class="form-control" name="contact"
value="" required='true'>
```

```
</div>
                      </div>
                      <div class="form-group row">
                        <lase="col-12" >Email ID:</label>
                        <div class="col-12">
                           <input type="email" class="form-control" name="emailid"</pre>
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Age:</label>
                        <div class="col-12">
                           <input type="number" class="form-control" name="age"</pre>
value="" required='true'>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Gender:</label>
                        <div class="col-12">
                           <input type="radio" name="gender" value="male"> Male
                           <input type="radio" name="gender" value="male"> Female
</div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Blood Group:</label>
                        <div class="col-12">
                          <select type="text" class="form-control" name="bloodgroup"</pre>
required="true" >
      <option value="">--Choose Blood Group--</option>
      {% for i in group %}
         <option value="{{i.bloodgroup}}">{{i.bloodgroup}}</option>
                  {% endfor %}
</select>
                        </div>
                      </div>
                      <div class="form-group row">
                        <label class="col-12" >Address:</label>
                        <div class="col-12">
```

```
<textarea class="form-control" name="address"
required='true'></textarea>
                         </div>
                       </div>
                       <div class="form-group row">
                         <label class="col-12" >Message:</label>
                         <div class="col-12">
                           <textarea class="form-control" name="message"
required='true'></textarea>
                         </div>
                       </div>
                       <div class="form-group row">
                         <div class="col-12">
                           <button type="submit" class="btn btn-alt-success"</pre>
name="submit">
                             <i class="fa fa-plus mr-5"></i> Add
                           </button>
                         </div>
                      </div>
                    </form>
                  </div>
                </div>
                <!-- END Bootstrap Register -->
             </div>
             </div>
         </div>
         <!-- END Page Content -->
       </main>
      <!-- END Main Container -->
     {% include 'adminfooter.html' %}
    </div>
    <!-- END Page Container -->
    <!-- Codebase Core JS -->
     <script src="{% static 'adminassets/js/core/jquery.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/popper.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/bootstrap.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.slimscroll.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.scrollLock.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.appear.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.countTo.min.js' %}"></script>
```

```
<script src="{% static 'adminassets/js/core/js.cookie.min.js' %}"></script>
    <script src="{% static 'adminassets/js/codebase.js' %}"></script>
  </body>
</html>
{% ifequal error "no" %}
<script>
  alert('Record Saved Successfully');
  window.location=('{% url 'donorlist' %}');
</script>
{% endifequal %}
{% ifequal error "yes" %}
<script>
  alert('Something went wrong, Try Again');
</script>
{% endifequal %}
{% endblock %}
                         VIEW DONOR LIST PAGE CODING
{% load static %}
{% block body %}
<html lang="en" class="no-focus"> <!--<![endif]-->
<title>Blood Bank Management System - Donor Detail</title>
k rel="stylesheet" href="{% static
'adminassets/js/plugins/datatables/dataTables.bootstrap4.min.css' %}">
    k rel="stylesheet" href="{% static 'adminassets/css/codebase.min.css' %}">
</head>
  <body>
    <div id="page-container" class="sidebar-o sidebar-inverse side-scroll page-header-</pre>
fixed main-content-narrow">
{% include 'sidebar.html' %}
      {% include 'admin_nav.html' %}
      <!-- Main Container -->
      <main id="main-container">
         <!-- Page Content -->
         <div class="content">
           <!-- Register Forms -->
```

```
<h2 class="content-heading">View Donor Detail</h2>
         <div class="row">
           <div class="col-md-12">
             <!-- Bootstrap Register -->
             <div class="block block-themed">
               <div class="block-header bg-gd-emerald">
                 <h3 class="block-title">View Donor Detail</h3>
                 <div class="block-options">
                   <button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="state toggle" data-action-mode="demo">
                     <i class="si si-refresh"></i>
                   </button>
                   <button type="button" class="btn-block-option" data-</pre>
toggle="block-option" data-action="content_toggle"></button>
                 </div>
               </div>
               <div class="block-content">
                 {% for i in donor %}
             <table border="1" class="table table-bordered table-striped table-vcenter
js-dataTable-full-pagination">
 Donor Number
 {{i.id}}}
 Donor Name
 {{i.fullname}}
Mobile Number
 {{i.mobileno}}
 Email
 {{i.emailid}}
Gender
 {{i.gender}}
 Age
 {{i.age}}}
 Blood Group
 {{i.group}}
```

```
Address
  {{i.address}}
 Message
  {{i.message}}
  Posting Date
  {{i.postingdate}}
 {% endfor %}
</div>
               </div>
             </div>
             <!-- END Bootstrap Register -->
     </main>
     <!-- END Main Container -->
    {% include 'adminfooter.html' %}
    </div>
    <!-- END Page Container -->
    <!-- Codebase Core JS -->
    <script src="{% static 'adminassets/js/core/jquery.min.js' %}"></script>
   <script src="{% static 'adminassets/js/core/popper.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/bootstrap.min.js' %}"></script>
```

```
<script src="{% static 'adminassets/js/core/jquery.slimscroll.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.scrollLock.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.appear.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.countTo.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/js.cookie.min.js' %}"></script>
    <script src="{% static 'adminassets/js/codebase.js' %}"></script>
</html>
{% endblock %}
                     MANAGE BLOOD GROUP PAGE CODING
{% load static %}
{% block body %}
<html lang="en" class="no-focus"> <!--<![endif]-->
  <head>
    <title>Blood Bank Management System - Manage Blood Group</title>
    k rel="stylesheet" href="{% static
'adminassets/js/plugins/datatables/dataTables.bootstrap4.min.css' %}">
    <link rel="stylesheet" id="css-main" href="{% static</pre>
'adminassets/css/codebase.min.css' %}">
  </head>
  <body>
    <div id="page-container" class="sidebar-o sidebar-inverse side-scroll page-header-</p>
fixed main-content-narrow">
      {% include 'sidebar.html' %}
      {% include 'admin_nav.html' %}
      <!-- Main Container -->
      <main id="main-container">
         <!-- Page Content -->
         <div class="content">
           <h2 class="content-heading">Manage Blood Group</h2>
```

```
<!-- Dynamic Table Full Pagination -->
         <div class="block">
          <div class="block-header block-header-default">
            <h3 class="block-title">Manage Blood Group</h3>
          </div>
          <div class="block-content block-content-full">
            <!-- DataTables init on table by adding .js-dataTable-full-pagination class,
functionality initialized in js/pages/be tables datatables.js -->
            <table class="table table-bordered table-striped table-vcenter js-
dataTable-full-pagination">
              <thead>
                Blood Group Name
                 15%;">Action
                 </thead>
              {% for i in group %}
                  {{forloop.counter}}
                  {{i.bloodgroup}}
                  <a href="{% url
'delete bloodgroup' i.id %}" onclick="return confirm('Do you really want to Delete
?');"><i class="fa fa-trash fa-delete" aria-hidden="true"></i>/a>
                {% endfor %}
              </div>
         </div>
         <!-- END Dynamic Table Full Pagination -->
        <!-- END Dynamic Table Simple -->
       <!-- END Page Content -->
     </main>
```

```
<!-- END Main Container -->
     {% include 'adminfooter.html' %}
    </div>
    <!-- END Page Container -->
    <!-- Codebase Core JS -->
     <script src="{% static 'adminassets/js/core/jquery.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/popper.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/bootstrap.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.slimscroll.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.scrollLock.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.appear.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/jquery.countTo.min.js' %}"></script>
    <script src="{% static 'adminassets/js/core/js.cookie.min.js' %}"></script>
    <script src="{% static 'adminassets/js/codebase.js' %}"></script>
    <!-- Page JS Plugins -->
    <script src="{% static 'adminassets/js/plugins/datatables/jquery.dataTables.min.js'</pre>
%}"></script>
    <script src="{% static</pre>
'adminassets/js/plugins/datatables/dataTables.bootstrap4.min.js' %}"></script>
    <!-- Page JS Code -->
    <script src="{% static 'adminassets/js/pages/be tables datatables.js' %}"></script>
  </body>
</html>
{% endblock %}
```

### **TESTING**

After completion of project, testing is needed to confirm the system can handle most of the situation. The testing is completed by follow a series of instruction to test the system ability. Before releasing the system, testing must be carried out carefully to increase the quality of system and provides better user experience for the users [3].

Software testing is employed to verify that the requirements have been correctly implemented, and that the software is fit for purpose, as well as identifying defects present in the software. There are various types of testing that may be conducted including unit testing, integration testing, system testing, performance testing, and user acceptance testing [5].

## 7.1 Unit Testing

Unit Testing is mainly to test the system's individual part of function. The unit test is requiring to input to the system with all of the possible input such as correct input, empty input, wrong format and others possible input. This is to ensure the system can validate the input as correct input or invalid input. The unit testing will be carrying out included user login system.

Unit testing is a practice wherein we automatically execute our code to check that it does what we think it should. With unit testing, we can build a possibly large collection of tests that can quickly be executed, for instance every time we change the code, to make sure everything that worked still does [4].

# 7.2 Integration Testing

In Integration Testing, the individual software modules are combined and tested as a whole unit. The integration testing generally follows unit testing where each module is tested as a separate unit. The main purpose of the integration testing is to test the functional and performance requirements on the major items of the project. All the modules of the project developed individually would be combined and tested as a whole system in the integration testing.

# 7.3 System Testing

The system testing is mainly done on the whole integrated system to make sure that the project has been developed meets all the requirements. The test cases for the system testing will be the combination of unit and integration tests.

# 7.4 Acceptance Testing

This testing is generally performed when the project is nearing its end. This test mainly qualifies the project and decides if it will be accepted by the users of the system. The users or the customers of the project are responsible for the test

## **LIMITATION**

## 8.1 Limitations

Besides the above achievements and the successful completion of the project, we still feel the project has some limitations, listed as below:

- 1. It is not a Large-scale system.
- 2. Only limited information provided by this system.
- 3. Since it is an offline project, operated from pc in which it is installed.
- 4. People who are not familiar with computers can't use this software.

## 8.2 Future Scope

This web application involves almost all the basic features of the blood bank and donor management. The future implementation will be online help for the users and chatting with website administrator.

### **8.3 Future Enhancement**

"Blood Bank and Donor Management System" provides various features, which complement the information system and increase the productivity of the system. These features make the system easily usable and convenient. Some of the important features included are listed as follows:

- Intelligent User Forms Design
  - Data access and manipulation through same forms
  - Access to most required information
- Data Security
- Restrictive data access, as per login assigned only.
- Organized and structured storage of facts.

- Strategic Planning made easy. No decay of old Records. Exact financial position of the Business.

## **CONCLUSION**

Technology is introducing new innovations day by day, thus reducing the time required to do things. The project entitled "Blood Bank and Donor Management System" is developed using HTML, CSS and JS as front end and Python language and SQLite database in back end to computerize the process of donor's management. The proposed system can be used to reduce the time required to deliver required blood to the needy in cases of emergency. The web application provides a way of communication and synchronization between the hospitals and the blood banks. It also provides them with the facility of communicating with the nearby donors in emergency. The database of the hospitals and the blood banks must be checked for consistency on regular basis for smooth working of the system. The proposed system uses Google Maps which provides the user with an efficient way of locating the nearby donors/blood banks.

## **BIBLIOGRAPHY**

- https://en.wikipedia.org/wiki/Blood\_bank
- https://www.geeksforgeeks.org/python-django/
- <a href="https://www.javatpoint.com">https://www.javatpoint.com</a>
- <a href="https://www.python.org/">https://www.python.org/</a>
- <a href="https://www.tutorialspoint/">https://www.tutorialspoint/</a>
- https://www.medicinenet.com/blood\_bank/definition.html
- https://www.wbhealth.gov.in/pages/blood bank
- <a href="https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/blood-banking">https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/blood-banking</a>

### REFERENCES

- 1. K Ekanayaka, E. M. S. S., & Wimaladharma, (2015). Blood bank management system. *Technical session-computer science and technology & industrial information technology*, 7.
- 2. Sulaiman, S., Hamid, A. A. K. A., & Yusri, N. A. N. (2015). Development of a blood bank management system. Procedia-Social and Behavioral Sciences, 195, 2008-2013.
- 3. Cheema, A. S., Srivastava, S., Srivastava, P. K., & Murthy, B. K. (2015, December). A standard compliant blood bank management system with enforcing mechanism. In 2015 International Conference on Computing, Communication and Security (ICCCS) (pp. 1-7). IEEE.
- 4. Adarsh, N., Arpitha, J., Ali, M. D., Charan, N. M., & Mahendrakar, P. G. (2014, July). Effective blood bank management based on RFID in real time systems. In 2014 International Conference on Embedded Systems (ICES) (pp. 287-290). IEEE.
- 5. Selvamani, K., & Rai, A. K. (2015). A novel technique for online blood bank management. Procedia Computer Science, 48, 568-573.
- 6. Sandaruwan, P. A. J., Dolapihilla, U. D. L., Karunathilaka, W. N. R., Wijayaweera, W. A. D. T. L., Rankothge, W. H., & Gamage, N. D. U. (2020, December). Towards an Efficient and Secure Blood Bank Management System. In 2020 IEEE 8th R10 Humanitarian Technology Conference (R10-HTC) (pp. 1-6). IEEE.
- 7. PRASANNA, K. G., & REDDY, P. S. (2020). EMERGENCY BLOOD BANK MANAGEMENT SYSTEM.
- 8. Kulshreshtha, V., & Maheshwari, S. (2012). Benefits of management information system in blood bank. International Journal of Engineering and Science, 1(12), 5-7.

- 9. Mohanty, M. N., Mohapatra, S. K., & Pradhan, B. B. (2019, December). Multi-Agent Approach based Blood Bank Management System for Emergency Patients. In Proceedings of the 2019 Annual Meeting on Management Engineering (pp. 75-81).
- 10. Bhardwaj, A., Sharma, A., & Shrivastava, V. K. (2012). Data mining techniques and their implementation in blood bank sector—a review. International Journal of Engineering Research and Applications (IJERA), 2(4), 1303-1309.
- 11. Cetin, E., & Sarul, L. S. (2009). A blood bank location model: A multiobjective approach. European Journal of Pure and Applied Mathematics, 2(1), 112-124.
- 12. LIANG, J., LIU, L., & XIAO, W. (2012). How to Well Perform the Blood Bank Management Inspection Input. Chinese Health Quality Management, 03.
- 13. Catassi , C. A., & Peterson, E. L. (1967). The blood inventory control system—helping blood bank management through computerized inventory control. Transfusion, 7(1), 60-69
- 14. Kulshreshtha, V., & Maheshwari, S. Role of Software Engineering in Blood Bank Management Information System., Chicago,
- 15. Esmail, M. Y., & Osman, Y. S. H. (2018, August). Computerized Central Blood Bank Management System (CCBBMS). In 2018 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE) (pp. 1-5). IEEE.