Study and Development of a Blood Donation System

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Submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SONARGAON UNIVERSITY (SU)

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APPROVAL

The Project titled **"Blood Gratuity Supervision System and its Significance'** 'submitted by Md. Sagor Hossain (CSE2001019195), Md. Shoraf Bhuiyan (CSE2001019069), Sanjida Akter Shimu (CSE1903018018) to the Department of Computer Science and Engineering, Sonargaon University (SU), has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents.

Board of Examiners

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……..

(Examiner Name & Signature) **Examiner 1**
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DECLARATION

We, hereby, declare that the work presented in this outcome of the investigation performed by us under the supervision of Nabila Anwar, Lecturer, Department of Computer Science and Engineering, Sonargaon University, Dhaka, Bangladesh. We reaffirm that no part of this Project and thereof has been or is being submitted elsewhere for the award of any degree or diploma.

Countersigned

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ABSTRACT

Blood donation is a vital part of worldwide healthcare. It relates to blood transfusion as a life-sustaining and life-saving procedure as well as a form of therapeutic phlebotomy as a primary medical intervention. Over one hundred million units of blood are donated each year throughout the world. The modern world almost wholly depends on advance technology. Healthcare is now also a part of online based world. Blood donor management is basically a web-based application that has been chosen to donate and receive blood. This application is based on an online platform. It is user-friendly, simple, fast, and cost-effective which saves time and lives. This application has many features and the main feature is that receiver can find donors online for blood management. Another important feature is that receiver can send a request for blood and if the blood group matches then the donor can accept the blood request.

ACKNOWLEDGMENT

At the very beginning, we would like to express our deepest gratitude to the Almighty Allah for giving us the ability and the strength to finish the task successfully within the scheduled time.

We are auspicious that we had the kind associations as well as supervision of **Nabila Anwar**, Lecturer, Department of Computer Science and Engineering, Sonargaon University whose hearted and valuable support with best concern and direction acted as necessary recourse to carry out our project.

We would like to convey our special gratitude to **Brig. Gen. (Retd) Professor. Habibur Rahman Kamal, ndc, psc**, Dean, Faculty of Science and Engineering for his kind concern and precious suggestions.

We are also thankful to all our teachers during our whole education, for exposing us to the beauty of learning.

Finally, our deepest gratitude and love to my parents for their support, encouragement, and endless love.

LIST OF ABBREVIATION

BGS	**Blood Gratuity Supervision**
CSS	**Cascading Sheets Style**
HTML	**Hyper Text Markup Language**
HTTP	**Hyper Text Transfer Protocol**
UI	**User Interface**
JS	**JavaScript**
XAMMP	**X - Operating System, Apache, MySQL, Php, Perl**

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CHAPTER 1

INTRODUCTION TO BLOOD GRATUITY SUPERVISION

1.1 Introduction

This project is aimed to develop online blood donation information. The entire project has been developed keeping in view of the distributed client server computing technology, in mind.

This project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned, using the constructs of oracle and all the user interfaces have been designed using the HTML, CSS and JS.

The database connectivity is planned using the oracle database connectivity. The standards of security and data protective mechanism have been given a big choice for proper usage.

The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff.

1.2 Motivation

Analysis of the association between donor status and motivational factors is presented. The donors who were motivated to donate when someone they know is in need were first-time donors and 91.8% were repeat donors. The attitude of staff was important to the majority of both first-time donors and repeat donors. Further, the desire to help a person in need of blood as a motivator was significantly associated with donor status as approximately four-fifths of first-time donors and repeat donors endorsed this motivator. A statistically significant number of the donors who endorsed incentives as a motivator were first-time donors. Only 42.4%of them were repeat donors. Slightly over three-fourths, 77.2% of the participants who considered a reminder to donate when there is a shortage of blood as a motivator were repeat donors. Of the donors that endorsed appeals on radio, television or from a famous person as a motivator, was first-time donors while of them were repeat donors.

1.3 Problem Definition

Entering the details about the blood groups, members, phone number, addresses etc. And tracking the database is complicated when the details are maintained manually. This makes the maintenance of schedule erroneous.

1.4 What is 'Blood Gratuity Supervision'?

"Donor management" is simply the process of tracking the details of your donors and your interactions with them, and then using that information appropriately.

1.5 Objectives

This is an online application which allows you to access the information about Blood donor, readily scalable and adaptable to meet the complex need of blood recipient and Blood Banks who are key facilitator for the & healthcare Sector.

CHAPTER 2

MATHODOLOGY AND BACKGROUND STUDY

2.1 Methodology

A cross-sectional study was conducted at the donor clinic of Tamale Teaching Hospital in the Northern Region of Ghana from 06 January to 02 February 2018. Purposive sampling technique was used to sample 355 eligible first-times and repeat whole blood donors. Data were collected face-to-face with a 27-item self-administered questionnaire. Chi-square test was used to determine the association between donor status and the motivators of blood donation, barriers to blood donation and the socio-demographic characteristics of donors.

2.2 Background Study

Blood transfusion is an essential component of the health care system of every country and patients who require blood transfusion service as part of the clinical management of their condition have the right to expect that sufficient and safe blood will be available to meet their needs. However, this is not always the case, especially in developing countries. To recruit and retain adequate regular voluntary non-remunerated blood donors the motivators and barriers of donors must be understood. Equally important to this goal is the knowledge of blood donors.

2.3 Design Requirements

Software design is a process to transform user requirements into some suitable form, which helps the programmer in software coding and implementation.

For assessing user requirements, an SRS (Software -requirement Specification) document is created whereas for coding and implementation, there is a need of more specific and detailed requirements in software terms. !he output of this process can directly be used into implementation in programming languages. Software design is the first step in SDLC (Software Design life cycle), which moves the concentration from problem domain to solution domain. It tries to specify how to fulfill the requirements mentioned in SRS.

CHAPTER 3

BLOOD DONORS, PATIENT AND DONOR SAFETY

3.1 INTRODUCTION

Blood, fluid that transports oxygen and nutrients to the cells and carries away carbon dioxide and other waste products. Technically, blood is a transport liquid pumped by the heart (or an equivalent structure) to all parts of the body, after which it is returned to the heart to repeat the process. Blood is both a tissue and a fluid. It is a tissue because it is a collection of similar specialized cells that serve particular functions. These cells are suspended in a liquid matrix (plasma), which makes the blood a fluid. If blood flow ceases, death will occur within minutes because of the effects of an unfavorable environment on highly susceptible cells.

3.2 Types of donation

Blood donations are divided into groups based on who will receive the collected blood. An 'allogeneic' (also called 'homologous') donation is when a donor gives blood for storage at a blood bank for transfusion to an unknown recipient. A 'directed' donation is when a person, often a family member, donates blood for transfusion to a specific individual. Directed donations are relatively rare when an established supply exists. A 'replacement donor' donation is a hybrid of the two and is common in developing countries. In this case, a friend or family member of the recipient donates blood to replace the stored blood used in a transfusion, ensuring a consistent supply. When a person has blood stored that will be transfused back to the donor at a later date, usually after surgery, that is called an 'autologous donation'. Blood that is used to make medications can be made from allogeneic donations or from donations exclusively used for manufacturing.

3.3 Who need blood?

Millions of blood transfusions are needed every year for various reasons.

Serious-injuries/surgery

a common need for blood donations is after a major disaster causing excessive bleeding has occurred such as a road traffic accident of a natural or another disaster. The average car accident victim can need as many as 100 pints (4.5 liters) of blood. Blood donations are

also needed for casualties of war. Although not necessarily a major injury, blood may also be needed when a large amount of blood is lost through other mechanisms such as surgery.

Infections

There are a number of severe infections that can prevent the body from producing different blood components.

Blood-related conditions

Red Blood Cell Disorders

Anemia is an illness resulting from a deficiency in red blood cells or abnormal hemoglobin— an iron-rich component of red blood cells that carries oxygen to all the cells in the body. As a result, individuals with this condition feel lethargic. Some forms of anemia are so severe that they need to be treated with blood transfusions.

Iron-deficiency anemia: In severe cases of iron deficiency, anemia can be treated in the short term with a blood transfusion. The transfusion immediately treats the anemia by providing blood with iron that can be used by the recipient. However, this is a temporary solution. Other treatments will be needed to resolve the illness.

Aplastic anemia: It is a form of anemia resulting from bone marrow failure. All types of blood cells are made from stem cells in bone marrow. In the case of bone marrow failure, the stem cells are damaged and cannot produce white blood cells, red blood cells, or platelets. Blood transfusions are commonly performed to stop the bleeding (platelet transfusion) and temporarily treat aplastic anemia symptoms such as tiredness (red blood cell donation). These transfusions provide blood cells that the recipient cannot produce on their own. The number of transfusions that a recipient can obtain is limited by antibodies that they may develop against the transfused blood and the accumulation of iron. However, medications can be taken to suppress the immune system’s response to the blood and to remove the excess iron.

Chronic Diseases that cause anemia: Anemia can be caused by several diseases including chronic infections, inflammatory, and autoimmune diseases such as Charon’s disease, systemic lupus, and rheumatoid arthritis. Blood transfusions may be provided to treat severe anemia symptoms resulting from these conditions.

Thalassemia is an inherited blood disorder, commonly occurring in individuals of Asian or African descent, in which the patient cannot produce hemoglobin. The only treatment available for thalassemia is a regular blood transfusion, which provides the recipient with the normal red blood cells it needs to transport oxygen. Iron chelators are also taken to prevent iron build-up. Blood transfusions are typically needed every 2 to 4 weeks.

Sickle cell disease is another inherited red blood cell disorder. Individuals with this disease have abnormal shaped hemoglobin, which causes the red blood cell to take on a sickle shape that can block or slow down blood flow. While blood transfusion will not treat sickle cell anemia, it can temporarily treat complications related to sickle cell disease such as severe anemia.

White Blood Cell Disorders

Lymphoma is cancer that originates in the lymphatic system, a part of the immune system that fights infection and disease. The lymphatic system includes lymph nodes, the spleen, the thymus, bone marrow and other glands.

Leukemia originates in tissues that generate blood such as bone marrow and the lymphatic system. Patients with leukemia and lymphoma generate abnormal white blood cells the rapidly multiple.

Multiple myelomas originate in white blood cells called plasma cells. Plasma cells normally generate antibodies to fight invading organisms. However, in the case of multiple myeloma, the cells accumulate in the bone marrow and produce abnormal proteins that can cause harm. In the case of these white blood cell disorders, blood transfusions may be provided to replenish blood cell components that may be lost due to damage to the bone marrow. Many chemotherapy drugs that are taken to treat these diseases can also reduce blood cell production, and blood transfers are provided to make up for this loss.

A myelodysplastic syndrome is a group of diseases in which bone marrow produces a low number of fully matured or functional white blood cells, red blood cells, and platelets, which can result in symptoms similar to anemia. In some cases, patients with the myelodysplastic syndrome may be treated with a blood transfusion of platelets or red blood cells to stop bleeding a relieve anemia symptoms.

Platelets

Thrombocytopenia diseases (Heparin-induced thrombocytopenia and thrombotic thrombocytopenic purpura) are conditions in which the patient has a low level of platelets, the cells responsible for blood clotting. While blood transfusions are rarely used to treat this disease, they may be used in cases of severe bleeding or when the patient is at risk of bleeding.

Plasma Disorders

Hemophilia is an inherited disease in which the patient has a low level of one of many clotting factors (clotting factor VIII, IX or XI) found in plasma. This prevents individuals with hemophilia from clotting resulting in excessive bleeding from even minor injuries. Hemophilia is treated with blood clotting factors derived from plasma donations.

Von Will brand disease is another inherited bleeding disease. Patients with this disease have low levels of a protein called the Von Will brand factor. This factor allows platelets to stick together and clot. Without this factor, individuals with Von Will brand disease experience excessive bleeding from minor cuts. Among many treatments for managing this disease are products derived from plasma.

Excessive blood loss

There are several conditions that cause significant blood loss.

3.4 Donor safety

The donor is also examined and asked specific questions about their medical history to make sure that donating blood is not hazardous to their health. The donor's hematocrit or hemoglobin level is tested to make sure that the loss of blood will not make them anemic, and this check is the most common reason that a donor is ineligible. Accepted hemoglobin levels for blood donations, by the American Red Cross, is 12.5g/dL (for females) and 13.0g/dL (for males) to 20.0g/dL, anyone with a higher or lower hemoglobin level cannot donate. Pulse, blood pressure, and body temperature are also evaluated. Elderly donors are sometimes also deferred on age alone because of health concerns. In addition to age, weight and height are important factors when considering the eligibility for donors. For example, the American Red Cross requires a donor to be 110

pounds (50 kg) or more for whole blood and platelet donation and at least 130 pounds (59 kg) (males) and at least 150 pounds (68 kg) (females) for power red donations (double red erythrocytapheresis). The safety of donating blood during pregnancy has not been studied thoroughly, and pregnant women are usually deferred until six weeks after the pregnancy.

CHAPTER 4

DESIGN AND WORKING OF OUR WEBSITE

4.1 Introduction

Software design is a process to transform user requirements into some suitable form, which helps the programmer in software coding and implementation.

For assessing user requirements, an SRS (Software Requirement Specification) document is created whereas for coding and implementation, there is a need of more specific and detailed requirements in software terms. The output of this process can directly be used into implementation in programming languages.

Software design is the first step in SDLC (Software Design life cycle), which moves the concentration from problem domain to solution domain. It tries to specify how to fulfill the requirements mentioned in SRS.

4.2 Software Design Level

Software design yields three levels of results:

- Architectural Design - The architectural design is the highest abstract version of the system. It identifies the software as a system with many components interacting with each other. At this level, the designers get the idea of proposed solution domain.
- High-Level Design - The high-level design breaks the 'single entity-multiple component' concept of architectural design into less-abstracted view of sub-systems and modules and depicts their interaction with each other. High-level design focuses on how the system along with all of its components can be implemented in forms of modules. It recognizes modular structure of each sub-system and their relation and interaction among each other.
- Detailed Design - Detailed design deals with the implementation part of what is seen as a system and its sub-systems in the previous two designs. It is more detailed

towards modules and their implementations. It defines logical structure of each module and their interfaces to communicate with other modules.

4.3 Working of our Website

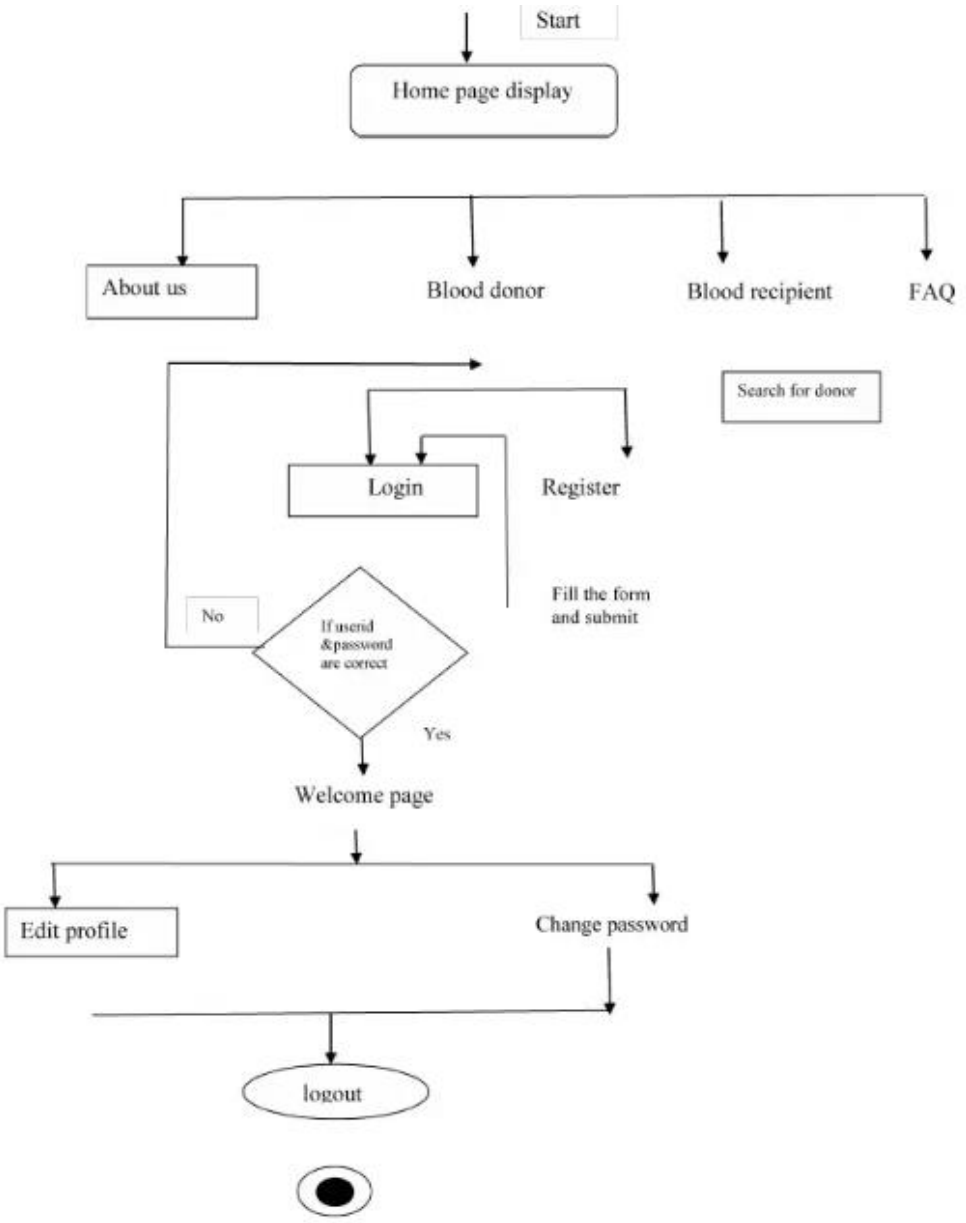

Figure:1.1 (Website Working Process)

Through this application any person who is interested in donating the blood can register himself by entering the details.

Acceptor can find a donor by searching in this website and can contact him through the results displayed in this site, to request blood.

Admin is the main authority who can do addition, deletion, and modification if required.

CHAPTER 5

DATA HANDLING AND TECHNOLOGIES USED

5.1 Entities:

Entities can be a person or can be an organization to donate blood. He / She or they can be register them self or organization by user name with details.

- User
- Donor details

5.2 Entities with attributes:

Entities should put a unique user name and password to keep their donation registration safe and secure for future use. They have to provide their details as well as to get the right donor or patients.

A. user

- User name
- Password

B. Donor details

- Donor name
- Age
- Gender
- Address
- Phone number
- Email

5.3 Description of technologies used

Apache XAMPP

XAMPP stands for Cross-Platform (X), Apache (A), MySQL (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing purposes. Everything you need to set up a web server – server application (Apache), database (MySQL), and scripting language (PHP) – is included in a simple extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server is extremely easy as well. Web development using XAMPP is especially beginner friendly, as this popular PHP and MySQL for beginner's course will teach you.

CHAPTER 6

COADING

6.1 Coding Of Entire Website

```
<!DOCTYE html>

<html>

<head>

<title>Blood Donation</title>

<link rel="stylesheet" href="https://unpkg.com/purecss@1.0.0/build/pure-min.css">

<link rel="stylesheet" type="text/css" href="css/bootstrap.css">

<link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.2.0/css/all.css"
integrity="sha384-hWVjflwFxL6sNzntih27bfxkr27PmbbK/iSvJ+a4+0owXq79v+lsFkW54bOGbiDQ"
crossorigin="anonymous">

<link href="https://fonts.googleapis.com/css?family=Herr+Von+Muellerhoff" rel="stylesheet">

<link
href="https://fonts.googleapis.com/css?family=Raleway:300,300i,400,400i,500,500i,600,600i,70
0,700i,800,800i" rel="stylesheet">

<link
href="https://fonts.googleapis.com/css?family=Montserrat:300i,400,400i,500,500i,600,600i,700
,700i,800,800i,900" rel="stylesheet">

<link
href="https://fonts.googleapis.com/css?family=Open+Sans:400,400i,600,600i,700,700i,800,800i
" rel="stylesheet">

<link rel="stylesheet" href="css/owl.carousel.min.css">

<link rel="stylesheet" href="css/owl.theme.default.min.css">

<link rel="stylesheet" href="css/animate.css">

<link rel="stylesheet" type="text/css" href="style.css">

<link rel="stylesheet" type="text/css" href="css/hover.css">
```

```
</head>
<body>
<section class="topbar">
<div class="container">
<div class="colnmns">
<div class="gmail-text">
<i class="fas fa-envelope"></i>
<p>sagorrajababu89@gmail.com</p>
<i class="fas fa-phone"></i>
<p> +88 01745998083</p>
</div>
</div>
</div>
</section>
<header class="header">
<div class="container">
<nav class="navbar navbar-default">
<div class="contaner">
<div class="navbar-header">
<a class="navbar-brand" href="#">
<img src="images/Blood.png">
</a>
</div>
<div class="collapse navbar-collapse" id="bs-example-navbar-collapse-1">
<ul class="nav navbar-nav navbar-right mein-menu">
<li><a href="#home">home</a></li>
<li><a href="#resort">About</a></li>
```

```
<li><a href="#important">important</a></li>

<li><a href="#voluntears">voluntears</a></li>

<li><a href="#Reviewes">Reviewes</a></li>

<li><a href="#Contactus">Contact Us</a></li>

</ul>

</div>

</div>

</nav>

</div>

</header>

<section class="hero-slider" id="home">


<!-- Set up your HTML -->

<div class="owl-carousel">

<div>

<div class="welcome">

<div class="container">

<div class="slider-content wow bounceInLeft">

<h1 class="wow bounceInDown" data-wow-duration="2s" data-wow-delay="1s">Welcome For Donate</h1>

<h4>Start a brand new blood donation & campaign</h4>

<div class="wel-btn">

<a href="#">Larn More</a>

</div>

</div>

</div>

</div>

</div>
```

</section>

<section class="resort" id="resort">

<img class="wow zoomIn"data-wow-duration="2s" data-wow-delay=".3s" src="images/blood-2.png">

<h3 class="wow bounceInDown" data-wow-duration="2s" data-wow-delay="1s">Why you should donate your blood</h3>

Blood donation is a solemn virtue that can save lives of many. In our country, road accidents are

taking place everyday. Apart from injured people from the accidents, there are many patients

of surgeries,

Especially heart surgeries who require emergency blood. Also there are millions

of patients of thalassemia and other similar diseases who need blood transfusion every 15 days

or so. Blood cannot be made in a laboratory. So other than us humans, there is no alternative

way to get blood.

```
</div>

</div>

</section>

<section class="section-global" id="">

<div class="container">

<div class="service-text">

<h1><span class="wow zoomIn" data-wow-duration=".4s" data-wow-delay=".2s" style="visibility: visible; animation-duration: 0.4s; animation-delay: 0.2s; animation-name: zoomIn;">Introduction and <span class="wow zoomIn" data-wow-duration=".4s" data-wow-delay=".2s" style="visibility: visible; animation-duration: 0.4s; animation-delay: 0.2s; animation-name: zoomIn;">Motivation</span></span></h1>

</div>

<div class="row-gap">

<div class="row row-grid justify-content-around align-items-center">

<div class="col-lg-6">

<div class="">

<h2 class="">Mythology</h2>

<p class="lead my-4">Myth: Donating blood makes you gain weight. Myth: Donating blood takes a long time. Myth: Donating blood will impact my ability to do my daily activities. Myth: Giving blood will harm me by taking away red cells or platelets that my body needs to function.</p>

</div>

</div>


<div class="col-lg-6">

<img alt="Image placeholder" src="images/bp2.JPG" class="img-fluid img-center">

</div>

</div>

<div class="row row-grid justify-content-around align-items-center">

<div class="col-lg-6">

<img alt="Image placeholder" src="images/bp1.JPG" class="img-fluid img-center">
```

```
</div>

<div class="col-lg-6">

<div class="">

<h2 class="">Donar</h2>

<p class="lead my-4">There is no specific amount that we can point to and say, “that's a major gift” because it differs depending on the organization.</p>

</div>

</div>

</div>

<div class="row row-grid justify-content-around align-items-center">

<div class="col-lg-6">

<div class="">

<h2 class="">Patients</h2>

<p class="lead my-4">Every day, blood donors help patients of all ages: accident and burn victims, heart surgery and organ transplant patients, and those battling cancer.</p>

</div>

</div>


<div class="col-lg-6">

<img alt="Image placeholder" src="images/bp3.JPG" class="img-fluid img-center">

</div>

</div>

</div>

</div>

</section>

<section class="service" id="important">

<div class="container">

<div class="service-text">
```

<h1><span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">About Important to <span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">Donate Blood</h1>

</section>

<section class="ww-tb">

<ul class="nav nav-tabs tabs-left" role="tablist">

<li role="presentation" class="active">

Cancer Patients Need Blood

<li role="presentation">

Diversity in the Blood Supply

<li role="presentation">

Power Red Donation

<li role="presentation">

Plasma Donation

<li role="presentation">

Plasma used for

<li role="presentation">

Platelets and Thrombocytopenia

<!-- <li role="presentation">

EXTENSION PER TRACK$40

 -->

Go For Donate

<h3 class="wow bounceInDown" data-wow-duration="2s">Cancer Patients Need Blood</h3>

For cancer patients, blood transfusions can act as a resource to implement platelets back into the body after heavy treatments such as chemo or radiation therapy.

<h3>Diversity in the Blood Supply</h3>

People come in all different shapes, sizes and blood types. Most blood types fall into one of the four major groups: A, B, AB, O. However, some people have rare blood types that fall outside the major groups, and for these patients, we need a more diverse blood supply.

<img src="images/bb.png">

<h3>Power Red Donation</h3>

Power Red is similar to a whole blood donation, except a special machine is used to allow you to safely donate two units of red blood cells during one donation while returning your plasma and platelets to you

<img src="images/cc.jpg">

<h3>Plasma Donation</h3>

Plasma is the liquid portion of blood. About 55% of our blood is plasma, and the remaining 45% are red blood cells, white blood cells and platelets that are suspended in the plasma,

Plasma is about 92% water. It also contains 7% vital proteins such as albumin, gamma globulin and anti-hemophilic factor, and 1% mineral salts, sugars, fats, hormones and vitamins

<img src="images/dd.png">

<h3>plasma used for</h3>

Plasma is commonly given to trauma, burn and shock patients, as well as people with severe liver disease or multiple clotting factor deficiencies. It helps boost the patient’s blood volume, which can prevent shock, and helps with blood clotting. Pharmaceutical companies use plasma to make treatments for conditions such as immune deficiencies and bleeding disorders

<img src="images/ImageForArticle_22459_16516995120156132.webp">

<h3>Platelets and Thrombocytopenia</h3>

Platelets, or thrombocytes, are small, colorless cell fragments in our blood that form clots and stop or prevent bleeding. Platelets are made in our bone marrow, the sponge-like tissue inside our bones. Bone marrow contains stem cells that develop into red blood cells, white blood cells, and platelets.

</section>

<section class="angel-item">

```
<div class="container">

<div class="row">

<div class="col-md-3">

<div class="item-Skin-Care">

<div class="item-bdr-text">

<img src="images/p1.jpg">

<div class="Skin-Care-text">

<a href="#"><h3 class="wow bounceInDown" data-wow-duration="2s" data-wow-
delay=".5s">Platelets</h3></a>

</div>

</div>

</div>

</div>

<div class="col-md-3">

<div class="item-Skin-Care">

<div class="item-bdr-text">

<img src="images/p2.jpg">

<div class="Skin-Care-text">

<a href="#"><h3 class="wow bounceInLeft" data-wow-duration="2s" data-wow-
delay=".5s">Plasma</h3></a>

</div>

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</div>

</div>

<div class="col-md-3">

<div class="item-Skin-Care">

<div class="item-bdr-text">

<img src="images/p3.jpg">
```

```
<div class="Skin-Care-text">

<a href="#"><h3 class="wow bounceInRight" data-wow-duration="2s" data-wow-delay=".5s">Red Blood Cells </h3></a>

</div>

</div>

</div>

</div>

<div class="col-md-3">

<div class="item-Skin-Care">

<div class="item-bdr-text">

<img src="images/p4.jpg">

<div class="Skin-Care-text">

<a href="#"><h3 class="wow bounceInUp" data-wow-duration="2s" data-wow-delay=".5s">Cryoprecipitate</h3></a>

</div>

</div>

</div>

</div>

</div>

</div>

</section>

<section class="service" id="voluntears">

<div class="container">

<div class="service-text">

<h1><span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">Our </span><span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">voluntears</span></h1>

</div>

</div>
```

```
</section>
<section class="products" id="Reviewes">
<div class="container">
<div class="row">
<div class="col-md-4">
<div class="product-box">
<div class="product-box-img">
<img src="images/v1.webp">
<div class="product-box-btn">
</div>
</div>
</div>
</div>
<div class="col-md-4">
<div class="product-box">
<div class="product-box-img">
<img src="images/v2.webp">
<div class="product-box-btn">
</div>
</div>
</div>
</div>
<div class="col-md-4">
<div class="product-box">
<div class="product-box-img">
<img src="images/v3.jpeg">
<div class="product-box-btn">
```

```
</div>

</div>

</div>

</div>

</div>

</div>

</section>

<section class="section-review">

<div class="webyaam">

<marquee class="animate-text-inner">Come For Donate</marquee>

</div>

<div class="container">


<div class="service-text">

<h1><span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">D</span>onor's Reviewe<span class="wow zoomIn"data-wow-duration=".4s" data-wow-delay=".2s">s</span></h1>

</div>

<div class="row">

<div class="col-md-6">

<div class="customer-fluid">

<div class="row">

<div class="col-md-4 customer-img-col">

<div class="customer-img">

<img src="images/bd2.jpeg">

</div>

</div>

<div class="col-md-8">
```

In reality, I think I look away so that I don't accidentally flinch and botch the insertion. Around 10 minutes pass, and my donation is complete. But, only after regular hand exercises, bum clenches, and leg raising to keep the blood pumping.

<h3>SELINA HUBB</h3>

<h4>Actress</h4>

<img src="images/bd1.webp">

You can't get AIDS or any other infectious disease from giving blood because we always use new, sterile needles that are discarded after one use.

<h3>JANE SMITH</h3>

<h4>Student</h4>

```
</div>

</div>

</div>

</div>

</div>

</section>

<section class="section-global" id="Contactus">

<div class="container">

<div class="row">

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

<form class="contact-form gform"
action="https://script.google.com/macros/s/AKfycbxTabzydo7o-jY-UWEJ_tSFdG-
E47IMQwjNAReqrFq8dilRL5TJp02q_nfMo82NApF3/exec" method="post">

<div class="row">

<div class="col-lg-6 col-sm-6">

<div class="form-floating form-group">

<label for="patientName" class="form-label">Patient Name</label>

<input type="text" name="name" class="form-control" id="patientName" placeholder="Patient
Name" value="" required="">




</div>

</div>

<div class="col-lg-6 col-sm-6">

<div class="form-floating form-group">

<label for="emailAddress" class="form-label">Email Address</label>

<input type="email" name="email" class="form-control" id="emailAddress" placeholder="Email
Address" value="" required="">

</div>
```

```
</div>

<div class="col-lg-6 col-sm-6">

<div class="form-floating form-group">

<label for="phoneNumber" class="form-label">Phone Number</label>

<input type="text" name="phonenumber" class="form-control" id="phoneNumber"
placeholder="Phone Number" value="" required="">

</div>

</div>

<div class="col-lg-6 col-sm-6">

<div class="form-floating form-group">

<label for="patientName" class="form-label">Address</label>

<input type="text" name="address" class="form-control" id="addressName"
placeholder="Address" value="" required="">


</div>

</div>

<div class="col-lg-12 col-sm-6">

<div class="form-floating form-group">

<label for="patientName" class="form-label">Message</label>

<textarea class="form-control" name="message" id="exampleFormControlTextarea1"
rows="3"></textarea>


</div>

</div>


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

<button type="submit" class="main-btn hvr-grow">

<span>Submit</span>

</button>
```

```
</div>

</div>

<div style="display:none" class="thankyou_message">

<!-- You can customize the thankyou message by editing the code below -->

<h2><em>Thanks</em> for contacting us! We will get back to you soon!

</h2>

</div>

</form>

</div>


</div>

</div>

</section>

<button onclick="topFunction()" id="myBtn" title="Go to top">Top</button>

<script src="js/jquery.min.js"></script>

<script src="js/bootstrap.js"></script>

<script src="jquery.min.js"></script>

<script src="js/owl.carousel.min.js"></script>

<script>

$(document).ready(function(){

$(".owl-carousel").owlCarousel({

items: 1,

dots: false,

nav: false,

loop: true,

autoplay: false,

autoplayTimeout:3000
```

```
});

});

</script>

<script src="js/wow.min.js"></script>

<script>

new WOW().init();

</script>

<script data-cfasync="false" type="text/javascript" src="form-submission-handler.js"></script>

<script>


let mybutton = document.getElementById("myBtn");

window.onscroll = function() {scrollFunction()};

function scrollFunction() {

if (document.body.scrollTop > 20 || document.documentElement.scrollTop > 20) {

mybutton.style.display = "block";

} else {

mybutton.style.display = "none";

}

}

function topFunction() {

document.body.scrollTop = 0;

document.documentElement.scrollTop = 0;

}

</script>

</body>

</html>
```

CHAPTER 7

OUTPUT

HOME PAGE

This is the overview of web home page. Here we are showing all the information to process ahead for registration and also for get the ideas for patients. In the top of the page having contact details.

Figure:1.2 (Website Home Page)

ABOUT US PAGE

In the about us page, people will get information about our organization to donate or take blood donation for patients. Here all segments written in clearly who can donate or who are the actual patients to get blood donation for their health recover. Here have all the lists of the patients who need blood to make their health well.

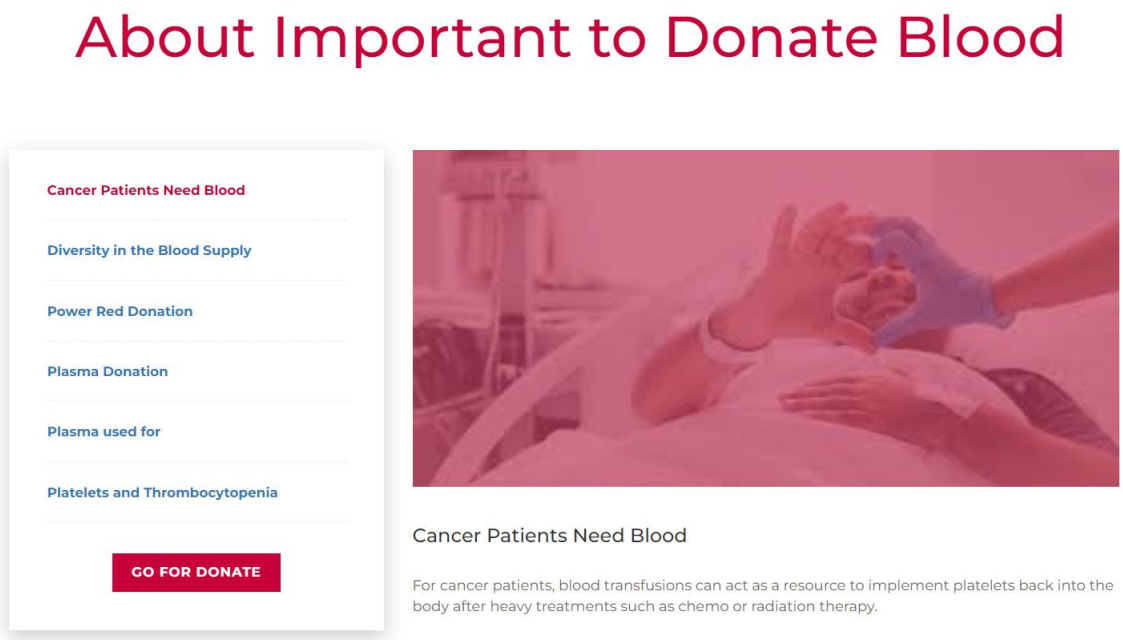

Figure:1.3 (Website About Us Page)

DONOR REGISTRATION FROM

This is the form to get registered for blood donation. Who are interested to donate blood, they can register them self by filling up the all blank boxes. And here is the message box to put their comment of required things. By fill up this form, patients will also reach to us, who need blood as well.

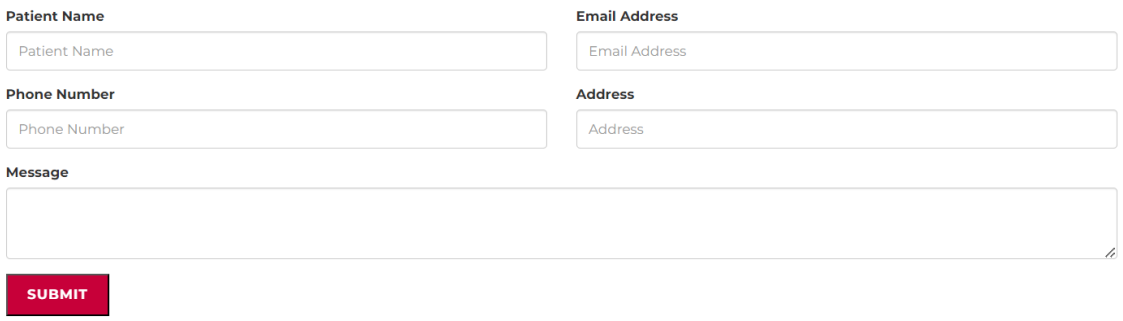

Figure:1.4 (Donor Registration Form)

CHAPTER 8

CONCLUSION, LIMITATIONS AND FUTURE WORKS

8.1 Conclusion

It has been a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of not only programming in in JS and web servlets web based application and to some extent databases, but also about all handling procedure related with "Online Blood Donation Management".

It also provides knowledge about the latest technology used in developing web enabled application and client-server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

8.2 Limitations

- The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
- Training for simple computer operations is necessary for the users working on the system.

8.3 Future Work

We stated that blood transfusions have been decreasing for the past seven years and are expected to increase slowly in the near future. A lower transfusion rate appears to be advantageous for recipients because a liberal transfusion policy has been associated with poorer outcomes including increased mortality, multi-organ failure, increased ICU and hospital stays.

REFERENCES

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