

PLASMA DONOR APPLICATION

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ABSTRACT: During the COVID 19 crisis, the requirement of plasma became a high priority and the donor count has become low. Saving the donor information and helping the needy by notifying the current donors list, would be a helping hand. In regard to the problem faced, an application is to be built which would take the donor details, store them and inform them upon a request. This plasma therapy is considered to be safe & promising. This system proposed here aims at connecting the donors & the patients by an online application. By using this application, the users can either raise a request for plasma donation or requirement. This system is used if anyone needs a Plasma Donor.

1.

INTRODUCTION

1.1 PROJECT OVERVIEW

Recently concern grows about the plasma donation for COVID-19 during the pandemic situation. This convalescent plasma was used to recover patients who are critically ill as it helps to grow antibodies on their body. Recent researches show that many people are willing to help someone in need through money, blood and plasma donation etc. but they find it difficult to identify and approach the needy people who are not aware of technological innovations, including the use of social media. Plasma is used to various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a Process where blood is donated by recovered patients in order to establish anti bodies that fights the infection. This system comprises of Admin, user and donor where both can request for Plasma. The proposed method helps the users to check the availability of donors. A donor has to register to the

website providing their details. The registered users can get the information about the donor count of each blood group. The database will have all the details such as name,

email, phone number, infected status. Whenever a user requests for a particular blood group then the concerned blood group donors will receive the notification regarding the requirement. For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates were high but the donor count was very low and, in such situations, it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors.

1.2 PURPOSE

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

2. LITERATURE REVIEW

2.1 EXISTING PROBLEM:

2.1.1 TITLE: Instant Plasma Donor Recipient Connector web application.

AUTHOR: Kalpana Devi Guntoju¹, Swinish Jalli²

The world is suffering from the COVID 19 crisis and no vaccine has been found yet. But there is another scientific way in which we can help reduce mortality or help people affected by COVID19 by donating plasma from recovered patients. In the absence of an approved antiviral treatment plan for a fatal COVID19 infection,

plasma therapy is an experimental approach to treat COVID19-positive patients and help them faster recovery. Therapy is considered competent. In the recommendation system, the donor who wants to donate plasma can donate by uploading their COVID19 certificate and the blood bank can see the donors who have uploaded the certificate and they can make a request to the donor and the hospital can register/login and search for the necessary things. plasma from a blood bank and they can request a blood bank and obtain plasma from the blood bank. The main goal of our project is to design a user-friendly web application that is like a scientific vehicle from which we can help reduce mortality or help those affected by COVID19 by donating plasma from patients who have recovered without approved anti-retro-viral therapy planning for a deadly COVID19 infection, plasma therapy is an experimental approach to treat those COVID-positive patients and help them recover faster. Therapy, which is considered reliable and safe. If a particular person has fully recovered from COVID19, they are eligible to donate their plasma. As we all know, the traditional methods of finding plasma, one has to find out for oneself by looking at hospital records and contacting donors have been recovered, sometimes may not be available at home and move to other places. In this type of scenario, the health of those who are sick becomes disastrous. Therefore, it is not considered a rapid process to find plasma.

2.1.2 TITLE: A Web Application to Manage All Blood Donation and Transfusion Processes.

AUTHOR: Rehab S. Ali¹, Tamer F. Hafez², Ali Badawey Ali³.

Many lives could be lost due to the difficulty in obtaining a proper blood bag, Therefore, this work aims to help citizens fulfill their needs for a safe and reliable blood group by searching for and locating a specific blood group. In this paper, we illustrate the problem of the blood bags shortage which is represented in the uncontrolled blood banks and parallel markets, lack of awareness and confidence, disappearance of the rare blood groups, and the difficulty in finding a specific

blood group. Hence, we proposed the Blood Bag web-based application that is connected to a centralized database to gather and organize the data from all blood banks and blood donation campaigns. The proposed application organizes and controls the whole critical processes related to blood donation, testing and storage of blood bags, and delivering it to the patient. One blood bag can save a life during surgeries or road accidents, etc. Usually, patients or their families look for a specific blood group they indeed need in the blood banks but they normally cannot find it due to the shortage of blood bags. This is because of the fear of donating blood and the misconception that donating blood is harmful and transmits diseases. This is one of the obstacles to provide the blood bags. The availability of the blood bags is critical because of the high proportion of patients with renal failure, some cases of birth, surgeries processes and incidents that need to get the blood as soon as possible to save these cases' lives. The blood bank is the pool of different blood groups were keeping a stockpile of blood to be distributed in case. The matched blood groups for a safe transfusion. Accidents (or any medical emergency and compensation of blood missing from the body), and keeping the blood in the freezer temperature.

2.1.3 TITLE: Developing a plasma donor application using Function-as-a-service in AWS.

AUTHOR: Aishwarya R Gowri¹

Plasma is a liquid portion of the blood, over 55% of human blood is plasma. Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish an antibody that fights the infection. In this project plasma donor application is being developed by using AWS services. The services used are AWS Lambda, API gateway, Dynamo DB, AWS Elastic Compute Cloud with the help of these AWS services, it eliminates the need of configuring the servers and reduces the infrastructural costs associated with it and helps to achieve serverless computing. For instance, during COVID 19 crisis

the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates were high but the donor count was very low and, in such situations, it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors. The proposed method helps the users to check the availability of donors. A donor has to register to the website providing their details. The registered users can get the information about the donor count of each blood group. The database will have all the details such as name, email, phone number, infected status. Whenever a user requests for a particular blood group then the concerned blood group donors will receive the notification regarding the requirement. A Json code is written to store the information, to fetch the requested information in lambda.

2.1.4 TITLE: Nearest Blood & Plasma Donor Finding: A Machine Learn in Approach.

AUTHOR: Nayan Das¹, Asif Iqbal².

The necessity of blood has become a significant concern in the present context all over the world. Due to a shortage of blood, people couldn't save themselves or their friends and family members. A bag of blood can save a precious life. Statistics show that a tremendous amount of blood is needed yearly because of major operations, road accidents, blood disorders, including Anemia, Hemophilia, and acute viral infections like Dengue, etc. Approximately 85 million people require single or multiple blood transfusions for treatment. Voluntary blood donors per 1,000 population of some countries are quite promising, such as Switzerland (113/1,000), Japan (70/1,000), while others have an unsatisfying result like India has 4/1,000, and Bangladesh has 5/1000. Recently a life-threatening virus, COVID-19, spreading throughout the globe, which is more vulnerable for older

people and those with pre-existing medical conditions. For them, plasma is needed to recover their illness. Our Purpose is to build a platform with clustering algorithms which will jointly help to provide the quickest solution to find blood or plasma donor. Closest blood or plasma donors of the same group in a particular area can be explored within less time and more efficiently. Keywords—Blood donation, Plasma donation, K means clustering, Labeled Agglomerate clustering. Different methods have been used to solve this problem. This time, we have tried another way, a clustering approach, to solve the problem by grouping every user into small groups. This unsupervised machine learning approach is much faster and effective. In section II, we will discuss related work done previously to solve this problem. In section III, clustering algorithms relating to our project will explicitly be discussed. In section IV, our proposed method will be presented. In section V, we will analyze our experiment result.

2.1.5 TITLE: Securing Information on a Web Application System to Facilitate Online Blood Donation Booking.

AUTHOR: Hrishitva Patel¹.

Blood donation has saved many lives in the past. According to the American Red Cross statistics, a patient needs a blood transfusion every two seconds. Many benefits arise from blood donation to both the donor and the blood recipients. With blood donation, cancer patients, people involved in accidents, or those battling diseases that require blood donation have access to enough blood to sustain their survival. There is a need to digitize the blood donation booking to facilitate blood donation across the United States, and ensure patients in need of blood, receive their donation from eligible donors on time. This report demonstrates the security measures implemented to secure patient and blood donor data on a blood donation booking web application. Blood is donated for different reasons in hospitals and other blood banks. It is essential to help blood recipients survive surgeries, cancer treatment, and chronic illnesses, among other illnesses. The

World Health Organization describes blood as the most precious gift a person can give to a person in need of it. Blood donated comprises four components: platelets, plasma, white blood cells, and red blood cells. Cancer patients require a blood transfusion to enhance platelets back into the body after radiation therapy. With a developed web application to book a blood donation session, it is easier for hospitals to know which blood component they need most and thus inform the system administrator to prompt for more blood donors.

2.2 REFERENCES:

1. Rehab S. Ali¹, Tamer F. Hafez², Ali Badawey Ali³, A Web Application to Manage All Blood Donation and Transfusion Processes, 2017.
2. Aishwarya R Gowri, developing a plasma donor application using Function-as-a-service in AWS, 2020.
3. Nearest Blood & Plasma Donor Finding: A Machine Learning Approach, 2021
4. Hrishitva Patel, Securing Information on a Web Application System to Facilitate Online Blood Donation Booking, 2022.
5. Kalpana Devi Guntoju¹, Tejaswini Jalli², Instant Plasma Donor Recipient Connector web application, 2022.

2.3 PROBLEM STATEMENT DEFINITION:

In critical or emergency situations where accident occurs or during on-going treatments and surgeries etc. there is urgent need for specific blood group. It requires lot of time to make the blood available and it is inconvenient during emergency situation, some rare blood groups are time consuming and difficult to arrange which are O- , AB- etc. In our country there is less awareness of blood donation, near about 20% of Indian population donates blood. In existing system, the blood bank management system exhibited at a lot of ineffectiveness and inefficiency that had fetched impact taken by management. The system which was manual that is based on paper card to collect

blood donor data, keep record of blood donors and disseminate results to blood donors, had weakness that needed IT based solutions.

2.3.1 PROBLEM STATEMENT:

In the emergency condition, sometimes it becomes very much difficult to look for the exact match of blood group of donor and acceptor. It may lead to delay in transaction of plasma within the specified amount of time. This application is providing each entity the facility to approach nearby blood donors so that it will become much easier to search rare blood groups in the hour of need.

I am (USER)

Donor has to upload their blood group details for plasma donation.

I am Trying To

The project blood bank management system is known to be a pilot project that is designed for the blood bank to gather blood from various sources and distribute it to the needy people who have high requirements for it.

But

This might be the result of a human error, it leads to error prone results, It consumes lot of manpower to better results.

Because

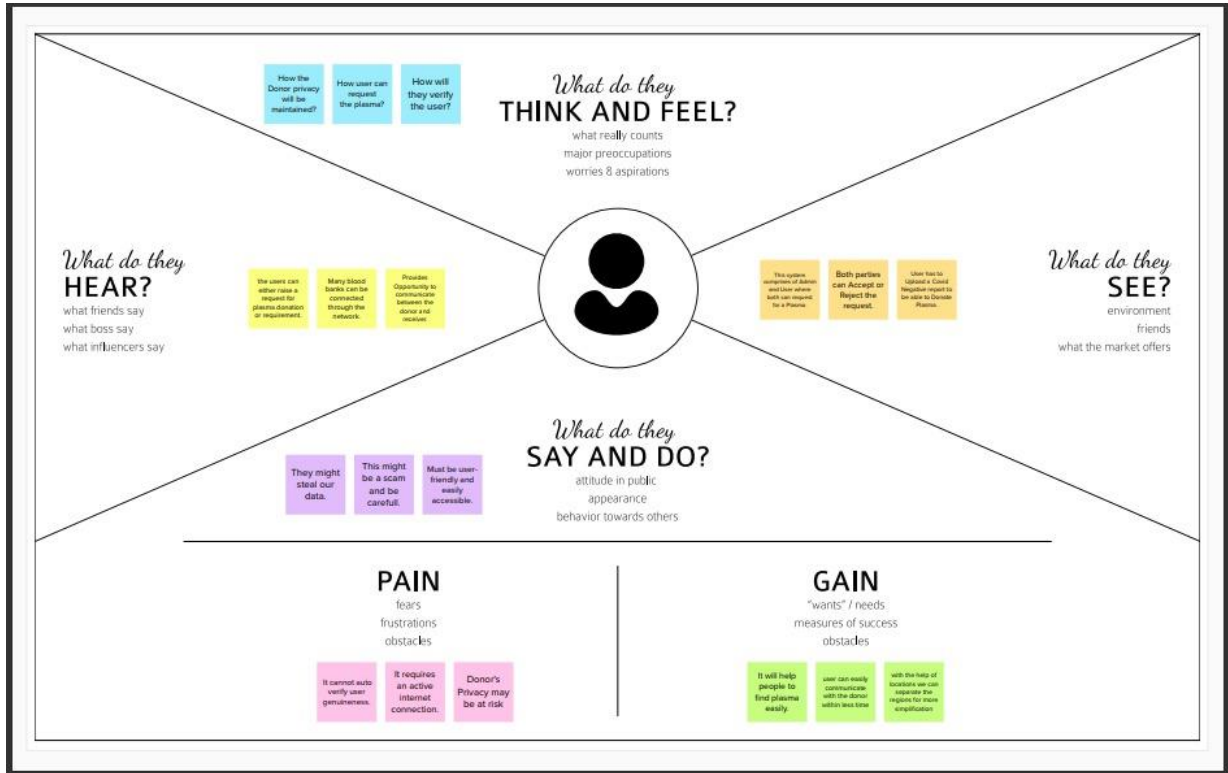
It is hard, and there is a delay to know about the donor details.

Which makes me feel?

If the blood group is not available in the blood bank user can request the donor to donate the plasma to him and save someone life. Using this system people can register himself or herself who want to donate plasma. To register in the system, they have to enter their contact information like address mobile number etc.

3. IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS:



3.2 IDEATION & BRAINSTORMING:

2

Brainstorm

Write **Photo** any ideas that come to mind that address your problem statement.

🕒 10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Divya M K



Sowmiya R



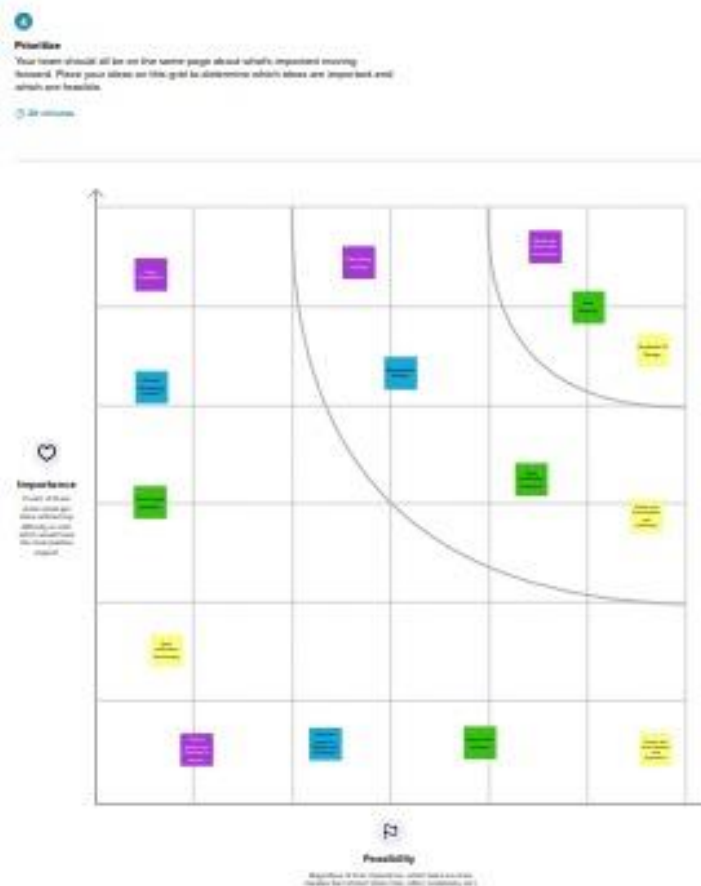
Jannathul Firdause A



Vismaya P Nair



Group Ideas:



3.3 PROPOSED SOLUTION:

The new idea will improve the existing system and it will move from conventional desktop system to mobile system. This paper introduces new features of improved system over existing system in many aspects. The proposed plasma donor application helps the people who are in need of plasma by giving them all details of plasma availability or regarding the donors with the same blood group. This is a web application allows you to access the whole information about plasma donor application, readily scalable and adaptable to meet the complex need of plasma Who are Key Facilitator for the Healthcare Sector, it also supports all the functionalities of plasma donor application.

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In existing system, the blood bank management system exhibited at a lot of ineffectiveness and inefficiency that had fetched impact taken by management.
2.	Idea / Solution description	It saves time as he can search donors online without going anywhere.
3.	Novelty / Uniqueness	It is a user-friendly application.
4.	Social Impact / Customer Satisfaction	Accurate findings increase people's satisfaction.
5.	Business Model (Revenue Model)	-
6.	Scalability of the Solution	This system proposed here aims at connecting the donors & the patients by an online application.

3.4 PROBLEM SOLUTION FIT:

1. CUSTOMER SEGMENT(S) <ul style="list-style-type: none"> • Donors • Patient • Hospitals 	6. CUSTOMER CONSTRAINTS <ul style="list-style-type: none"> • Regular Internet connection • Donor health condition • Unavailability of plasma 	5. AVAILABLE SOLUTIONS <p>The existing application used only collecting details of donors but it does not notify them at the right time.</p> <p>Our solution is building a website that notifies the donors at the right time.</p>
2. JOBS-TO-BE-DONE/PROBLEMS <ul style="list-style-type: none"> • Difficult to find donors at the right time / at the time of emergency. • Donors not aware of plasma requirements. 	9. PROBLEM ROOT CAUSE <ul style="list-style-type: none"> • Not able to find the donors at the time of emergency. • Count of donors has been tremendously decreasing since hospital management couldn't contact them or get them notified at the right. 	7. BEHAVIOUR <p>The customer comes forward to</p> <ul style="list-style-type: none"> • Attend plasma donation camps. • Donate plasma • The hospital management/ patient is able to find plasma donors at the right time.
3. TRIGGERS <p>Blood donation improves or saves lives and enhances social solidarity. It is also influenced by increasing deaths due to unavailability of plasma at required times.</p>	10. YOUR SOLUTION <p>Creating website which will provide information about available donors and plasma. If not available, the customer will be notified when plasma is available.</p>	8. CHANNELS OF BEHAVIOUR <p>Online:</p> <p>Can use the website to find donors.</p> <p>Offline:</p> <p>Can use the record maintain by the hospital.</p>
4. EMOTIONS: BEFORE/AFTER <p>Before:</p> <p>Patient/ hospital find it hard to get a right resource to get plasma leaving them upset.</p> <p>After:</p> <p>The donors and customers have a feeling of satisfaction.</p>		

4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

1. Admin:

Admin can manage both donors and users. Admin has the only responsibility maintain and stored the record.

2. Users:

From this module user can create their account, when user create his account, the user gets a user id and password which identifies him uniquely. From this module user can search donor for blood.

3. Donors Registration:

In this module, people who are interested in donating blood get registered in this site and give his overall details related to donor. User details contain name, address, city, gender, blood group, location, contact number etc.

4. Donor Search:

The people who are in need of blood can search in our site for getting the details of donors having the same blood group and within the same city.

5. Notification:

In this module, notification sends to donors for emergency. SMS send to registered donors phone number.

4.2 NON-FUNCTIONAL REQUIREMENTS:

1.Usability:

The system shall allow the users to access the system with pc using web application. The system uses a web application as an interface. The system is user

friendly which makes the system easy

2.Availability:

The system is available 100% for the user and is used 24 hrs. a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

3. Scalability:

Scalability is the measure of a system's ability to increase or decrease in performance and cost in response to changes in application and system processing demands.

4. Security:

A security requirement is a statement of needed security functionality that ensures one of many different security properties of software is being satisfied.

5. Performance:

The information is refreshed depending upon whether some updates have occurred or not in the application. The system shall respond to the member in not less than two seconds from the time of the request submittal. The system shall be allowed to take more time when doing large processing jobs. Responses to view information shall take no longer than 5 seconds to appear on the screen.

6. Reliability:

The system has to be 100% reliable due to the importance of data and the damages that can be caused by incorrect or incomplete data. The system will run 7 days a week. 24 hours a day.





5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS:

A data-flow diagram is a visual representation of how data moves through a system or a process (usually an information system). The DFD additionally gives details about each entity's inputs and outputs as well as the process itself. A data-flow diagram lacks control flow, loops, and decision-making processes. Using a flowchart, certain

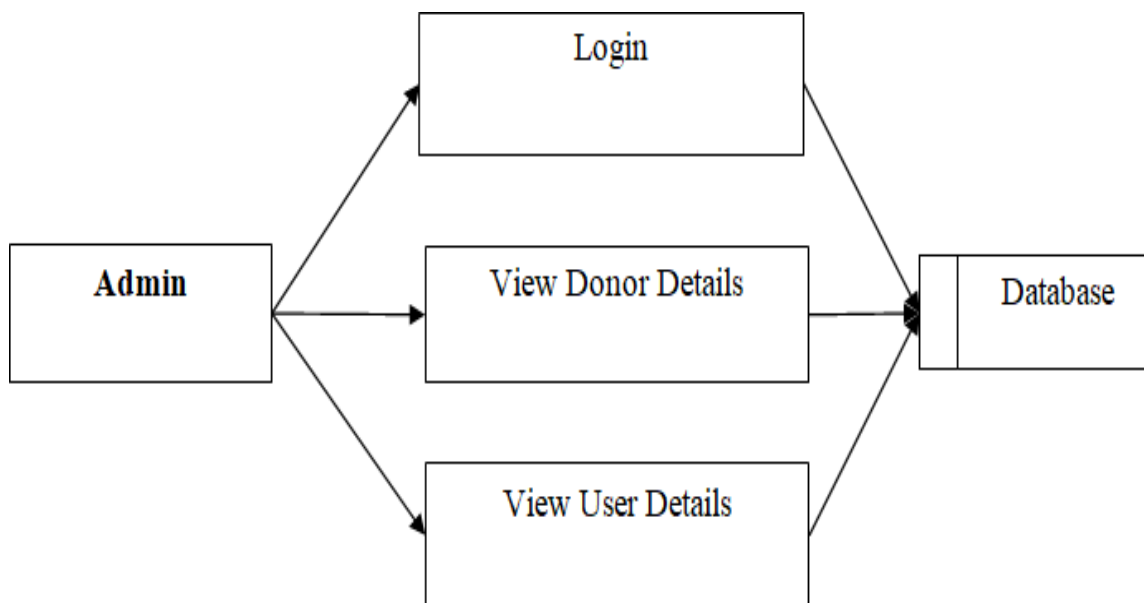
operations depending on the data may be depicted.

Data flow Symbols:

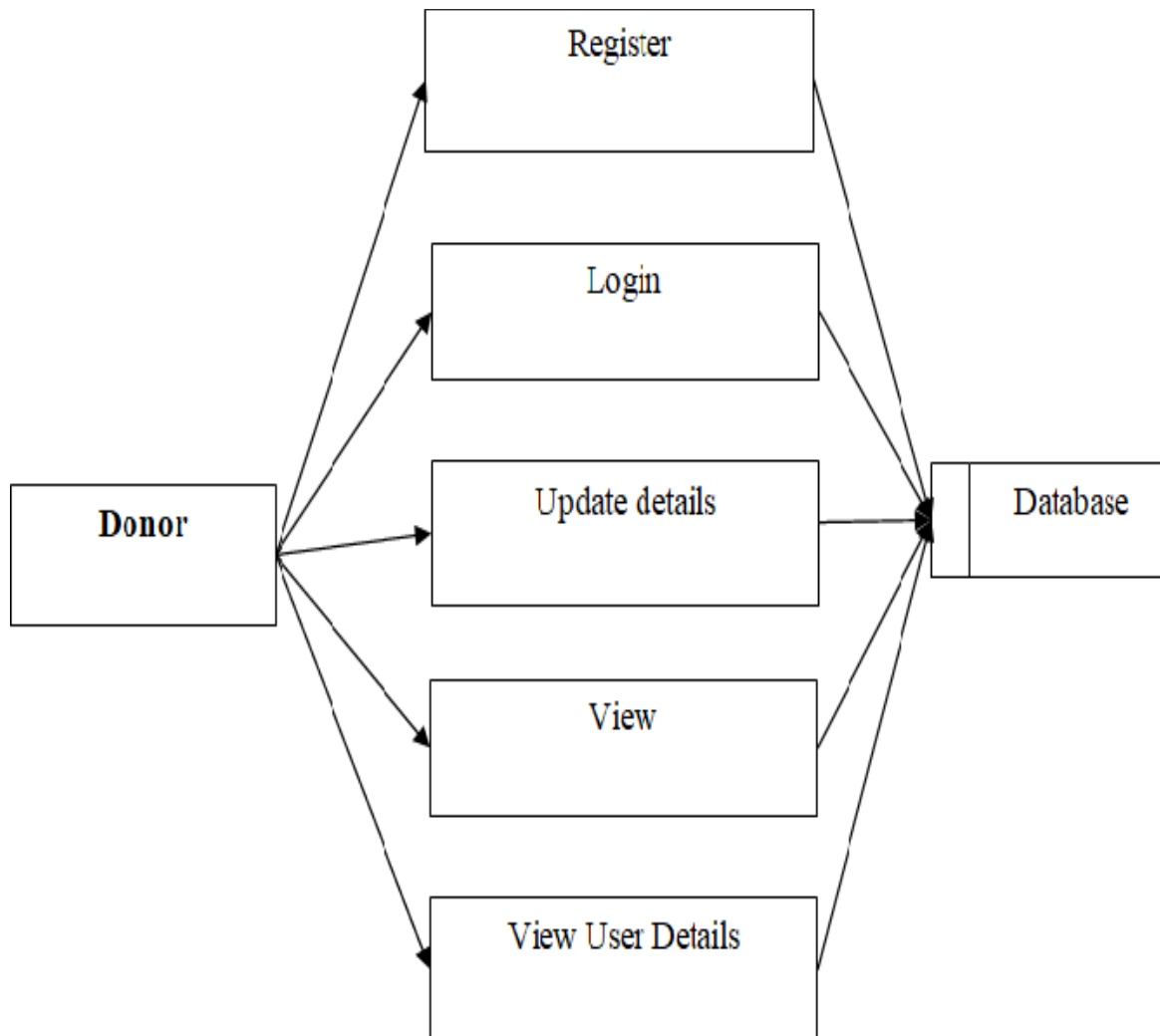
Symbol	Description
	An entity . A source of data or a destination for data.
	A process or task that is performed by the system.
	A data store , a place where data is held between processes.
	A data flow .

LEVEL 0:

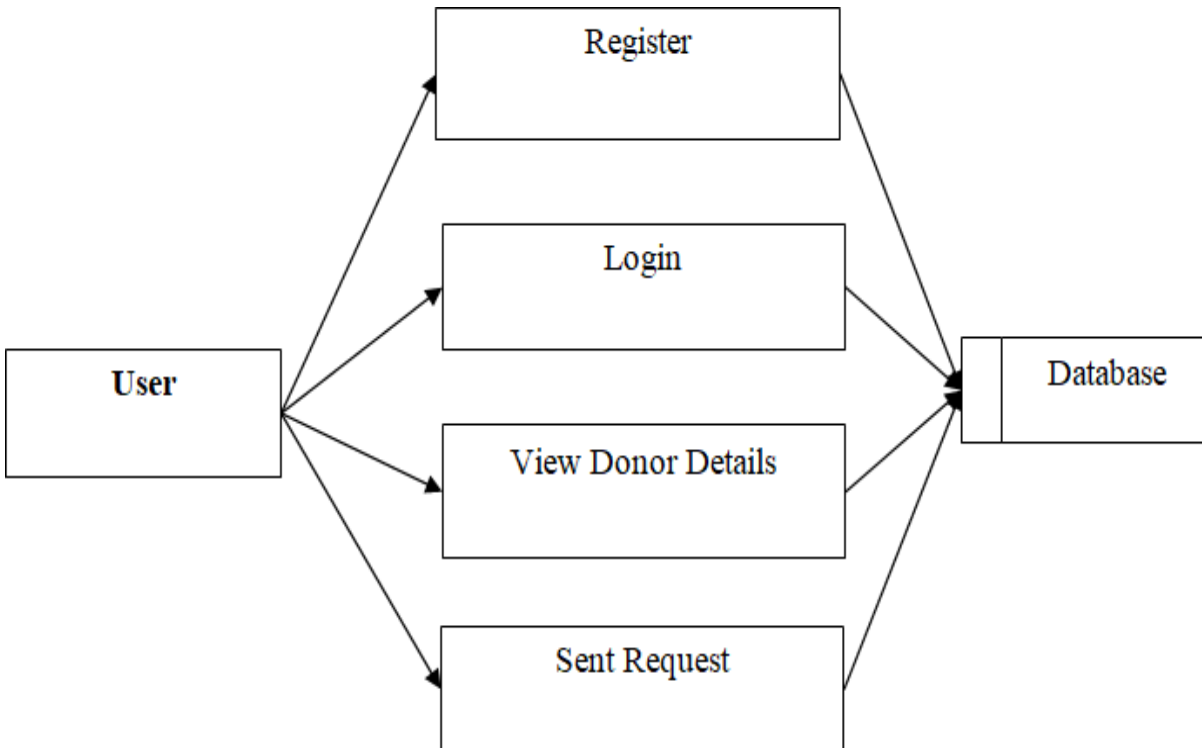
The Level 0 DFD shows how the system is divided into 'sub-systems' (processes), each of which deals with one or more of the data flows to or from an external agent, and which together provide all of the functionality of the system as a whole. It also identifies internal data stores that must be present in order for the system to do its job, and shows the flow of data between the various parts of the system.

**LEVEL 1:**

The next stage is to create the Level 1 Data Flow Diagram. This highlights the main functions carried out by the system. As a rule, to describe the system was using between two and seven functions - two being a simple system and seven being a complicated system. This enables us to keep the model manageable on screen or paper.

**LEVEL 2:**

A Data Flow Diagram (DFD) tracks processes and their data paths within the business or system boundary under investigation. A DFD defines each domain boundary and illustrates the logical movement and transformation of data within the defined boundary. The diagram shows 'what' input data enters the domain, 'what' logical processes the domain applies to that data, and 'what' output data leaves the domain. Essentially, a DFD is a tool for process modeling and one of the oldest.

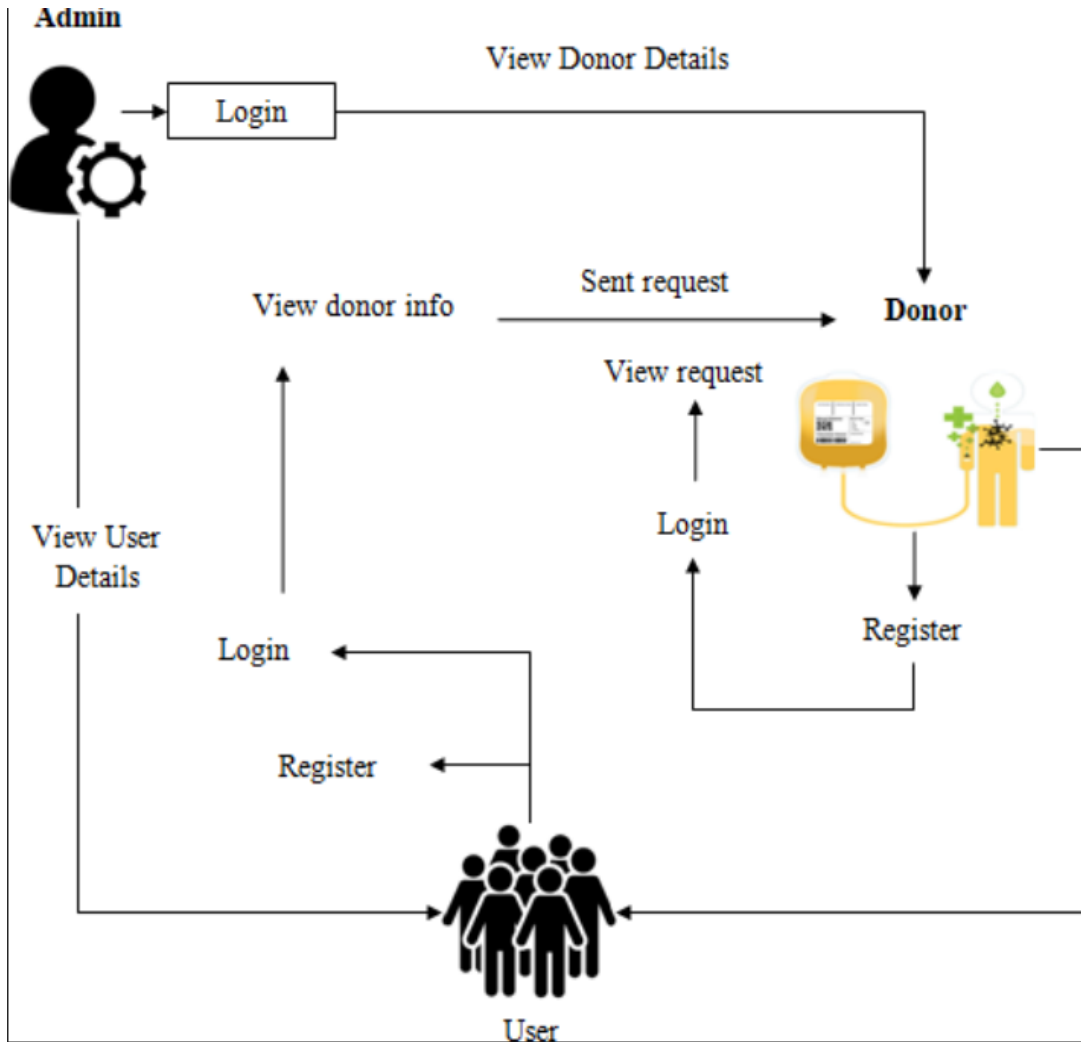


5.2 SOLUTION & TECHNICAL ARCHITETURE:

5.2.1 SOLUTION ARCHITETURE:

System architecture, also known as systems architecture, is the conceptual model that describes a system's structure, behavior, and additional viewpoints. An architecture description is a formal description and representation of a system that is organized in a way that allows for reasoning about the system's structures and behaviors. System architecture might include system components, their outwardly evident attributes, and the connections (e.g., behavior) between them. It can give a strategy for acquiring items and developing systems that will operate together to accomplish the entire system. There have been initiatives to codify languages for describing system architecture; they are referred to collectively as architecture description languages (ADLs).

5.2.2 TECHNICAL ARCHITETURE:



COMPONENTS & TECHNOLOGIES:

S.No	Component	Description	Technology
1.	User Interface	Web UI	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python

3.	Application Logic-2	Logic for a process in the application	SMTP
4.	Application Logic-3	Logic for a process in the application	SMTP
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	Local host
7.	File Storage	File storage requirements	Local host
8.	External API-1	Purpose of External API used in the application	-
9.	External API-2	Purpose of External API used in the application	-
10.	Machine Learning Model	Purpose of Deep Learning Model	Classifies and detect the images with high accuracy
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local Server Configuration

APPLICATION CHARACTERISTICS:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	PYCHARM
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	-
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Able to respond the changes in an application
4.	Availability	Justify the availability of application (e.g., use of loadbalancers, distributed servers etc.)	The system must always be functional

5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Takes no longer time to response
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5.3 USER STORIES:

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story/ Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail	I can receive confirmation notifications through Gmail	Medium	Sprint-1

	Login	USN-4	As a user, I can login to the application by entering email & password	I can access into my User profile and view details in dashboard	High	Sprint-1
	Dashboard	USN-5	As a user, I can send the proper requests to donate and obtain plasma.	I can receive appropriate notifications through email	High	Sprint-1
Customer (Web user)	Login	USN-6	As a user, I can register and log into the application by entering email & password to view the profile	I can access into my User profile and view details in dashboard	High	Sprint-1
	Dashboard	USN-7	As a user, I can send the proper requests to donate and obtain plasma.	I can receive appropriate notifications through email	High	Sprint-1
Customer Care Executive	Application	USN-8	As a customer care executive, I can try to address user's concerns and questions	I can view and address their concerns and questions	Medium	Sprint-2
Administrator	Application	USN-9	As an administrator I can help with user-facing aspects of a website, like its appearance, navigation	I can change the appearance and navigation in a userfriendly manner	Medium	Sprint-3

			and use of media.			
		USN-10	As an administrator, I can involve working with the technical side of websites.	I can help with such as Troubleshoot issues, setting up web hosts, ensuring users have-access and programming servers	Medium	Sprint-1

6. PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority
Sprint-1	Registration and Login	USN-1	Create UI to interact with pages. To create the user and admin login functionality	High
Sprint-2	Cloud and Database	USN-2	Connecting flask app with database [IBMDB2] Implementation of IBM chatbot	High

Sprint-3	Deployment in Develops phase	USN-3	Creating images with docker, Deploying Kubernetes and add the mailing service.	High
Sprint-4	Testing and Deployment to user	USN-4	To make sure that the software is handy to users.	High

6.2 SPRINT DELIVERY SCHEDULE:

6.2.1 PROJECT TRACKER:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed(as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

6.2.2 VELOCITY:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day).

Sprint duration = 6 days

Velocity of the team = 20 points

$\text{Average velocity (AV)} = \frac{\text{Velocity}}{\text{Sprint duration}}$

$$AV = 20/6 = 3.34$$

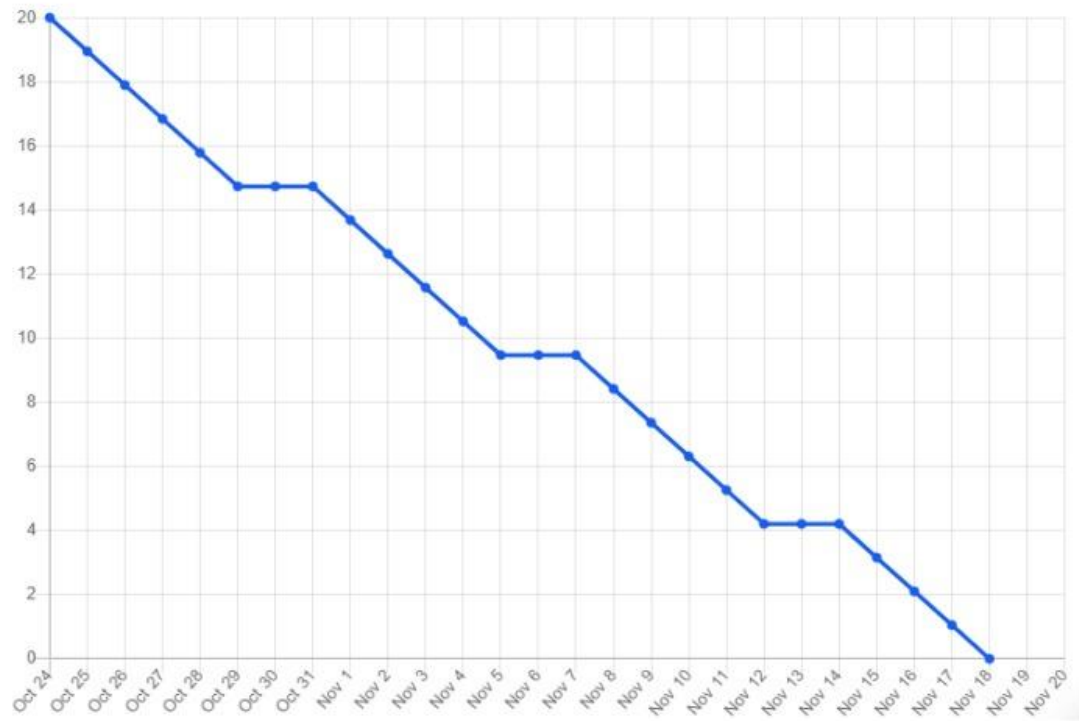
Average Velocity = 3.34

6.2.3 Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

BURNDOWN CHART:

Burndown Chart



7. CODING AND SOLUTIONING

7.1 Index.html:

```
<!doctype html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">

  <meta name="description" content="">
  <meta name="author" content="">

  <title>Plasma Donor Application</title>

  <link rel="stylesheet" href="{{ url_for('static', filename= 'css/styles.css') }}">
  <link rel="stylesheet" href="{{ url_for('static', filename= 'css/bootstrap-icons.css')
}}">
  <link rel="stylesheet" href="{{ url_for('static', filename= 'css/bootstrap.min.css')
}}">

</head>

<body id="section_1">

  <header class="site-header">
    <div class="container">
      <div class="row">

        <div class="col-lg-8 col-12 d-flex flex-wrap">
          <p class="d-flex me-4 mb-0">
            <i class="bi-geo-alt me-2"></i>
            Chennai, India.
          </p>

          <p class="d-flex mb-0">
            <i class="bi-envelope me-2"></i>
```

```

        <a href="mailto:info@company.com">
            info@company.com
        </a>
    </p>
</div>

<div class="col-lg-3 col-12 ms-auto d-lg-block d-none">
    <ul class="social-icon">
        <li class="social-icon-item">
            <a href="#" class="social-icon-link bi-twitter"></a>
        </li>

        <li class="social-icon-item">
            <a href="#" class="social-icon-link bi-facebook"></a>
        </li>

        <li class="social-icon-item">
            <a href="#" class="social-icon-link bi-instagram"></a>
        </li>

        <li class="social-icon-item">
            <a href="#" class="social-icon-link bi-youtube"></a>
        </li>

        <li class="social-icon-item">
            <a href="#" class="social-icon-link bi-whatsapp"></a>
        </li>
    </ul>
</div>

</div>
</div>
</header>

<nav class="navbar navbar-expand-lg bg-light shadow-lg">
    <div class="container">
        <a class="navbar-brand" href="/home">

```

```

        
        <span>
            Plasma Donor Platform
            <small>Non-profit Organization</small>
        </span>
    </a>

    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav"
        aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
    </button>

    <div class="collapse navbar-collapse" id="navbarNav">
        <ul class="navbar-nav ms-auto">
            <li class="nav-item">
                <a class="nav-link click-scroll" href="#top">Home</a>
            </li>

            <li class="nav-item">
                <a class="nav-link click-scroll" href="#section_2">About</a>
            </li>

            <li class="nav-item">
                <a class="nav-link click-scroll" href="#section_4">Register</a>
            </li>

            <li class="nav-item">
                <a class="nav-link click-scroll" href="#section_6">Contact</a>
            </li>

            <li class="nav-item ms-3">
                <a class="nav-link custom-btn custom-border-btn btn"
href="/login">Logout</a>
            </li>
        </ul>
    </div>
</div>

```

```
</nav>
```

```
<main>
```

```
<section class="hero-section hero-section-full-height">
```

```
<div class="container-fluid">
```

```
<div class="row">
```

```
<div class="col-lg-12 col-12 p-0">
```

```
<div id="hero-slide" class="carousel carousel-fade slide" data-bs-ride="carousel">
```

```
<div class="carousel-inner">
```

```
<div class="carousel-item active">
```

```

```

```
<div class="carousel-caption d-flex flex-column justify-content-end">
```

```
<h1>be a Kind Heart</h1>
```

```
<p>Volunteer charity </p>
```

```
</div>
```

```
</div>
```

```
<div class="carousel-item">
```

```

```

```
<div class="carousel-caption d-flex flex-column justify-content-end">
```

```
<h1>Non-profit</h1>
```

```
<p>You can support us to grow more</p>
```

```
</div>
```

```
</div>
```

```
<div class="carousel-item">
```

```

        <div class="carousel-caption d-flex flex-column
justify-content-end">

            <h1>Humanity</h1>

            <p>Please tell your friends about our website</p>
        </div>
    </div>
</div>

<button class="carousel-control-prev" type="button" data-bs-
target="#hero-slide"

    data-bs-slide="prev">
    <span class="carousel-control-prev-icon" aria-
hidden="true"></span>

    <span class="visually-hidden">Previous</span>
</button>

<button class="carousel-control-next" type="button" data-bs-
target="#hero-slide"

    data-bs-slide="next">
    <span class="carousel-control-next-icon" aria-
hidden="true"></span>

    <span class="visually-hidden">Next</span>
</button>
</div>
</div>
</div>
</div>
</section>
<section class="section-padding">
    <div class="container">
        <div class="row">

            <div class="col-lg-10 col-12 text-center mx-auto">
                <h2 class="mb-5">Welcome to Plasma Donation</h2>
            </div>

            <div class="col-lg-3 col-md-6 col-12 mb-4 mb-lg-0">

```



```

        <div class="featured-block d-flex justify-content-center align-
items-center">
            <a href="#" class="d-block">
                

                <p class="featured-block-text">Become a
<strong>Volunteer</strong></p>
            </a>
        </div>
    </div>

    <div class="col-lg-3 col-md-6 col-12 mb-4 mb-lg-0 mb-md-4">
        <div class="featured-block d-flex justify-content-center align-
items-center">
            <a href="#" class="d-block">
                

                <p class="featured-block-text"><strong>Caring</strong>
Earth</p>
            </a>
        </div>
    </div>

    <div class="col-lg-3 col-md-6 col-12 mb-4 mb-lg-0 mb-md-4">
        <div class="featured-block d-flex justify-content-center align-
items-center">
            <a href="#" class="d-block">
                

                <p class="featured-block-text">Make a
<strong>Donation</strong></p>
            </a>
        </div>
    </div>

    <div class="col-lg-3 col-md-6 col-12 mb-4 mb-lg-0">
        <div class="featured-block d-flex justify-content-center align-
items-center">
            <a href="#" class="d-block">
                >

        <p class="featured-block-text"><strong>Non-Profit</strong>
Program</p>

        </a>
    </div>
</div>

</div>
</div>
</section>
<section class="section-padding section-bg" id="section_2">
    <div class="container">
        <div class="row">

            <div class="col-lg-6 col-12 mb-5 mb-lg-0">
                
            </div>

            <div class="col-lg-6 col-12">
                <div class="custom-text-box">
                    <h2 class="mb-2">Our Story</h2>

                    <h5 class="mb-3">Plasma Donation, Non-Profit Organization</h5>

                    <p class="mb-0">This is a sample website build for ibm
internship with anna university.
                    You can feel free to use it. . Thank
                    you.</p>
                </div>

                <div class="row">
                    <div class="col-lg-6 col-md-6 col-12">
                        <div class="custom-text-box mb-lg-0">
                            <h5 class="mb-3">Our Mission</h5>

                            <p>To Reduce the searching time for plasma which is
needed in remote location.</p>

```

2"

```
<ul class="custom-list mt-2">
  <li class="custom-list-item d-flex">
    <i class="bi-check custom-text-box-icon me-2">
      Non-Profit
    </i>
  </li>
```

2"

```
<li class="custom-list-item d-flex">
  <i class="bi-check custom-text-box-icon me-2">
    Volunteer
</li>
```

</u1>

</div>

</div>

</div>

</div>

</div>

</div>

</section>

```
<section class="about-section section-padding">
```

```
<div class="container">
```

```
<div class="row">
```

```
<div class="col-lg-6 col-md-5 col-12">
```

```
                                class="about-image ms-lg-auto bg-light shadow-lg img-fluid"
```

</div>

```
<div class="col-lg-5 col-md-7 col-12">
```

<div class="custom-text-block">

Admin Information

<p class="text-muted mb-lg-4 mb-md-4">Founding Partner</p>

```

        <ul class="social-icon mt-4">
            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-twitter"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-facebook"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-instagram"></a>
            </li>
        </ul>
    </div>
</div>
</section>

<section class="cta-section section-padding section-bg">
    <div class="container">
        <div class="row justify-content-center align-items-center">

            <div class="col-lg-5 col-12 ms-auto">
                <h2 class="mb-0">Make an impact. <br> Save lives.</h2>
            </div>

            <div class="col-lg-5 col-12">
                <a href="#" class="me-4">Make a donation</a>

                <a href="#section_4" class="custom-btn btn smoothscroll">Become a
volunteer</a>
            </div>
        </div>
    </div>
</div>

```

```
</section>
```

```
<section class="volunteer-section section-padding" id="section_4">
```

```
<div class="container">
```

```
<div class="row">
```

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

```
<h2 class="text-white mb-4">Register</h2>
```

```
<form class="custom-form volunteer-form mb-5 mb-lg-0" action="#"
method="post" role="form">
```

```
<h3 class="mb-4">Become a volunteer today</h3>
```

```
<div class="row">
```

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

```
<input type="text" name="volunteer-name" id="volunteer-
name" class="form-control"
placeholder="Jack Doe" required>
</div>
```

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

```
<input type="email" name="volunteer-email"
id="volunteer-email"
pattern="^[^ @]*@[^ @]*" class="form-control"
placeholder="Jackdoe@gmail.com"
required>
</div>
```

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

```
<input type="number" name="volunteer-subject"
id="volunteer-subject"
class="form-control" placeholder="Mobile No."
required>
</div>
```

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

```
<div class="input-group input-group-file">
```

```
<input type="file" class="form-control"
```

```

id="inputGroupFile02">

        <label class="input-group-text"
for="inputGroupFile02">Upload your Health Certificate</label>

        <i class="bi-cloud-arrow-up ms-auto"></i>
    </div>
</div>
</div>

    <textarea name="volunteer-message" rows="3" class="form-
control" id="volunteer-message"
        placeholder="Your Address"></textarea>

    <button type="submit" class="form-control">Submit</button>
</form>
</div>

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

    <div class="custom-block-body text-center">
        <h4 class="text-white mt-lg-3 mb-lg-3">About Volunteering</h4>

        <p class="text-white">You simply need to Register your details
like name, contact details, Heath certificate, blood group,in the registration form and
Simple wait for a request message. When a patient near you needs a plasma you will get
notified via email or a phone call.</p>
    </div>
</div>

</div>
</div>
</section>

```

```

<section class="contact-section section-padding" id="section_6">
  <div class="container">
    <div class="row">

      <div class="col-lg-4 col-12 ms-auto mb-5 mb-lg-0">
        <div class="contact-info-wrap">
          <h2>Get in touch</h2>

          <div class="contact-image-wrap d-flex flex-wrap">
            

            <div class="d-flex flex-column justify-content-center ms-
3">

              <p class="mb-0">Scarlet Jhonson</p>
              <p class="mb-0"><strong>Admin Controller</strong></p>
            </div>
          </div>

          <div class="contact-info">
            <h5 class="mb-3">Contact Infomation</h5>

            <p class="d-flex mb-2">
              <i class="bi-geo-alt me-2"></i>
              Chennai, India
            </p>

            <p class="d-flex mb-2">
              <i class="bi-telephone me-2"></i>

              <a href="tel: 9876543210">
                +91-9876543210
              </a>
            </p>

            <p class="d-flex">
              <i class="bi-envelope me-2"></i>

```

```

        <a href="mailto:info@yourgmail.com">
            donate@plasma.org
        </a>
    </p>

    <a href="#" class="custom-btn btn mt-3">Get Direction</a>
</div>
</div>
</div>

<div class="col-lg-5 col-12 mx-auto">
    <form class="custom-form contact-form" action="#" method="post"
role="form">

        <h2>Request form</h2>

        <p class="mb-4">Or, you can just send an email:
            <a href="#">infoplasma@charity.org</a>
        </p>
        <div class="row">
            <div class="col-lg-6 col-md-6 col-12">
                <input type="text" name="first-name" id="first-name"
class="form-control"
                    placeholder="Jack" required>
            </div>

            <div class="col-lg-6 col-md-6 col-12">
                <input type="text" name="last-name" id="last-name"
class="form-control"
                    placeholder="Doe" required>
            </div>
        </div>

        <input type="email" name="email" id="email" pattern="^[ @]*@[^
@]*" class="form-control"
            placeholder="Jackdoe@gmail.com" required>

        <textarea name="message" rows="5" class="form-control"
id="message"
            placeholder="What can we help you?"></textarea>

```



```

        <button type="submit" class="form-control">Send
Message</button>
    </form>
</div>

</div>
</div>
</section>
</main>

<footer class="site-footer">
    <div class="container">
        <div class="row">
            <div class="col-lg-3 col-12 mb-4">
                
            </div>

            <div class="col-lg-4 col-md-6 col-12 mb-4">
                <h5 class="site-footer-title mb-3">Quick Links</h5>

                <ul class="footer-menu">
                    <li class="footer-menu-item"><a href="#" class="footer-menu-
link">Our Story</a></li>

                    <li class="footer-menu-item"><a href="#" class="footer-menu-
link">Newsroom</a></li>

                    <li class="footer-menu-item"><a href="#" class="footer-menu-
link">Causes</a></li>

                    <li class="footer-menu-item"><a href="#" class="footer-menu-
link">Become a volunteer</a></li>

                    <li class="footer-menu-item"><a href="#" class="footer-menu-
link">Partner with us</a></li>
                </ul>
            </div>

```

```

<div class="col-lg-4 col-md-6 col-12 mx-auto">
  <h5 class="site-footer-title mb-3">Contact Infomation</h5>

  <p class="text-white d-flex mb-2">
    <i class="bi-telephone me-2"></i>

    <a href="tel: 9876543210" class="site-footer-link">
      +91-9876543210
    </a>
  </p>

  <p class="text-white d-flex">
    <i class="bi-envelope me-2"></i>

    <a href="mailto:info@yourgmail.com" class="site-footer-link">
      donate@plasma.org
    </a>
  </p>

  <p class="text-white d-flex mt-3">
    <i class="bi-geo-alt me-2"></i>
    Chennai, India.
  </p>

  <a href="#" class="custom-btn btn mt-3">Get Direction</a>
</div>
</div>
</div>

<div class="site-footer-bottom">
  <div class="container">
    <div class="row">

      <div class="col-lg-6 col-md-7 col-12">
        <p class="copyright-text mb-0">Copyright © 2023 <a
href="#">Plasma</a> Donor Org.
        </p>

```

```

    </div>

    <div class="col-lg-6 col-md-5 col-12 d-flex justify-content-center
align-items-center mx-auto">
        <ul class="social-icon">
            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-twitter"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-facebook"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-instagram"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-linkedin"></a>
            </li>

            <li class="social-icon-item">
                <a href="#" class="social-icon-link bi-youtube"></a>
            </li>
        </ul>
    </div>

</div>
</div>
</div>
</footer>

<!-- JAVASCRIPT FILES -->

<script src="{ url_for('static', filename= 'js/jquery.min.js') }"></script>
<script src="{ url_for('static', filename= 'js/bootstrap.min.js') }"></script>
<script src="{ url_for('static', filename= 'js/jquery.sticky.js') }"></script>
<script src="{ url_for('static', filename= 'js/click-scroll.js') }"></script>
<script src="{ url_for('static', filename= 'js/counter.js') }"></script>
<script src="{ url_for('static', filename= 'js/custom.js') }"></script>

```

```
</body>
```

```
</html>
```

7.2 App.py:

```
import ibm_db
import ibm_db_dbi
import pandas
from flask import Flask, render_template, request, session
from sqlalchemy import create_engine

engine = create_engine('sqlite://',
                       echo = False)

dsn_hostname = "2d46b6b4-cbf6-40eb-bbce-
6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
dsn_uid = "zzd89111"
dsn_pwd = "p7PccD5sBH1chhA0"

dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "BLUDB"
dsn_port = "32328"
dsn_protocol = "TCPIP"
dsn_security = "SSL"

dsn = (
    "DRIVER={0};"
    "DATABASE={1};"
    "HOSTNAME={2};"
    "PORT={3};"
    "PROTOCOL={4};"
    "UID={5};"
    "PWD={6};"
    "SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol,
dsn_uid, dsn_pwd,dsn_security)
```

```

try:
    conn = ibm_db.connect(dsn, "", "")
    print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ",
dsn_hostname)

except:
    print ("Unable to connect: ", ibm_db.conn_errormsg() )

app = Flask(__name__)

@app.route("/")
def login():
    error = None
    if request.method == 'POST':
        username = request.form['uname']
        password = request.form['password']
        session['uname'] = request.form['uname']

        conn = ibm_db.connect(dsn, "", "")
        pd_conn = ibm_db_dbi.Connection(conn)

        selectQuery = "SELECT * from regtb where UserName='" + username + "' and
password='" + password + "'"
        dataframe = pandas.read_sql(selectQuery, pd_conn)

```

```

@app.route("/home")
def home():
    return render_template('index.html')

@app.route("/adminLogin", methods=['GET', 'POST'])
def adminlogin():
    error = None
    if request.method == 'POST':
        username = request.form['uname']
        password = request.form['password']

        conn = ibm_db.connect(dsn, "", "")
        pd_conn = ibm_db_dbi.Connection(conn)

        selectQuery = "SELECT * from admindb where LASTNAME='" + username + "' and
FIRSTNAME='" + password + "'"
        dataframe = pandas.read_sql(selectQuery, pd_conn)

        if dataframe.empty:
            data1 = 'Username or Password is wrong'
            return render_template('goback.html', data=data1)
        else:
            print("Login")
            selectQuery = "SELECT * from regtb "
            dataframe = pandas.read_sql(selectQuery, pd_conn)

            dataframe.to_sql('Employee_Data', con=engine, if_exists='append')

            # run a sql query
            print(engine.execute("SELECT * FROM Employee_Data").fetchall())

            return render_template('AdminHome.html', data=engine.execute("SELECT * FROM
Employee_Data").fetchall())
            return render_template('adminLogin.html')

@app.route("/adminindex")
def adminindex():
    conn = ibm_db.connect(dsn, "", "")

```

```
pd_conn = ibm_db_dbi.Connection(conn)

selectQuery = "SELECT * from regtb "
dataframe = pandas.read_sql(selectQuery, pd_conn)

dataframe.to_sql('Employee_Data',
                 con=engine,
                 if_exists='append')

# run a sql query
data = engine.execute("SELECT * FROM Employee_Data").fetchall()

return render_template('Admin/adminindex.html' , data=data)
```

8. TESTING

8.1 TEST CASES:

A test case has components that describe input, action and an expected response, in order to determine if a feature of an application is working correctly. A test case is a set of instructions on “HOW” to validate a particular test objective/target, which when followed will tell us if the expected behavior of the system is satisfied or not.

Characteristics of a good test case:

1. Accurate: Exacts the purpose.
2. Economical: No unnecessary steps or words.
3. Traceable: Capable of being traced to requirements.
4. Repeatable: Can be used to perform the test over and over.
5. Reusable: Can be reused if necessary.

S.NO	Scenario	Input	Excepected output	Actual output
1	Admin Login Form	User name and password	Login	Login success.
2	Donor Registration Form	Donor basic details	Registration	Donor registration details stored in database.
3	User Registration Form	User basic details	Registration	User registration details stored in database.
4	User Login Form	User name and password	Login	Login success.

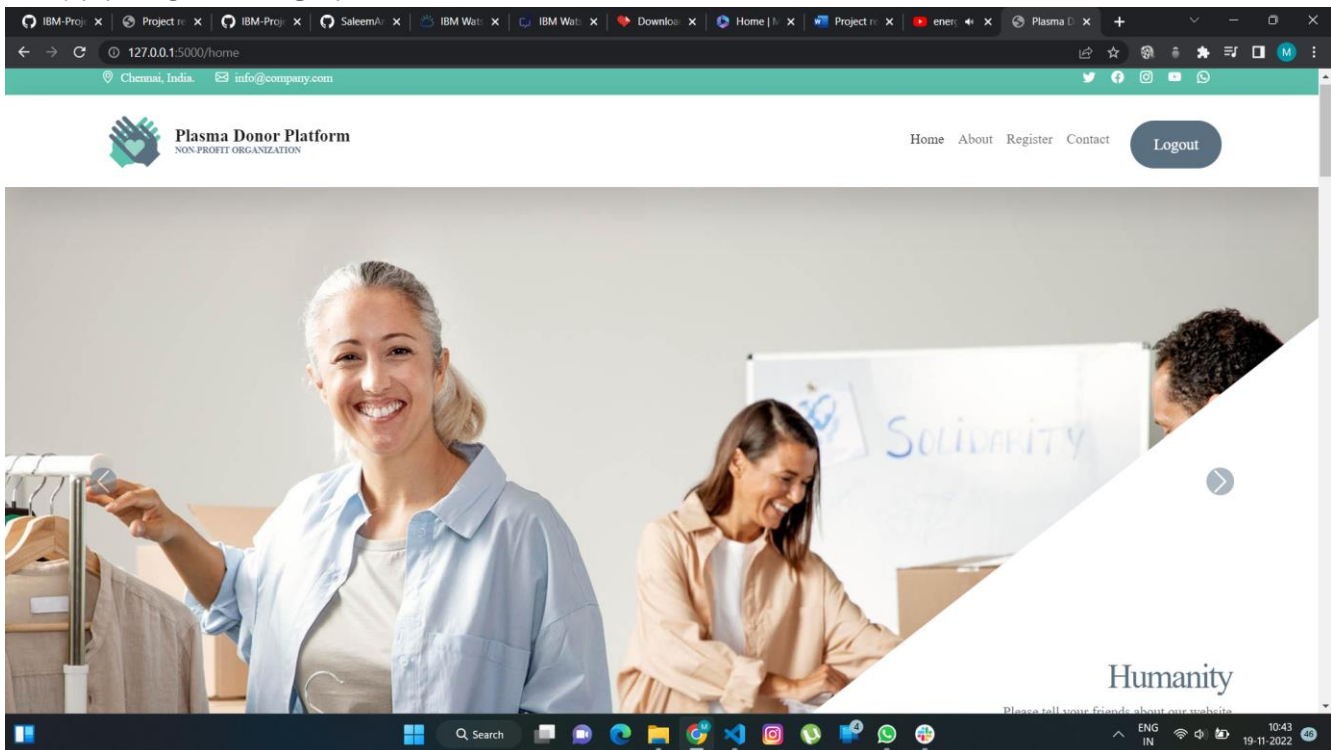
8.2 USER ACCEPTANCE TESTING:

This is a type of testing done by users, customers, or other authorized entities to determine application/software needs and business processes. Acceptance testing is the most important phase of testing as this decides whether the client approves the application/software or not. It may involve functionality, usability, performance, and U.I of the application. It is also known as user acceptance testing (UAT), operational acceptance testing (OAT), and end-user testing.

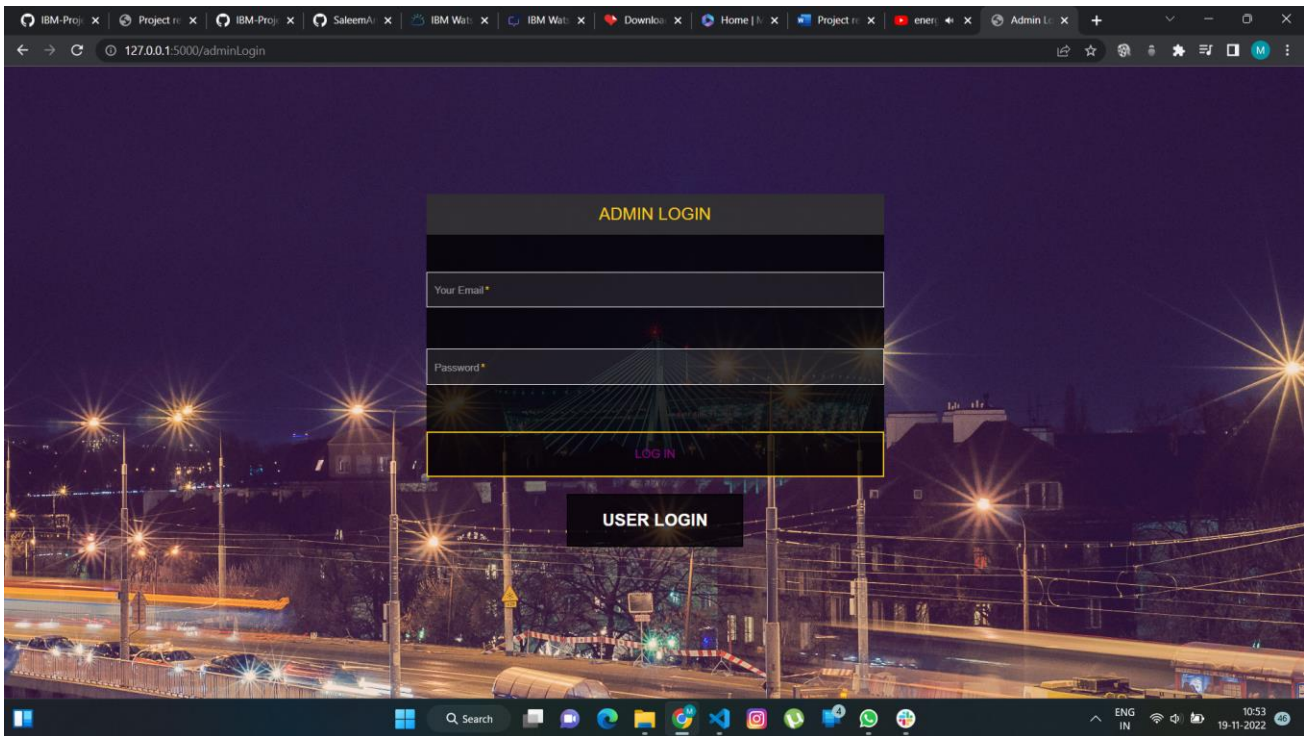
9. RESULTS

9.1 PERFORMANCE METRICS:

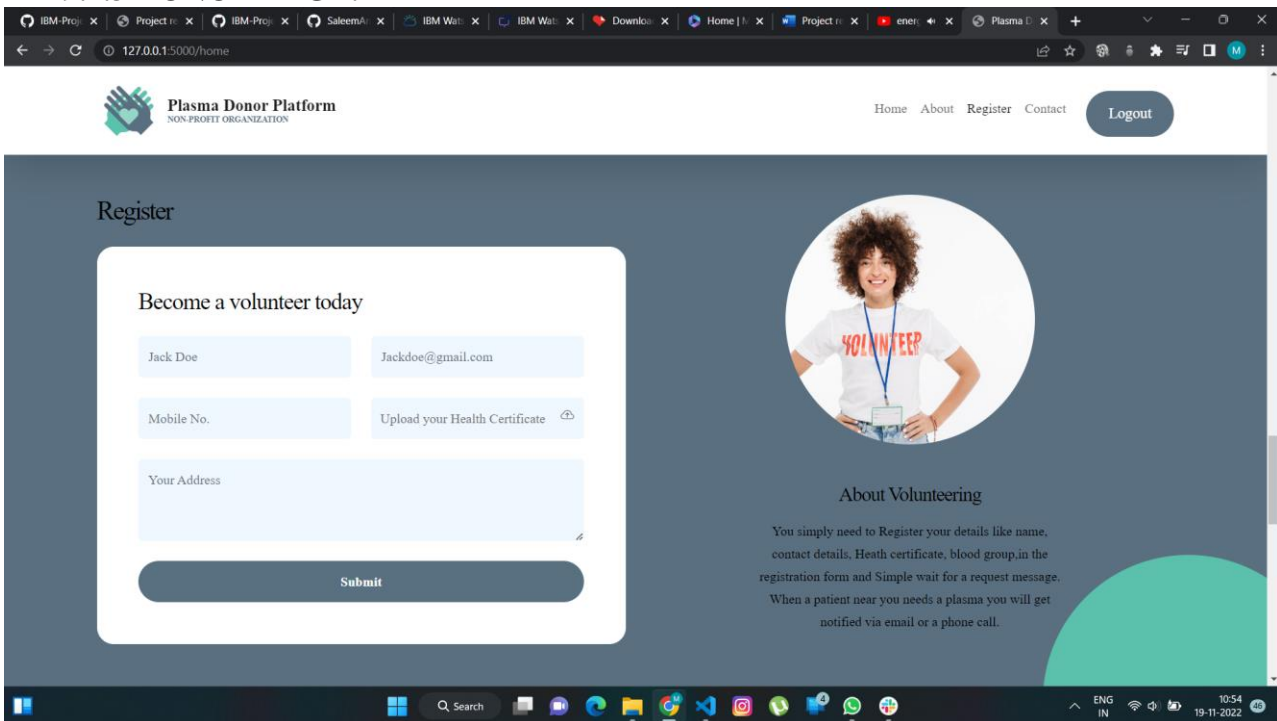
9.1.1 HOME PAGE:



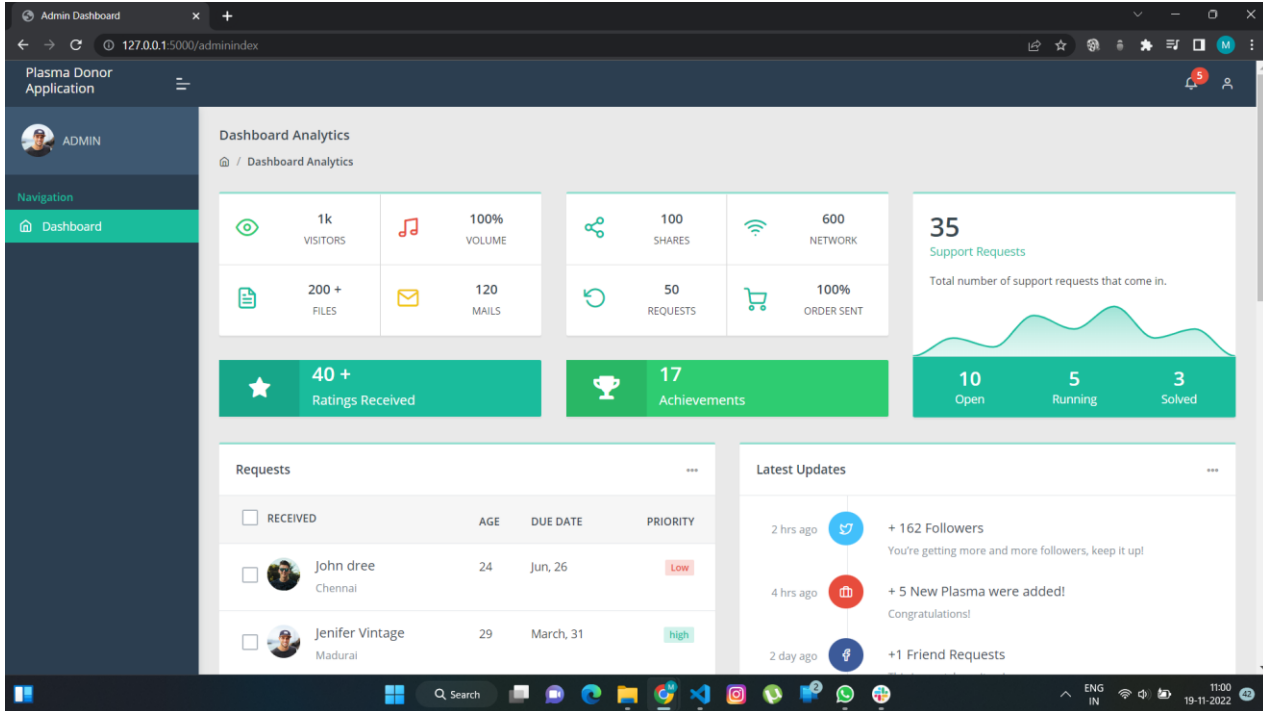
9.1.2 ADMIN LOGIN PAGE:



9.1.3 DONOR PAGE:



9.1.4 ADMIN PAGE:



9.1.5 USER LOGIN/SIGNUP PAGE:

The User Login/Signup page includes the following elements:

- Navigation:** SIGN UP (highlighted in yellow) and LOG IN.
- Form Title:** SIGN UP FOR FREE
- Form Fields:**
 - First Name *
 - Last Name *
 - Your Email *
 - Your Phone *
 - Password *
- Buttons:** SIGN UP (highlighted in yellow) and ADMIN LOGIN.

9.2 INPUT:


Plasma Donor Application x +

127.0.0.1:5000/home

Plasma Donor Platform
NON-PROFIT ORGANIZATION

Home About Register Contact Logout

Get in touch

 Scarlet Jhonson
Admin Controller

Contact Information

Chennai, India
+91-9876543210
donate@plasma.org

Get Direction

Request form

Or, you can just send an email: infoplasma@charity.org

Jack Doe

Jackdoe@gmail.com

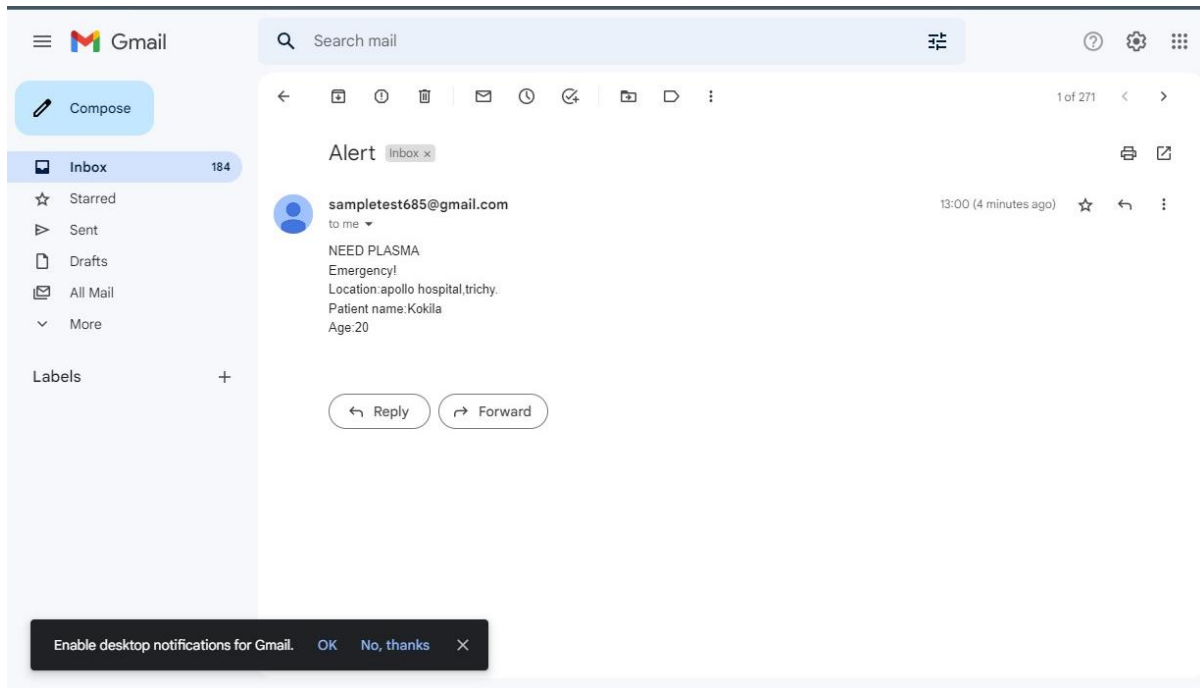
What can we help you?

Send Message

Windows Search

ENG IN 10:56 19-11-2022

9.3 OUTPUT:



10. ADVANTAGES & DISADVANTAGES

10.1 ADVANTAGES:

1. It is a user-friendly application.
2. The people in need of plasma can search for the donors by giving their blood group and city name.
3. It saves time as he can search donors online without going anywhere.
4. Using this system user can get plasma in time and can save and here our system work, whenever a person needs plasma user get information of the person who has the same blood group needs.

10.2 DISADVANTAGES:

1. It is time consuming.
2. It leads to error prone results.
3. It consumes lot of manpower to better results.
4. It lacks of data security.
5. Retrieval of data takes lot of time.

11. CONCLUSION

This project is designed for successful completion of project on Plasma Donor Application system. The basic building aim is to provide plasma donation service to the city recently. Plasma Donor Application System is a Web based application that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a plasma. This project aims at maintaining all the information pertaining to plasma donors, different blood groups available in each plasma bank and helps them manage in a better way plasma donation system can collect plasma from many donors in short from various sources and distribute that plasma to needy people who require plasma. To do all this we require high quality Web Application to manage those jobs. Plasma application provides a reliable platform to connect local plasma donors with patients.

12. FUTURE SCOPE

This system is developed such a way that additional enhancement can be done without much difficulty. The renovation of the project would increase the flexibility of the system. In future, we can develop this project in android platform. We will add extra features like donor location tracking system (GPS), Feedback form, and enable call option etc.

13. APPENDIX

13.1 SOURCE CODE:

```
import ibm_db
import ibm_db_dbi
import pandas
from flask import Flask, render_template, request, session
from sqlalchemy import create_engine

engine = create_engine('sqlite://',
                       echo = False)

dsn_hostname = "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
dsn_uid = "zdz89111"
dsn_pwd = "p7PccD5sBH1chhAO"

dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "BLUDB"
dsn_port = "32328"
dsn_protocol = "TCPIP"
dsn_security = "SSL"

dsn = (
    "DRIVER={0};"
    "DATABASE={1};"
    "HOSTNAME={2};"
    "PORT={3};"
    "PROTOCOL={4};"
    "UID={5};"
    "PWD={6};"
    "SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid,
    dsn_pwd,dsn_security)

try:
    conn = ibm_db.connect(dsn, "", "")
    print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ", dsn_hostname)

except:
    print ("Unable to connect: ", ibm_db.conn_errormsg() )
```



```
app = Flask(__name__)
```

```
@app.route("/")
```

```
def login():
```

```
    error = None
```

```
    if request.method == 'POST':
```

```
        username = request.form['uname']
```

```
        password = request.form['password']
```

```
        session['uname'] = request.form['uname']
```

```
    conn = ibm_db.connect(dsn, "", "")
```

```
    pd_conn = ibm_db_dbi.Connection(conn)
```

```
    selectQuery = "SELECT * from regtb where UserName='" + username + "' and password='" + password + "''"
```

```
    dataframe = pandas.read_sql(selectQuery, pd_conn)
```

```
    return render_template('login.html')
```

```
@app.route("/home")
```

```
def home():
```

```
    return render_template('index.html')
```

```
@app.route("/adminLogin", methods=['GET', 'POST'])
```

```
def adminlogin():
```

```
    error = None
```

```
    if request.method == 'POST':
```

```
        username = request.form['uname']
```

```
        password = request.form['password']
```

```
    conn = ibm_db.connect(dsn, "", "")
```

```
    pd_conn = ibm_db_dbi.Connection(conn)
```

```
    selectQuery = "SELECT * from admindb where LASTNAME='" + username + "' and FIRSTNAME='" + password + "''"
```

```
    dataframe = pandas.read_sql(selectQuery, pd_conn)
```

```
    if dataframe.empty:
```

```
        data1 = 'Username or Password is wrong'
```

```
        return render_template('goback.html', data=data1)
```



```

else:
    print("Login")
    selectQuery = "SELECT * from regtb "
    dataframe = pandas.read_sql(selectQuery, pd_conn)

    dataframe.to_sql('Employee_Data', con=engine,if_exists='append')

    # run a sql query
    print(engine.execute("SELECT * FROM Employee_Data").fetchall())

    return render_template('AdminHome.html', data=engine.execute("SELECT * FROM
Employee_Data").fetchall())
    return render_template('adminLogin.html')

@app.route("/adminindex")
def adminindex():
    conn = ibm_db.connect(dsn, "", "")
    pd_conn = ibm_db_dbi.Connection(conn)

    selectQuery = "SELECT * from regtb "
    dataframe = pandas.read_sql(selectQuery, pd_conn)

    dataframe.to_sql('Employee_Data',
                    con=engine,
                    if_exists='append')

    # run a sql query
    data = engine.execute("SELECT * FROM Employee_Data").fetchall()

    return render_template('Admin/adminindex.html' , data=data)

```

```

@app.route("/adminlogin", methods=['GET', 'POST'])

def adminlogin():

    error = None

    if request.method == 'POST':

        if request.form['uname'] == 'admin' or request.form['password'] == 'admin':

            conn = mysql.connector.connect(user='root', password="", host='localhost', database='lPlasmadb')

            # cursor = conn.cursor()

            cur = conn.cursor()

            cur.execute("SELECT * FROM regtb ")

            data = cur.fetchall()

            return render_template('AdminHome.html' , data=data)

        else:

            return render_template('index.html', error=error)

@app.route("/donorlogin", methods=['GET', 'POST'])

def donorlogin():

    error = None

    if request.method == 'POST':

        username = request.form['uname']

        password = request.form['password']

        session['dname'] = request.form['uname']

        conn = mysql.connector.connect(user='root', password="", host='localhost', database='lPlasmadb')

        cursor = conn.cursor()

```

```

        cursor.execute("SELECT * from donortb where username='" + username + "' and Password='" +
password + "'")

        data = cursor.fetchone()

        if data is None:

            alert = 'Username or Password is wrong'

            return render_template('goback.html', data=alert)

        else:

            print(data[0])

            session['uid'] = data[0]

            conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

            # cursor = conn.cursor()

            cur = conn.cursor()

            cur.execute("SELECT * FROM donortb where username='" + username + "' and Password='" +
password + "'")

            data = cur.fetchall()

            return render_template('DonorHome.html', data=data)

@app.route("/userlogin", methods=['GET', 'POST'])

def userlogin():

    if request.method == 'POST':

        username = request.form['uname']

        password = request.form['password']

        session['uname'] = request.form['uname']

```

```

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute("SELECT * from regtb where username='" + username + "' and Password='" +
password + "'")

data = cursor.fetchone()

if data is None:

    alert = 'Username or Password is wrong'

    return render_template('goback.html', data=alert)

else:

    print(data[0])

    session['uid'] = data[0]

    conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

    # cursor = conn.cursor()

    cur = conn.cursor()

    cur.execute("SELECT * FROM regtb where username='" + username + "' and Password='" +
password + "'")

    data = cur.fetchall()

    return render_template('UserHome.html', data=data )

@app.route("/newuser", methods=['GET', 'POST'])

def newuser():

    if request.method == 'POST':

        name1 = request.form['name']

```

```

gender1 = request.form['gender']

Age = request.form['age']

email = request.form['email']

pnumber = request.form['phone']

address = request.form['address']


uname = request.form['uname']

password = request.form['psw']

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute(

    "INSERT INTO regtb VALUES ('" + name1 + "','" + gender1 + "','" + Age + "','" + email + "','" +

pnumber + "','" + address + "','" + uname + "','" + password + "')"

    conn.commit()

    conn.close()

    # return 'file register successfully'

    return render_template('UserLogin.html')

@app.route("/personal", methods=['GET', 'POST'])

def personal():

    if request.method == 'POST':

        name1 = request.form['name']

        gender1 = request.form['gender']

```

```

Age = request.form['age']

email = request.form['email']

pnumber = request.form['phone']

address = request.form['address']

blood = request.form['blood']

health = request.form['health']

dname = session['dname']

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute(

    "INSERT INTO personltb VALUES ('" + name1 + "','" + gender1 + "','" + Age + "','" + email +

    "','" + pnumber + "','" + address + "','" + blood + "','" + health + "','" + dname+"")")

conn.commit()

conn.close()

alert = 'Record Saved'

return render_template('goback.html', data=alert)

@app.route("/appr")

def appr():

    cid = request.args.get('cid')

    dname = session['dname']

    conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

    cursor = conn.cursor()

```

```

cursor.execute(
    "delete from personltb where id=" + str(cid) + " ")
conn.commit()
conn.close()

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')
cur = conn.cursor()

cur.execute("SELECT * FROM personltb where Username=" + dname + " ")
data = cur.fetchall()

return render_template('DonorPersonalInfo.html', data=data)

@app.route("/DonorPersonalInfo")
def DonorPersonalInfo():
    dname = session['dname']

    conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')
    cur = conn.cursor()

    cur.execute("SELECT * FROM personltb where Username=" + dname + " ")
    data = cur.fetchall()

    return render_template('DonorPersonalInfo.html', data=data)

@app.route("/newdonor", methods=['GET', 'POST'])
def newdonor():
    if request.method == 'POST':
        name1 = request.form['name']
        phone = request.form['phone']

```



```

email = request.form['email']

uname = request.form['uname']

password = request.form['psw']

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute(

    "INSERT INTO donortb VALUES ('" + name1 + "','" + phone + "','" + email + "','" + uname +

    "','" + password + "')"

    conn.commit()

    conn.close()

return render_template('DonorLogin.html')

@app.route("/Search")

def Search():

    return render_template('Search.html')

@app.route("/dsearch", methods=['GET', 'POST'])

def dsearch():

    if request.form["submit"] == "Submit":

        blood = request.form['blood']

        conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

        cur = conn.cursor()

        cur.execute("SELECT * FROM personltb where blood ='" + blood + "'")

        data = cur.fetchall()

```

```

    return render_template('Search.html', data=data)

elif request.form["submit"] == "SendMail":

    blood = request.form['blood']

    info = request.form['info']

    conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

    cursor = conn.cursor()

    cursor.execute("SELECT * FROM personltb where Blood like '%" + blood + "%'")

    data = cursor.fetchall()

    for item in data:

        sendmsg(item[4], info)

        print(item[4])

    alert = 'Send Notication'

    return render_template('goback.html', data=alert)

@app.route("/SendRequest")

def SendRequest():

    session['cid'] = request.args.get('cid')

    return render_template('Notification.html')

@app.route("/noti", methods=['GET', 'POST'])

def noti():

    info = request.form['info']

    did = session['cid']

    print(did)

```

```

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute("SELECT * FROM personltb where id=" + did + "")

data = cursor.fetchone()

if data:

    bloo =data[7]

    print(bloo)

else:

    return 'Incorrect username / password !'

conn = mysql.connector.connect(user='root', password="", host='localhost', database='1Plasmadb')

cursor = conn.cursor()

cursor.execute("SELECT * FROM personltb where Blood like '%" + bloo + "%'")

data = cursor.fetchall()

for item in data:

    sendmsg(item[4], info)

    print(item[4])

alert = 'Send Notication'

return render_template('goback.html', data=alert)

def sendmsg(Mailid,message):

    import smtplib

    from email.mime.multipart import MIMEMultipart

    from email.mime.text import MIMEText

```

```
from email.mime.base import MIMEBase

from email import encoders

fromaddr = "sampletest685@gmail.com"

toaddr = Mailid

# instance of MIMEMultipart

msg = MIMEMultipart()

# storing the senders email address

msg['From'] = fromaddr

# storing the receivers email address

msg['To'] = toaddr

# storing the subject

msg['Subject'] = "Alert"

# string to store the body of the mail

body = message

# attach the body with the msg instance

msg.attach(MIMEText(body, 'plain'))

# creates SMTP session

s = smtplib.SMTP('smtp.gmail.com', 587)

# start TLS for security

s.starttls()

# Authentication

s.login(fromaddr, "hneucvnontsuwgpj")
```

```
# Converts the Multipart msg into a string
text = msg.as_string()

# sending the mail
s.sendmail(fromaddr, toaddr, text)

# terminating the session
s.quit()

if __name__ == '__main__':
    app.run(debug=True, use_reloader=True)
```

13.2 GITHUB & PROJECT DEMO LINK :

GitHub: [Plasma Donor Application Team 36720 Github link](#)

Video link: [Plasma Donor Application Output Video Link](#)

