

# **PLASMA DONOR APPLICATION**

## **TEAM ID: PNT2022TMID47827**

**Report**

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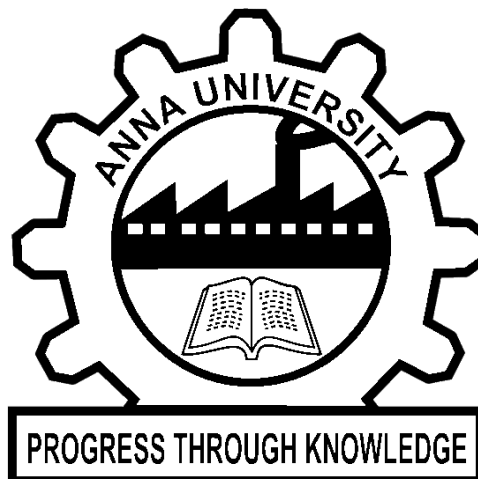
*In partial fulfillment for the award of the degree  
Of*

**BACHELOR OF ENGINEERING**

**IN**

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**ANNA UNIVERSITY, CHENNAI - 600 025**

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# **CHAPTER 1**

## **INTRODUCTION**

With rapid increase in the usage of social networks sites across the world, there is also a steady increase in plasma donation requests as being noticed in the number of posts on these sites such as Face book and twitter seeking plasma donors. Finding plasma donor is a challenging issue in almost every country. There are some plasma donor finder applications in the market such as Blood app by Red Cross and Blood Donor Finder application.

### **1.1 PROJECT OVERVIEW**

The Plasma Donor Application project 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. We have referred many journal articles few of them are mentioned below with pros and cons. Our plan is to rectify an underneath cons and to give the efficient web phishing detection method.

### **1.2 PURPOSE**

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 antiretroviral therapy planning for a deadly COVID19 infection.

The application helps patients who need plasma-derived biotherapies to improve or save their lives. Those in need are suffering from life-threatening conditions such as haemophilia, immune deficiencies, and other blood disorders. Plasma is the essential ingredient in many medications and treatments.

## **CHAPTER -2**

### **LITERATURE SURVEY**

#### **2.1 EXISTING PROBLEM**

There are a quite good number of software packages that exist for PLASMA DONOR APPLICATION system. But when I visited most plasma donor center system portal. I found that existing system is limited only to those particular plasma center.

##### **Problem Found in Existing System**

- At the present there is no software to keep any records in plasma center.
- It becomes difficult to provide any record immediately at times of emergency.
- Required more human efforts in maintaining the branch related information .
- Manually to keep the accounts is also tedious & risky job & to maintain those accounts in ledgers for a long period is also very difficult.
- Difficult to manage and maintain the files.
- Chance of damage of files, if the data is stored in the files for duration of time.
- Time consuming is retrieving, storing and updating the data.
- It is difficult to keep track the record about the donor & receiver he has donated or received the plasma at the last time.

## **2.2 REFERENCES**

### **CASE STUDY I**

**TITLE:** Microscale Passive Plasma Separation

**AUTHOR:** Ripathis S, Kumar V, Prabhakar A, Joshi S, Agarwal A

**YEAR:** 2015

**INFERENCE:**

Plasma separation in microdevices is one such process which has received extensive attention from researchers globally.

### **CASE STUDY - II**

**TITLE:** Instant Plasma donor Recipient connector web application

**AUTHOR:** Kalpana Devi Guntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay Mallisetti

**YEAR:** 2022

**ABSTRACT:**

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.

### **CASE STUDY - III**

**TITLE:** An Android Application for Volunteer Blood Donors

**AUTHOR:** Sultan N. Turhan **YEAR:**  
2017

**INFERENCE:**

Provides an uninterrupted communication between the health care centers and volunteer donors.

### **CASE STUDY – IV**

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

**AUTHOR:** Aishwarya R Gowri

**YEAR:** 2020

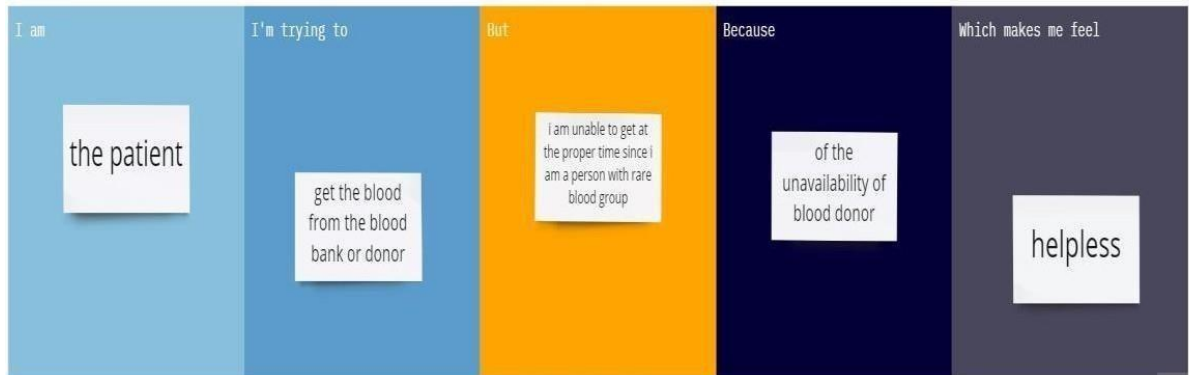
**ABSTRACT:**

A 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 antibodies 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, DynamoDB, 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.

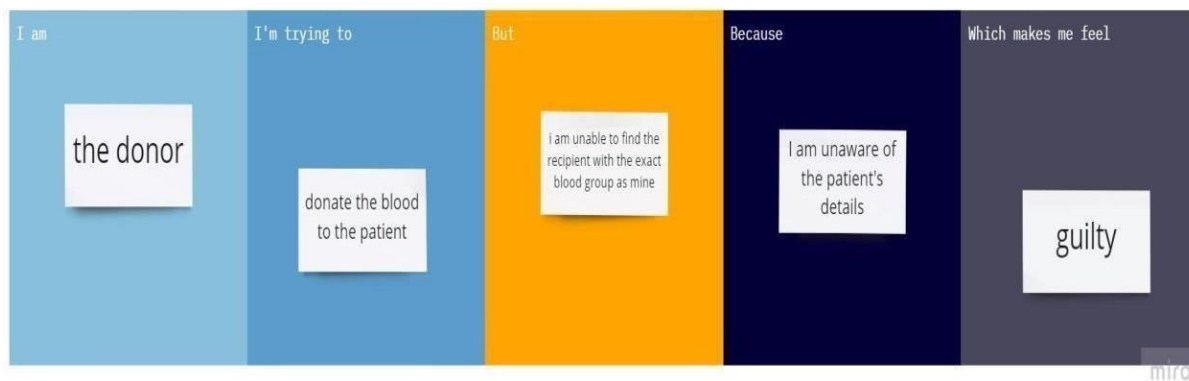
For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates were high but the donor count was very low and in such situations it was very important to get the information 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.

## 2.3 PROBLEM SOLUTION DEFINITION

### PROBLEM STATEMENT 1



### PROBLEM STATEMENT 2

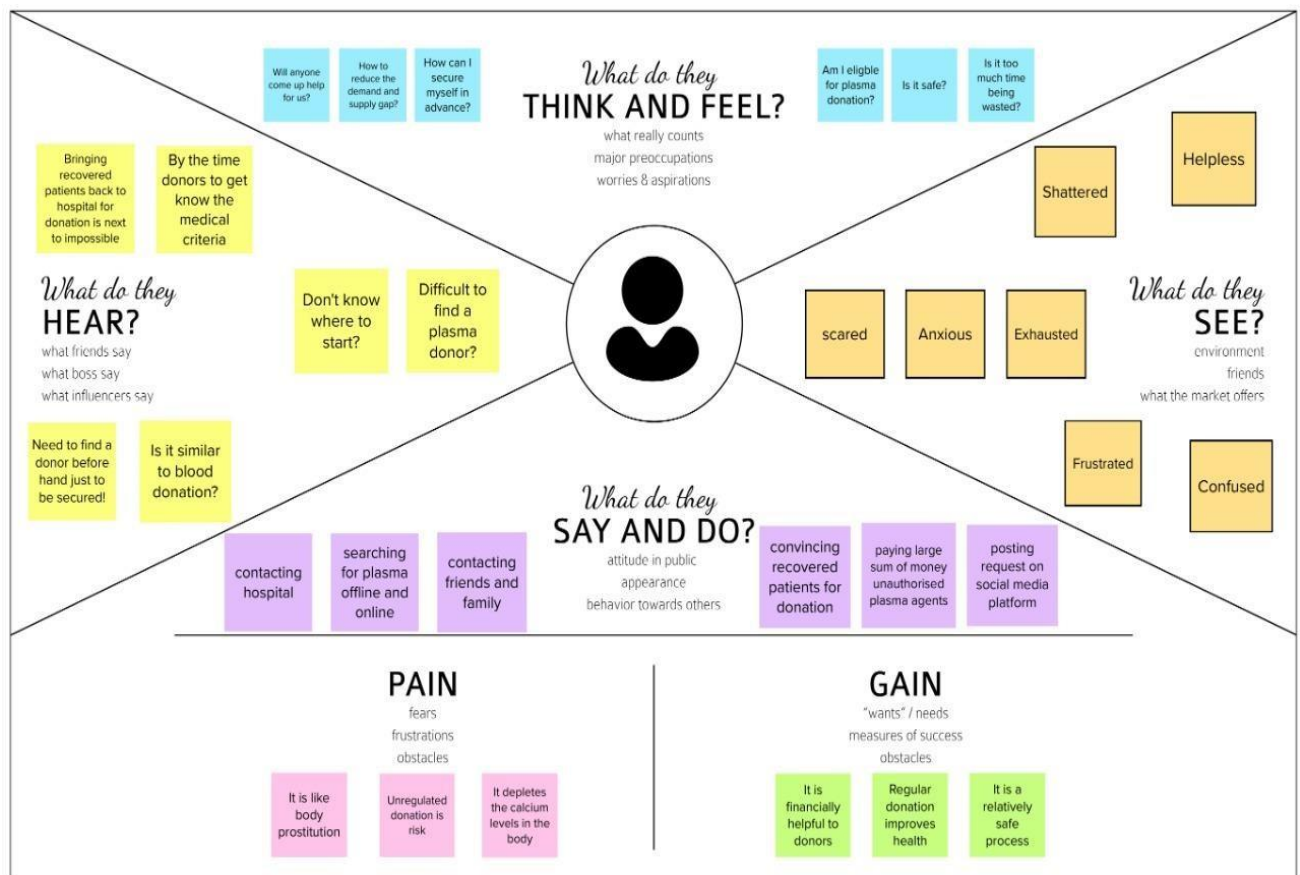




# CHAPTER 3

## IDEATION AND PROPOSED SOLUTION


### 3.1 EMPATHY MAP CANVAS



## 3.2 IDEATION AND BRAINSTORMING




### Step-1: Team Gathering, Collaboration and Select the Problem Statement

Template




## Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.


 10 minutes to prepare  
 1 hour to collaborate  
 2-8 people recommended

[Share template feedback](#)



### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

 10 minutes

A

Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B


Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.

C

Learn how to use the facilitation tools


Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) 

1


### Define your problem statement

It was very difficult to find the plasma donor, check whether the donor was infected previously and was recovered, and which donor is eligible to donate plasma was a challenging task. As the plasma therapy was one of the ways to treat the infected patients getting the donor details played a major role.

 5 minutes


PROBLEM


People get to know one another by sharing their ideas, thoughts and experiences with those around them. This project purpose is to create a web application for finding the donor and their thoughts.





### Key rules of brainstorming


To run an smooth and productive session


 Stay in topic.

 Encourage wild ideas.

 Defer judgment.

 Listen to others.

 Go for volume.

 If possible, be visual.

## Step-2: Brainstorm, Idea Listing and Grouping

2

### Brainstorm

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

10 minutes

**TIP**  
You can attach a sticky note and fill the pencil (which is visible) can be used to draw!

#### Team Leader

Very rare types are easy to find

Plasma is 90% water and frequent donation will not harm you.

#### Team Member 1

It is the best place that people share their opinions to donate

Available 24/7

#### Team Member 2

Easy to updating their health and location status

Donors can easily get the idea of nearby donation camps

#### Team Member 3

Provide safe and quality plasma and there are collected from voluntary donors.

It provides efficient and user friendly services

3

### Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

20 minutes

Neural Network

Cloud Computing

Artificial Intelligence

Natural Language Processing

**TIP**  
Add color-coded tags to sticky notes to make it easier to find, compare, organize, and categorize important ideas as they arise rather than your mind.

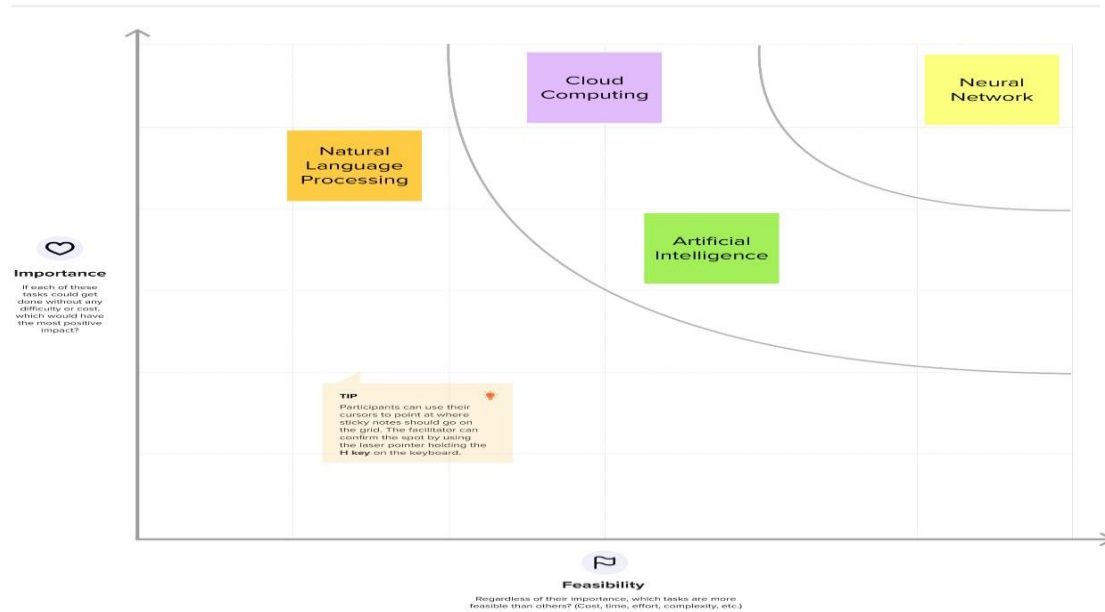
## Step-3: Idea Prioritization

4

### Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes



### 3.3 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Build cloud-based Plasma donor applications to save a life.
2.	Idea / Solution description	Our solution is to build a Cloud Based Application that can track the donors when the recipient needs plasma. It also has the list of donors who are ready to donate and removes the donor once donated. It also notifies the right donor when there is a need. It is an effective application during an emergency.
3.	Novelty / Uniqueness	It can track the donors in real time and monitor them with accurate details like name, age, and whether they have donated within the stipulated time, etc.. and can notify via email or message when the recipient finds the donor.
4.	Social Impact / Customer Satisfaction	Recipients need not worry about the right donor. All they must do is feed the data into the application to search for the right donor.
5.	Business Model (Revenue Model)	Based on the status of the donors, the recipient needs to offer to the user. The more critical the case is, the bigger the revenue.
6.	Scalability of the Solution	It can track and maintain any number of donors and recipients without any errors and give them accurate results.

### 3.4 PROBLEM SOLUTION FIT

Define CS, fit into CC	<b>1.CUSTOMER SEGMENT</b> <b>CS</b> <ul style="list-style-type: none"> <li>- The recipient who are in need of plasma.</li> <li>- The NGO's &amp; hospital managements.</li> </ul>	<b>6.CUSTOMER CONSTRAINTS</b> <b>CC</b> <ul style="list-style-type: none"> <li>- There are no connection details between the customers.</li> <li>- Unavailability of plasma at the needed time.</li> </ul>	<b>5.AVAILABLE SOLUTIONS</b> <b>AS</b> <ul style="list-style-type: none"> <li>- Seeking help through social media.</li> <li>- Existing system involves, only the collection of donor data and will not notify the about the recipient.</li> </ul>	Explore AS, differentiate
	<b>2.JOBS TO BE DONE/PROBLEMS</b> <b>J&amp;P</b> <ul style="list-style-type: none"> <li>- Establish a connection between the donor and the recipient.</li> <li>- Notify donors at the correct time.</li> <li>- Demand has increased.</li> </ul>	<b>9.PROBLEM ROOT CAUSE</b> <b>RC</b> <ul style="list-style-type: none"> <li>- 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.</li> </ul>	<b>7.BEHAVIOUR</b> <b>BE</b> <ul style="list-style-type: none"> <li>- The recipient will get the plasma at the right time.</li> <li>- The donors whose details, stored in database during registration will be notified.</li> </ul>	
	<b>3.TRIGGERS</b> <b>TR</b> <ul style="list-style-type: none"> <li>- We can advertise the web app through the NGO's and through the pharmaceutical companies.</li> </ul> <hr/> <b>4.EMOTIONS: BEFORE/AFTER</b> <b>EM</b> <ul style="list-style-type: none"> <li>- Before: Anxiety, Stress, Scared</li> <li>- After: Relaxed, Happy</li> </ul>	<b>10.YOUR SOLUTION</b> <b>SL</b> <ul style="list-style-type: none"> <li>- Finding the respective donor and notify them through email for the requests.</li> </ul>	<b>8.CHANNELS OF BEHAVIOUR</b> <b>CH</b> <ul style="list-style-type: none"> <li>- The donor will register and they will be notified through the mail.</li> <li>- It will act as a communication channel.</li> </ul>	

## CHAPTER-4 REQUIREMENT ANALYSIS

### 4.1 FUNCTIONAL REQUIREMENT

In software engineering and systems engineering, a functional requirement defines a function of a system or its components.

**Access Website:** Software operator should be capable to access web-application through either an application browser or similar service on the PC. There should not be any limitation to access web-application.

**Software operator Registration:** Given that software operator has accessed web-application, then the software operator should be able to register through the web-application. The donor software operator must provide first name, gender, plasma group, location, contact, software operator name and password.

**New Releases:** When a new/update/revise version of the web-application is released, the appearance will be automatically appears when the software operator access the web-application.

**Software operator log-in:** Given that the software operator has registered, then the software Operator should be able to login to the web-application. The login information will be stored on the database for future use.

**Search result in a list view:** Search result can be viewed in a list. Each element in the list represents a specific donor. Each element should include first name, gender, plasma group, location, contact according to the software operator position.

**Request plasma:** Software operator (Clinic) should be able to request for plasma at emergency situation, software operator need to define plasma group, location, required date, contact. The plasma request requested will be sent to plasma bank and then to the Inventory to check the availability. If available, the requested plasma will be sent to the requested donor (Clinic).

**View Request:** The plasma Bank should be able to view received request and then respond to them and can search requests by selecting two options select plasma group and provision.

**Search plasma Bank Stock:** Receiving the blood or plasma request from Clinic, the blood or plasma stock in the Blood or plasma Bank Inventory will be searched to match the requested blood or plasma request.

**View Blood or plasma request Details:** The Clinic, Blood or plasma Bank should be able to view the Blood or plasma requestId, time of the blood or plasma request placed, name of the clinic, location and the address of the clinic. In addition to this an additional feature of tracking the distribution person which includes his location and the checkpoints passed.

**View Distribution Status:** The Clinic, Blood or plasma Bank should be able to view the status of the distribution time. If the distribution seems to be delayed then the clinic manager must be able to call the distribution person to get the update/revise on the distribution.



## 4.2 NON-FUNCTIONAL REQUIREMENTS

In systems engineering and requirements engineering, a non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specifies behaviors.

**Maintainability:** The plasma donor application System have must have high level of Maintainability.

**Serviceability:** If issue arises in the plasma donor application System, then then project must be programmed in such a way that developer can service it again.

**Environmental :**The plasma donor application System must be working in latest operating system environments like windows 7, windows 8, windows 10 and on Linux.

**Data Integrity:** All the data in the plasma donor application System must be accurate and reliable.

**Usability:** The plasma donor application System must have a good looing user friendly interface.

**Recoverability :**The plasma donor application System must have a proper data backup mechanism.

**Interoperability:** The plasma donor application System must work with or use the parts or equipment of another system.

**Capacity:** The plasma donor application System must fulfill on storage requirements, today and in the future. The Blood bank Management System must be scale up for increasing volume demands.

**Performance:** The plasma donor application System must perform well in different scenarios.

**Security:** The plasma donor application System must be secured with proper user name and passwords.

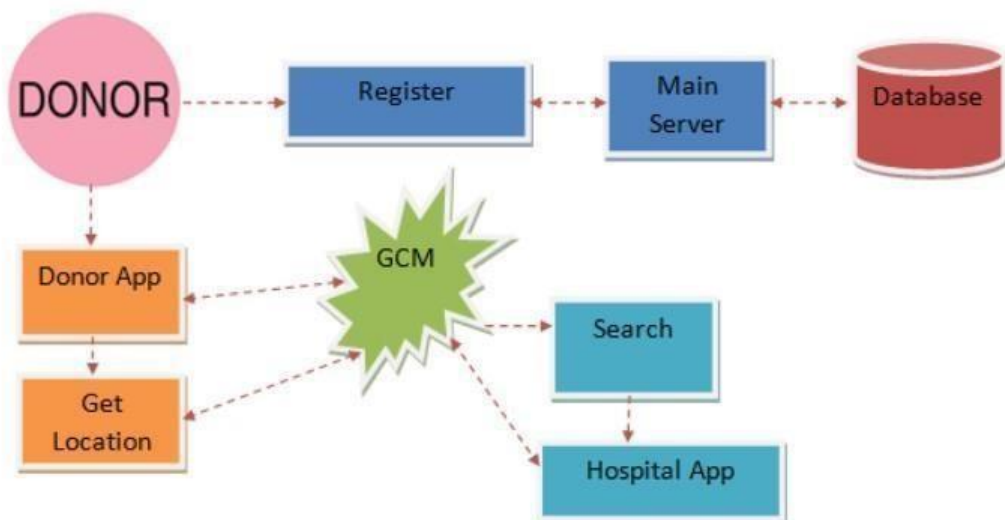
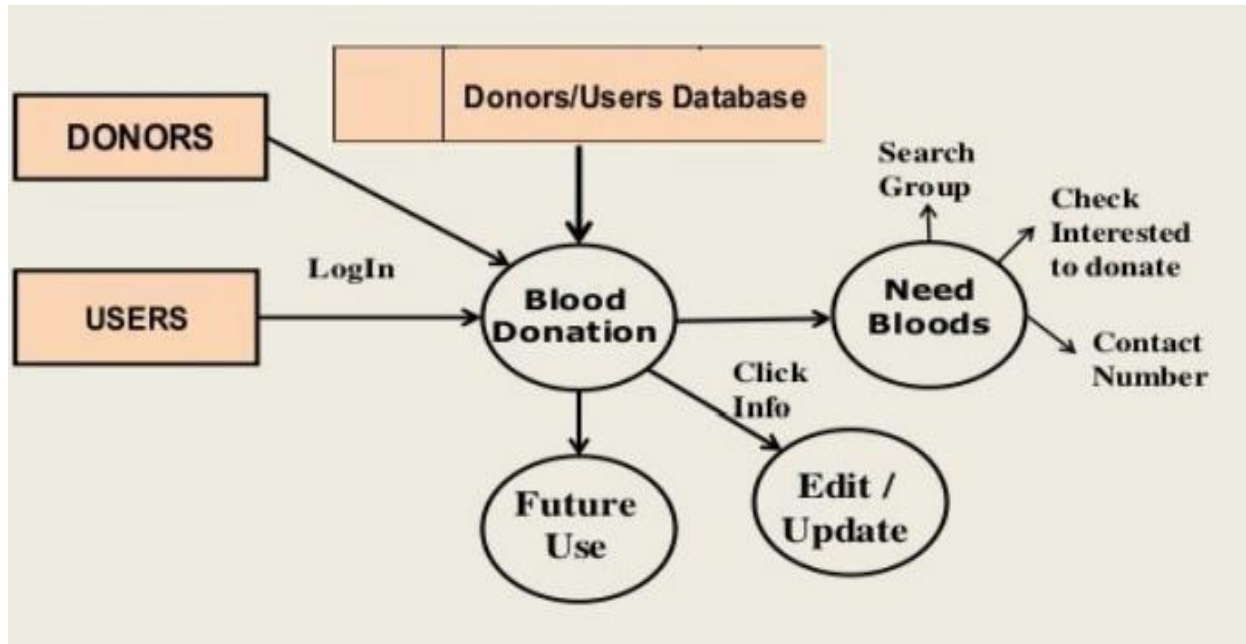
**Regulatory:** The plasma donor application System must obey all the governmental requirements and constraints.

**Availability:** The plasma donor application System must be available 24 hours a day with no bandwidth issues.

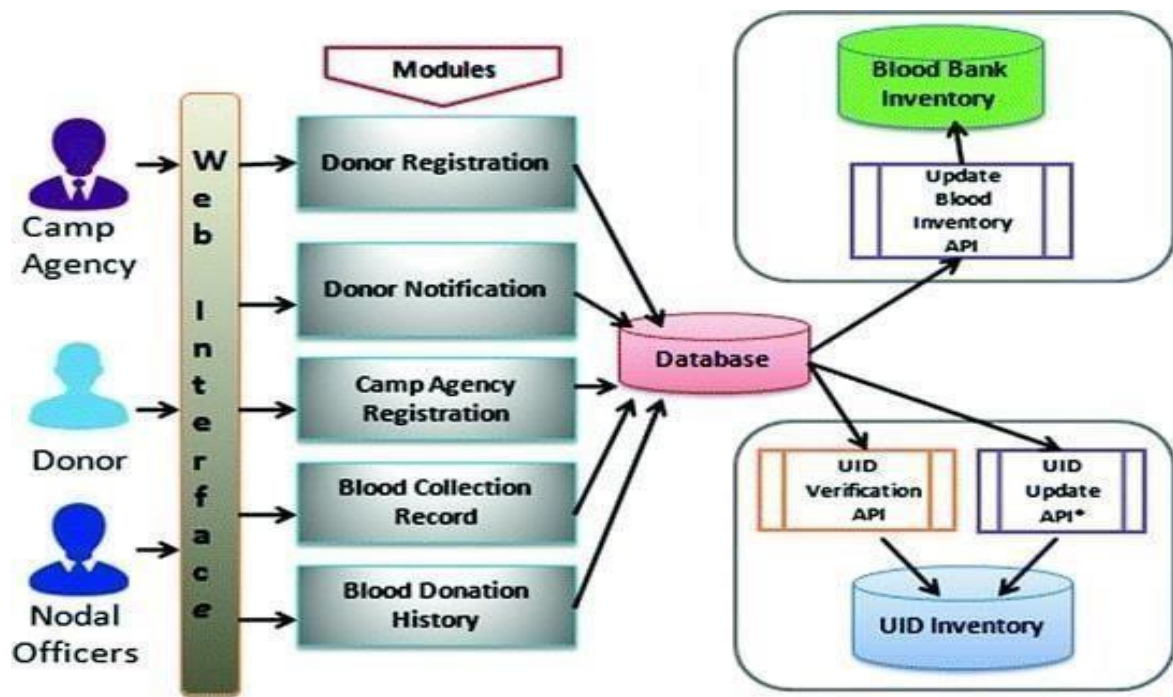
**Manageability:** The plasma donor application System must Alerts when the system suffers from a recoverable interruption.

## CHAPTER-5 PROJECT DESIGN

### 5.1 DATA FLOW DIAGRAM

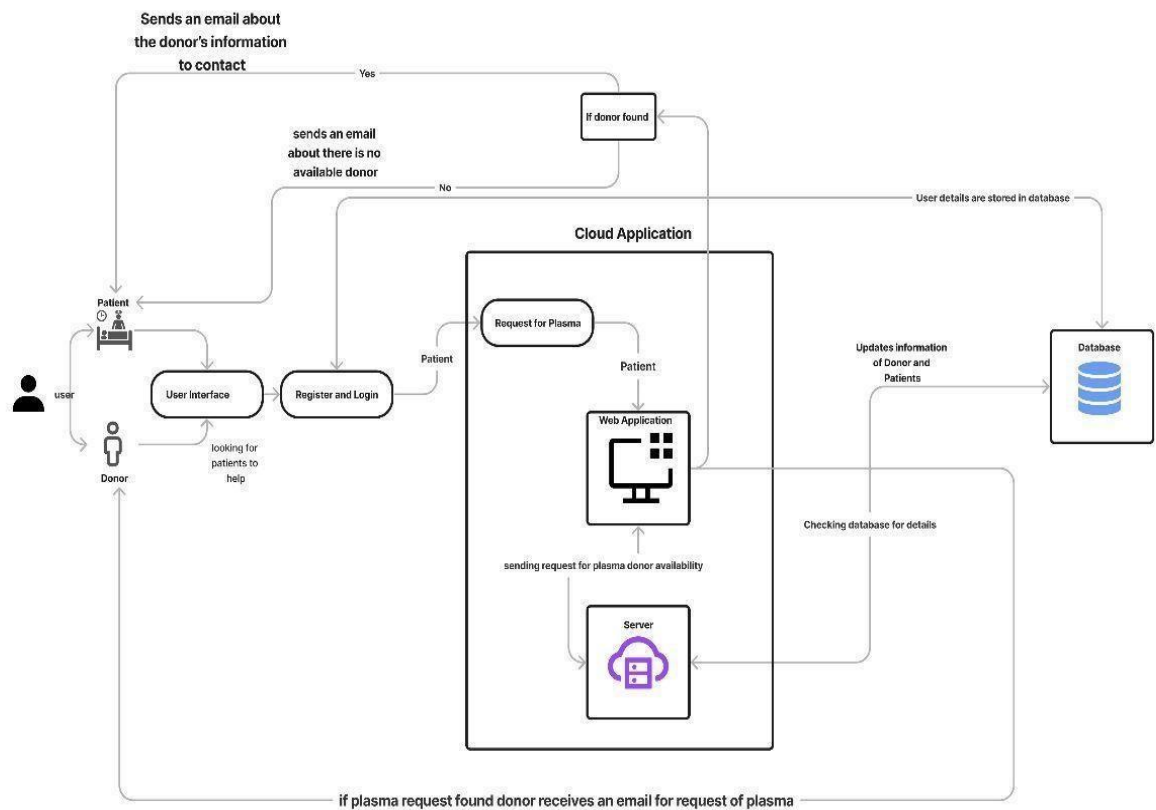


Level 0



Level 1

## 5.2 SOLUTION AND TECHNOLOGY ARCHITECTURE



## 5.3 USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Donor	App 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
	Login	USN-2	As a user, I can log into the application by entering email & password	I can receive confirmation email & click confirm	High	Sprint-2
	Register For Donate	USN-3	As a user, I can log into the application and find the current bank to donate plasma and confirm my booking	I can register & access the dashboard with Facebook Login	Medium	Sprint-3
patient/doctor	Find the bank	USN-4	As a patient, I can directly access the application and find the plasma available bank	I can access my account / dashboard	High	Sprint-1,2
	Request for plasma	USN-5	As a user, I can enter into the application and find the current bank and request for plasma and state the emergency	I can register & access the dashboard with Facebook Login	Medium	Sprint-3
Administrator	Maintain the applications	USN-6	As Administrator I can log into the application by entering email & password and maintaining details for users	I can access my account / dashboard	High	Sprint-3
	Connect The Bank With Users	USN-7	As Administrator, i can hold the good communication between bank and user	I can access my account / dashboard	Low	Sprint-4
	Maintain Database	USN-8	As Administrator i can hold the exact details of donor and patient and also bank for requesting and available of plasma	I can access my account / dashboard	Medium	Sprint-4
Plasma Bank	Connect The Bank With Users	USN-7	As Bank, i can hold the good communication between Administrator and user	I can access my account / dashboard	Medium	Sprint-3

	Maintain Database	USN-8	As Bank i can hold the exact details of donor and patient and also bank for requesting and available of plasma	I can access my account / dashboard	High	Sprint-4
BOT	Help the user my bot mesg in appliation	USN-9	As AI bot, i can hold the good communication between bank and user also help the user	I can access my account / dashboard	Medium	Sprint-4

## CHAPTER-6

### 6.1 SPRINT PLANNING AND ESTIMATION

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	5 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
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#### 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)

**AV=Sprint duration/Velocity**

AV=20/6=3.333...

Sprint 1(AV)= 3.34

Sprint 2(AV)= 3.34

Sprint 3(AV)= 3.34

Sprint 4(AV)= 3.34

## 6.2 SPRINT DELIVERY SCHEDULE

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Donor Registration	USN-1	As a user, I can register in the donor application by entering my name, phone_no, Email id, blood group ,aadhar no	9	High	Team lead
Sprint-1	Login	USN-2	As a admin, I can log into the application by entering email & password	9	High	Team Lead
Sprint-1	Chatbot	USN-3	As a user I can ask query in chatbot.	2	Medium	Team Lead
Sprint -2	Confimation	USN-4	As a user, I can receive confirmation mail.	4	Medium	Team Lead
Sprint - 2	Dashboard	USN-5	As a user, I can view dashboard and select	5	Medium	Team Member 1

Sprint-2	View Donor List	USN-6	As a user, I can view all the donor list and contact them directly	9	High	Team Lead
Sprint-2	Search Donor	USN-7	As a user, I can search for the donor	9	Medium	Team Lead
Sprint-3	About us	USN-8	As a User, I can view the about us page	5	Medium	Team Member 2

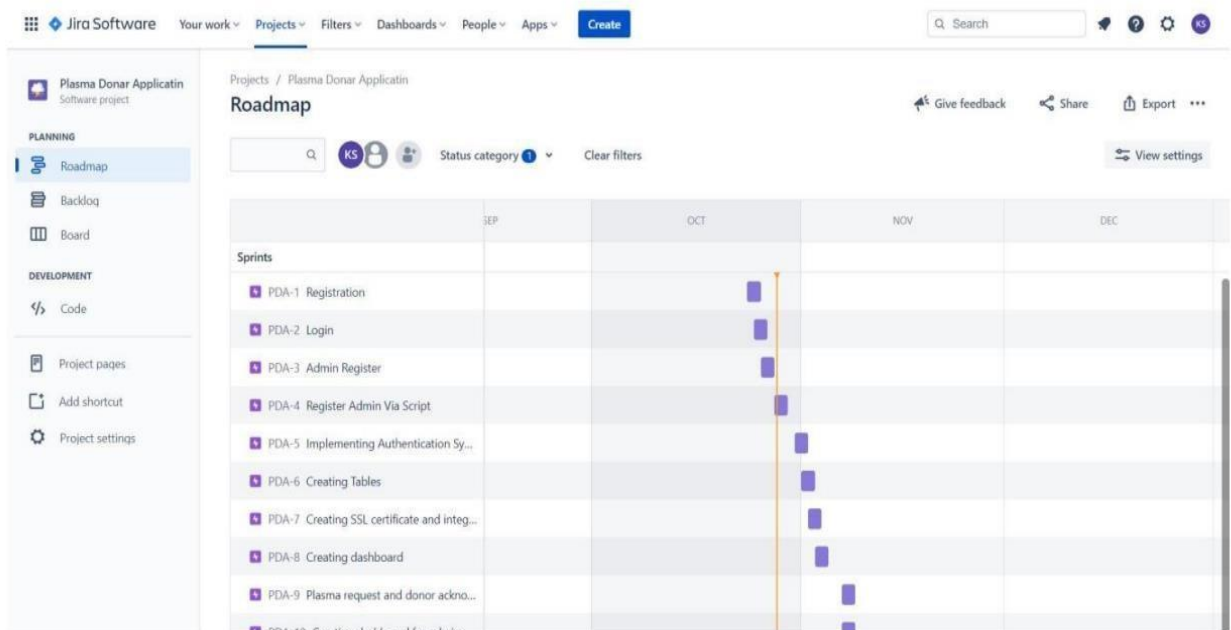
			which contains all contact information			
--	--	--	--	--	--	--



<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-3	Modify data	USN-9	As a admin, I can modify the User data.	9	High	Team Lead
Sprint-3	Send mail	USN-10	As a user, I can send mail to donors using sendgrid.	9	High	Team Lead Team Member 3 Team Member 1
Sprint-3	Home page	USN-11	As a user I can view the home page and select the desired option.	9	Medium	Team Lead Team Member 1 Team Member 2 Team Member 3
Sprint -4	Send Query	USN-12	As a user I can ask my query through email.	9	Medium	Team Lead Team Member 3
Sprint-4	Download data	USN-13	As a admin I can download the user data	9	High	Team Lead



## 6.2 REPORT FROM JIRA



## CHAPTER-7 CODING AND SOLUTIONING

### 7.1 FEATURE CODE Admin

#### Page

```
<!DOCTYPE html>
<html lang="en" >
<head>
<meta charset="UTF-8">
<title>Admin Login</title>
<link href="https://fonts.googleapis.com/css?family=Open+Sans"
rel="stylesheet">
<link href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font
awesome.min.css" rel="stylesheet" integrity="sha384-
wvfXpqpZZVQGK6TAh5PVlGOfQNHSoD2xbE+QkPxCAFINEevoEH3Sl0si
bVcOQVnN"
crossorigin="anonymous">
<link rel="stylesheet" type="text/css" href="../static/adminlogin.css">
</head>
<div class="loader_bg">
<div class="loader"></div>
</div>
<!-- partial:index.partial.html -->
<div class="box-form">
<div class="left">
<div class="overlay">
<h1>Wc Admin!</h1>
<p>Good governance depends on ability to take responsibility by
both administration as well as people...</p>
<span>
<h3> <u>login with social media</u></h3>
<a href="https://www.facebook.com/login/"><i class="fa fa facebook"
aria-hidden="true"></i></a>
<a
href="https://accounts.google.com/ServiceLogin?art=ANgoxccWMJUYH
Qa3XU_QXDv2zFIXhG7Wy7iJAIPJ8JsryC6xHQj-SeDlstF
bGjgZ0BZWYpE5U3qrh9MUAqzry3Wytg4n8Ig"><i class="fa fa-google" aria
hidden="true"></i> Login with Gmail</a> <!-- <a href="#"><i class="bi bi-
google" aria hidden="true"></i></a> -->
```

```

</span>
</div>
</div>
<div class="right">
<h5>Admin!</h5> <!-- <p>Don't have an account? <a href="#">Creat
Your Account</a> it takes less than a minute</p> -->
<div class="inputs">
<input type="text" placeholder="user id">
<br>
<input type="password" placeholder="password">
</div>
<br><br>
<div class="remember-me--forget-password">
<!-- Angular -->
<!-- <label>
<input type="checkbox" name="item" />
<span class="text-checkbox">Remember me</span>
</label> -->
<br>
<button><a href="/admin">Login</a></button>
<!-- <p>forget password?</p> -->
</div>
<br>
<p>Don't have an account? <a href="/adminreg">Create Your
Account</a> it takes less than a minute</p>
</div>
</div>
<!-- partial --> <script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri
pt> <script> setTimeout(function(){ $('loader_bg').fadeToggle();
}, 1600);
</script>
</body>
</html>

```

## Donor Login Page

```
<!DOCTYPE html>
<html lang="en" >
<head>
<meta charset="UTF-8">
<title>Donar Login</title> <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.cs
s ">
<link rel="stylesheet" href="../static/logincss.css">
</head>
<center><h4>{ { msg } }</h4></center>
<body>
<div class="loader_bg">
<div class="loader"></div>
</div>
<!-- partial:index.partial.html -->
<div id="login-form-wrap">
<h2>Donar Login</h2>
<form id="login-form">
<p>
<input type="text" id="email" name="email" placeholder="Email" required><i
class="validation"><span></span><span></span></i>
</p>
<p>
<input type="password" id="password" name="password"
placeholder="password" required><i
class="validation"><span></span><span></span></i>
</p>
<p>
<a href="/donar">
<button type="button" class="btn btn-success">Log in</button>
</a>
</p>
</form>
<div id="create-account-wrap">
<p>Are you New ? <a href="/donregistration">Create Account</a><p>
</div><!--create-account-wrap-->
```

```

</div><!--login-form-wrap-->
<!-- partial -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri
pt> <script> setTimeout(function(){ $('loader_bg').fadeToggle();
}, 1600);
</script>
</body>
</html>

```

## Dashboard

```

<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
<link rel="stylesheet" href="assets/css/bootstrap.min.css">
<link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
<link rel="stylesheet" type="text/css" href="../static/donar.css"> <link
rel="stylesheet" href="assets/plugins/grid-gallery/css/grid
gallery.min.css">
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+
fzT"
crossorigin="anonymous">
<title>Admin Page</title><header class="p-3 text-bg-dark">
<div class="container">
<div class="d-flex flex-wrap align-items-center justify-content-center justify-
content-lg-start">
<a href="/" class="d-flex align-items-center mb-2 mb-lg-0 text white
text-decoration-none">

```

```

<svg class="bi me-2" width="40" height="32" role="img" aria
label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
</a>
<ul class="nav col-12 col-lg-auto me-lg-auto mb-2 justify-content
center mb-md-0">
<li><b><center>
ADMIN DASHBOARD, Nice to see you Again Admin!</center>
</b></li>
</ul>
</div>
</div>
</header>
</head>
<body>
<div class="loader_bg">
<div class="loader"></div>
</div>
<br><a href="/mail">
<button style="margin-left: 1400px;" type="button" class="btn btn
success">Mail</button></a> <br><br><br><br><br>
<div class="content-center">
<center>
<button type="button" class="btn btn-warning btn-lg"><a
href="/plasmadon">Donation requests</a></button>
<br><br>
<button type="button" class="btn btn-danger btn-lg"><a
href="/plasmareq">Recipient requests</a></button>
</center>
<br><a href="/">
<button style="margin-left: 20px;" type="button" class="btn btn success">Log
out</button></a>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri
pt>
</body>
<style> body{
background: rgb(2,0,36);
background: linear-gradient(270deg, rgba(2,0,36,1) 0%, rgba(9,9,121,1)

```

```

0%, rgba(0,212,255,1) 100%);
} button a:link {
text-decoration: none;
color: #000000;
}
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; color: #ffffff;} table,
th, td {
border: 1px solid black;
}
</style> <script>
setTimeout(function(){
$('.loader_bg').fadeToggle();
}, 1600);
</script>
</html>

```

## Donor requesting page

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
<link rel="stylesheet" href="assets/css/bootstrap.min.css">
<link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
<link rel="stylesheet" type="text/css" href="../static/donar.css"> <link
rel="stylesheet" href="assets/plugins/grid-gallery/css/grid
gallery.min.css">
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-

```

iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+  
fzT"

crossorigin="anonymous">

<title>Donar Req</title>

</head>

<body>

<header class="p-3 text-bg-dark">

<div class="container">

<div class="d-flex flex-wrap align-items-center justify-content center  
justify-content-lg-start">

<a href="/" class="d-flex align-items-center mb-2 mb-lg-0 text-white  
text-decoration-none">

<svg class="bi me-2" width="40" height="32" role="img" aria-  
label="Bootstrap"><use xlink:href="#bootstrap"/></svg>

</a>

<ul class="nav col-12 col-lg-auto me-lg-auto mb-2 justify content-center  
mb-md-0">

<li><a href="/" class="nav-link px-2 text  
white"><b>Home</b></a></li>

<li><a href="#" class="nav-link px-2 text  
white"><b>About</b></a></li>

<li><a href="#" class="nav-link px-2 text  
white"><b>Blogs</b></a></li>

<li><a href="#" class="nav-link px-2 text  
white"><b>Camps</b></a></li>

</ul>

<div class="text-end">

<button type="button" class="btn btn-outline-secondary"><a  
href="/adminlogin">Admin Login</a></button>

<button type="button" class="btn btn-outline-info"><a  
href="/recipientlogin">Looking for plasma?</a></button>

<button type="button" class="btn btn-outline-warning"><a  
href="/donarlogin">Donate Now!</a></button>

</div>

</div>

</div>

</header>

<div class="marquee">



```

<marquee width="80%" direction="left" height="20px" scrolldelay="100">
Welcome Donar ! You are the Saviour, Your donation can save the lot of
lives ♥ Thanks for donating
</marquee>
</div>
<!--donar table-->
<div class="foot">
<center><h3>DONATION DETAILS</h3></center>
<a href="/">
<button style="margin-left: 20px;" type="button" class="btn btn success">Log
out</button></a> <center><p>{{ msg }}</p></center>
<center>
<form action="{{ url_for('giveplasma') }}" method="POST">
<table align="center" cellpadding = "5">
<tr>
<td>Name</td>
<td><input type = "text" name="name" required/></td>
</tr>
<tr>
<td>Age</td>
<td><input type="number" name="age" required/></td>
</tr>
<tr>
<td>Gender</td>
<td><input type="radio" name="gender" value="Male"/>Male
<input type="radio" name="gender" value="Female"/>Female</td> </tr>
<tr>
<td>Mobile No</td>
<td><input type="number" name="mnumb" maxlength="10" required/></td>
</tr>
<tr>
<td>Email</td>
<td><input type="text" name="email" maxlength="50" required/></td>
</tr>
<tr>
<td>City</td>
<td><input type = "text" name="city" required/></td>
</tr>

```

```

<tr>
<td>Address</td>
<td><textarea name="address" required></textarea></td>
</tr>
<tr>
<td>Blood Group</td>
<td><select name="bloodgroup" id="blood" required>
<option>A+ve</option>
<option>A-ve</option>
<option>B+ve</option>
<option>B-ve</option>
<option>AB+ve</option>
<option>AB-ve</option>
<option>O+ve</option>
<option>O-ve</option>
</select></td>
</tr>
<tr>
<td>Any Health Issues</td>
<td><input type="text" name="issue" maxlength="3" required/>
(type "Yes" or "No")</td>
</tr>
<tr>
<td>Last blood donated date</td>
<td><input type="date" name="lastbd" required></td>
</tr>
<tr>
<td>Book Slot</td>
<td><input type="date" name="slot" required/></td>
</tr>
</table>

<center>
<input type="submit" value="Submit">
<!-- <button type="button" class="btn btn-success"><a
href="#">Register</a></button> -->
<!-- <button type="button" class="w3-button w3-green" value="Submit"><a
href="#">Register</a></button> -->

```

```

</center>
</form>
</center>
</div>
<footer class="bg-dark text-center text-white">
<!-- Grid container -->
<div class="container p-4 pb-0">
<!-- Section: Social media -->
<section class="mb-4">
<!-- Facebook -->
<!-- <a class="btn btn-outline-light btn-floating m-1" href="#"
role="button"
><i class="fab fa-facebook-f"></i><b
>f</b></a> -->
<!-- Twitter -->
<a class="btn btn-outline-light btn-floating m-1"
href="#" role="button" ><i class="fab fa-
twitter"></i
></a>
<!-- Google -->
36<a class="btn btn-outline-light btn-floating m-1"
href="#" role="button" ><i class="fab fa-
google"></i
></a>
<!-- Instagram -->
<a class="btn btn-outline-light btn-floating m-1"
href="#" role="button" ><i class="fab fa-
instagram"></i
></a>
<!-- Linkedin -->
<a class="btn btn-outline-light btn-floating m-1"
href="#" role="button" ><i class="fab fa-
linkedin-in"></i
></a>
<!-- Github -->
<a class="btn btn-outline-light btn-floating m-1"
href="#" role="button" ><i class="fab fa-
github"></i

```

```
></a>
</section>
<!-- Section: Social media -->
</div>
<!-- Grid container -->
<!-- Copyright -->
<div class="text-center p-3" style="background-color: rgba(0,
0, 0, 0.2);">
© 2020 Copyright:
<a class="text-white"
href="#">kishorekumar1409@gmail.com</a>
</div>
<!-- Copyright -->
</footer>
</body>
</html>
```

## CHAPTER-8 TESTING

### 8.1 USER ACCEPTANCE TEST

#### 1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).

#### 2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved.

Resolution	Severity1	Severity2	Severity3	Severity4	Subtotal
By Design	10	4	2	4	20
Duplicate		0	1	0	2
External	2	2	1	1	6
Fixed	4	1	1	10	16
Not Reproduced		0	0	0	0
Skipped	1	1	0	1	3
Won't Fix	0	2	2	0	4
Totals	18	10	7	16	51

#### 3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested.

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	9	0	0	9
Client Application	10	0	0	10
Security	1	0	0	1
Outsource Shipping	0	0	0	0
Exception Reporting	9	0	0	9
Final Report Output	9	0	0	9
Version Control	1	0	0	1

## CHAPTER-9 RESULT

### 9.1 PERFORMANCE METRICS

**Formal code metrics** - Such as Lines of Code (LOC), code complexity, Instruction Path Length, etc. In modern development environments, these are considered less useful.

**Developer productivity metrics**—Such as active days, assignment scope, efficiency and code churn. These metrics can help you understand how much time and work developers are investing in a software project.

**Agile process metrics**—Such as lead time, cycle time and velocity. They measure the progress of a dev team in producing working, shipping-quality software features.

**Operational metrics**—Such as Mean Time Between Failures (MTBF) and Mean Time to Recover (MTTR). This checks how software is running in production and how effective operations staff are at maintaining it.

**Test metrics**—Such as code coverage, percent of automated tests, and defects in production. This measures how comprehensively a system is tested, which should be correlated with software quality.

**Customer satisfaction**—Such as Net Promoter Score (NPS), Customer Effort Score (CES) and Customer Satisfaction Score (CSAT). The ultimate measurement of how customers experience the software and their interaction with the software vendor.

## CHAPTER – 10

### ADVANTAGES AND DISADVANTAGES

#### **Advantages :**

- **Speed:** This website is fast and offers great accuracy as compared to manual registered keeping.
- **Maintenance:** Less maintenance is required.
- **User Friendly:** It is very easy to use and understand. It is easily workable and accessible for everyone.
- **Fast Results:** It would help you to provide plasma donors easily depending upon the availability of it.

#### **Disadvantages :**

- **Internet:** It would require an internet connection for the working of the website.
- **Auto-Verification:** It cannot automatically verify the genuine users.

## **CHAPTER-11**

### **CONCLUSION**

The efficient way of finding plasma donor for the infected people is implemented using the plasma donor website that is hosted on AWS platform.

To ensure the smooth functioning of the website operations.

I have hosted the website in AWS platform to make sure the operations are running successfully AWS lambda function is used and to deploy the application AWS EC2 service is used.



## **CHAPTER-12**

### **FUTURE SCOPE**

Upgrading the UI that is more user-friendly which will help many users to access the website and also ensures that many plasma donors can be added into the community.

Using elastic load balancer, it helps to handle multiple requests at the same time which will maintain the uptime of the website with negligible downtime.

## CHAPTER-13 APPENDIX

### SOURCE CODE:

#### App.py

```
from flask import Flask,render_template,request,url_for,redirect
from markupsafe import escape

import ibm_db
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=30756;SECURIT
Y=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=blk20068;PWD=LsEEBW71f
9uXFnsf",'','')

app = Flask(__name__)

@app.route('/')
def index():
    return render_template('index.html')    # index - home page

# admin credentials

@app.route('/adminlogin')
def adminlogin():
    return render_template('adminlogin.html')    # admin log in page

@app.route('/adminreg')
def adminreg():
    return render_template('adminreg.html')    # admin sign up page

@app.route('/recipregistration')
def recipregistration():
```

```

    return render_template('recipregistration.html')    ## recipient signup page
uh

@app.route('/recipientlogin')
def recipientlogin():
    return render_template('reclogin.html')            ## recipt login page

@app.route('/recipientrec',methods = ['POST', 'GET'])
def recipientrec():
    if request.method == 'POST':

        fname = request.form['fname']
        lname = request.form['lname']
        dob = request.form['dob']
        email = request.form['email']
        mnumb = request.form['mnumb']
        gender = request.form['gender']
        address = request.form['address']
        pin = request.form['pin']

        sql = "SELECT * FROM recipientrec WHERE fname =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,fname)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)

        if account:
            return render_template('reclogin.html', msg="Already your account
exists, please try to log in")
        else:
            insert_sql = "INSERT INTO recipientrec VALUES (?, ?, ?, ?, ?, ?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prepare_stmt, 1, fname)
            ibm_db.bind_param(prepare_stmt, 2, lname)
            ibm_db.bind_param(prepare_stmt, 3, dob)
            ibm_db.bind_param(prepare_stmt, 4, email)
            ibm_db.bind_param(prepare_stmt, 5, mnumb)
            ibm_db.bind_param(prepare_stmt, 6, gender)
            ibm_db.bind_param(prepare_stmt, 7, address)
            ibm_db.bind_param(prepare_stmt, 8, pin)
            ibm_db.execute(prepare_stmt)

            return render_template('reclogin.html', msg="Account has been created
successfully..")

    return "success..."

```

```

### donar credential

@app.route('/donregistration')
def donregistration():
    return render_template('donregistration.html')    ## donar signup page uh

@app.route('/donarlogin')
def donarlogin():
    return render_template('donlogin.html')          ## donar login page

# @app.route('/donarrequest')
# def donarrequest():
#     return render_template('donar.html')    ## plasma requesting page

## donar details table

@app.route('/donrec', methods = ['POST', 'GET'])
def donrec():
    if request.method == 'POST':

        fname = request.form['fname']
        lname = request.form['lname']
        dob = request.form['dob']
        email = request.form['email']
        mnumb = request.form['mnumb']
        gender = request.form['gender']
        address = request.form['address']
        pin = request.form['pin']

        sql = "SELECT * FROM donarrec WHERE fname =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt, 1, fname)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)

        if account:
            return render_template('donlogin.html', msg="Already your account exists, please try to log in")
        else:
            insert_sql = "INSERT INTO donarrec VALUES (?, ?, ?, ?, ?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prepare_stmt, 1, fname)
            ibm_db.bind_param(prepare_stmt, 2, lname)
            ibm_db.bind_param(prepare_stmt, 3, dob)
            ibm_db.bind_param(prepare_stmt, 4, email)

```

```

        ibm_db.bind_param(prepare_stmt, 5, mnumb)
        ibm_db.bind_param(prepare_stmt, 6, gender)
        ibm_db.bind_param(prepare_stmt, 7, address)
        ibm_db.bind_param(prepare_stmt, 8, pin)
        ibm_db.execute(prepare_stmt)

        return render_template('donlogin.html', msg="Account has been created
successfully..")

    return "success..."

@app.route('/admin')
def admin():
    return render_template('admin.html')

@app.route('/donar')
def donar():
    return render_template('donar.html')

## donar registering for donation
@app.route('/giveplasma', methods = ['POST', 'GET'])
def giveplasma():
    if request.method == 'POST':

        name = request.form['name']
        age = request.form['age']
        gender = request.form['gender']
        mnumb = request.form['mnumb']
        email = request.form['email']
        city = request.form['city']
        address = request.form['address']
        bloodgroup = request.form['bloodgroup']
        issue = request.form['issue']
        lastbd = request.form['lastbd']
        slot = request.form['slot']

        sql = "SELECT * FROM donar WHERE name =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,name)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)

        if account:
            return render_template('donlogin.html', msg="Your request for donation
is successfully submitted..")
        else:
            insert sql = "INSERT INTO donar VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, ?)"

```



```

        donar.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)
    if donar:
        return render_template("plasmadon.html", donar = donar, msg="Delete
successfully")

    ## while student != False:
    ##     print ("The Name is : ", student)

    # print(student)
    return "success..."

@app.route('/mail')
def mail():
    return render_template('mail.html')

@app.route('/recipient')
def recipient():
    return render_template('recipient.html')

@app.route('/takeplasma', methods = ['POST', 'GET'])
def takeplasma():
    if request.method == 'POST':

        name = request.form['name']
        age = request.form['age']
        gender = request.form['gender']
        mnumb = request.form['mnumb']
        proof = request.form['proof']
        address = request.form['address']
        plasma = request.form['plasma']

        sql = "SELECT * FROM recipient WHERE name =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,name)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)

        if account:
            return render_template('reclogin.html', msg="You are already a member,
please login using your details")
        else:
            insert_sql = "INSERT INTO recipient VALUES (?, ?, ?, ?, ?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)

```

```

        ibm_db.bind_param(prepare_stmt, 1, name)
        ibm_db.bind_param(prepare_stmt, 2, age)
        ibm_db.bind_param(prepare_stmt, 3, gender)
        ibm_db.bind_param(prepare_stmt, 4, mnumb)
        ibm_db.bind_param(prepare_stmt, 5, proof)
        ibm_db.bind_param(prepare_stmt, 6, address)
        ibm_db.bind_param(prepare_stmt, 7, plasma)
        ibm_db.execute(prepare_stmt)

    return render_template('recipient.html', msg="Registration succesfull for
Plasma request..")

@app.route('/plasmareq')
def plasmareq():
    recipient = []
    sql = "SELECT * FROM recipient"
    stmt = ibm_db.exec_immediate(conn, sql)
    dictionary = ibm_db.fetch_both(stmt)
    while dictionary != False:
        # print ("The Name is : ", dictionary)
        recipient.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)

    if recipient:
        return render_template("plasmareq.html", recipient = recipient)

@app.route('/delete/<name>')
def deleted(name):
    sql = f"SELECT * FROM recipient WHERE name='{escape(name)}'"
    print(sql)
    stmt = ibm_db.exec_immediate(conn, sql)
    recipient = ibm_db.fetch_row(stmt)
    print ("The Name is : ", recipient)
    if recipient:
        sql = f"DELETE FROM recipient WHERE name='{escape(name)}'"
        print(sql)
        stmt = ibm_db.exec_immediate(conn, sql)

    recipient = []
    sql = "SELECT * FROM recipient"
    stmt = ibm_db.exec_immediate(conn, sql)
    dictionary = ibm_db.fetch_both(stmt)
    while dictionary != False:
        recipient.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)
    if recipient:

```

```

        return render_template("plasmareq.html", recipient = recipient,
msg="Delete successfully")

        return "Deleted Successfully"

if __name__ == "__main__":
    app.run(port=5000, host="0.0.0.0", debug=True)

```

## TEMPLATES >

### Index.html

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <!-- CSS only -->
    <link
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
    <link rel="shortcut icon" href="assets/images/fav.jpg">
    <link rel="stylesheet" href="../../static/bootstrap.min.css">
    <link rel="stylesheet" href="../../static/fontawsom-all.min.css">
    <link rel="stylesheet" href="../../static/grid-gallery.min.css">
    <link rel="stylesheet" href="../../static/grid-gallery.css">
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
1YQeCzEYfBKjA/T2uDLtpkwGzCiq6soy8tYaIlGyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <link rel="stylesheet" type="text/css" href="../../static/style.css" />
    <title>Home page</title>

</head>

<body>
    <div class="loader_bg">
        <div class="loader"></div>
    </div>

    <header class="p-3 text-bg-dark">
        <div class="container">

```



```

        <div class="d-flex flex-wrap align-items-center justify-content-
center justify-content-lg-start">
            <a href="/" class="d-flex align-items-center mb-2 mb-lg-0
text-white text-decoration-none">
                <svg class="bi me-2" width="40" height="32" role="img"
aria-label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
                </a>

            <ul class="nav col-12 col-lg-auto me-lg-auto mb-2 justify-
content-center mb-md-0">
                <li><a href="/" class="nav-link px-2 text-
white"><b>Home</b></a></li> &nbsp;&nbsp;&nbsp;
                <li><a href="#" class="nav-link px-2 text-
white"><b>About</b></a></li> &nbsp;&nbsp;&nbsp;
                <li><a href="#" class="nav-link px-2 text-
white"><b>Blogs</b></a></li> &nbsp;&nbsp;&nbsp;
                <li><a href="#" class="nav-link px-2 text-
white"><b>Camps</b></a></li>
            </ul>
            <div class="text-end">
                <button type="button" class="btn btn-outline-secondary"><a
href="/adminlogin">Admin Login</a></button>
                <button type="button" class="btn btn-outline-info"><a
href="/recipientlogin">Looking for plasma?</a></Looking></button>
                <button type="button" class="btn btn-outline-warning"><a
href="/donarlogin">Donate Now!</a></button>
            </div>
        </div>
    </div>
</header>
<div class="slider-detail">

    <div id="carouselExampleIndicators" class="carousel slide" data-
ride="carousel">
        <ol class="carousel-indicators">
            <li data-target="#carouselExampleIndicators" data-slide-to="0"
class="active"></li>
            <li data-target="#carouselExampleIndicators" data-slide-
to="1"></li>

        </ol>
        <div class="carousel-inner">
            <div class="carousel-item active">
                
                <div class="carousel-caption d-none d-md-block">
                    <h5 class=" bounceInDown">Donate Plasma & Save a
Life</h5>

```

```

    </div>

</div>

<!--***** About Us Starts Here *****-->
<section id="about" class="contianer-fluid about-us">
    <div class="container">
        <div class="row session-title">
            <h2><u>About Us</u></h2>
            <p> text will be added</p>
        </div>
        <div class="row">
            <div class="col-md-6 text">
                <h2>About Plasma Donars</h2>
                <p>when a patient needs plasma, he/she has to contact a
Medical center or a compatible blood group of a donor in their circle, family,
and friends. However, it is difficult to find suitable donor within a limited
group of people in a given time. In addition, there is no guarantee that
Medical center will have compatible plasma in stock. There is also steady
increase in plasma donation requests posts in social networking sites (like
Facebook, twitter, Instagram, etc.) requesting for donation.</p>
                <p>Ease of access, requirements of plasma, and the plasma
donation statistics are taken into consideration while researching the topic.
There is a steady need for plasma.</p>
                <p>Although this application helps finding donors, but the
ease of communication with those donors is not prompt and it requires man
power as the requester (patient or clinic) has to contact each donor
individually. Also, there is no application that provides a proper
communication channel to notify donors about the plasma donation
requirements.</p>
                <p>Our application provides donors with functionalities
including "plasma request", "Ask for donation", "share with friend", (slot
alloted to donate plasma), at the same time the recipient can send requests
and use this application to maintain the donation activities.</p>
            </div>
            <div class="col-md-6 image">
                
            </div>
        </div>
    </div>
</section>

<!-- ##### Gallery Start Here #####-->
<div id="gallery" class="gallery-container-fluid">

```

```

<div class="container">
  <div class="row session-title">
    <h2><u>Checkout Our Gallery</u></h2>
  </div>
  <div class="gallery-row row">
    <div id="gg-screen"></div>
    <div class="gg-box">
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        
      </div>
      <div class="gg-element">
        

```

```

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

<!-- ##### Donation Process Start Here
#####-->

<section id="process" class="donation-care">
    <div class="container">
        <div class="row session-title">
            <h2><u>Donation Process</u></h2>
            <!-- <p><b>The donation process from the time you arrive center
until the time you leave.</b></p> -->
        </div>
        <div class="row">
            <div class="col-md-3 col-sm-6 vd">
                <div class="bkjiu">
                    
                    <h4><b>1 - </b>Registration</h4>
                    <p>When you arrive at a plasma center, you will check in
at the front desk. You will need to show a valid photo ID, proof of address,
and proof of social security.</p>
                    <button class="btn btn-sm btn-danger"><a
href="#">Readmore </a><i class="fas fa-arrow-right"></i></button>
                </div>
            </div>
            <div class="col-md-3 col-sm-6 vd">
                <div class="bkjiu">
                    
                    <h4><b>2 - </b>Screening</h4>
                    <p>During the screening, you will give a blood sample and
get your vital signs checked, including your blood pressure, pulse, and
temperature</p>
                    <button class="btn btn-sm btn-danger">Readmore <i
class="fas fa-arrow-right"></i></button>
                </div>
            </div>
            <div class="col-md-3 col-sm-6 vd">
                <div class="bkjiu">
                    
                    <h4><b>3 - </b>Physical Exam</h4>

```



```

        <p> The first time you give plasma, you will receive a
brief physical exam given by a trained medical specialist to make sure you
stay in good health.</p>
        <button class="btn btn-sm btn-danger">Readmore <i
class="fas fa-arrow-right"></i></button>
    </div>
</div>
<div class="col-md-3 col-sm-6 vd">
    <div class="bkjiu">
        
        <h4><b>4 - </b>Donation</h4>
        <p>After approval, plasma center staff will set you
up at a plasmapheresis machine that collects whole blood from a vein in your
arm and it separates out the plasma.</p>
        <button class="btn btn-sm btn-danger">Readmore <i
class="fas fa-arrow-right"></i></button>
    </div>
</div>
</div>

</div>
</section>

<!--##### Our Blog Starts Here
#####-->
<div id="blog" class="blog-container containr-fluid">
    <div class="container">
        <div class="session-title row">
            <h2><u>Latest Blog</u></h2>
            <!-- <p>Lorem ipsum dolor sit amet, consectetur
adipiscing elit. Fusce fringilla vel nisl a dictum. Donec ut est arcu. Donec
hendrerit velit consectetur adipiscing elit.</p> -->
        </div>
        <div class="row news-row">
            <div class="col-md-6">
                <div class="news-card">
                    <div class="image">
                        
                    </div>
                    <div class="detail">
                        <h3>Give Thanks, Give Blood</h3>
                        <p>Blood donors share life. And for that,
thousands of people are thankful that blood donors give generously. After
donating blood,we wants to thank our loyal platelet donors with a t-shirt they
can wear loud and proud... </p>

```



## CHAPTER -13

### FUTURE SCOPE

Upgrading the UI that is more user-friendly which will help many users to access the website and also ensures that many plasma donors can be added into the community.

Using elastic load balancer, it helps to handle multiple requests at the same time which will maintain the uptime of the website with negligible downtime.

## **11.Appendix**

source code

<https://github.com/IBM-EPBL/IBM-Project-43045-1660712309>

demo video drive link:

[https://drive.google.com/file/d/1dZSEdzi1\\_J97Qnd8Zjllu0QgFg8kr0Ew/view?usp=drivesdk](https://drive.google.com/file/d/1dZSEdzi1_J97Qnd8Zjllu0QgFg8kr0Ew/view?usp=drivesdk)