PLASMA DONOR APPLICATION

A Project Report

Submitted by

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1. INTRODUCTION

1.1 Project Overview

Although the government is carrying out Covid vaccination campaigns on a large scale, the number of vaccines produced is not enough for all the population to get vaccinated at present. And with the corona positive cases rising every day, saving lives has become the prime matter of concern. As per the data provided by WHO more than 3 million people have died due to the coronavirus .However, apart from vaccination, there is another scientific method by which a covid infected person can be treated and the death risk can be reduced.

This plasma therapy is an experimental approach to treat corona-positive patients and help them recover. This plasma therapy is considered to be safe & promising. A person who has recovered from Covid can donate his/her plasma to a person who is infected with the coronavirus.

1.2 Purpose

With rapid increase in the usage of social networks sites across the world, there is also a steady increase in blood donation requests as being noticed in the number of posts on these sites such as Facebook and twitter seeking blood donors. Finding blood donor is a challenging issue in almost every country. There are some blood donor finder applications in the market such as blood app by Red Cross and Blood Donor Finder application by Neologix. However, more reliable applications that meet the needs of users are prompted.So is the plasma donation also has need of application for donating plasma in the situations like covid.

2. LITERATURE SURVEY

2.1 Existing problem

Conventionally, when a patient needs plasma, he/she has to contact a blood bank 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 blood banks will have compatible blood group in stock. There is also steady increase in blood donation requests posts in social networking sites (like Facebook, twitter, Instagram, etc.) requesting for donation.

There are some plasma donor finder applications which allows the donor to book appointment with blood banks and also can find local blood drives and donation centers quickly and easily . However, there is no direct communication between the donor and that clinic in need of a specific blood type. As a result, this app is more beneficial for donors but not for clinics to find needed blood type directly and promptly.

2.2 References

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5682362/

[2] https://nevonprojects.com/instant-plasma-donor-recipient-connector-android-app/h

[3] "Severless computing:Economic and architectural impact",ESEC/FSE,2017. According to R. C. Gojko Adzic ,in this paper the author has carried out analysis based on the opportunities presented by serverless computing. They emphasize that serverless services are more affordable approach for many network services and it is more user friendly as serverless approach will relieve the customers from the intricacies of deployment. These services will help to improve the new business opportunities.

[4] "Building a chatbot with severless computing",IBM watson research center,2016. According to C. P. C. a. V. I. M. Yan ,in this paper author conducted a survey of existing serverless platform in this paper from source projects, industry, academia, use cases, and key characteristics and has described the challenges and the open problems associated with it. Authors work presented a experience of serverless technologies using different services from different cloud provides such as Amazon, Google, IBM, Microsoft Azure.

[5] "Cloud Event Programming Paradigms:Applications and Analysis","9th IEEE International Conference on Cloud Computing(CLOUD),pp.pp.400 - 406,2017. According to S. E. a. B. J. J. Short , in this paper three demonstrators for IBM Bluemix OpenWhisk was presented. They exhibit even-based programming triggered by weather forecast data, speech utterances and Apple WatchOS2 application data. And also demonstrated a chatbot using IBM Bluemix OpenWhisk that calls on the IBM Watson services which include dates, weather, alarm services, news and music tutor.

[6] “Making Serverless Computing More Serverless”, IEEE 11th International Conference on Cloud Computing (CLOUD), pp. pp. 456-459, 2018., 2018. According to S. Z. Al-Ali , in this paper serverlessOS was designed. It comprises of components such as 1. desegregation model that leverages desegregation for abstraction but it will enable resources to move fluidly between servers for the performance. 2. The second key component is cloud orchestration layer which helps to manage fine-grained resource placement and allocation throughout the application lifetime with the help of global and local decision making 3. And the third component is an isolation capability which enforces data and resource isolation.

[7] “EMARS: Efficient Management and Allocation of Resources in Serverless”, IEEE 11th International Conference on Cloud Computing (CLOUD), pp. pp. 827-830, 2018. According to A. S. a. S. Jindal , in this paper an efficient resource management system for serverless computing framework was proposed which aims to enhance resource with a focus on memory allocation among the containers and the design which was added on top of an open-source serverless platform, openLambda and it is based on allocation workloads and serverless functions memory needs events are triggered.

2.3 Problem Statement Definition

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you’ll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

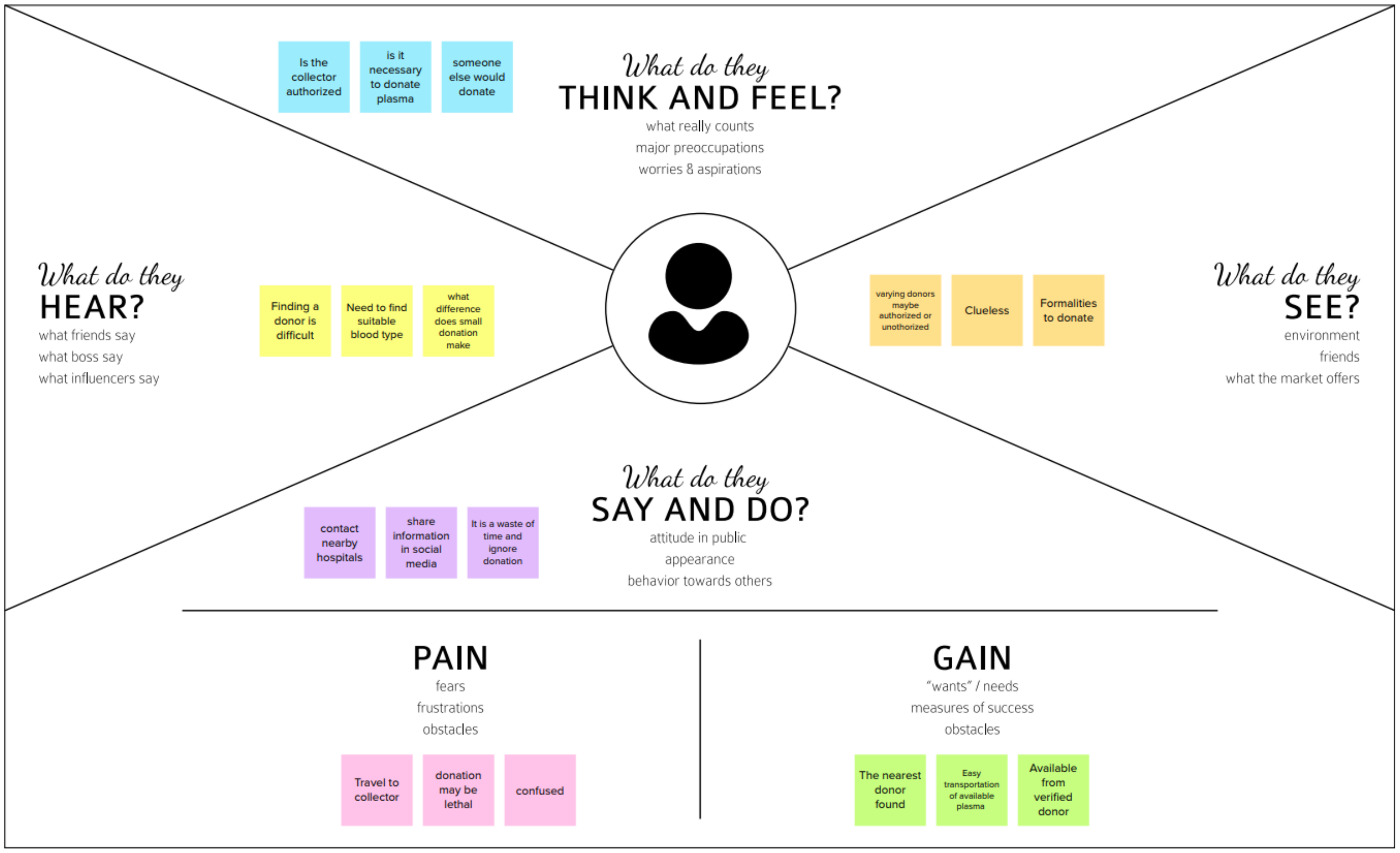
Problem Statement (PS)	**I am (Customer)**	**I’m tryingto**	**But**	**Because**	**Which makesme feel**
PS-1	A donor	Donate plasma	I’m unaware of the platforms	I don’t know muchabout the plasma donation sites.	Dim-witted
PS-2	A recipient	Get plasma	I’m unable to find donors	I’m unaware of the donors availability	Depressed about my life

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user’s behaviours and attitudes.

It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user’s perspective along with his or her goals and challenges.

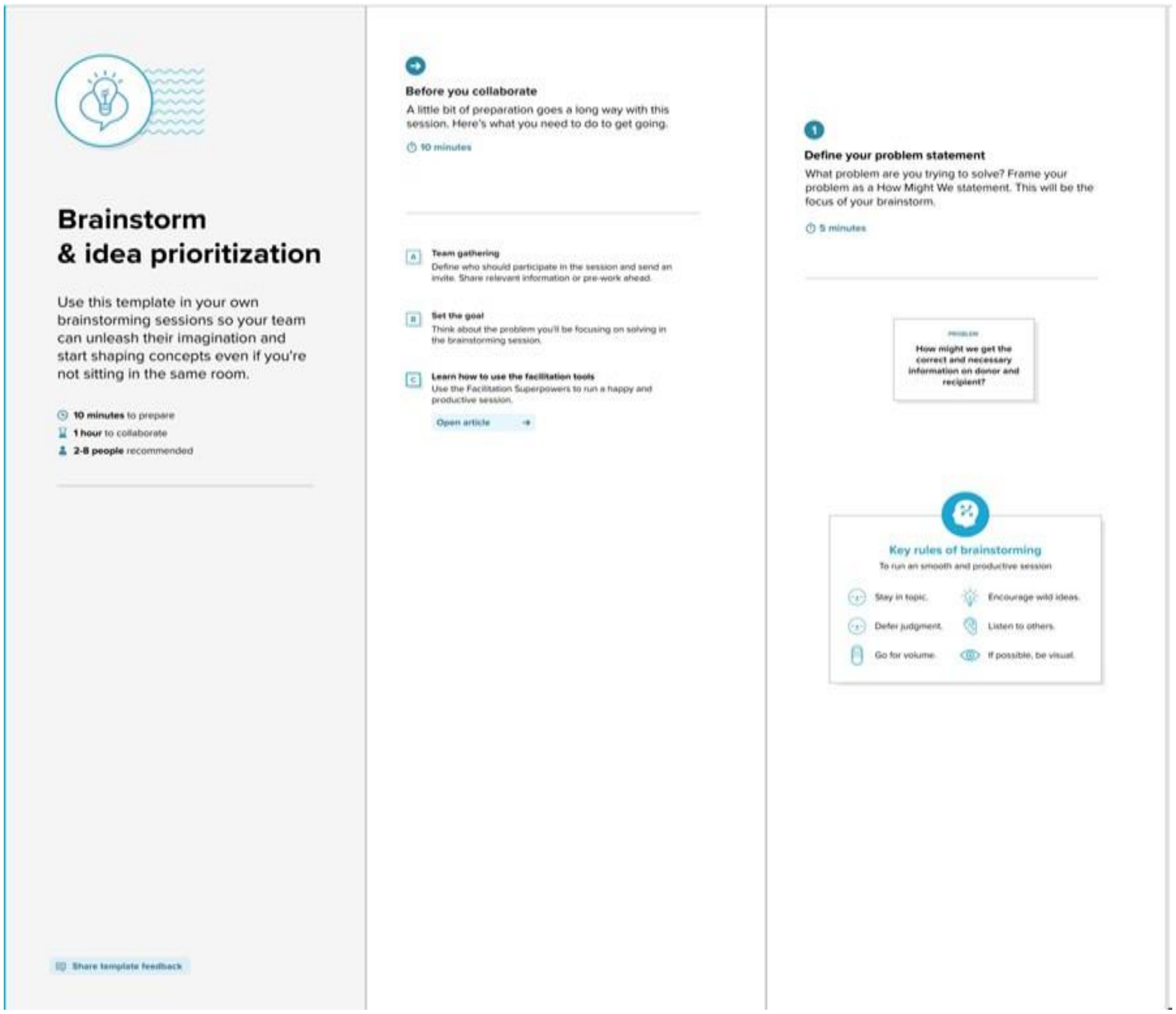


3.2 Ideation & Brainstorming

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

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.

Step-1: Team Gathering, Collaboration and Selectthe Problem Statement



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**

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

PROBLEM

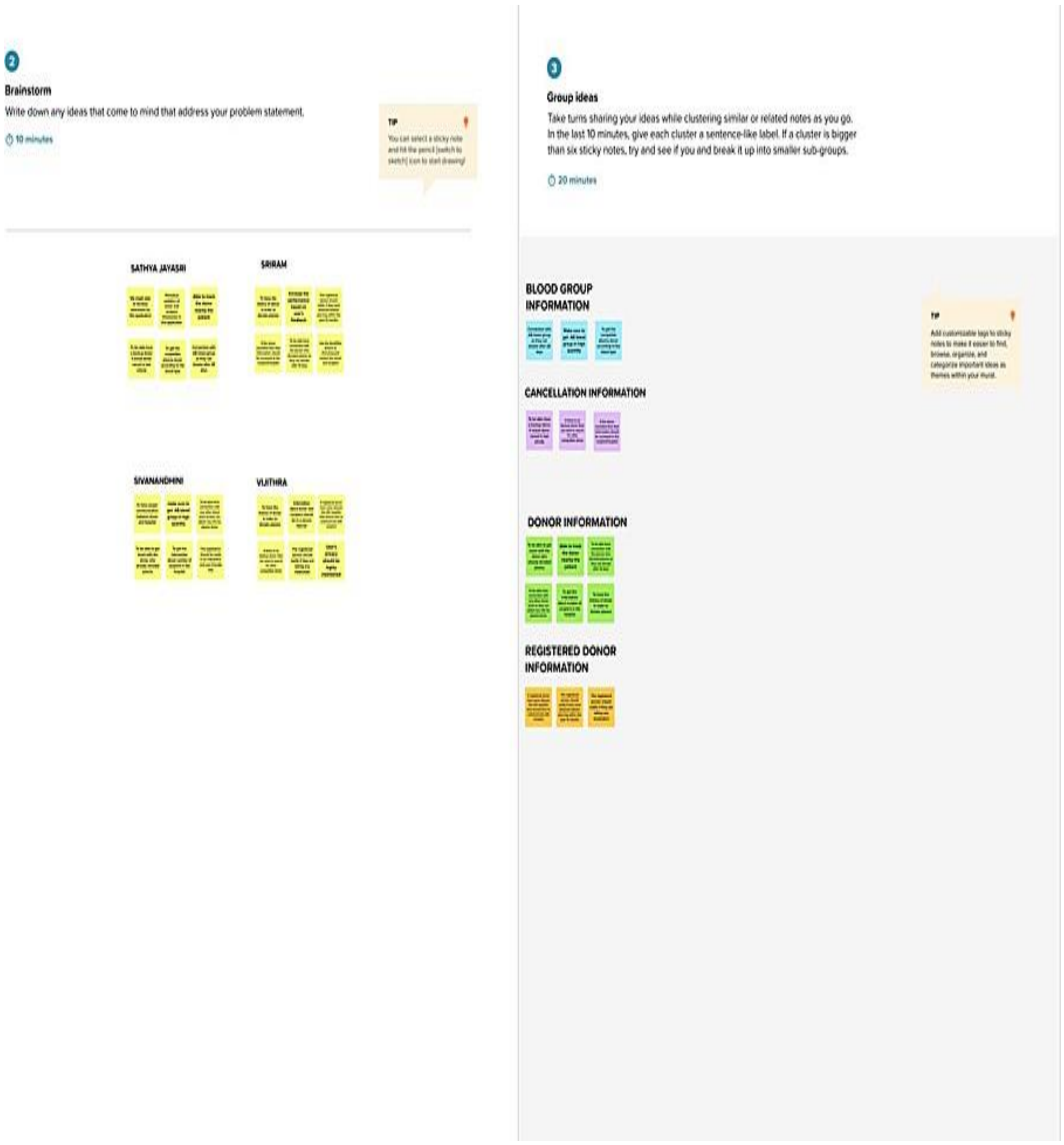
How might we get the correct and necessary information on donor and recipient?

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

SATHYA JAYASRI

SRIRAM

SIVANANDHINI

VIJITHRA

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

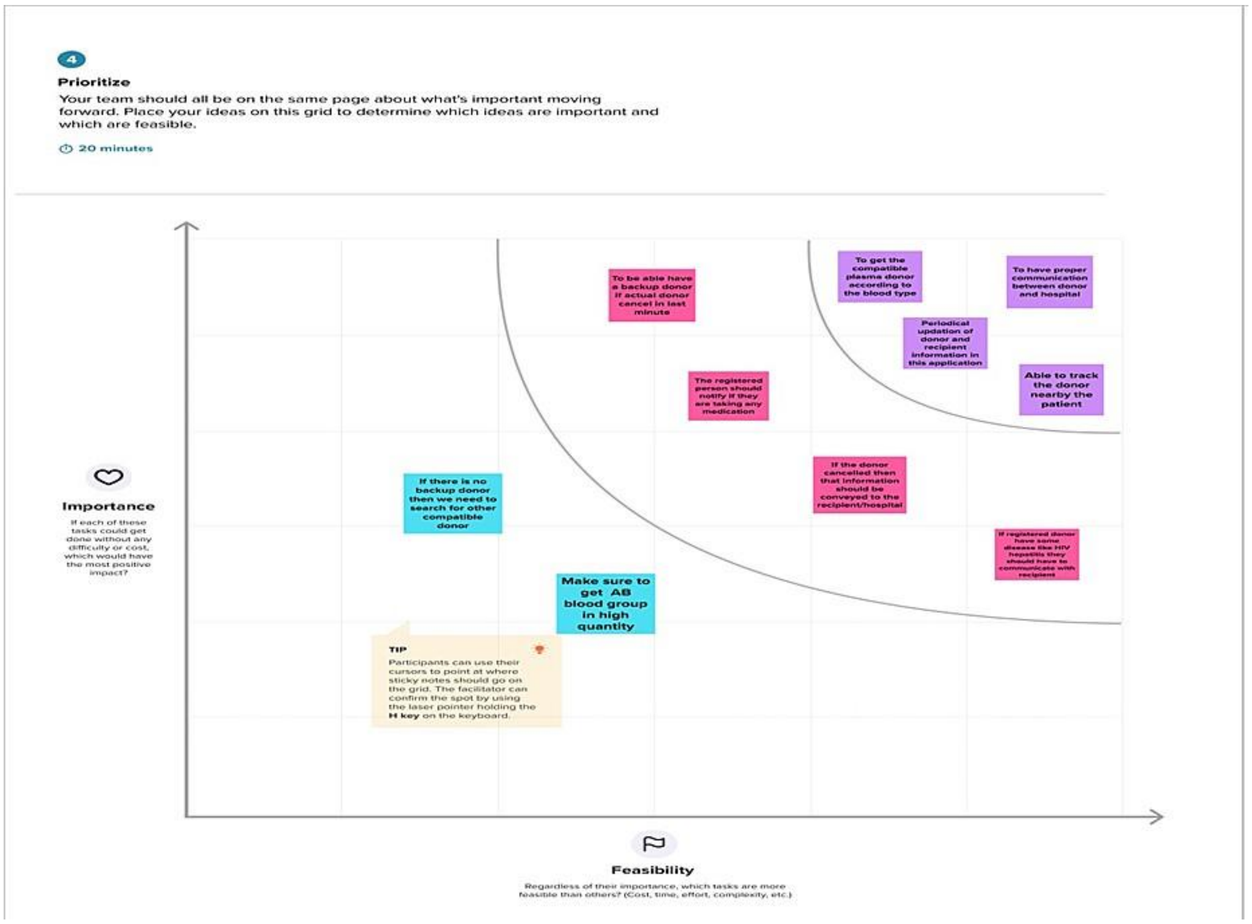
BLOOD GROUP INFORMATION

CANCELLATION INFORMATION

DONOR INFORMATION

REGISTERED DONOR INFORMATION

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

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

Importance
If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?
Feasibility
Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)
To be able have a backup donor if actual donor cancel in last minute
To get the compatible plasma donor according to the blood type
To have proper communication between donor and hospital
Periodical updation of donor and recipient information in this application
The registered person should notify if they are taking any medication
Able to track the donor nearby the patient
If there is no backup donor then we need to search for other compatible donor
If the donor cancelled then that information should be conveyed to the recipient/hospital
If registered donor have some disease like HIV hepatitis they should have to communicate with recipient
Make sure to get AB blood group in high quantity

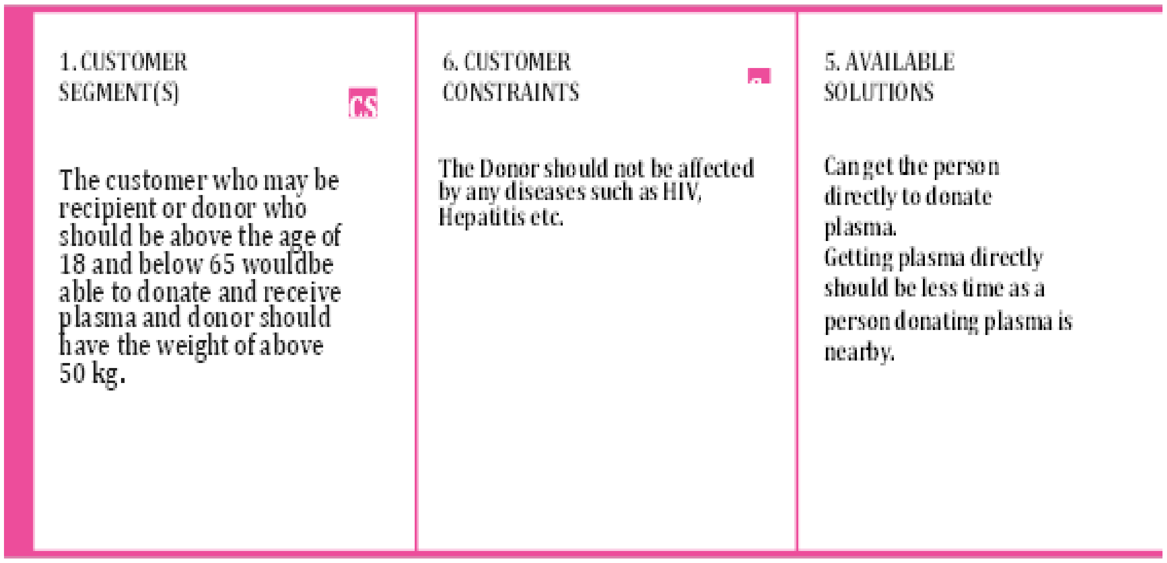
3.3 Proposed Solution

Project team shall fill the followinginformation in proposedsolution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to besolved)	Obtaining data about the availability of plasmain hospitals,blood banksand recipients blood type information is not quite easy.

2.	Idea / Solution description	The application will link all donors,control a plasma transfusion service and createa database to hold dataon stocks of plasma ineach area.
3.	Novelty / Uniqueness	The application make sure to have a constantavailability AB type as its a universal plasma.
4.	Social Impact / Customer Satisfaction	By thisapplication,it helps the donors to donateplasma for required recipients which helpsin saving life’s in covid situation and creating awareness on donating plasma.
5.	Business Model(Revenue Model)	The needof plasma increases day by day asthereis covid so it increases the revenue.
6.	Scalability of the Solution	The demandof the plasmacan be metthroughthis application as it provides simplicity over complexity whichhelps the user to use themwithease.

3.4 Problem Solution fit


1. CUSTOMER SEGMENT(S) CS

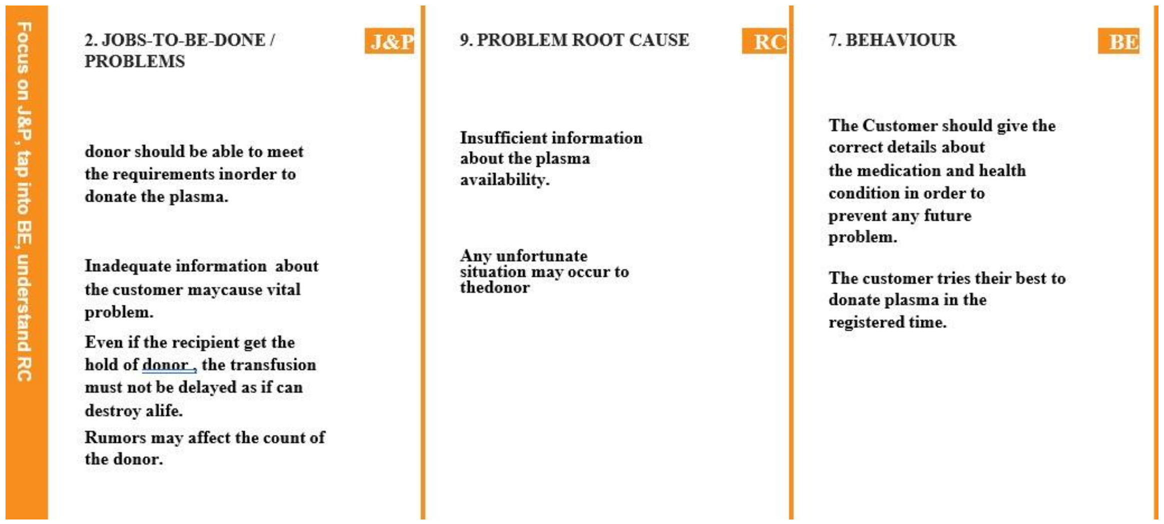
The customer who may be recipient or donor who should be above the age of 18 and below 65 wouldbe able to donate and receive plasma and donor should have the weight of above 50 kg.

6. CUSTOMER CONSTRAINTS

The Donor should not be affected by any diseases such as HIV, Hepatitis etc.

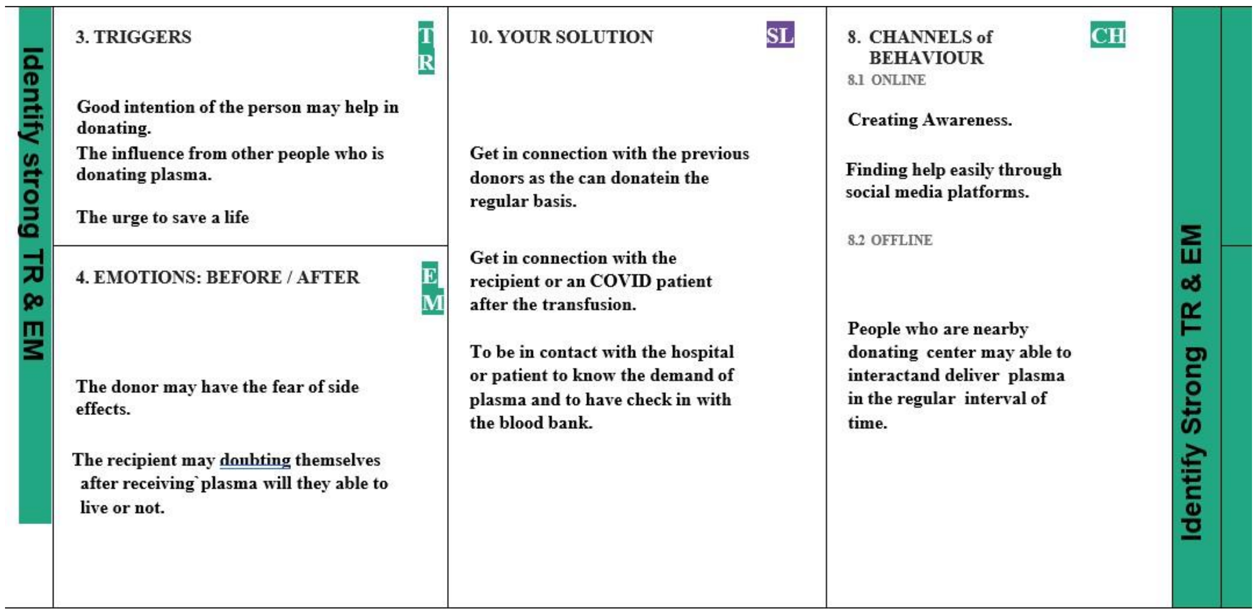
5. AVAILABLE SOLUTIONS

Can get the person directly to donate plasma.
Getting plasma directly should be less time as a person donating plasma is nearby.



Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS J&P	9. PROBLEM ROOT CAUSE RC	7. BEHAVIOUR BE
donor should be able to meet the requirements inorder to donate the plasma. Inadequate information about the customer maycause vital problem. Even if the recipient get the hold of donor , the transfusion must not be delayed as if can destroy alife. Rumors may affect the count of the donor.	Insufficient information about the plasma availability. Any unfortunate situation may occur to thedonor	The Customer should give the correct details about the medication and health condition in order to prevent any future problem. The customer tries their best to donate plasma in the registered time.



Identify strong TR & EM

3. TRIGGERS TR	10. YOUR SOLUTION SL	8. CHANNELS of BEHAVIOUR CH
Good intention of the person may help in donating. The influence from other people who is donating plasma. The urge to save a life	Get in connection with the previous donors as the can donatein the regular basis. Get in connection with the recipient or an COVID patient after the transfusion. To be in contact with the hospital or patient to know the demand of plasma and to have check in with the blood bank.	8.1 ONLINE Creating Awareness. Finding help easily through social media platforms. 8.2 OFFLINE People who are nearby donating center may able to interactand deliver plasma in the regular interval of time.
4. EMOTIONS: BEFORE / AFTER EM		
The donor may have the fear of side effects. The recipient may doubting themselves after receiving`plasma will they able to live or not.		

Identify Strong TR & EM

4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Following are thefunctional requirements of the proposedsolution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story/ Sub-Task)
FR-1	User Registration	Registration throughForm Registration through Gmail Registration throughLinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login viaGmail.
FR-4	User Credentials	Credentials of users is submitted.
FR-5	User Verification	User credentials are verified.
FR-6	Donor & Recipient Confirmation	Donor &Recipient are allocated to a certain time.

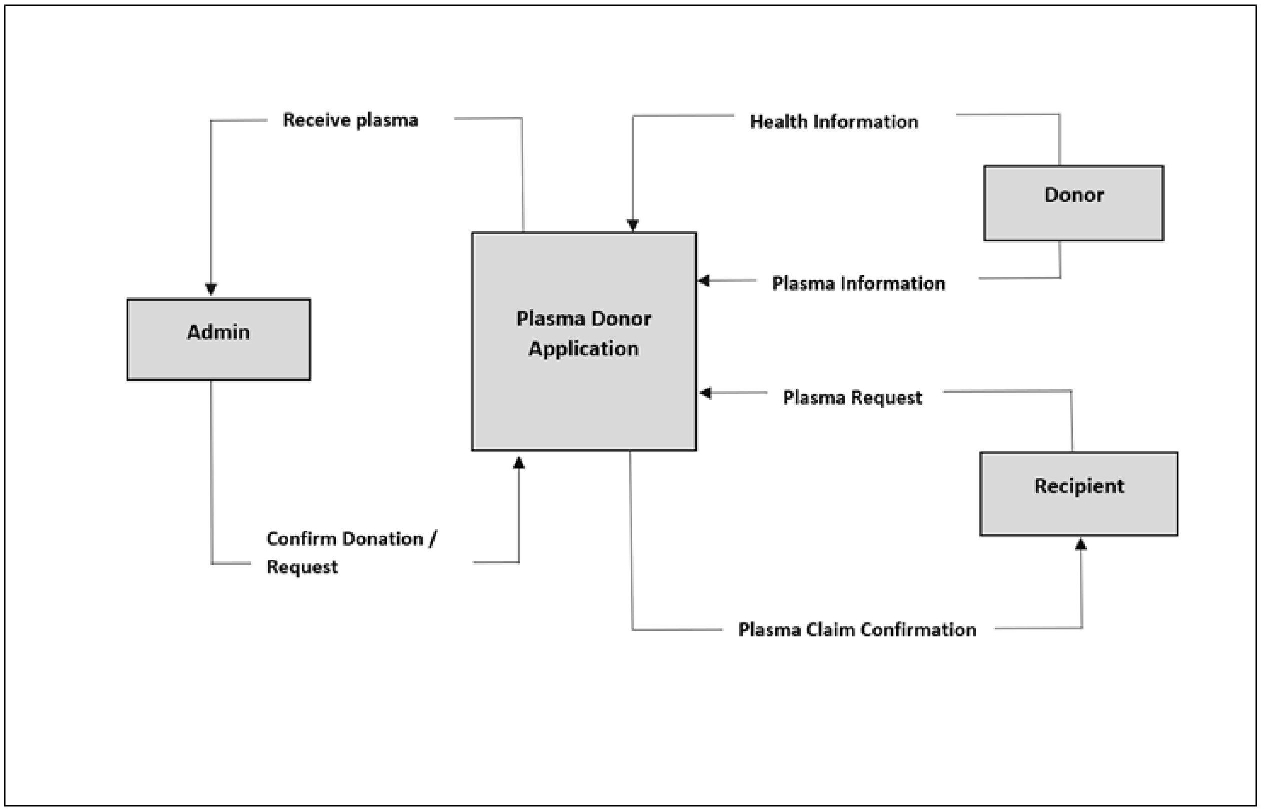
4.2 Non-Functional requirements

Following are the non-functional requirements of the proposedsolution.

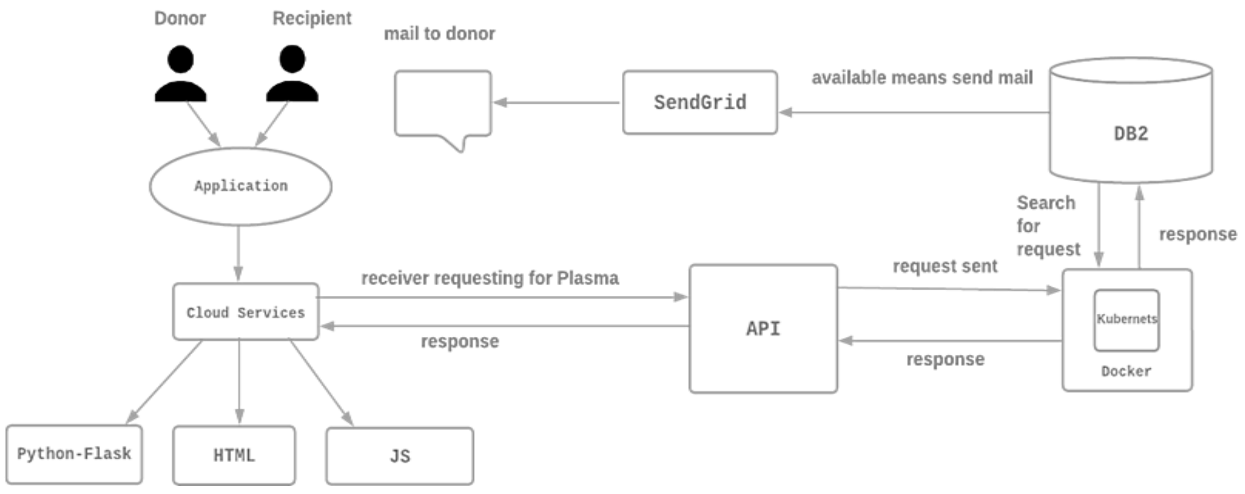
FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The quality of experience wheninteracting with the application willbe attained.
NFR-2	**Security**	The application prevents the donors and recipients data frombeing hijacked or misused.
NFR-3	**Reliability**	The application worksunder specific need of plasma in required time.
NFR-4	**Performance**	The application triesto provide quick responses to the recipients.
NFR-5	**Availability**	The application runs properly and meets the userrequirements.
NFR-6	**Scalability**	The application can handle more usersand evolve concurrently as per needs.

5. PROJECT DESIGN

5.1 Data Flow Diagrams



5.2 Solution & Technical Architecture



5.3 User Stories

User Type	Functional Requirement(Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobileuser)	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 emailonceI have registered for the application	I can receive confirmationemail &click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail	I can register and access dashboard with Gmail Login	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application byentering email &	I can receive confirmationmail and register	High	Sprint-1

			password			
	Dashboard	USN-6	As a user, I can browsethe dashboard bylogging in before	I can access the resources in thedashboard	High	Sprint-1
Customer (Webuser)		USN-7	As a user, I can login to the application andsee thecategories of donor and recipient	I can see the informati onabout the donor and recipient	Low	Sprint-2
Customer Care Executive		USN-8	As a user, I can see the feedback and comme nt	I can rectify the problem that are commented in the feedback session	High	Sprint-1
Administrator		USN-9	As a user, I can see the availability of donorinformat ion	I can update the donor informati on	Medi um	Sprint-1
		USN-10	As a user, I can see the demand of the donorby the recipients request	I can fix the required donorfor the requested recipients	Medi um	Sprint-1

		USN-11	As a user, I can inform the donor and recipients of the date and time to donate	I can notify the donor andthe recipients	Medi um	Sprint- 1
		USN-12	As a user, I have the information of previous donors and recovered covid patients	I can notify them to donateagain	Low	Sprint- 1

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-1	Registration	USN-1	As a user, I can register for the application byentering my email, password, and confirming my password.	2	High	4
Sprint-1		USN-2	As a user, I will receiveconfirmation email once I have registered for the application	1	High	4
Sprint-2		USN-3	As a user,I can register for the application through Facebook	2	Low	4
Sprint-1		USN-4	As a user,I can register for the application through Gmail	2	Medium	4
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email& password	1	High	4

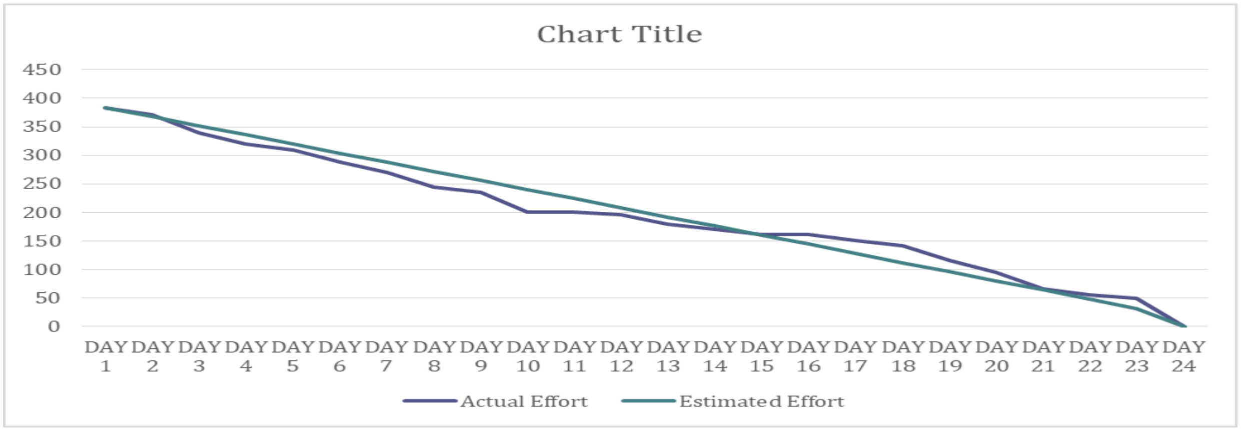
Sprint-3	Dashboard	USN-6	As a user, I can findthe compatible donor by registering.	3	High	4
Sprint-3		USN-7	As a user, I can find the donor availability bylogging in.	3	High	4
Sprint-2		USN-8	As a user, I can create a profile by registering.	2	Medium	4
Sprint-3		USN-9	As a user, I can see the demandof plasma.	3	Medium	4
Sprint-4	Database	USN-10	As a user, I can storethe availability andneed of plasmainformation value.	4	High	4

6.2 Sprint Delivery Schedule

Sprint	**Total Story Points**	**Duration**	**Sprint Start Date**	**Sprint End Date (Planned)**	**Story Points Completed (as on PlannedEnd Date)**	**Sprint Release Date (Actual)**
Sprint-1	6	6 Days	24 Oct 2022	29 Oct 2022		
Sprint-2	4	6 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	9	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	4	6 Days	14 Nov 2022	19 Nov 2022		

6.3 Reports from JIRA

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



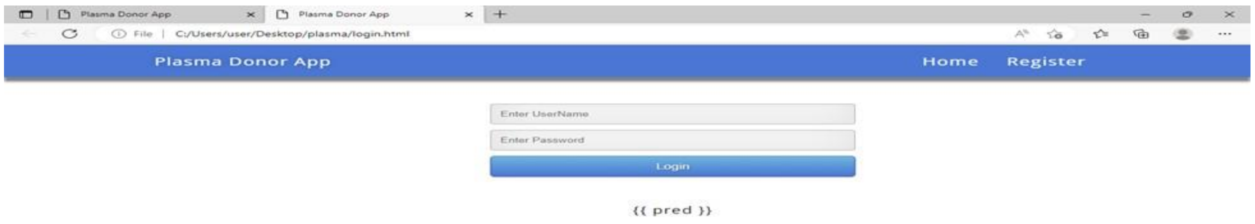
7. CODING & SOLUTIONING (Explain the features added in the project along with code)

7.1 Feature 1

7.1.1 Login.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
<meta charset="UTF-8">
<title>Plasma Donor App</title>
<link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
<link rel="stylesheet" href="style.css">
<style>
.login{
top: 20%;
}
</style>
</head>
<body>
<div class="header">
<div>Plasma Donor App</div>
```

```
<ul>
<li><a href="/registration">Register</a></li>
<li><a class="active" href="/login">Home</a></li>
</ul>
</div>
<div class="login" >
<div>
</div><!-- Main Input For Receiving Query to our ML -->
<form action="{{ url_for('loginpage')}}"method="post">
<input type="text" name="user" placeholder="Enter UserName"
required="required" style="color:black" />
<input type="password" name="passw" placeholder="Enter Password"
required="required" style="color:black" />
<button type="submit" class="btn btn-primary btn-block btn-
large">Login</button>
</form>
<br><br>
<div style="color:black">
 {{ pred }}</div>
 </div>
</body>
</html>
```

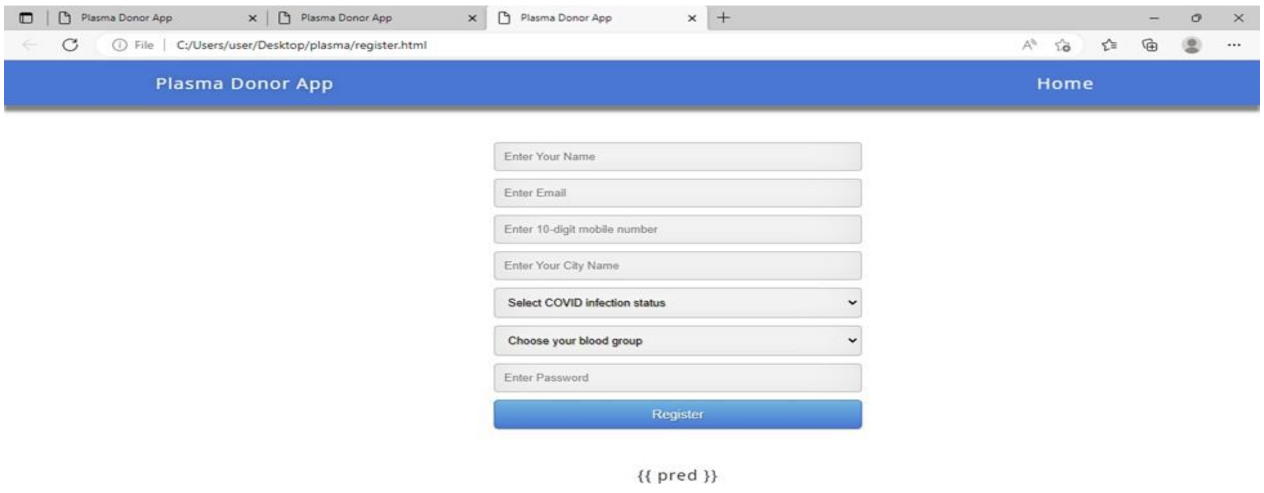


7.1.2 Register.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
<meta charset="UTF-8">
<title>Plasma Donor App</title>
<link     href='https://fonts.googleapis.com/css?family=Pacifico'     rel='stylesheet'
```

```
type='text/css'>
	<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
	<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
	<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
	<link rel="stylesheet" href="style.css">
	<style>
	.login{
	top: 20%;
	}
	</style>
	</head>
	<body>
	<div class="header">
	<div>Plasma Donor App</div>
	<ul>
	<li><a class="active" href="/login">Home</a></li>
	</ul>
	</div>
	<div class="login">
	<!-- Main Input For Receiving Query to our ML -->
	<form action="{{ url_for('register')}}"method="post">
	<input type="text" name="name" placeholder="Enter Your Name"
required="required" style="color:black"/>
	<input type="email" name="email" placeholder="Enter Email"
required="required" style="color:black"/>
	<input type="text" name="phone" placeholder="Enter 10-digit mobile number"
required="required" style="color:black"/>
	<input type="city" name="city" placeholder="Enter Your City Name"
required="required" style="color:black"/>
	<select name="infect">
	<option value="select" selected>Select COVID infection status</option>
	<option value="infected">Infected</option>
	<option value="uninfected">Uninfected</option>
	</select>
	<select name="blood">
	<option value="select" selected>Choose your blood group</option>
	<option value="O Positive">O Positive</option>
	<option value="A Positive">A Positive</option>
```

```
<option value="B Positive">B Positive</option>
<option value="AB Positive">AB Positive</option>
<option value="O Negative">O Negative</option>
<option value="A Negative">A Negative</option>
<option value="B Negative">B Negative</option>
<option value="AB Negative">AB Negative</option>
</select>
<input type="password" name="passw" placeholder="Enter Password" required="required" style="color:black"/>
<button type="submit" class="btn btn-primary btn-block btn-large">Register</button>
</form>
<br><br>
<div style="color:black">
{{ pred }}</div>
</div>
</body>
</html>
```



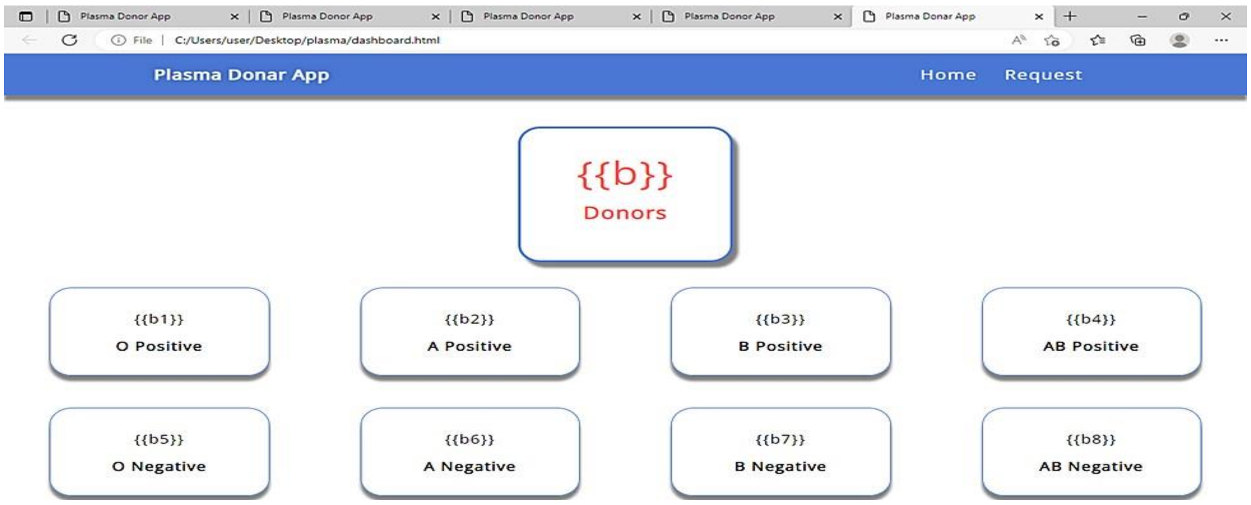
7.1.3 Dashboard.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Plasma Donar App</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
        <linkrel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></scrip
t>
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
        <link rel="stylesheet" href="style.css">
        </head>
        <style>
        .big{
        top:70;
        background-color:white;
        margin-top:80px;
        margin-left:550px;
        margin-right:550px;
        height:200px;
        border-radius: 25px;
        border: 3px solid #4a77d4;
        box-shadow: 6px 8px 4px grey;
        text-align:center;
        }
        .row{
        height:150px;
        }
        .col{
        margin:10px;
        margin-left:50px;
        margin-right:50px;
        border-radius: 25px;<!DOCTYPE html>
        <html lang="en">
        <head>
        <title>Plasma Donar App</title>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <linkrel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

```
            <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></scrip
t>
            <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
            <link rel="stylesheet" href="style.css">
            </head>
            <style>
            .big{
            top:70;
            background-color:white;
            margin-top:80px;
            margin-left:550px;
            margin-right:550px;height:200px;
            border-radius: 25px;
            border: 3px solid #4a77d4;
            box-shadow: 6px 8px 4px grey;
            text-align:center;
            }
            .row{
            height:150px;
            }
            .col{
            margin:10px;
            margin-left:50px;
            margin-right:50px;
            border-radius: 25px;
            <div class="ext1"><font size="20px">{{b}}</font><br><b>Donors</b></div>
            </div>
            </div>
            <br>
            <div class="row">
            <div class="col" >
            <div class="ext">{{b1}}<br><b>O Positive</b></div>
            </div>
            <div class="col" >
            <div class="ext">{{b2}}<br><b>A Positive</b></div>
            </div>
            <div class="col" >
            <div class="ext">{{b3}}<br><b>B Positive</b></div>
            </div>
```

```
<div class="col" >
<div class="ext">{{b4}}<br><b>AB Positive</b></div>
</div>
</div> <br>
<div class="row">
<div class="col" >
<div class="ext">{{b5}}<br><b>O Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b6}}<br><b>A Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b7}}<br><b>B Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b8}}<br><b>AB Negative</b></div>
</div>
</div>
</div>
</body>
</html>
```

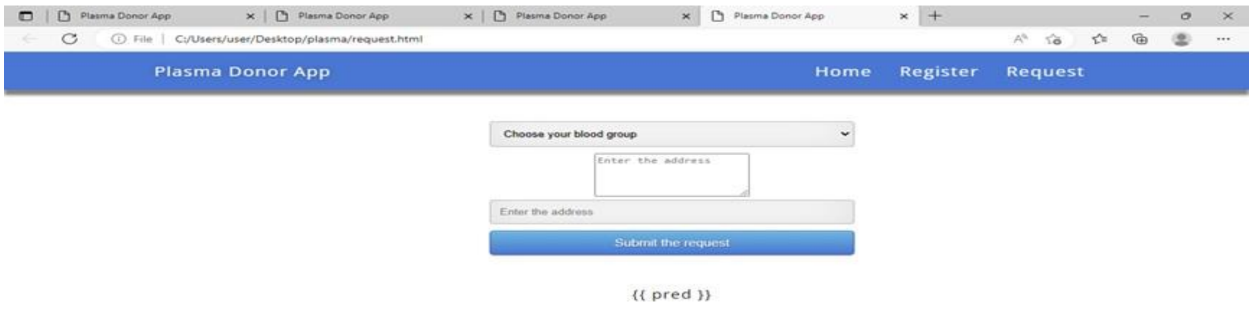


7.1.4 Request.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
```

```
        <meta charset="UTF-8">
        <title>Plasma Donor App</title>
        <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
        <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
        <link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
        <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
        <link rel="stylesheet" href="style.css">
        <style>
        .login{
        top: 20%;
        }
        </style>
        </head>
        <body>
        <div class="header">
        <div>Plasma Donor App</div>
        <ul>
        <li><a class="active" href="/login">Home</a></li>
        </ul>
        </div>
        <div class="login">

        <!-- Main Input For Receiving Query to our ML -->
        <form action="{{ url_for('register')}}"method="post">
        <input type="text" name="name" placeholder="Enter Your Name"
required="required" style="color:black"/>
        <input type="email" namname="email" placeholder="Enter Email"
required="required" style="color:black"/>
        <input type="text" name="phone" placeholder="Enter 10-digit mobile number"
required="required" style="color:black"/>
        <input type="city" name="city" placeholder="Enter Your City Name"
required="required" style="color:black"/>
        <select name="infect">
        <option value="select" selected>Select COVID infection status</option>
        <option value="infected">Infected</option>
        <option value="uninfected">Uninfected</option>
        </select>
```

```
<select name="blood">
<option value="select" selected>Choose your blood group</option>
<option value="O Positive">O Positive</option>
<option value="A Positive">A Positive</option>
<option value="B Positive">B Positive</option>
<option value="AB Positive">AB Positive</option>
<option value="O Negative">O Negative</option>
<option value="A Negative">A Negative</option>
<option value="B Negative">B Negative</option>
<option value="AB Negative">AB Negative</option>
</select>
<input type="password" name="passw" placeholder="Enter Password" required="required" style="color:black"/>
<button type="submit" class="btn btn-primary btn-block btn-large">Register</button>
</form>
<br><br>
<div style="color:black">
{{ pred }}</div>
</div>
</body>
</html>
```



7.1.5 Style sheet

```
@import url(https://fonts.googleapis.com/css?family=Open+Sans);
.btn {
display: inline-block;
*display: inline;
*zoom: 1; padding:
4px 10px 4px;
```

```
		margin-bottom: 0;
		font-size: 13px;
		line-height: 18px;
		color: #333333;
		text-align: center;
		text-shadow: 0 1px 1px rgba(255, 255, 255, 0.75);
		vertical-align: middle;
		background-color: #f5f5f5;
		background-image: -moz-linear-gradient(top, #ffffff, #e6e6e6);
		background-image: -ms-linear-gradient(top, #ffffff, #e6e6e6);
		background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#ffffff),
	to(#e6e6e6));
		background-image: -webkit-linear-gradient(top, #ffffff, #e6e6e6);
		background-image: -o-linear-gradient(top, #ffffff, #e6e6e6);
		background-image: linear-gradient(top, #ffffff, #e6e6e6);
		background-repeat: repeat-x;
		filter: progid:dximagetransform.microsoft.gradient(startColorstr=#ffffff,
endColorstr=#e6e6e6,	GradientType=0);
		border-color: #e6e6e6 #e6e6e6 #e6e6e6;
		border-color: rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.25);
		border: 1px solid #e6e6e6;
		-webkit-border-radius: 4px;
		-moz-border-radius: 4px;
		border-radius: 4px;
		-webkit-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0,
	0, 0.05);
		-moz-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0,
	0.05);
		box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.05);
		cursor: pointer; *margin-left: .3em;
		}
		.btn:hover, .btn:active, .btn.active, .btn.disabled, .btn[disabled] { background-
	color: #e6e6e6; }
		.btn-large {
			  padding: 9px 14px;
			font-size: 15px;
			line-height: normal;
			-webkit-border-radius: 5px;
			-moz-border-radius: 5px;
			border-radius: 5px;
			}
```

```
.btn:hover {
	color: #333333;
	text-decoration: none;
	background-color: #e6e6e6;
	background-position: 0 -15px;
	-webkit-transition: background-position 0.1s linear;
	-moz-transition: background-position 0.1s linear;
	-ms-transition: background-position 0.1s linear;
	-o-transition: background-position 0.1s linear;
	transition: background-position 0.1s linear;
	}
.btn-primary, .btn-primary:hover {
	text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25);
	color: #ffffff;
	}
.btn-primary.active { color: rgba(255, 255, 255, 0.75); }
.btn-primary {
	background-color: #4a77d4;
	background-image: -moz-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: -ms-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#6eb6de), 
to(#4a77d4));
	background-image: -webkit-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: -o-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: linear-gradient(top, #6eb6de, #4a77d4);
	background-repeat: repeat-x;
	filter: progid:dximagetransform.microsoft.gradient(startColorstr=#6eb6de, 
endColorstr=#4a77d4, GradientType=0);
	border: 1px solid #3762bc;
	text-shadow: 1px 1px 1px rgba(0,0,0,0.4);
	  box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 
0, 0.5);
	}
.btn-primary:hover, .btn-primary:active, .btn-primary.active, .btn-
primary.disabled, .btn-primary[disabled] {
	filter: none;
	background-color: #4a77d4;
	}

.btn-block { width: 100%; display:block; }
* { -webkit-box-sizing:border-box; -moz-box-sizing:border-box; -ms-box-
```

```
sizing:border-box; -o-box-sizing:border-box; box-sizing:border-box; }
html { width: 100%; height:100%; overflow:hidden; }
body {
	width: 100%;
	height:100%;
	font-family: 'Open Sans', sans-serif;
	background: #fffff;
	color: #000000;

	font-size: 18px;
	text-align:center;
	letter-spacing:1.2px;
}
.header {
				top:0;
				margin:0px;
				left: 0px;
				right: 0px;
				position: fixed;
				background: #4a77d4;
				color: white;
				box-shadow: 0px 8px 4px grey;
				overflow: hidden;
				padding: 15px;
				font-size: 1.5vw;
				width: 100%;
				text-align: center;
			}
.login {
	position: absolute;
	top: 70%;
	left: 50%;
	margin: -25px 0 0 -150px;
	width:400px;
	height:400px;
}

.header div { color: #fff; text-shadow: 0 0 10px rgba(0,0,0,0.3); letter-
spacing:1px; text-align:center; float:left; padding-left:150px;}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  padding-right:150px;
  overflow: hidden;
 }
li {
  float: right;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 0px 15px;
  text-decoration: none;
}
input {
	width: 100%;
	margin-bottom: 10px;
	background: rgba(255,255,255,255);
	border: none;
	outline: none;
	padding: 10px;
	font-size: 13px;
	color: black;
	text-shadow: black;
	border: 1px solid rgba(0,0,0,0.3);
	border-radius: 4px;
		box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px
rgba(255,255,255,0.2);
	-webkit-transition: box-shadow .5s ease;
	-moz-transition: box-shadow .5s ease;
	-o-transition: box-shadow .5s ease;
	-ms-transition: box-shadow .5s ease;
	transition: box-shadow .5s ease;
}
input:focus { box-shadow: inset 0 -5px 45px rgba(100,100,100,0.4), 0 1px 1px
rgba(255,255,255,0.2); }
select {
	width: 100%;
	margin-bottom: 10px;
```

```
            background: rgba(255,255,255,255);
            border: none;
            outline: none;
            padding: 10px;
            font-size: 13px;
            color: #000000;
            text-shadow: 1px 1px 1px rgba(0,0,0,0.3);
            border: 1px solid rgba(0,0,0,0.3);
            border-radius: 4px;
       box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px
    rgba(255,255,255,0.2);
            -webkit-transition: box-shadow .5s ease;
            -moz-transition: box-shadow .5s ease;
            -o-transition: box-shadow .5s ease;
            -ms-transition: box-shadow .5s ease;
            transition: box-shadow .5s ease;
    }
```

7.2 Feature 2

7.2.1 App.py

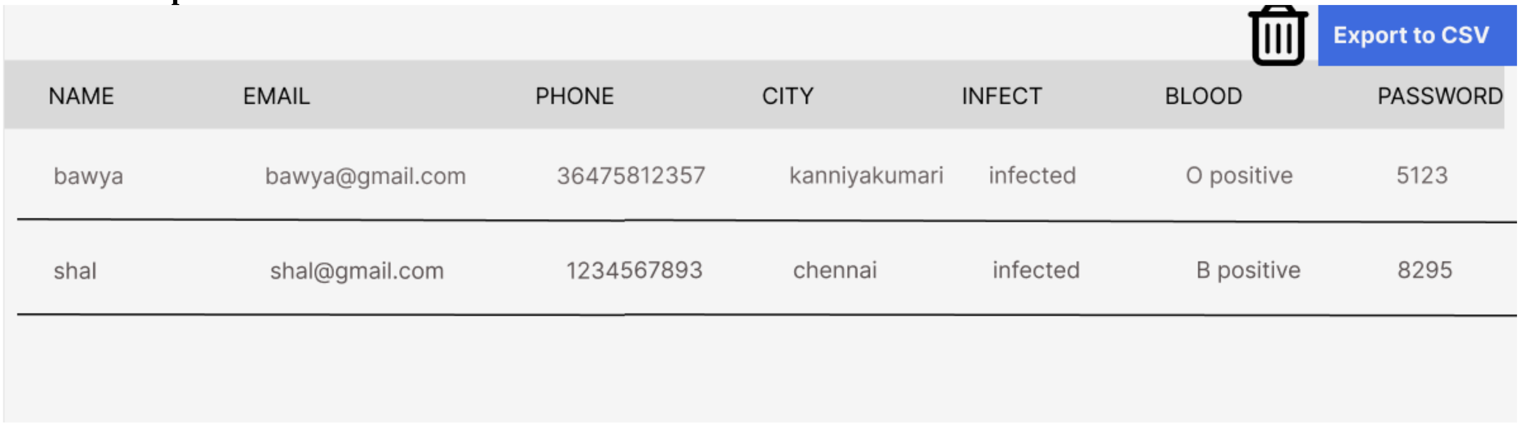
```
    from flask import Flask, render_template, request, redirect, url_for, session

    import ibm_db

    import json

    import requests

    app = Flask(__name__)

    conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-
4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;SECURI
TY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=cts72740;PWD=dORK
SzIzhwxBmMvg","","")

    @app.route('/registration')

    def home():

     return render_template('register.html')

    @app.route('/register',methods=['POST'])
```

```
def register():
 x = [x for x in request.form.values()]
print(x)
name=x[0]
email=x[1]
phone=x[2]
city=x[3]
infect=x[4]
blood=x[5]
password=x[6]
sql = "SELECT * FROM plasmadonor WHERE email =?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt,1,email)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print(account)
if account:
    return render_template('register.html', pred="You are already a member, please
login using your details")
else:
 insert_sql = "INSERT INTO plasmadonor VALUES (?, ?, ?, ?, ?, ?, ?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, name)
ibm_db.bind_param(prep_stmt, 2, email)
 ibm_db.bind_param(prep_stmt, 3, phone)
 ibm_db.bind_param(prep_stmt, 4, city)
ibm_db.bind_param(prep_stmt, 5, infect)
ibm_db.bind_param(prep_stmt, 6, blood)
ibm_db.bind_param(prep_stmt, 7, password)
ibm_db.execute(prep_stmt)
        return render_template('register.html', pred="Registration Successful, please
login using your details")
@app.route('/')
@app.route('/login')
def login():
  return render_template('login.html')
@app.route('/loginpage',methods=['POST'])
def loginpage():
   user = request.form['user']
   passw = request.form['passw']
  sql = "SELECT * FROM plasmadonor WHERE email =? AND password=?"
  stmt = ibm_db.prepare(conn, sql)
 ibm_db.bind_param(stmt,1,user)
ibm_db.bind_param(stmt,2,passw)
ibm_db.execute(stmt)
 account = ibm_db.fetch_assoc(stmt)
 print (account)
print(user,passw)
 if account:
 return redirect(url_for('stats'))
```

```
else:

        return render_template('login.html',  pred="Login  unsuccessful.  Incorrect
username / password !")

@app.route('/stats')

def stats():

 '''sql = "SELECT blood FROM user group by blood"

stmt = ibm_db.prepare(conn, sql)

ibm_db.execute(stmt)

count = ibm_db.fetch_assoc(stmt)

 print(count)'''

    return render_template('stats.html',b=5,b1=2,b2=3,b3=4,b4=2,b5=1,b6=2,b7=1,b8=1)

@app.route('/requester')

def requester():

 return render_template('request.html')

@app.route('/requested',methods=['POST'])

def requested():

 bloodgrp = request.form['bloodgrp']

address = request.form['address']

print(address)

sql = "SELECT * FROM plasmadonor WHERE blood=?"

stmt = ibm_db.prepare(conn, sql)

ibm_db.bind_param(stmt,1,bloodgrp)

ibm_db.execute(stmt)

data = ibm_db.fetch_assoc(stmt)

msg = "Need Plasma of your blood group for: "+address
```

```
while data != False:

print ("The Phone is : ", data["PHONE"]
url="https://www.fast2sms.com/dev/bulk?authorization=xCXuwWTzyjOD2ARd1EngbH3a7tKI
q5PklJ8YSf0Lh4FQZecs9iNI1dSvuqprxFwCKYJXA5amQkBE36Rl&sender_id=FSTSMS&me
ssage="+msg+"&language=english&route=p&numbers="+str(data["PHONE"])

result=requests.request("GET",url)

print(result)

data = ibm_db.fetch_assoc(stmt)

return render_template('request.html', pred="Your request is sent to the concerned
people.")

if__name__== "_main_":

app.run(host='0.0.0.0', port=8080)
```

Output :

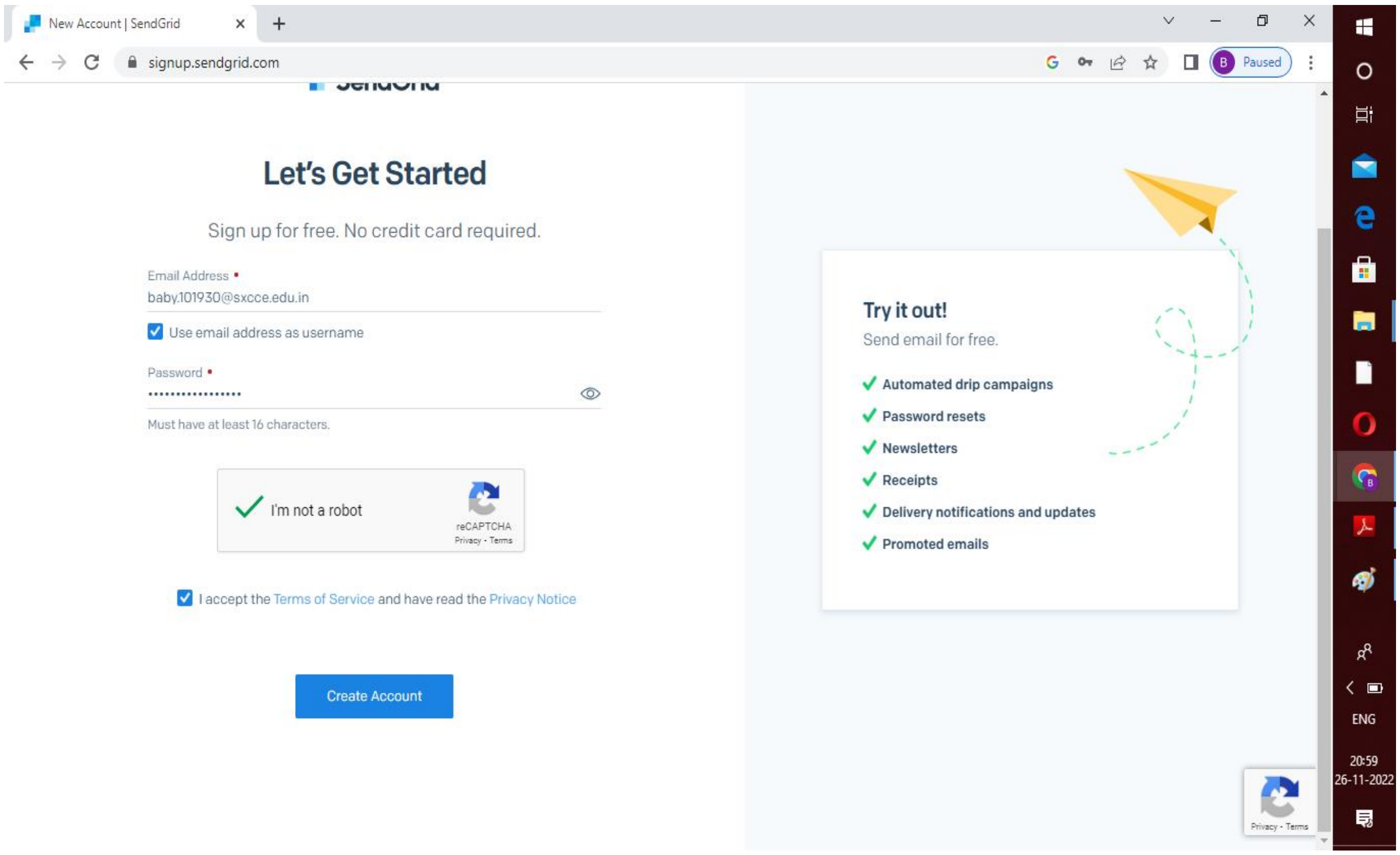


NAME	EMAIL	PHONE	CITY	INFECT	BLOOD	PASSWORD
bawya	bawya@gmail.com	36475812357	kanniyakumari	infected	O positive	5123
shal	shal@gmail.com	1234567893	chennai	infected	B positive	8295

7.2.2 Integrating sendgrid with python code

```
Senderemail.py
import smtplib
import sendgrid
import os
from sendgrid.helpers.mail import Mail, Email, To, Content
SUBJECT = "Interview Call"
```

```
          s = smtplib.SMTP('smtp.gmail.com', 587)
          def sendmail(TEXT,email):
          print("sorry we cant process your candidature")
          s = smtplib.SMTP('smtp.gmail.com', 587) s.starttls()
          s.login("il.pradeepthi@gmail.com", "oms@1Ram")
          message = 'Subject: {}\n\n{}'.format(SUBJECT, TEXT)
          s.sendmail("il.pradeepthi@gmail.com", email, message)
          s.quit()
          def sendgridmail(user,TEXT):
          sg=sendgrid.SendGridAPIClient('SG.Jak_K6_OQRCHDWK9Cxv64Q.8aziFLnMRH_
9P K5lNqOcP7ylJmezx_qSKfB1iCeGL4o')
          from_email = Email("sivanandhini2210@gmail.com") # Change to your verified
sender
          to_email = To("vijithrap7@gmail.com") # Change to your recipientsubject
          = "Sending with SendGrid is Fun"
          content = Content("text/plain",TEXT)
          mail = Mail(from_email, to_email, subject, content)


          # Get a JSON-ready representation of the Mail object mail_json = mail.get()#
          Send an HTTP POST request to /mail/send
          response = sg.client.mail.send.post(request_body=mail_json)
          print(response.status_code)
          print(response.headers)
```



New Account | SendGrid

signup.sendgrid.com

Paused

Let's Get Started

Sign up for free. No credit card required.

Email Address •
baby.101930@sxcce.edu.in

☑ Use email address as username

Password •
•••••••••••••••••

Must have at least 16 characters.

✓ I'm not a robot

☑ I accept the Terms of Service and have read the Privacy Notice

Create Account

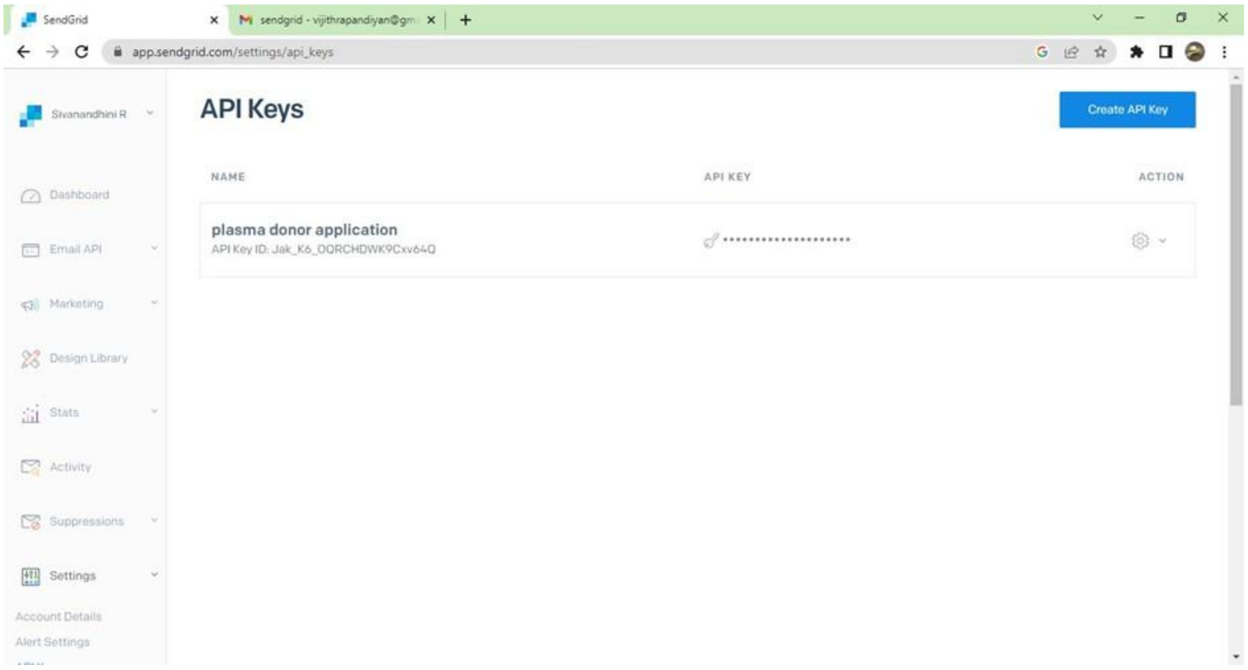
Try it out!

Send email for free.

✓ Automated drip campaigns
✓ Password resets
✓ Newsletters
✓ Receipts
✓ Delivery notifications and updates
✓ Promoted emails

ENG

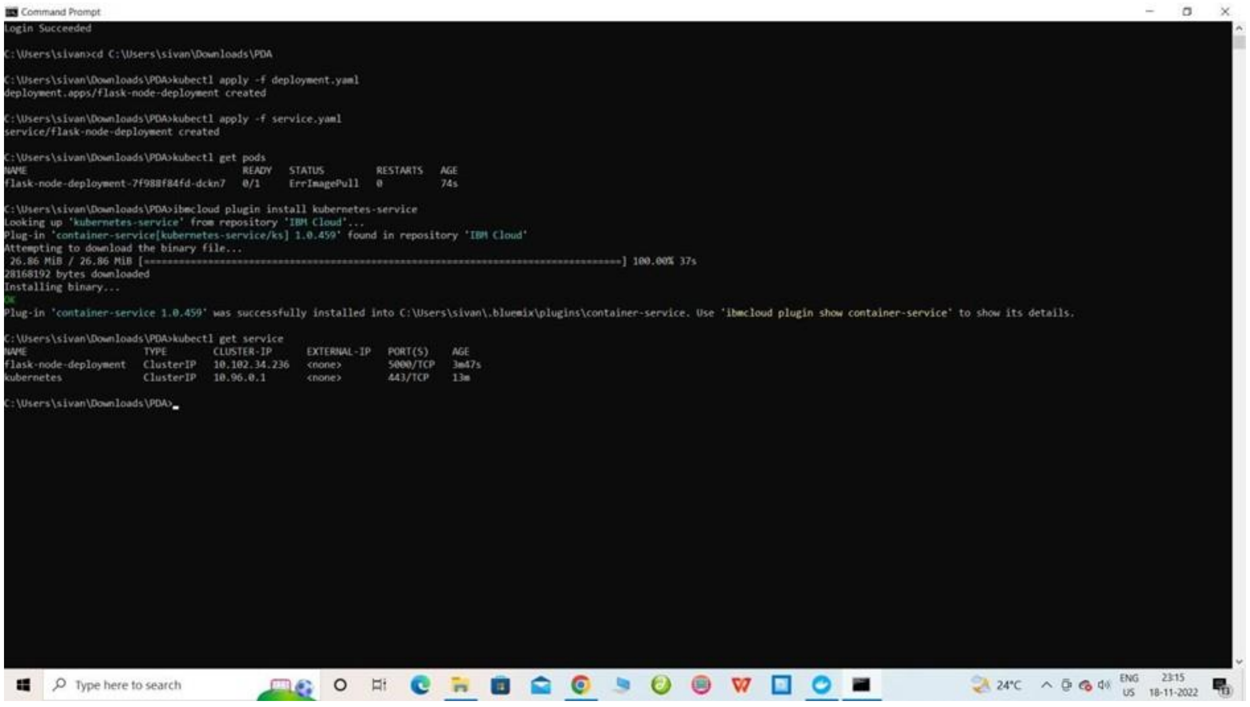
20:59
26-11-2022



API Keys

NAME	API KEY	ACTION
plasma donor application API Key ID: Jak_K6_OQRCHDWK9Cxv64Q	••••••••••••••••••••	

7.2.3 Deploy in Kubernetes cluster

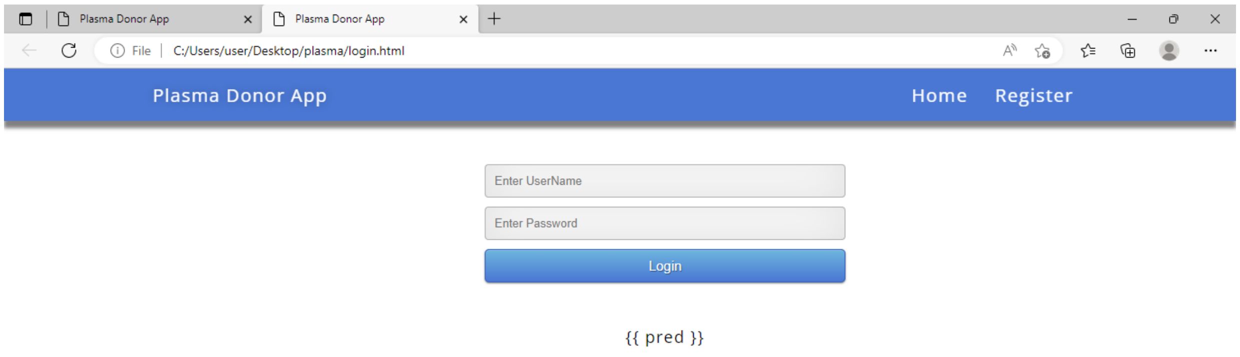


```
Login Succeeded

C:\Users\sivan>cd C:\Users\sivan\Downloads\PDA

C:\Users\sivan\Downloads\PDA>kubectl apply -f deployment.yaml
deployment.apps/flask-node-deployment created

C:\Users\sivan\Downloads\PDA>kubectl apply -f service.yaml
service/flask-node-deployment created

C:\Users\sivan\Downloads\PDA>kubectl get pods
NAME                                     READY   STATUS         RESTARTS   AGE
flask-node-deployment-7f988f84fd-dckn7   0/1     ErrImagePull   0          74s

C:\Users\sivan\Downloads\PDA>ibmcloud plugin install kubernetes-service
Looking up 'kubernetes-service' from repository 'IBM Cloud'...
Plug-in 'container-service[kubernetes-service/ks] 1.0.459' found in repository 'IBM Cloud'
Attempting to download the binary file...
 26.86 MiB / 26.86 MiB [===========================================================================] 100.00% 37s
28168192 bytes downloaded
Installing binary...
OK
Plug-in 'container-service 1.0.459' was successfully installed into C:\Users\sivan\.bluemix\plugins\container-service. Use 'ibmcloud plugin show container-service' to show its details.

C:\Users\sivan\Downloads\PDA>kubectl get service
NAME                    TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)    AGE
flask-node-deployment   ClusterIP   10.102.34.236   <none>        5000/TCP   3m47s
kubernetes              ClusterIP   10.96.0.1       <none>        443/TCP    13m

C:\Users\sivan\Downloads\PDA>_
```

8. TESTING

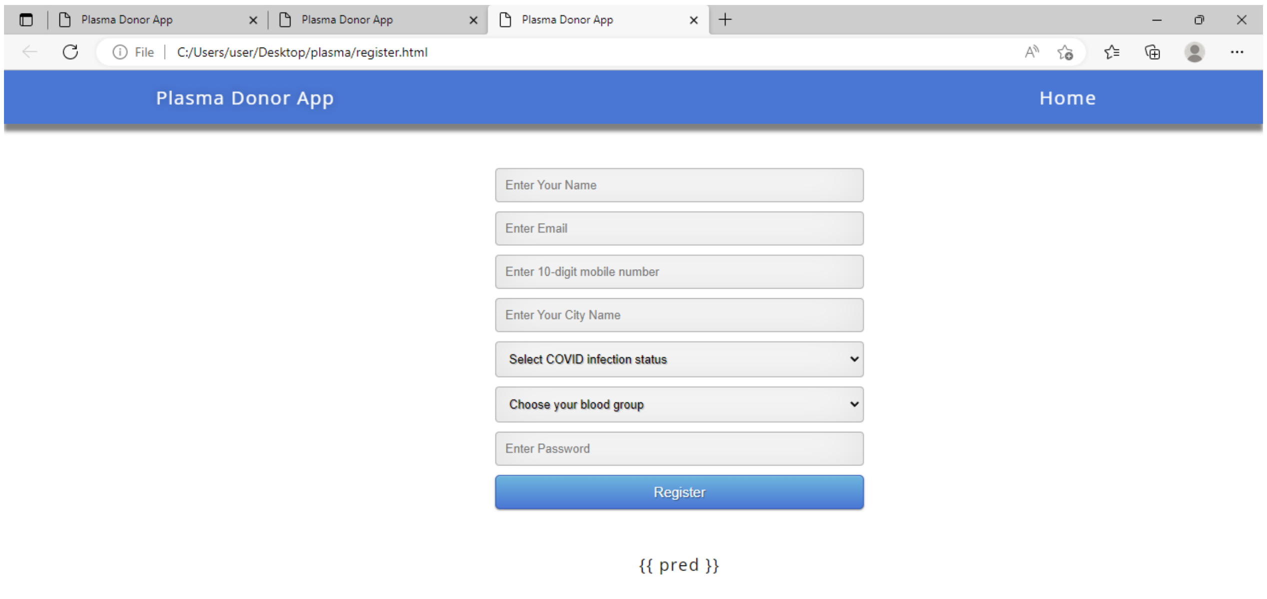
8.1 Test Cases:

8.1.1 Login page

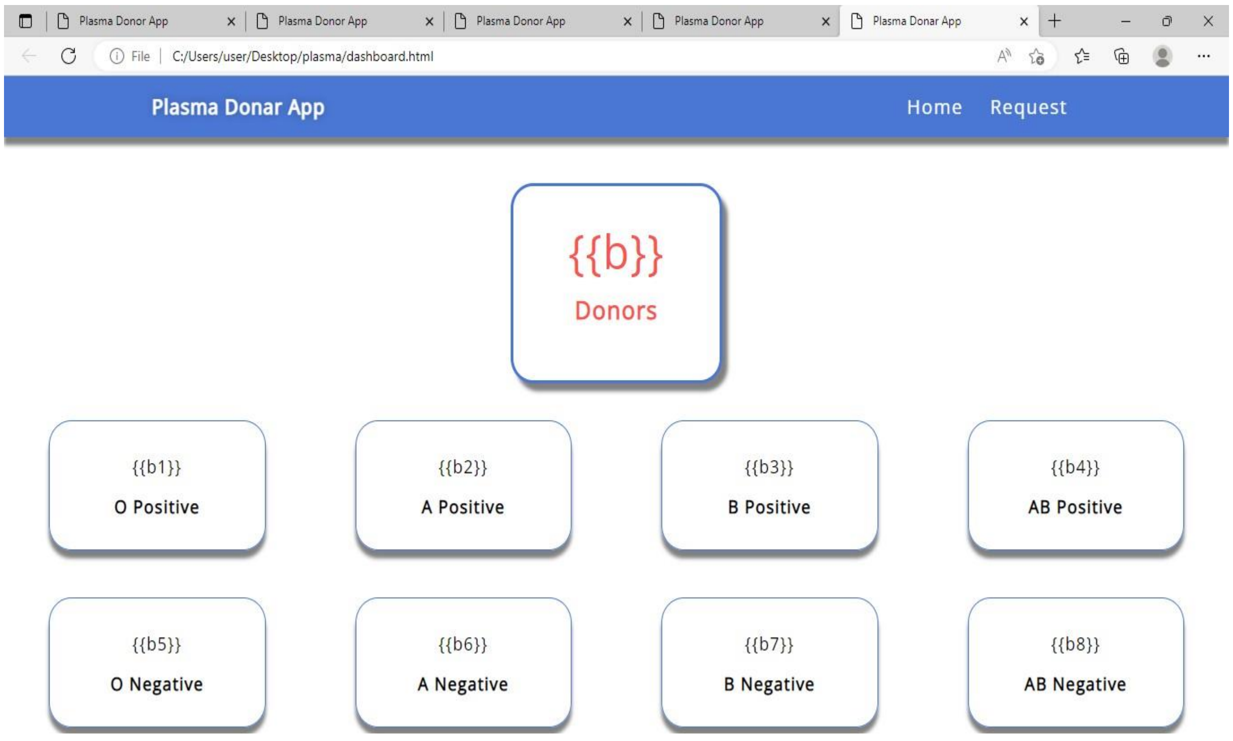


{{ pred }}

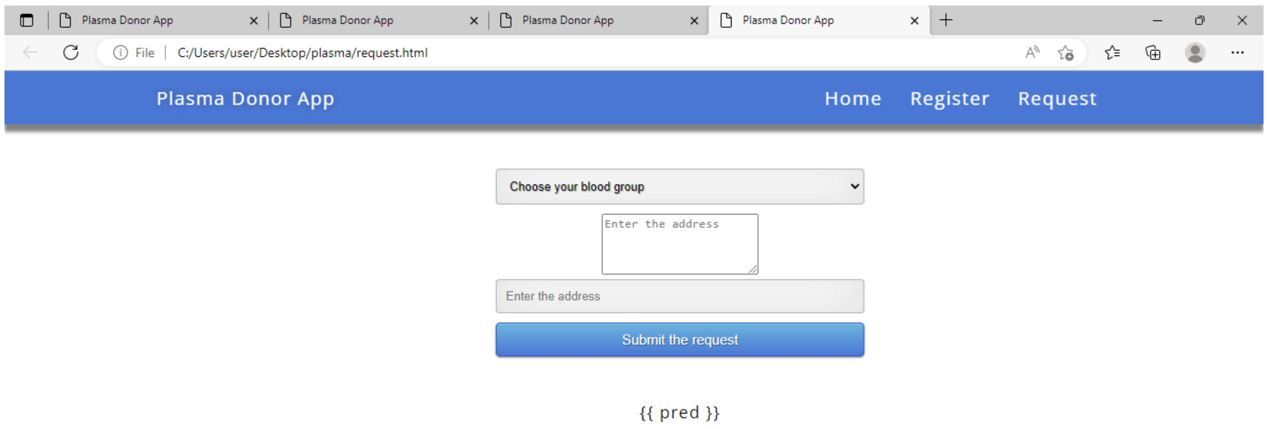
8.1.2 Registration Page



8.1.3 Dashboard Page



8.1.4 Request Page


Plasma Donor App

C:/Users/user/Desktop/plasma/request.html

Plasma Donor App Home Register Request

Choose your blood group

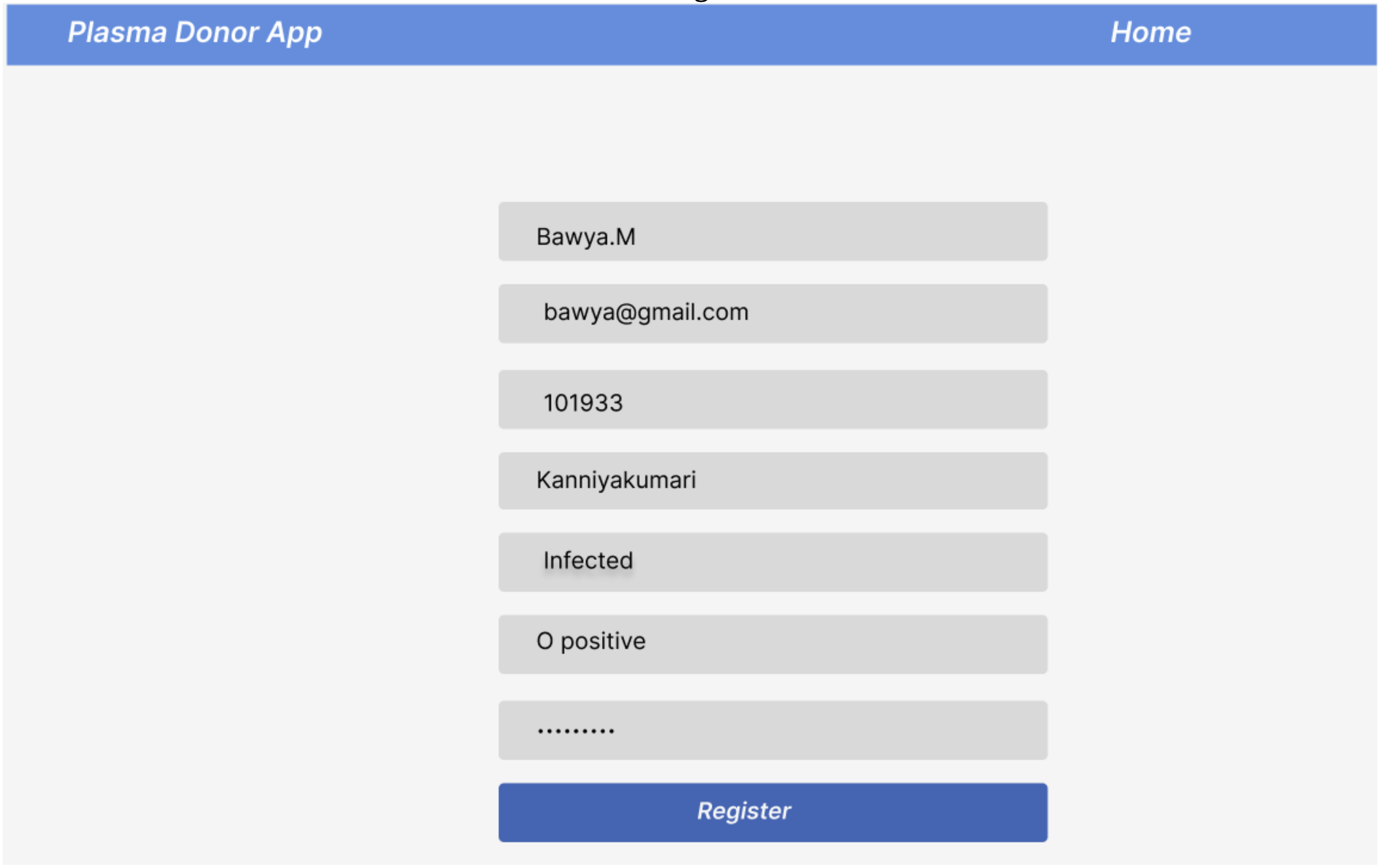
Enter the address

Enter the address

Submit the request

{{ pred }}

8.1.5 Database Connection Page


Plasma Donor App Home

Bawya.M

bawya@gmail.com

101933

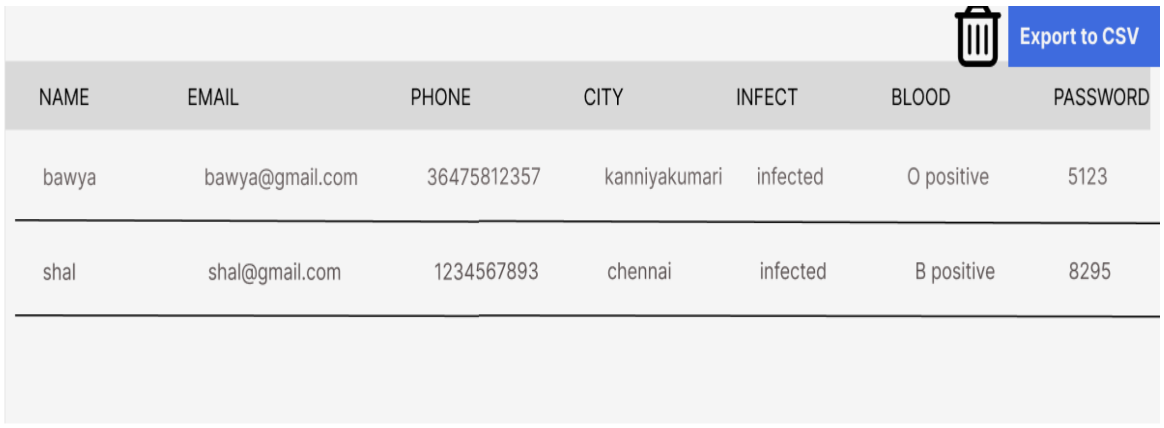
Kanniyakumari

Infected

O positive

•••••••••

Register



Export to CSV

NAME	EMAIL	PHONE	CITY	INFECT	BLOOD	PASSWORD
bawya	bawya@gmail.com	36475812357	kanniyakumari	infected	O positive	5123
shal	shal@gmail.com	1234567893	chennai	infected	B positive	8295

8.2 User Acceptance Testing:

8.2.1 Defect Analysis

This reportshows the numberof resolved or closed bugs at each severity level, and how they were resolved

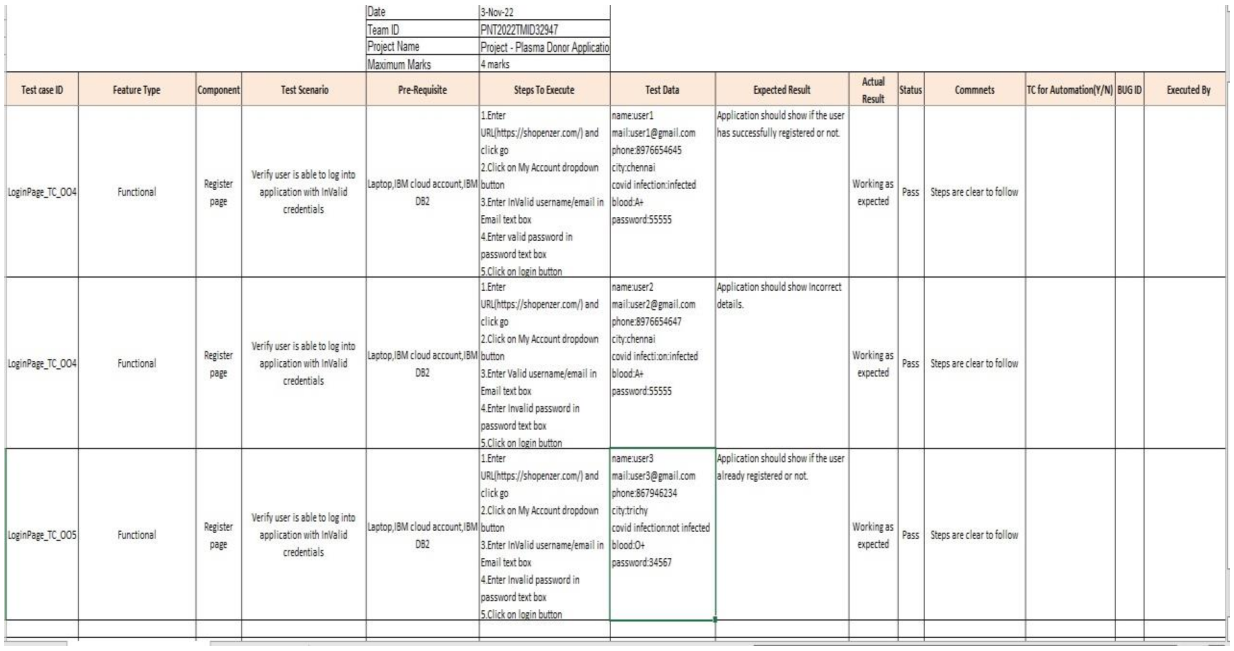
Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	2	4	2	3	11
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	4	2	4	4	14
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	3	2	3	8
Totals	9	12	13	12	46

8.2.2 Test Case Analysis

This reportshows the numberof test cases that have passed, failed,and untested

Section	Total Cases	Not Tested	Fa il	Pass
Print Engine	7	2	2	3
Client Application	51	10	5	36
Security	2	1	1	0
Outsource Shipping	3	2	0	1
Exception Reporting	9	3	3	3
Final Report Output	4	2	1	1
Version Control	2	1	0	1

8.2.3 Testcases Report

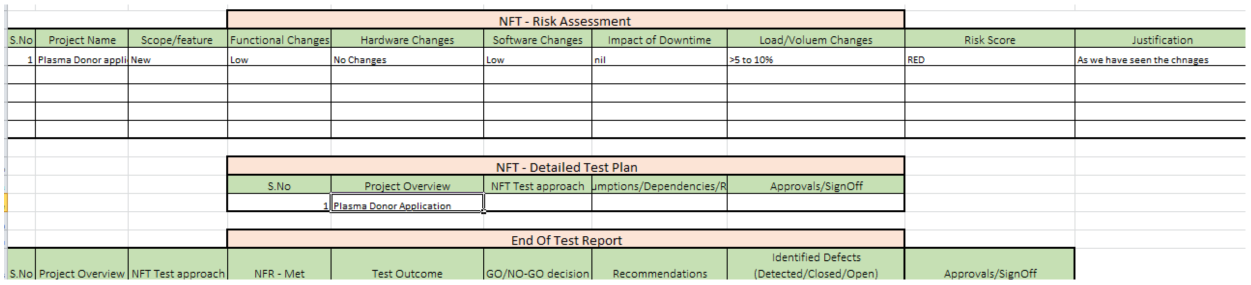


Date	3-Nov-22
Team ID	PNT2022TMID32947
Project Name	Project - Plasma Donor Applicatio
Maximum Marks	4 marks

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Commnets	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_OO4	Functional	Register page	Verify user is able to log into application with InValid credentials	Laptop,IBM cloud account,IBM DB2	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	name:user1 mail:user1@gmail.com phone:8976654645 city:chennai covid infection:infected blood:A+ password:55555	Application should show if the user has successfully registered or not.	Working as expected	Pass	Steps are clear to follow			
LoginPage_TC_OO4	Functional	Register page	Verify user is able to log into application with InValid credentials	Laptop,IBM cloud account,IBM DB2	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter Invalid password in password text box 5.Click on login button	name:user2 mail:user2@gmail.com phone:8976654647 city:chennai covid infecti:on:infected blood:A+ password:55555	Application should show Incorrect details.	Working as expected	Pass	Steps are clear to follow			
LoginPage_TC_OO5	Functional	Register page	Verify user is able to log into application with InValid credentials	Laptop,IBM cloud account,IBM DB2	1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter Invalid password in password text box 5.Click on login button	name:user3 mail:user3@gmail.com phone:867946234 city:trichy covid infection:not infected blood:O+ password:34567	Application should show if the user already registered or not.	Working as expected	Pass	Steps are clear to follow			

9. RESULTS

9.1 Performance Metrics



NFT - Risk Assessment

S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Voluem Changes	Risk Score	Justification
1	Plasma Donor appli	New	Low	No Changes	Low	nil	>5 to 10%	RED	As we have seen the chnages

NFT - Detailed Test Plan

S.No	Project Overview	NFT Test approach	umptions/Dependencies/R	Approvals/SignOff
1	Plasma Donor Application			

End Of Test Report

S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	Approvals/SignOff

10. ADVANTAGES & DISADVANTAGES

10.1 Advantages

- It is a user-friendly application.
- It will help people to find plasma easily

10.2 Disadvantages

- It cannot auto verify user genuineness.
- It requires an active internet connection.

11. CONCLUSION

Plasma donor application provides a reliable platform to connect local blood donors with patients. BLOODR creates a communication channel through authenticated clinics whenever a patient needs blood donation. It is a useful tool to find compatible blood donors who can receive blood request posts in their local area. Clinics can use this web application to maintain the blood donation activity. Future improvement of the BLOODR is explained.

12. FUTURE SCOPE

The discovery phase, can often times be chaotic. Besides appreciating that this is part of the process and to be okay with it, we recognised in retrospect that there were uncharted paths which we did not explore, but should have. As students, we have the goal to complete the project deliverables on time. Amidst the chaos, we found ourselves having conversations such as which path do we want to hunt down, and why. Eventually, we sat down as a team and collectively decided to move on after devoting an agreed set amount of time to the discovery phase.

In the ideal world, with more time, we should tease out these other paths. It is worthwhile hunting down all our options further, testing a variety of hypothesis, before moving on to the design process.

13. APPENDIX

Source Code

Login.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
<meta charset="UTF-8">
<title>Plasma Donor App</title>
<link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
<link rel="stylesheet" href="style.css">
<style>
.login{
top: 20%;
}
```

```
        </style>
        </head>
        <body>
        <div class="header">
        <div>Plasma Donor App</div>
        <ul>
        <li><a href="/registration">Register</a></li>
        <li><a class="active" href="/login">Home</a></li>
        </ul>
        </div>
        <div class="login" >
        <div>
        </div><!-- Main Input For Receiving Query to our ML -->
        <form action="{{ url_for('loginpage')}}"method="post">
        <input type="text" name="user" placeholder="Enter UserName"
required="required" style="color:black" />
        <input type="password" name="passw" placeholder="Enter Password"
required="required" style="color:black" />
        <button type="submit" class="btn btn-primary btn-block btn-
large">Login</button>
        </form>
        <br><br>
        <div style="color:black">
        {{ pred }}</div>
        </div>
        </body>
        </html>
```

Register.html

```
        <!DOCTYPE html>
        <html >
        <!--From https://codepen.io/frytyler/pen/EGdtg-->
        <head>
        <meta charset="UTF-8">
        <title>Plasma Donor App</title>
        <link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
```

```
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300' rel='stylesheet' type='text/css'>
<link rel="stylesheet" href="style.css">
<style>
.login{
top: 20%;
}
</style>
</head>
<body>
<div class="header">
<div>Plasma Donor App</div>
<ul>
<li><a class="active" href="/login">Home</a></li>
</ul>
</div>
<div class="login">
<!-- Main Input For Receiving Query to our ML -->
<form action="{{ url_for('register')}}"method="post">
<input type="text" name="name" placeholder="Enter Your Name" required="required" style="color:black"/>
<input type="email" name="email" placeholder="Enter Email" required="required" style="color:black"/>
<input type="text" name="phone" placeholder="Enter 10-digit mobile number" required="required" style="color:black"/>
<input type="city" name="city" placeholder="Enter Your City Name" required="required" style="color:black"/>
<select name="infect">
<option value="select" selected>Select COVID infection status</option>
<option value="infected">Infected</option>
<option value="uninfected">Uninfected</option>
</select>
<select name="blood">
<option value="select" selected>Choose your blood group</option>
<option value="O Positive">O Positive</option>
<option value="A Positive">A Positive</option>
<option value="B Positive">B Positive</option>
```

```
        <option value="AB Positive">AB Positive</option>
        <option value="O Negative">O Negative</option>
        <option value="A Negative">A Negative</option>
        <option value="B Negative">B Negative</option>
        <option value="AB Negative">AB Negative</option>
        </select>
        <input type="password" name="passw" placeholder="Enter Password"
required="required" style="color:black"/>
        <button type="submit" class="btn btn-primary btn-block btn-
large">Register</button>
        </form>
        <br><br>
        <div style="color:black">
        {{ pred }}</div>
        </div>
        </body>
        </html>
```

Dashboard.html

```
        <!DOCTYPE html>
        <html lang="en">
        <head>
        <title>Plasma Donar App</title>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <linkrel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></scrip
t>
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
        <link rel="stylesheet" href="style.css">
        </head>
        <style>
        .big{
        top:70;
        background-color:white;
        margin-top:80px;
        margin-left:550px;
        margin-right:550px;
        height:200px;
        border-radius: 25px;
        border: 3px solid #4a77d4;
        box-shadow: 6px 8px 4px grey;
        text-align:center;
        }
        .row{
        height:150px;
        }
        .col{
        margin:10px;
        margin-left:50px;
        margin-right:50px;
        border-radius: 25px;<!DOCTYPE html>
        <html lang="en">
        <head>
        <title>Plasma Donar App</title>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <linkrel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
        <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
        <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></scrip
t>
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
        <link rel="stylesheet" href="style.css">
        </head>
        <style>
        .big{
        top:70;
```

```
background-color:white;
margin-top:80px;
margin-left:550px;
margin-right:550px;height:200px;
border-radius: 25px;
border: 3px solid #4a77d4;
box-shadow: 6px 8px 4px grey;
text-align:center;
}
.row{
height:150px;
}
.col{
margin:10px;
margin-left:50px;
margin-right:50px;
border-radius: 25px;
<div class="ext1"><font size="20px">{{b}}</font><br><b>Donors</b></div>
</div>
</div>
<br>
<div class="row">
<div class="col" >
<div class="ext">{{b1}}<br><b>O Positive</b></div>
</div>
<div class="col" >
<div class="ext">{{b2}}<br><b>A Positive</b></div>
</div>
<div class="col" >
<div class="ext">{{b3}}<br><b>B Positive</b></div>
</div>
<div class="col" >
<div class="ext">{{b4}}<br><b>AB Positive</b></div>
</div>
</div> <br>
<div class="row">
<div class="col" >
```

```
<div class="ext">{{b5}}<br><b>O Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b6}}<br><b>A Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b7}}<br><b>B Negative</b></div>
</div>
<div class="col" >
<div class="ext">{{b8}}<br><b>AB Negative</b></div>
</div>
</div>
</div>
</body>
</html>
```

Request.html

```
<!DOCTYPE html>
<html >
<!--From https://codepen.io/frytyler/pen/EGdtg-->
<head>
<meta charset="UTF-8">
<title>Plasma Donor App</title>
<link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet'
type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
<link rel="stylesheet" href="style.css">
<style>
.login{
top: 20%;
}
</style>
```

```
</head>
<body>
<div class="header">
<div>Plasma Donor App</div>
<ul>
<li><a class="active" href="/login">Home</a></li>
</ul>
</div>
<div class="login">

<!-- Main Input For Receiving Query to our ML -->
<form action="{{ url_for('register')}}"method="post">
<input type="text" name="name" placeholder="Enter Your Name"
required="required" style="color:black"/>
<input type="email" namname="email" placeholder="Enter Email"
required="required" style="color:black"/>
<input type="text" name="phone" placeholder="Enter 10-digit mobile number"
required="required" style="color:black"/>
<input type="city" name="city" placeholder="Enter Your City Name"
required="required" style="color:black"/>
<select name="infect">
<option value="select" selected>Select COVID infection status</option>
<option value="infected">Infected</option>
<option value="uninfected">Uninfected</option>
</select>
<select name="blood">
<option value="select" selected>Choose your blood group</option>
<option value="O Positive">O Positive</option>
<option value="A Positive">A Positive</option>
<option value="B Positive">B Positive</option>
<option value="AB Positive">AB Positive</option>
<option value="O Negative">O Negative</option>
<option value="A Negative">A Negative</option>
<option value="B Negative">B Negative</option>
<option value="AB Negative">AB Negative</option>
</select>
<input type="password" name="passw" placeholder="Enter Password"
```

```
required="required" style="color:black"/>
        <button type="submit" class="btn btn-primary btn-block btn-
large">Register</button>
        </form>
        <br><br>
        <div style="color:black">
        {{ pred }}</div>
        </div>
        </body>
        </html>
```

Style sheet

```
        @import url(https://fonts.googleapis.com/css?family=Open+Sans);
        .btn {
        display: inline-block;
        *display: inline;
        *zoom: 1; padding:
        4px 10px 4px;
        margin-bottom: 0;
        font-size: 13px;
        line-height: 18px;
        color: #333333;
        text-align: center;
        text-shadow: 0 1px 1px rgba(255, 255, 255, 0.75);
        vertical-align: middle;
        background-color: #f5f5f5;
        background-image: -moz-linear-gradient(top, #ffffff, #e6e6e6);
        background-image: -ms-linear-gradient(top, #ffffff, #e6e6e6);
        background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#ffffff),
to(#e6e6e6));
        background-image: -webkit-linear-gradient(top, #ffffff, #e6e6e6);
        background-image: -o-linear-gradient(top, #ffffff, #e6e6e6);
        background-image: linear-gradient(top, #ffffff, #e6e6e6);
        background-repeat: repeat-x;
        filter: progid:dximagetransform.microsoft.gradient(startColorstr=#ffffff,
endColorstr=#e6e6e6,      GradientType=0);
        border-color: #e6e6e6 #e6e6e6 #e6e6e6;
        border-color: rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.25);
        border: 1px solid #e6e6e6;
```

```
    -webkit-border-radius: 4px;
    -moz-border-radius: 4px;
    border-radius: 4px;
    -webkit-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0,
0, 0.05);
    -moz-box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0,
0.05);
    box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0, 0, 0.05);
    cursor: pointer; *margin-left: .3em;
    }
    .btn:hover, .btn:active, .btn.active, .btn.disabled, .btn[disabled] { background-
color: #e6e6e6; }
    .btn-large {
         padding: 9px 14px;
        font-size: 15px;
        line-height: normal;
        -webkit-border-radius: 5px;
        -moz-border-radius: 5px;
        border-radius: 5px;
        }
    .btn:hover {
        color: #333333;
        text-decoration: none;
        background-color: #e6e6e6;
        background-position: 0 -15px;
        -webkit-transition: background-position 0.1s linear;
        -moz-transition: background-position 0.1s linear;
        -ms-transition: background-position 0.1s linear;
        -o-transition: background-position 0.1s linear;
        transition: background-position 0.1s linear;
        }
    .btn-primary, .btn-primary:hover {
        text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25);
        color: #ffffff;
        }
    .btn-primary.active { color: rgba(255, 255, 255, 0.75); }
    .btn-primary {
        background-color: #4a77d4;
        background-image: -moz-linear-gradient(top, #6eb6de, #4a77d4);
        background-image: -ms-linear-gradient(top, #6eb6de, #4a77d4);
        background-image: -webkit-gradient(linear, 0 0, 0 100%, from(#6eb6de),
to(#4a77d4));
	background-image: -webkit-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: -o-linear-gradient(top, #6eb6de, #4a77d4);
	background-image: linear-gradient(top, #6eb6de, #4a77d4);
	background-repeat: repeat-x;
	filter: progid:dximagetransform.microsoft.gradient(startColorstr=#6eb6de,
endColorstr=#4a77d4, GradientType=0);
	border: 1px solid #3762bc;
	text-shadow: 1px 1px 1px rgba(0,0,0,0.4);
	  box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.2), 0 1px 2px rgba(0, 0,
0, 0.5);
	}
.btn-primary:hover, .btn-primary:active, .btn-primary.active, .btn-
primary.disabled, .btn-primary[disabled] {
	filter: none;
	background-color: #4a77d4;
	}

.btn-block { width: 100%; display:block; }
* { -webkit-box-sizing:border-box; -moz-box-sizing:border-box; -ms-box-
sizing:border-box; -o-box-sizing:border-box; box-sizing:border-box; }
html { width: 100%; height:100%; overflow:hidden; }
body {
	width: 100%;
	height:100%;
	font-family: 'Open Sans', sans-serif;
	background: #fffff;
	color: #000000;

	font-size: 18px;
	text-align:center;
	letter-spacing:1.2px;
}
.header {
			top:0;
			margin:0px;
			left: 0px;
			right: 0px;
			position: fixed;
			background: #4a77d4;
			color: white;
```

```
                        box-shadow: 0px 8px 4px grey;
                        overflow: hidden;
                        padding: 15px;
                        font-size: 1.5vw;
                        width: 100%;
                        text-align: center;
                }
.login {
        position: absolute;
        top: 70%;
        left: 50%;
        margin: -25px 0 0 -150px;
        width:400px;
        height:400px;
}

.header div { color: #fff; text-shadow: 0 0 10px rgba(0,0,0,0.3); letter-
spacing:1px; text-align:center; float:left; padding-left:150px;}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  padding-right:150px;
  overflow: hidden;
}
li {
  float: right;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 0px 15px;
  text-decoration: none;
}
input {
        width: 100%;
        margin-bottom: 10px;
        background: rgba(255,255,255,255);
        border: none;
        outline: none;
        padding: 10px;
        font-size: 13px;
        color: black;
        text-shadow: black;
        border: 1px solid rgba(0,0,0,0.3);
        border-radius: 4px;
                box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px
rgba(255,255,255,0.2);
        -webkit-transition: box-shadow .5s ease;
        -moz-transition: box-shadow .5s ease;
        -o-transition: box-shadow .5s ease;
        -ms-transition: box-shadow .5s ease;
        transition: box-shadow .5s ease;
}
input:focus { box-shadow: inset 0 -5px 45px rgba(100,100,100,0.4), 0 1px 1px
rgba(255,255,255,0.2); }
select {
        width: 100%;
        margin-bottom: 10px;
        background: rgba(255,255,255,255);
        border: none;
        outline: none;
        padding: 10px;
        font-size: 13px;
        color: #000000;
        text-shadow: 1px 1px 1px rgba(0,0,0,0.3);
        border: 1px solid rgba(0,0,0,0.3);
        border-radius: 4px;
box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px
rgba(255,255,255,0.2);
        -webkit-transition: box-shadow .5s ease;
        -moz-transition: box-shadow .5s ease;
        -o-transition: box-shadow .5s ease;
        -ms-transition: box-shadow .5s ease;
        transition: box-shadow .5s ease;
}
```

App.py

```
from flask import Flask, render_template, request, redirect, url_for, session

import ibm_db

import json

import requests

app = Flask(__name__)

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-
4a4f-a32e-
9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;SECURI
TY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=cts72740;PWD=dORK
SzIzhwxBmMvg","","")

@app.route('/registration')

def home():

 return render_template('register.html')

@app.route('/register',methods=['POST'])

def register():

 x = [x for x in request.form.values()]

print(x)

name=x[0]

email=x[1]

phone=x[2]

city=x[3]

infect=x[4]

blood=x[5]

password=x[6]

sql = "SELECT * FROM plasmadonor WHERE email =?"
```

```
stmt = ibm_db.prepare(conn, sql)

ibm_db.bind_param(stmt,1,email)

ibm_db.execute(stmt)

account = ibm_db.fetch_assoc(stmt)

print(account)

if account:

      return render_template('register.html', pred="You are already a member, please
login using your details")

else:

 insert_sql = "INSERT INTO plasmadonor VALUES (?, ?, ?, ?, ?, ?, ?)"

prep_stmt = ibm_db.prepare(conn, insert_sql)

ibm_db.bind_param(prep_stmt, 1, name)

ibm_db.bind_param(prep_stmt, 2, email)

 ibm_db.bind_param(prep_stmt, 3, phone)

 ibm_db.bind_param(prep_stmt, 4, city)

ibm_db.bind_param(prep_stmt, 5, infect)

ibm_db.bind_param(prep_stmt, 6, blood)

ibm_db.bind_param(prep_stmt, 7, password)

ibm_db.execute(prep_stmt)

          return render_template('register.html', pred="Registration Successful, please
login using your details")

@app.route('/')

@app.route('/login')

def login():
  return render_template('login.html')

@app.route('/loginpage',methods=['POST'])

def loginpage():

   user = request.form['user']

   passw = request.form['passw']

  sql = "SELECT * FROM plasmadonor WHERE email =? AND password=?"

  stmt = ibm_db.prepare(conn, sql)

 ibm_db.bind_param(stmt,1,user)

ibm_db.bind_param(stmt,2,passw)

ibm_db.execute(stmt)

 account = ibm_db.fetch_assoc(stmt)

 print (account)

print(user,passw)

 if account:

 return redirect(url_for('stats'))

else:

              return render_template('login.html', pred="Login unsuccessful. Incorrect
username / password !")

@app.route('/stats')

def stats():

 '''sql = "SELECT blood FROM user group by blood"

stmt = ibm_db.prepare(conn, sql)

ibm_db.execute(stmt)

count = ibm_db.fetch_assoc(stmt)
```

```
             print(count)'''
        return render_template('stats.html',b=5,b1=2,b2=3,b3=4,b4=2,b5=1,b6=2,b7=1,b8=1)

            @app.route('/requester')

            def requester():

             return render_template('request.html')

            @app.route('/requested',methods=['POST'])

            def requested():

             bloodgrp = request.form['bloodgrp']

            address = request.form['address']

            print(address)

            sql = "SELECT * FROM plasmadonor WHERE blood=?"

            stmt = ibm_db.prepare(conn, sql)

            ibm_db.bind_param(stmt,1,bloodgrp)

            ibm_db.execute(stmt)

            data = ibm_db.fetch_assoc(stmt)

            msg = "Need Plasma of your blood group for: "+address

            while data != False:

                    print ("The Phone is : ", data["PHONE"]
url="https://www.fast2sms.com/dev/bulk?authorization=xCXuwWTzyjOD2ARd1EngbH3a7tKI
q5PklJ8YSf0Lh4FQZecs9iNI1dSvuqprxFwCKYJXA5amQkBE36Rl&sender_id=FSTSMS&me
ssage="+msg+"&language=english&route=p&numbers="+str(data["PHONE"])

            result=requests.request("GET",url)

            print(result)

            data = ibm_db.fetch_assoc(stmt)

           return render_template('request.html', pred="Your request is sent to the concerned
people.")

            if__name__== "_main__":

            app.run(host='0.0.0.0', port=8080)
```

Senderemail.py

```
        import smtplib
        import sendgrid
        import os
        from sendgrid.helpers.mail import Mail, Email, To, Content
        SUBJECT = "Interview Call"
        s = smtplib.SMTP('smtp.gmail.com', 587)
        def sendmail(TEXT,email):
        print("sorry we cant process your candidature")
        s = smtplib.SMTP('smtp.gmail.com', 587) s.starttls()
        s.login("il.pradeepthi@gmail.com", "oms@1Ram")
        message = 'Subject: {}\n\n{}'.format(SUBJECT, TEXT)
        s.sendmail("il.pradeepthi@gmail.com", email, message)
        s.quit()
        def sendgridmail(user,TEXT):
        sg=sendgrid.SendGridAPIClient('SG.Jak_K6_OQRCHDWK9Cxv64Q.8aziFLnM
    RH_9P K5lNqOcP7ylJmezx_qSKfB1iCeGL4o')
        from_email = Email("sivanandhini2210@gmail.com") # Change to your verified
    sender
        to_email = To("vijithrap7@gmail.com") # Change to your recipient
        subject = "Sending with SendGrid is Fun"
        content = Content("text/plain",TEXT)
        mail = Mail(from_email, to_email, subject, content)


        # Get a JSON-ready representation of the Mail object mail_json = mail.get()
        # Send an HTTP POST request to /mail/send
        response = sg.client.mail.send.post(request_body=mail_json)
        print(response.status_code)
print(response.headers)
```