# PLASMA DONOR APPLICATION

DOMAIN: CLOUD APP DEVELOPMENT TEAM ID: PNT2022TMID11654 BATCH: B10-4A6E

## **TEAM**

Team Leader: MEDUNAN S

Team member: MAKESH S

Team member: MADHUSUTHANAN G

Team member: MOHAMMED ATHANAN M

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#### 1. INTRODUCTION

#### 1.1 Project Overview

The application has a simple accessible interface for donors to register and donate blood to the allocated blood bank. Additionally, they can upload a COVID-19 negative certificate, so that their blood plasma can be used for treating COVID-19 patients. The users can create an account and enter their information (name, age, address, blood group etc.) that can be used for registration and scheduling appointments at the nearest blood bank for blood donation.

Blood banks can look at potential donors and book them for an appointment. They can also request potential donors who are registered to the application for their blood. The donors who receive these requests can either accept and book an appointment or reject them.

Hospitals in need of blood plasma can request blood banks according to their needs. Blood banks can look at requests from hospitals and can either accept or reject them.

#### 1.2 Purpose

There has been an increase in demand for blood plasma among hospitals and blood banks as they are additionally used in an experimental treatment for COVID-19. Hence there is a requirement for new infrastructure to facilitate donors, blood banks and hospitals for easier donation and access of blood plasma that could potentially satisfy the excess demand for it to be used for treatment.

Convalescent plasma therapy uses blood from people who've recovered from an illness to help others recover.

This is an experimental form of therapy which is also used to treat COVID-19 by using blood plasma with high antibody levels against COVID-19. It may be used for some hospitalized people ill with COVID-19 who are either early in their illness or who have weakened immune systems.

Blood donated by people who've recovered from COVID-19 has antibodies to the virus that causes it. The donated blood is processed to remove blood cells, leaving behind liquid (plasma) and antibodies. These can be given to people with COVID19 to boost their ability to fight the virus.

As there is no effective antiviral treatment for COVID-19 there is a higher prevalence of other forms of therapy such as convalescent plasma therapy which has increased the demand for blood

plasma. Also, with lockdowns and increased restrictions it has become harder to facilitate donors, furthermore contributing to the scarcity of resources that can be used for treatment.

#### 2. LITERATURE SURVEY

#### 2.1 Existing problem

There has been an increase in demand for blood plasma among hospitals and blood banks as they are additionally used in an experimental treatment for COVID-19. Hence there is a requirement for new infrastructure to facilitate donors, blood banks and hospitals for easier donation and access of blood plasma that could potentially satisfy the excess demand for it to be used for treatment.

#### 2.2 References

- COVID-19 Convalescent Plasma: from donation to treatment A Systematic Review & Single Center Experience: https://tinyurl.com/plasma-systematic-review
- 2. Developing a plasma donor application using Function-as-a-service in AWS: http://ijiird.com/wp-content/uploads/050140.pdf
- 3. Blood donors appointment booking and managing system using PC and mobile web browsers in current pandemic (COVID-19): https://tinyurl.com/bdms-pc-mobile-browser
- 4. Blood Bank Management System: https://www.irjet.net/archives/V8/i6/IRJETV8I668.pdf
- 5. A Cross-Platform Blood Donation Application with a Real-Time, Intelligent, and Rational Recommendation System: https://tinyurl.com/blood-donor-rational-reccsys
- 6. Android Blood Bank: https://tinyurl.com/android-bbms
- 7. Android Based Health Care App: https://www.jetir.org/papers/JETIR2205390.pdf

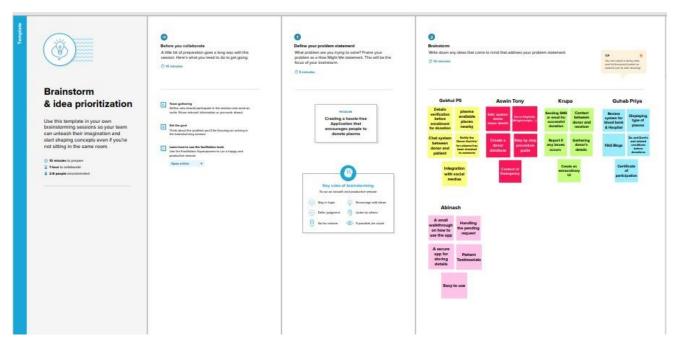
#### 2.3 Problem Statement Definition

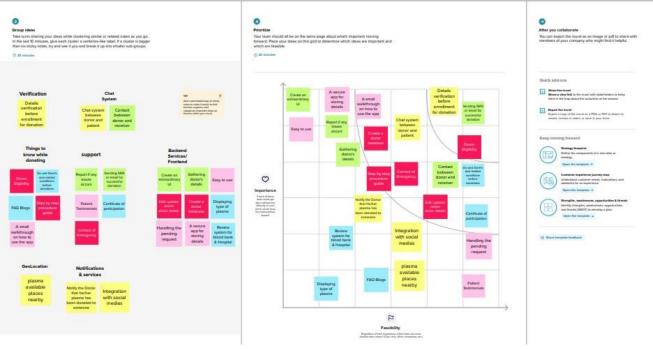
The main objective is to create an easy-to-use application that can be used by donors to donate their blood to blood banks. Hospitals in need for blood plasma can request blood from blood banks. This application should have a wider reach to appeal to more potential blood donors.

## 3. IDEATION & PROPOSED SOLUTION

## 3.1 Empathy Map Canvas

## 3.2 Ideation & Brainstorming





## 3.3 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	There has been an increase in demand for blood plasma among hospitals and blood banks. Hence there is a requirement for new infrastructure to facilitate donors, blood banks and hospitals for easier donation and access of blood plasma that could potentially satisfy the excess demand for it to be used for treatment.
2.	Idea / Solution description	This proposed system 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 requirements. The basic solution is to create a centralized system to keep a track on the upcoming as well as past Plasma Donation Events.

3.	Novelty / Uniqueness	
		A User Interface is simple for users to understand. We can use the application anywhere anytime. The user immediately needs the plasma for their treatment but the plasma is not available in nearby hospitals, then user can use this application to raise request and directly contact the donor, request them to donate the plasma. Today many of them have mobile phones they can install this application and
		use it to save the lives of people.
4.	Social Impact / Customer Satisfaction	Effect of donor motivation on donor satisfaction and loyalty are variable due to the influence of common donorship attitudes prevailing in donor population, impact of social marketing programs, focused on promotion of donor commitment and deliberate donorship. Thus, we have predicted that effect of donor motivation on donor relationship satisfaction and loyalty change.

5.	Business Model (Revenue Model)	This application is accessible by everyone. It is free. Because of the trouble in finding givers who match a specific blood bunch, this application empowers clients to enlist individuals who wish to give plasma and keep their data in a data set. Nowadays the need for plasma is increasing. Anyone with basic technical knowledge can access this app.
		technical knowledge can access this app.

Scalability of the Solution

This application helps users to find plasma donors by sitting in home itself instead of searching donors everywhere. When there is a emergency then plasma request to send to everyone. Once the donor is ready to donate receiver is notified about donation. Receiver can contact the donor. With this app donor can know the eligibility to donate and making it easier to locate suitable donor at right time.

# 4. REQUIREMENT ANALYSIS

## **4.1 Functional Requirements**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form
FR-2	User Confirmation	Confirmation via Email
FR-3	Search for donor	Search result can be viewed in a list. Each element in the list represents a specific donor with the donor details.
FR-4	Administrator	Monitor the overall functionalities of the application and ensure quality of service
FR-5	Send Request	If plasma is required, the requester places a request to the admin.

FR-6	User Credentials	Administrator has registered then the software administrator should be able to login to the web application. The login information will be stored on the database for future use.
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## **4.2 Non-Functional Requirements**

Following are the non-functional requirements of the proposed solution.

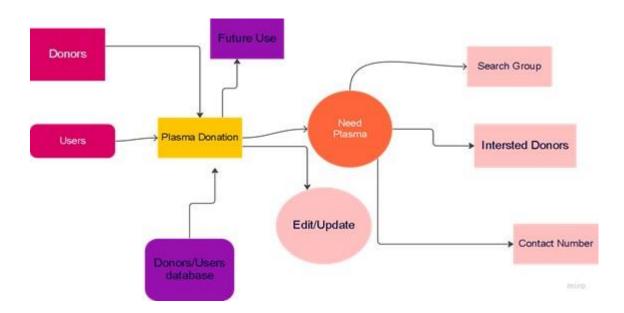
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Plasma donor Application is very useful to the emergency situation patient, because that application gives the information of the nearby plasma donors and request to donate their plasma to patient via email, SMS etc.
NFR-2	Security	Secured website and application that provides various security features Email Verification, password login etc.
NFR-3	Reliability	The plasma donor application should work properly, even when faults occur.

NFR-4	Performance	The plasma donor application must perform well in different scenarios. The Load Time should be less and there needs to be quick response to the request saying that delay is less.
NFR-5	Availability	The system should be available all times, meaning the user can access it using application. In case if a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backups of the database should be retrieved from the application data folder and saved by the administrator. Must be available 24/7.
NFR-6	Scalability	In the application to handle an increase in workload without performance degradation, or its ability to quickly enlarge. The solution must allow the hardware end of the deployed software services and components to be scaled horizontally as well as vertically.

#### 5. PROJECT DESIGN

#### **5.1 Data Flow Diagrams**

A data-flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow — there are no decision rules and no loops.



#### 5.2 Solution & Technical Architecture

### **Solution Architecture**

- Software Required: Python, Flask, Docker
- System Required: 8GB RAM, Intel Core i3, OS-Windows/Linux/MAC, Laptop or Desktop
- During the COVID 19 crisis, the requirement of plasma became a high priority and the donor count has become low. Saving the donor information and helping the needy by notifying the current donors list, would be a helping hand. In regard to the problem faced, an application is to be built which would take the donor details, store them and inform them upon a request.

• In other words, there is a requirement for new infrastructure to facilitate donors, blood banks and hospitals for easier donation and access of blood plasma that could potentially satisfy the excess demand for it to be used for treatment

#### **5.3** User Stories

User Type	Functional	User	User	Acceptance criteria	Priority	Release
	Requirement	Story	Story/Task			
	(Epic)	Number				
Donor	User	USN-1	As a user, I	I can access my	High	Sprint-
	Registration		can register	account/dashboard		1
			for the			
			application			
			by entering			
			my email,			
			password			
			and			
			confirming			
			my password.			
	Login	USN-2	As a user, I	I can receive	High	Sprint-
			can log into	confirmation email		2
			the	and click confirm		
			application			
			by entering			
			email and			
			password.			

	Register for donor	USN-3	As a user, I can log into the application and search result can be viewed in a list to donate plasma and confirm by booking	I can register & access the dashboard with Facebook Login	Medium	Sprint-
Patient/donor	Find the bank	USN-4	As a patient, I can directly access the application and find the plasma	I can access my account/dashboard	High	Sprint 1
	Request for plasma	USN-5	As a user, I can enter into the application and find the current bank and request for plasma an 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

Plasma Bank	Send request	USN-7	As a bank if plasma is required, the receiver will contact the donor.	I can access my account/dashboard	Medium	Sprint- 3
	User credentials	USN-8	Operator has registered then the software operator should be able to login to the web application. It will be	I can access my account/dashboard	Medium	Sprint- 4
			storied in database for future use.			

## 6. PROJECT PLANNING & SCHEDULING

## **6.1 Sprint Planning & Estimation**

## **6.2 Sprint Delivery Schedule**

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

**Velocity:** 

sprint duration = 6 days velocity =

20

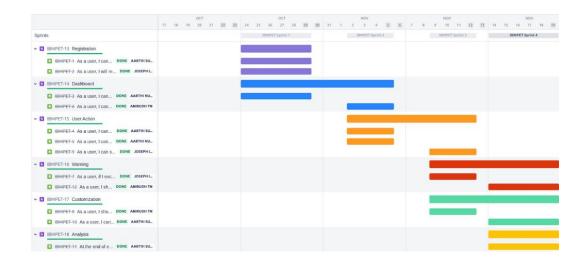
AV = VELOCITY / SPRINT DURATION

AV = 20 / 6

AV = 3.333

#### 6.3 Reports from JIRA

#### **Burndown Chart:**



#### 7. CODING & SOLUTIONING

Feature 1 - User Registration with Sendgrid verification

#### Html code

```
<!DOCTYPE html>
<html>
<head>
 <title>REGISTER</title>
 <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}</pre>
 <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <div class="flex items-center justify-center min-h-screen ">
   <div class="px-8 py-6 mt-4 text-left bg-black shadow-lg">
     <h3 class="text-2xl font-bold text-center" style="color: □white;">Login to your account</h3>
     <form class="regforms" action="/register" method="post">
       <div class="flasher">{{ msg }}</div></br></br></pr>
       <div class="mt- -20">
        (div)
          <input type="text" id="username" name="username" placeholder="Enter New Username"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
        </div>
        (div)
          <input type="text" id="email" name="email" placeholder="Enter Your Email Id"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
        </div>
```

```
<div>
          <input type="text" id="email" name="email" placeholder="Enter Your Email Id"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
        </div>
        <div class="mt-4">
          <input type="password" id="password" name="password" placeholder="Password"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
        </div>
        <div class="flex items-baseline justify-between">
          <button class="px-6 py-2 mt-4 text-white bg-blue-600 rounded-lg hover:bg-blue-900">Register/button class="px-6 py-2 mt-4 text-white bg-blue-600 rounded-lg hover:bg-blue-900">Register
        </div>
      </div>
     </form>
     Already have an account?
      <a href="/login" class="font-medium text-primary-600 hover:underline dark:text-primary-500">Login<
     </div>
 </div>
</body>
</html>
```

#### App.py

```
print("modules imported")
app = Flask(__name__)
print("Flask app created with ___name__")
app.config['SECRET_KEY'] = 'top-secret!'
app.config['MAIL_SERVER'] = 'smtp.sendgrid.net'
app.config['MAIL_PORT'] = 587
app.config['MAIL_USE_TLS'] = True
app.config['MAIL_USERNAME'] = 'apikey'
app.config['MAIL_PASSWORD'] = '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'
app.config['MAIL_DEFAULT_SENDER'] = 'abinash.drl169@gmail.com'
mail = Mail(app)
print("setup default configs")
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.clogj3sd0tgtu0lqde00.c
print("db conn made")
@app.route('/register', methods=['GET', 'POST'])
def register():
   msg = "Please fill out the form."
    if request.method == 'POST':
       username = request.form['username']
       email = request.form['email']
       password = request.form['password']
       sql = "SELECT * FROM users WHERE username=?"
       stmt = ibm_db.prepare(conn, sql)
       ibm_db.bind_param(stmt, 1, username)
       ibm_db.execute(stmt)
       account = ibm_db.fetch_assoc(stmt)
       print(account)
       if account:
          msg = "Username already exists!"
       elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
         msg = "Invalid email address!"
       elif not re.match(r'[A-Za-z0-9]+', username):
          msg = "Username must contain only letters and numbers!"
       else:
          insertsql = "INSERT INTO users VALUES(?,?,?)"
           prepstmt = ibm_db.prepare(conn, insertsql)
           ibm_db.bind_param(prepstmt, 1, username)
           ibm_db.bind_param(prepstmt, 2, email)
           ibm_db.bind_param(prepstmt, 3, password)
           ibm_db.execute(prepstmt)
           mailmsg = Message('Registration Verification', recipients=[email])
```

#### Feature 2 -User login

#### HTML code:

```
<!DOCTYPE html>
<html>
<head>
 <title>USER LOGIN</title>
 <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}</pre>
 <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
(body>
 <div class="flex items-center justify-center min-h-screen ">
   <div class="px-8 py-6 mt-4 text-left bg-black shadow-lg">
     <h3 class="text-2xl font-bold text-center" style="color: Dwhite;">Login to your account</h3>
     <form class="regforms" action="/login" method="post">
       <div class="flasher">{{ msg }}</div></br></br></pr>
       <div class="mt- -20">
         (div)
           <label class="block" style="color: Dwhite;" for="username">Username<label>
              <input type="text" id="username" name="username" placeholder="Username"</pre>
                class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
         </div>
         <div class="mt-4">
           <input type="password" id="password" name="password" placeholder="Password"</pre>
                class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
                style="color: | black:">
               <input type="password" id="password" name="password" placeholder="Password"</pre>
                class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
                style="color: | black;">
         </div>
         <div class="flex items-baseline justify-between">
           <button class="px-6 py-2 mt-4 text-white bg-blue-600 rounded-lg hover:bg-blue-900">Login</butt</pre>
         </div>
       </div>
      </form>
      Don't have an account yet?
       <a href="register" class="font-medium text-primary-600 hover:underline dark:text-primary-500">Sign
      Admin Login <a href="adminlogin"
         class="font-medium text-primary-600 hover:underline dark:text-primary-500">Admin Login
      </div>
  </div>
</body>
</html>
```

#### App.py

```
@app.route('/login', methods=['GET', 'POST'])
def login():
    global userid
    msg = ""
    if request.method == "POST":
       username = request.form["username"]
        password = request.form["password"]
       sql = "SELECT * FROM users WHERE username=? AND password=?"
        stmt = ibm_db.prepare(conn, sql)
       ibm_db.bind_param(stmt, 1, username)
       ibm_db.bind_param(stmt, 2, password)
       ibm_db.execute(stmt)
       account = ibm_db.fetch_assoc(stmt)
       print(account)
       if account:
            session['Loggedin'] = True
           session['id'] = account['USERNAME']
           userid = account['USERNAME']
           session['username'] = account['USERNAME']
           return render_template('dashboard.html', msg=username)
        else:
           msg = "Invalid login credentials!"
    return render_template('login.html', msg=msg)
```

#### Feature 3 - Admin login

#### Html code:

```
<!DOCTYPE html>
<html>
(head)
 <title>ADMINISTRATOR LOGIN</title>
 <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}</pre>
 <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <div class="flex items-center justify-center min-h-screen ">
   <div class="px-8 py-6 mt-4 text-left bg-black shadow-lg">
     <form action="/adminlogin" method="post">
       <div class="flasher">{{ msg }}</div></br></br></pr>
       <div class="mt- -20">
         (div)
           <label class="block" style="color: Dwhite;" for="username">Username<label>
              <input type="text" id="username" name="username" placeholder="Username"</pre>
                class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
                style="color: | black;">
         </div>
         <div class="mt-4">
           <label class="block" style="color: \( \square\) white; for="password">Password<label>
               <input type="password" id="password" name="password" placeholder="Password"</pre>
                 class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
                style="color: | black:">
```

```
<div class="mt- -20">
        <div>
          <label class="block" style="color: Dwhite;" for="username">Username<label>
             <input type="text" id="username" name="username" placeholder="Username"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
               style="color: | black;">
        </div>
        <div class="mt-4">
          <input type="password" id="password" name="password" placeholder="Password"</pre>
               class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:rin
              style="color: | black;">
        </div>
        <div class="flex items-baseline justify-between">
         <button class="px-6 py-2 mt-4 text-white bg-blue-600 rounded-lg hover:bg-blue-900">Login</butt</pre>
      </div>
     </form>
     Click here to login as normal user ->
      <a href="login" class="font-medium text-primary-600 hover:underline dark:text-primary-500">Login/
</body>
</html>
```

#### App.py

```
@app.route('/adminlogin', methods=['GET', 'POST'])
def adminlogin():
    global adminid
    msg = ""
    if request.method == "POST":
        username = request.form["username"]
        password = request.form["password"]
        sql = "SELECT * FROM admins WHERE username=? AND password=?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.bind_param(stmt, 2, password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            session['Loggedin'] = True
            session['id'] = account['USERNAME']
            adminid = account['USERNAME']
            session['username'] = account['USERNAME']
           return redirect(url_for('admindashboard'))
        else:
           msg = "Invalid admin credentials!"
    return render_template('adminlogin.html', msg=msg)
```

#### Feature 4 - User Views Profile Depending on Donor status

#### **Html code:**

</html>

```
k!DOCTYPE html>
 <html>
 <head>
    <title>CURRENT USER'S PROFILE</title>
    k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css')}
    <link type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css'</pre>
    <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
 </head>
 (body)
    <!-- navbar -->
    <nav>
       <div style="text-align: right;">
              <a type="button" href="dashboard">DASHBOARD</a>
              <a type="button" href="logout">LOGOUT</a>
          </div>
       <div class="class-container" id="container">
          <h4 style="text-align: center; color:□white; font-size:25px;">Welcome {{ msg }}!</h4>
       </div>
    </nav>
    <!-- navbar ends -->
   <nav>
          <div style="text-align: right;">
             <a type="button" href="dashboard">DASHBOARD</a>
             <a type="button" href="logout">LOGOUT</a>
          </div>
      <div class="class-container" id="container">
         <h4 style="text-align: center; color: □white; font-size:25px;">Welcome {{ msg }}!</h4>
   </nav>
   <!-- navbar ends -->
   <div class="flex justify-center mt-2">
      <caption>USER PROFILE</caption>
         {% for key, value in dictprofile.items() %}
          {{ key }} 
          {{ value }} 
          (/tr>
          {% endfor %}
      </div>
   To make any changes to your profile, please contact our s
</body>
```

#### App.py

```
@app.route('/profile')
def profile():
    username = userid
    dictprofile = {'Username':'', 'Email ID': '', 'Is Donor?': 'NO'}
    dictprofile['Username'] = username
   sql = "SELECT email FROM users WHERE username=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm db.execute(stmt)
   dictprofile['Email ID'] = ibm_db.fetch_tuple(stmt)[0]
   sql = "SELECT * FROM donor WHERE username=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.execute(stmt)
    gotprofile = ibm_db.fetch_tuple(stmt)
    if gotprofile:
        dictprofile['Is Donor?'] = 'YES'
        dictprofile['Full Name'] = gotprofile[1]
        dictprofile['Age'] = gotprofile[2]
        dictprofile['Gender'] = gotprofile[3]
        dictprofile['Phone Number'] = gotprofile[4]
        dictprofile['Address'] = gotprofile[5]
        dictprofile['City'] = gotprofile[6]
        dictprofile['State'] = gotprofile[7]
        dictprofile['Blood Group'] = gotprofile[8]
        dictprofile['Date of Positive Covid Test'] = gotprofile[9]
   sql = "SELECT email FROM users WHERE username=?"
   stmt = ibm_db.prepare(conn, sql)
   ibm_db.bind_param(stmt, 1, username)
   ibm_db.execute(stmt)
   dictprofile['Email ID'] = ibm_db.fetch_tuple(stmt)[0]
   sql = "SELECT * FROM donor WHERE username=?"
   stmt = ibm_db.prepare(conn, sql)
   ibm_db.bind_param(stmt, 1, username)
   ibm_db.execute(stmt)
   gotprofile = ibm_db.fetch_tuple(stmt)
   if gotprofile:
       dictprofile['Is Donor?'] = 'YES'
       dictprofile['Full Name'] = gotprofile[1]
       dictprofile['Age'] = gotprofile[2]
       dictprofile['Gender'] = gotprofile[3]
       dictprofile['Phone Number'] = gotprofile[4]
       dictprofile['Address'] = gotprofile[5]
       dictprofile['City'] = gotprofile[6]
       dictprofile['State'] = gotprofile[7]
       dictprofile['Blood Group'] = gotprofile[8]
       dictprofile['Date of Positive Covid Test'] = gotprofile[9]
       dictprofile['Date of Negative Covid Test'] = gotprofile[10]
   return render_template('userprofile.html', msg=userid, dictprofile = dictprofile)
```

### 8. TESTING

#### 8.1 Test Cases

				Diste	18-Nov-22	100							
				Team ID	PNT2022TMID53045	1							
				Project Name	Project - Plasma Dorer Application	1							
				Maximum Marks	4 marks								
Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Stegs To Gescute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/A)	BUGIO	Executed
Registration	Functional	Home page	Verify user is able to register in the front page		Click the page and go     Register in the front page for donor as a user     Neithy whether the user can register or not	Username: bet entall kethann@gmail.com pad:12345	Username siready exists	Working as expected	Fall		N.		
Registration	Functional	Home page	Verify user is able to register in the front page		Click the page and go     Register in the front page for donor as a user     Nerify whether the user can register or not	Username guhebprisas emakliguhe@grasi.com ped:prisa	Register should display and the registration has been done	Working as expected	Paus		N.		
LoginPage	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked login page		Click gs     Click on My Account dropdown button     Werfly Lagin/Singup popup displayed or not		Login/Signup popup should display	Working as expected	Paris		M:		
LoginFage	и	Home Page	Verify the Lif electors in Login/lignup popup		L. cisk gs 2. Cisk on My Account dropdown butten 2. Verify light/Singua popup with below Lil elements: a lisera area test box bureaword test box c. Login button d. New customer? Circute account link		Application should show below UI elements: a. Username text box b. parsword text box c. Cagin button with orange colour of New customer? Create account link	Working as expected	Paus		N		
LogiePage	Functional	Home page	Verify user is able to log into application with valid credentials.		L. click go 2. Click on My Account propodown button 3. Enter Valid Journame in Email best box 4. Enter valid password in password text box 5. Click on legin button	Username: ket password: 12965	User should navige to to user account homegage	Working as expected	Pass		N:		
LoginPage	Functional	Login page	Verify user is able to log into application with INValid credentials		2. Click go 2. Click on My Account dropdown button 3. Enter hiral disensing/enail in Email test box 4. Enter salid password in password test box 5. Click on login button	Username: Ket password: abode	Application should show "incorrect ernall or password "validation transage.	Working as expected	Fall		N		
Disnor Registration	Functional	Registration page	Verify the donor can able to register and give the could test within the correct date		SjOute of positive could test ZjOute of negative could test ZjOute of negative could test	30/13/3023 30/13/2022 17//11/2022	Docor has be to registered before 14 days or they should not be able to register	Working as expected	Fall		N.		
Donor Registration	Functional	Registration page	Verify the donor can able to register and give the could test within the correct data		Effortor has to do the registration before \$4 days	4-11-2002	Donor has to be registered before 14 days and the registration has been done and it should be display	Working as expected	Paus		N.		
Donar Registration	Rescriptal	Registration page	Wrify the donor has been already existed or not in DB donor		Туре цептати элд рациост	Durmane kit	Ket should be already existed	orking as expe	Fall		N.		
Sonor Registration	Functional	Registration page	Verify the donor has been already existed or not in DB donor		Type usentame and password	Usenteme priyas	New user so registration should be don	serving at expec	Paus		M:		
Dooor Request	Functional	Request Page	The donor has been requested in the plasma donor		Type the patient name	prame Ophelia	This prame is already evisted	orking as expec	Feil		м		
Donor Request	Functional	Request Page	The donor has been requested in the plasma donor		Type the patient name	prame megas	The prame is new so request has been	pricing as engine	Paki		M		
Past request	Functional	Past request page	Verify the past request of the door has been already there		Type the username for request	usernanie ket	Listed the part request	arting as espec	Paus		N.		
Past request	Functional	Past request page	Verify the past request of the donor has been already there		Type the usersame for request	username: priyas	sers past request	Working as expected	Fail		N:		
Admin bloodgroup request	Functional	Admin request page	Verify the user is not a donor		Type the request in the donor side	Usemante priyas	Its not a donor	Working as expected	Fall		N.		
Admin blood group request	Functional	Admin request page	Verify the user blood group is found in Database		Type the request in the donor side	Usernamecket	its a donor	Working as expected	Pain		N.		
Admin side: All	in database, request has been	Admin all request	Verify the admin all request been		Type the request is the donor side	Demaneket	Approved the request	Working as	Paris		M:		
Admin side: All	there in database, request frastrt been	Admin all request	displayed Verify the admin all request been displayed		19400 C 19400	Username priyaa	Not approved the request	Working as	Fell		N		
request Admin side: All	there in detabase donor, no donor is	page Admin all Donor page	Verify the admin all donor has been		Type the request in the donor side  Type the donor request in the donor side	Uterrameket	Approved the request	Working as	Pate				
Admin side: All donor	there In database donor, donor is there	Admin all donor mass	displayed Verify the admin all donor has been displayed		Type the dotor request in the donor side	Username privas	Wat approved the request	expected Working as expected	Fail		N		

## **8.2** User Acceptance Testing

## 2. Defect Analysis

This report shows the number of 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	0	0	0	0	0
Duplicate	0	0	0	0	0
External	1	0	0	1	1
Fixed	0	2	0	0	2
Not Reproduced	0	0	0	0	0
Skipped	0	0	0	0	0
Won't Fix	0	0	0	0	0
Totals	1	2	0	0	3

## 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
Login	3	0	0	3
Registration	4	0	0	4
Dashboard	1	0	0	1
Plasma Addition	3	0	1	2
Rewards and Goals	4	0	0	4
Deleting a Request	2	0	0	2
Donor Registration	2	0	0	2

#### 9. RESULTS

#### 9.1 Performance Metrics

#### NFT-Risk assessment:

80									
S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Voluem Changes	Risk Score	Justification
	200 2007 1007			annino .		Considerable time taken to			Adding this feature makes it coherant with features like adding group and
1	Plasma Donor v1	New	High	No Changes	Moderate	insert into DB	No Changes	ORANGE	hence, functional changes is high.
	Plasma Donor v2	Existing	Moderate	No changes	Moderate	Faster DB operations	NO changes	ORANGE	Up date d SQL statements for faster DB approxima

#### NFT - Detailed Test Plan:

	NFT - Detailed Test Plan								
S.No	Project Overview	NFT Test approach	Assumptions/Dependencies/Risks	Approvals/SignOff					
	1 Plasma Donor v1	Load testing	Flask installed, app deployed with docker	100000					
	2 Plasma Donor v2	Stress testing	Flask installed,app deployed with docker						
	3 Plasma Donor v3	Spike testing	Flask installed,app deployed with docker						
	4 Plasma Donor v4		Flask installed,app deployed with docker						

## End Of Test Report:

				End Of Test Report					
							(Detected/Closed/		
S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Open)	Approvals/SignOff	
							Bad request error on		
				Number of failures spikes from 0.3 to 0.9		-3	viewing approved		
				with increase in number of users from 70 to		Provide checks from input value before reading from	requests when not a		
1	Plasma Donor v1	Load testing	Failures	100	GO	database	donor		
				Increases from 3100 for one user to 1900ms					
2	Plasma Donor v2	Stress testing	Response time	for 20 users	Go				
				Varies from minimum if 1367 ms and					
				maximum of 25609ms for a specific feature					
3	Plasma Donor v3	Spike testing	Response time	of adding expenses	Go				
				41% failures with adding expense with spike			Bad request error on		
				in user data and incorrect input values, but			viewing approved		
				maintained aveage of 13000ms response		Provide checks from input value before inserting	requests when not a		
4	Plasma Donor v4	Reliability Testing	No of failures	timne	Go	Into database	donor		

#### 10. ADVANTAGES & DISADVANTAGES

#### **Advantages**

- The application makes the registration process of potential donors easier because of the app's userfriendly intuitive UI.
- 2. Blood banks and hospitals are able to access information of potential donors in a convenient manner.
- 3. Donor requests can be accepted/rejected at the discretion of the hospital/blood bank.
- 4. Provides email support for new users. Registered donors can be contacted for requesting plasma resources.
- 5. Database for donors and history of donation helps with tracking of these donors for future needs.

#### **Disadvantages**

- 1. Application cannot sort out platelet donors based on previous diseases.
- 2. Unable to handle spam accounts or ingenuine requests.
- Automated email only works for new users. Regular request email to donors must be done
  manually.

#### 11. CONCLUSION

A plasma donor application was developed which streamlines the process for potential donors to donate blood plasma wherever there is demand for such resources. This in turn aids in satisfying the demand for specific treatments that require blood plasma for the benefit of countless patients. This application was developed using IBM's cloud based tools such as DB2,etc. SendGrid is used for the automation of delivering mail to users. Docker and Kubernetes are used for deployment of the application.

#### 12. FUTURE SCOPE

Future augmentations/scope on this application would include:

- 1. Application could be made resilient to spam and ingenuine requests.
- 2. Tracking of donors with respect to donor history could be automated.
- 3. Requests from potential donors with certain immunities to diseases could be forwarded to/suggested to clinics/hospitals that require plasma with those immunities.
- 4. Frequent contact and outreach towards donors could be automated.

#### 13. APPENDIX

# 13.1 Source code import os from flask import Flask, render\_template, url\_for, redirect, session, request, flash import re from datetime import \* import ibm\_db from flask\_mail import Mail, Message print("modules imported") app = Flask(\_\_name\_\_) print("Flask app created with \_\_\_name\_\_") app.config['SECRET\_KEY'] = 'top-secret!' app.config['MAIL\_SERVER'] = 'smtp.sendgrid.net' app.config['MAIL\_PORT'] = 587 app.config['MAIL\_USE\_TLS'] = True app.config['MAIL\_USERNAME'] = 'apikey' app.config['MAIL\_PASSWORD'] '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' app.config['MAIL\_DEFAULT\_SENDER'] = 'abinash.drl169@gmail.com' mail = Mail(app) print("setup default configs") conn = ibm db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;

```
SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=kkt29633;
   PWD=w2Nriolg1HfcHAwB", ", ") print("db conn
made")
@app.route('/', methods=['GET', 'POST']) def index():
  print("going to index")
  return render_template('index.html')
#-----NORMAL USER ROUTES-----
@app.route('/login', methods=['GET', 'POST']) def login():
  global userid
 msg = ""
  if request.method == "POST":
    username = request.form["username"]
    password = request.form["password"]
    sql = "SELECT * FROM users WHERE username=? AND password=?"
    stmt = ibm_db.prepare(conn, sql)
   ibm_db.bind_param(stmt, 1, username) ibm_db.bind_param(stmt, 2, password)
     ibm_db.execute(stmt)
       account = ibm_db.fetch_assoc(stmt)
       print(account)
       if account:
      session['Loggedin'] = True
      session['id'] = account['USERNAME']
      userid = account['USERNAME']
      session['username'] = account['USERNAME']
      return render_template('dashboard.html', msg=username)
    else:
      msg = "Invalid login credentials!"
  return render_template('login.html', msg=msg)
```

```
@app.route('/register', methods=['GET', 'POST']) def register():
  msg = "Please fill out the form."
  if request.method == 'POST':
    username = request.form['username']
                                            email =
request.form['email']
    password = request.form['password']
    sql = "SELECT * FROM users WHERE username=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
      msg = "Username already exists!" elif not
          re.match(r'[^@]+@[^@]+\.[^@]+', email):
            msg = "Invalid email address!" elif not re.match(r'[A-Za-z0-
          9]+', username):
                              msg = "Username must contain only
          letters and numbers!"
      else:
        insertsql = "INSERT INTO users VALUES(?,?,?)"
         prepstmt = ibm_db.prepare(conn, insertsql)
      ibm_db.bind_param(prepstmt, 1, username)
                                                       ibm_db.bind_param(prepstmt, 2, email)
      ibm_db.bind_param(prepstmt, 3, password)
      ibm_db.execute(prepstmt)
      mailmsg = Message('Registration Verification', recipients=[email])
                                                                           mailmsg.body =
   ('Congratulations! Welcome new user!')
                                                mailmsg.html = ('<h1>Plasma App Registration
   Verification</h1>'
                                'Congratulations! Welcome new user'
                                                                                       '<br>'
   '<b>Plasma Donor App Team</b>!!')
      mail.send(mailmsg)
```

```
print("mail has been sent out")
      msg = "You have successfully created an account!"
      flash(msg)
      return redirect(url_for('index'))
  return render_template('register.html', msg=msg)
@app.route('/dashboard') def
dashboard():
  return render_template('dashboard.html', msg=userid)
@app.route('/newdonor') def
newdonor(): username = userid
     sql = "SELECT username FROM donor WHERE username=?" stmt =
     ibm_db.prepare(conn, sql) ibm_db.bind_param(stmt, 1, username)
     ibm_db.execute(stmt)
  account = ibm_db.fetch_assoc(stmt)
  print("reached account", account)
  if account:
    msg = "You have already registered as a donor! Donor registration is only 1 time!"
    flash(msg)
    return redirect(url_for('dashboard'))
  return render_template('newdonor.html')
@app.route('/newrequest') def
newrequest():
  return render_template('newrequest.html')
@app.route('/regdonor', methods=['GET', 'POST']) def regdonor():
 msg = ""
  if request.method == "POST":
```

```
username = userid
name = request.form['name']
age = request.form['age']
gender = request.form['gender']
phno = request.form['phone']
addr = request.form['address']
city = request.form['city'] state =
      request.form['state'] bgp =
      request.form['bloodgp'] dop =
      request.form['dop']
  don = request.form['don']
  if int(age)<18:</pre>
    msg="You have to be an adult to donate plasma!"
  elif not valiDate(dop, don):
  msg="Your Covid Negative test should have been received atleast 14 days ago!"
else:
  insertsql = "INSERT INTO donor VALUES(?,?,?,?,?,?,?,?,?,?)"
  prepstmt = ibm_db.prepare(conn, insertsql)
  ibm_db.bind_param(prepstmt, 1, username)
  ibm_db.bind_param(prepstmt, 2, name)
  ibm_db.bind_param(prepstmt, 3, age)
  ibm_db.bind_param(prepstmt, 4, gender)
  ibm_db.bind_param(prepstmt, 5, phno)
  ibm_db.bind_param(prepstmt, 6, addr)
  ibm_db.bind_param(prepstmt, 7, city)
  ibm_db.bind_param(prepstmt, 8, state)
  ibm_db.bind_param(prepstmt, 9, bgp)
  ibm_db.bind_param(prepstmt, 10, dop)
  ibm_db.bind_param(prepstmt, 11, don)
  print("prep insert - "+dop+"--"+don+"--"+addr)
  ibm_db.execute(prepstmt)
```

```
msg = "You have successfully applied as a donor."
                                                          print("executed insert")
  flash(msg)
  return redirect(url_for('dashboard'))
def valiDate(dop, don): d,m,y = [int(x) \text{ for } x \text{ in dop.split('-')}]
     d1 = date(d,m,y)
     d,m,y = [int(x) for x in don.split('-')] d2 = date(d,m,y)
     if d2>d1 and date.today()>d2+timedelta(days=14):
        return True
  return False
@app.route('/regrequest', methods=['GET', 'POST']) def regrequest():
  msg = ''''
  if request.method == "POST":
    username = userid
    pname = request.form['pname']
    print(userid, "\t", session['id'], "pname = ", pname)
    sql = "SELECT * FROM requests WHERE username=? AND pname=?" #patient's name = pname
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.bind_param(stmt, 2, pname)
    ibm db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print("reached account here for pname", account)
    if account:
      msg = "Register for a patient only once!"
      flash(msg)
      return redirect(url_for('dashboard'))
    phno = request.form['phone']
```

```
paddr = request.form['paddress'] city =
          request.form['city'] state =
          request.form['state'] bgp =
          request.form['bloodgp']
  insertsql = "INSERT INTO requests VALUES(?,?,?,?,?,?)"
  prepstmt = ibm_db.prepare(conn, insertsql)
  ibm db.bind param(prepstmt, 1, username)
    ibm_db.bind_param(prepstmt, 2, pname)
                                                ibm_db.bind_param(prepstmt, 3, phno)
    ibm_db.bind_param(prepstmt, 4, paddr)
                                               ibm_db.bind_param(prepstmt, 5, city)
    ibm_db.bind_param(prepstmt, 6, state)
    ibm_db.bind_param(prepstmt, 7, bgp)
    print("prep insert - "+username+"--"+pname+"--"+bgp)
    ibm_db.execute(prepstmt)
    msg = "You have successfully requested plasma."
                                                       print("executed insert")
  flash(msg)
  return redirect(url for('dashboard'))
@app.route('/pastrequests') def
pastrequests():
  username = userid
  flag = 0
  data = []
  sql = "SELECT pname,phone_number,paddress,city,state,blood_gp FROM requests WHERE
   username=?"
  stmt = ibm_db.prepare(conn, sql)
  ibm_db.bind_param(stmt, 1, username)
  ibm db.execute(stmt)
  request = ibm_db.fetch_tuple(stmt) while request != False:
       flag = 1 #atleast 1 match is found
      data.append(request)
```

```
request = ibm db.fetch tuple(stmt) if not flag:
       msg = "You have made 0 requests!"
       flash(msg)
    return redirect(url_for('dashboard'))
                                          else:
    print("No of requests = ", len(data))
    data = tuple(data)
    headings = ("Patient's Name", "Emergency Contact", "Patient's Address", "City", "State", "Blood
   Group Requested", "Options")
    return render_template('userrequests.html', msg=userid, data=data, headings=headings)
@app.route('/adminrequests') def
adminrequests():
  username = userid
  sql = "SELECT blood_gp FROM donor WHERE username=?"
  stmt = ibm_db.prepare(conn, sql)
  ibm_db.bind_param(stmt, 1, username)
  ibm_db.execute(stmt)
  mybgp = ibm_db.fetch_tuple(stmt)
  print("My bgp is: ", mybgp)
  if not mybgp:
    msg = "You have not registered as a donor yet! Please register first to view other's requests!"
    flash(msg)
    return redirect(url_for('dashboard'))
  flag = 0 data =
     sql = "SELECT pname,phone_number,state,blood_gp FROM approved_requests WHERE blood_gp=?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, mybgp[0])
    ibm_db.execute(stmt)
  request = ibm_db.fetch_tuple(stmt)
  while request != False:
```

```
flag = 1 #atleast 1 match is found
    data.append(request)
    request = ibm_db.fetch_tuple(stmt)
  if not flag:
    print("My bgp is: ", mybgp)
                                    msg = "No requests for your blood group were found!"
    flash(msg)
    return redirect(url_for('dashboard'))
  else:
    print("No of mybgp requests = ", len(data))
    data = tuple(data)
    headings = ("Patient's Name", "Emergency Contact", "State", "Blood Group Requested")
    return render template('bgprequests.html', msg=userid, data=data, headings=headings)
@app.route('/profile') def
profile():
  username = userid
  dictprofile = {'Username':", 'Email ID': ", 'Is Donor?': 'NO'}
  dictprofile['Username'] = username
     sql = "SELECT email FROM users WHERE username=?" stmt =
     ibm db.prepare(conn, sql) ibm db.bind param(stmt, 1, username)
     ibm_db.execute(stmt)
     dictprofile['Email ID'] = ibm_db.fetch_tuple(stmt)[0]
    sql = "SELECT * FROM donor WHERE username=?"
  stmt = ibm_db.prepare(conn, sql)
  ibm_db.bind_param(stmt, 1, username) ibm_db.execute(stmt)
  gotprofile = ibm_db.fetch_tuple(stmt)
  if gotprofile:
    dictprofile['Is Donor?'] = 'YES'
    dictprofile['Full Name'] = gotprofile[1]
```

```
dictprofile['Age'] = gotprofile[2]
    dictprofile['Gender'] = gotprofile[3]
    dictprofile['Phone Number'] = gotprofile[4]
    dictprofile['Address'] = gotprofile[5]
    dictprofile['City'] = gotprofile[6]
    dictprofile['State'] = gotprofile[7]
    dictprofile['Blood Group'] = gotprofile[8]
    dictprofile['Date of Positive Covid Test'] = gotprofile[9]
                                                            dictprofile['Date of Negative Covid Test'] =
gotprofile[10]
  return render_template('userprofile.html', msg=userid, dictprofile = dictprofile)
#-----ADMIN ROUTES-----
@app.route('/adminlogin', methods=['GET', 'POST']) def
adminlogin(): global adminid
  msg = ""
  if request.method == "POST":
    username = request.form["username"]
    password = request.form["password"]
    sql = "SELECT * FROM admins WHERE username=? AND password=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
                                              ibm_db.bind_param(stmt, 2, password)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
      session['Loggedin'] = True
      session['id'] = account['USERNAME']
      adminid = account['USERNAME']
```

```
session['username'] = account['USERNAME']
      return redirect(url_for('admindashboard'))
    else:
      msg = "Invalid admin credentials!"
  return render_template('adminlogin.html', msg=msg)
@app.route('/admindashboard') def
admindashboard():
 sql = "SELECT COUNT(*) FROM requests"
 stmt = ibm_db.exec_immediate(conn, sql)
 numreqs = ibm_db.fetch_tuple(stmt)[0]
 sql = "SELECT COUNT(*) FROM donor"
stmt = ibm_db.exec_immediate(conn, sql)
numdonors = ibm_db.fetch_tuple(stmt)[0]
     sql = "SELECT COUNT(*) FROM approved_requests" stmt =
     ibm_db.exec_immediate(conn, sql) numappreqs =
     ibm_db.fetch_tuple(stmt)[0]
 if not numreqs: numreqs = 0
 if not numappreqs: numappreqs = 0
 if not numdonors: numdonors = 0
 print(numreqs, numdonors, numappreqs)
  return render_template('admindashboard.html', msg=adminid, numreqs=numreqs,
   numdonors=numdonors, numappreqs=numappreqs)
@app.route('/allrequests') def
allrequests():
 data = []
```

```
flag = 0
  sql = "SELECT * FROM requests"
  stmt = ibm_db.exec_immediate(conn, sql)
  request = ibm_db.fetch_tuple(stmt)
  while request != False:
    flag = 1 #atleast 1 match is found
    data.append(request)
    request = ibm_db.fetch_tuple(stmt)
  if not flag:
    msg = "There are 0 requests!"
    flash(msg)
    return redirect(url_for('admindashboard'))
  else:
    print("No of requests = ", len(data))
    data = tuple(data)
    headings = ("Username", "Patient's Name", "Emergency Contact", "Patient's Address", "City", "State",
"Blood Group Requested", "Options")
    return render_template('viewallreqs.html', msg=adminid, data=data, headings=headings)
@app.route('/approvereq', methods=['POST','GET']) def approvereq():
  if request.method == "POST":
    bgp = request.form["bgp"]
    print("Request approved for bgp = ", bgp)
    pname = request.form['pname']
    phno = request.form['phone']
    state = request.form['state']
    sql = "SELECT * FROM approved_requests WHERE pname=? AND blood_gp=? AND
   phone_number=?"
    stmt = ibm_db.prepare(conn, sql)
```

```
ibm db.bind param(stmt, 1, pname)
    ibm_db.bind_param(stmt, 2, bgp)
    ibm_db.bind_param(stmt, 3, phno)
    ibm_db.execute(stmt)
    appreq = ibm_db.fetch_assoc(stmt)
    print("reached appreq", appreq)
    if appreq:
      msg = "Request already approved! Approve only 1 time!"
      flash(msg)
      return redirect(url_for('admindashboard'))
       insertsql = "INSERT INTO approved_requests VALUES(?,?,?,?)"
      prepstmt = ibm_db.prepare(conn, insertsql)
          ibm_db.bind_param(prepstmt, 1, pname) ibm_db.bind_param(prepstmt, 2, phno)
       ibm_db.bind_param(prepstmt, 3, state)
       ibm_db.bind_param(prepstmt, 4, bgp)
    ibm_db.execute(prepstmt)
    msg = "You have successfully approved a request."
                                                         print("executed insert")
  flash(msg)
  return redirect(url_for('admindashboard'))
@app.route('/alldonors') def
alldonors():
  data = []
 flag = 0
 sql = "SELECT * FROM donor"
 stmt = ibm_db.exec_immediate(conn, sql)
  donor = ibm_db.fetch_tuple(stmt)
  while donor != False:
    flag = 1 #atleast 1 match is found
    data.append(donor)
```

```
donor = ibm db.fetch tuple(stmt)
  if not flag:
    msg = "There are 0 donors!"
    flash(msg)
    return redirect(url_for('admindashboard'))
  else:
    print("No of donors = ", len(data))
                                        data = tuple(data)
                                  headings = ("Username", "Full Name", "Age", "Gender", "Phone
                         Number", "Donor's Address", "City", "State", "Blood Group", "+ve Covid
   Test", "-ve Covid Test")
           return render_template('viewalldonors.html', msg=adminid, data=data, headings=headings)
#-----GENERAL LOGOUT ROUTES-----
@app.route('/deletereq', methods=['GET','POST']) def deletereq():
 if request.method == 'POST':
    username = request.form['username']
    pname = request.form['pname']
    delsql = "DELETE FROM requests WHERE username=? AND pname=?"
    prepstmt = ibm_db.prepare(conn, delsql)
    ibm_db.bind_param(prepstmt, 1, username)
    ibm_db.bind_param(prepstmt, 2, pname)
    ibm_db.execute(prepstmt)
    msg = "You have successfully deleted the request." print("executed delete: ", pname)
    flash(msg)
    if 'adminid' in globals():
      return redirect(url_for('admindashboard'))
    elif 'userid' in globals():
      return redirect(url_for('dashboard'))
```

```
@app.route('/logout') def logout():
  session.pop('Loggedin', None) session.pop('id',
     None) session.pop('username', None) if
     'userid' in globals():
           global userid del
           userid
     elif 'adminid' in globals():
       global adminid
    del adminid
  return render_template('index.html')
if __name__ == "__main__":
  app.run(host = '0.0.0.0', debug=True)
Admindashboard.html
<!DOCTYPE html>
<html>
<head>
  <title>ADMIN DASHBOARD</title>
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/dashboards.css')}
   }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
                         rel="stylesheet"
   href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css">
</head>
<body>
```

```
<!-- navbar -->
   ul>
       <a style="color: white" href="logout">LOGOUT</a>
 <div class="class-container" id="container">
  <div class="header">
    <h2 class="header__title">
                             Welcome Admin
{{msg}}!
    </h2>
  </div>
 </div>
 <div class="flasher">
  {% with messages = get_flashed_messages() %}
  {% if messages %}
  {% for message in messages %}
  {{ message }}
  {% endfor %}
  {% endif %}
  {% endwith %}
 </div>
 <div class="flex justify-center mt-2">
  <caption>KEY SYSTEM STATS</caption>
    Number of Donors
     {{ numdonors }}
    Number of Requests
        {{ numreqs }}
```

```
Number of Approved Requests
          {{ numappreqs }}
                                                        </div>
  <div class="flex justify-center mt-2">
   <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
     <a href="allrequests">
       <button type="button"
         class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700 hover:bg-gradient-
   to-br focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800 shadowlg shadow-
   blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-sm px-5 py-2.5
   text-center mr-2 mb-2 ">VIEW
         ALL REQUESTS FOR PLASMA</button>
     </a>
   </div>
  </div>
  <div class="flex justify-center mt-10">
   <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
     <a href="alldonors">
       <button type="button"
         class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700 hover:bg-gradient-
   to-br focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800 shadowlg shadow-
   blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-sm px-5 py-2.5
   text-center mr-2 mb-2 ">VIEW
            ALL DONORS ON SYSTEM</button>
         </a>
         </div>
    </div>
</body>
```

```
</html>
Adminlogin.html
<!DOCTYPE html>
<html>
<head>
<title>ADMINISTRATOR LOGIN</title>
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}">
k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
<div class="flex items-center justify-center min-h-screen"> <div class="px-8 py-6 mt-4">
text-left bg-black shadow-lg">
   <h3 class="text-2xl font-bold text-center" style="color: white;">Admin Login</h3>
   <form action="/adminlogin" method="post">
    <div class="flasher">{{ msg }}</div></br>
    <div class="mt- -20">
     <div>
      <label class="block" style="color: white;" for="username">Username<label>
           <input type="text" id="username" name="username" placeholder="Username"
                 class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1
   focus:ring-blue-600"
           style="color: black;">
       </div>
     <div class="mt-4">
      <label class="block" style="color: white;" for="password">Password<label>
        <input type="password" id="password" name="password" placeholder="Password"</pre>
```

```
class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
   blue-600"
         style="color: black;">
     </div>
     <div class="flex items-baseline justify-between">
      <but
               class="px-6 py-2 mt-4 text-white bg-blue-600
                                                                 roundedlg
                                                                            hover:bg-blue-
   900">Login</button>
     </div>
    </div>
   </form>
   Click here to login as normal user ->
    <a href="login" class="font-medium text-primary-600 hover:underline dark:text-primary-
   500">Login</a>
   </body>
</html>
Bgprerequest.html
!DOCTYPE html>
<html>
<head>
  <title>REQUESTS TO ME</title>
  k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css') }}">
  <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
```

```
</head>
<body>
 <!-- navbar starts -->
 ul>
   <div style="text-align: right;">
     <a type="button" href="dashboard">DASHBOARD</a>
     <a type="button" href="profile">PROFILE</a>
     <a type="button" href="logout">LOGOUT</a>
   </div>
 <div class="class-container" id="container">
 <h4 style="text-align: center; color:white; font-size:25px; marginbottom: 100px;">The following
  requests are open for your blood group! Do donate!</h4>
 </div>
 <!-- navbar ends -->
 <div class="flex justify-center mt-2">
    {% for header in headings %}
     {{ header }}
     {% endfor %}
   {% for row in data %}
   {% for cell in row %}
     {{ cell }}
     {% endfor %}
   {% endfor %}
```

```
</div>
 To make a direct plasma donation, please contact the
   emergency contact provided.
</body>
</html>
Dashboard.html
<!DOCTYPE html>
<html>
<head>
  <title>USER DASHBOARD</title>
 type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/dashboards.css')}
   }}">
 k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
 k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <!-- navbar -->
  <a style="color: white" href="logout">LOGOUT</a>
   <a style="color: white" href="profile">PROFILE</a>
 <div class="class-container" id="container">
   <div class="header">
     <h2 class="header__title">
```

```
Welcome {{msg}}!
    </h2>
  </div>
</div>
<!-- navbar ends -->
<div class="flasher">
{% with messages = get_flashed_messages() %}
  {% if messages %}
    {% for message in messages %}
      {{ message }}
    {% endfor %}
  {% endif %}
{% endwith %}
</div>
  <div class="flex justify-center mt-2">
  <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
    <a href="newdonor">
      <button type="button"
        class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700
                                                                                  hover:bg-
 gradient-to-br
                      focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800
 shadowlg shadow-blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-
 sm px-5 py-2.5 text-center mr-2 mb-2 ">REGISTER AS DONOR</button>
    </a>
  </div>
</div>
<div class="flex justify-center mt-10">
  <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
    <a href="newrequest">
      <button type="button"
```

```
class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700
                                                                                    hover:bg-
   gradient-to-br
                        focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800
   shadowlg shadow-blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-
   sm px-5 py-2.5 text-center mr-2 mb-2 ">REQUEST PLASMA</button>
      </a>
    </div>
  </div>
  <div class="flex justify-center mt-10">
    <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
      <a href="pastrequests">
        <button type="button"
          class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700 hover:bg-gradient-
   to-br focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800 shadowlg shadow-
   blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-sm px-5 py-2.5
   text-center mr-2 mb-2 ">PAST REQUESTS</button>
      </a>
    </div>
  </div>
  <div class="flex justify-center mt-10">
    <div class="block p-6 rounded-lg shadow-lg bg-black max-w-sm">
      <a href="adminrequests">
        <button type="button"
          class="text-white bg-gradient-to-r from-blue-500 viablue-600 to-blue-700
                                                                                    hover:bg-
                        focus:ring-4 focus:outline-none focus:ring-blue-300 dark:focus:ring-blue-800
   gradient-to-br
   shadowlg shadow-blue-500/50 dark:shadow-lg dark:shadow-blue-800/80 fontmedium rounded-lg text-
   sm px-5 py-2.5 text-center mr-2 mb-2 ">ADMIN REQUESTS</button>
      </a>
    </div>
  </div>
  <!-- <section style="text-align: center;">
                                             <div><a type="button" href="newdonor"
style="fontsize:30px">REGISTER AS DONOR</a></div>
                                                                      <div><a type="button"
                                                            <hr>
```

```
href="newrequest" style="fontsize:30px">REQUEST PLASMA</a></div>
                                                                      <hr>
                                                                               <div><a
type="button" href="pastrequests" style="fontsize:30px">PAST REQUESTS</a></div>
                                                                                   <hr>
           <div><a type="button" href="adminrequests" style="fontsize:30px">ADMIN REQUESTS
   TO ME</a></div> </section> -->
</body>
</html>
Index.html
<!DOCTYPE html>
<html lang="en">
<head>
<title>PLASMA DONOR APPLICATION</title>
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/index.css') }}">
k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body> 
  <a href="login">LOGIN</a>
  <a href="register">REGISTER</a>
 <!-- navbar ends -->
 <div class="class-container" id="container">
  <div class="header">
```

```
<h2 class="header title">
                               PLASMA
DONOR APPLICATION
   </h2>
   <h3 class="header subtitle">
    Welcome to the Application
    <i class="fa fa-hand-o-down" style="font-size: 25px;"></i>
   </h3>
  </div>
 </div>
 <div class="flasher">
 {% with messages = get_flashed_messages() %}
 {% if messages %}
 {% for message in messages %}
 {{ message }}
 {% endfor %}
 {% endif %}
 {% endwith %}
 </div>
 <!-- what we focus on -->
 <div class="bdy">
                       <img id="imag"
                                            src="https://s3.jp-tok.cloud-
   objectstorage.appdomain.cloud/plasma-53045-bucket/logo.jpg"/>
  </br>
   </br>
```

The main objective is to create an easy-to-use application that can be used by donors to donate their blood to blood banks. Hospitals in need for blood plasma can request blood from blood banks. This application should have a wider reach to appeal to more potential blood donors.

```
</br>
   </br>
   Vision: To donate plasma in a hassle free condition by using our app.
   </div>
 <!-- focus section ends -->
 <!-- footer starts -->
 <div class="footer-basic">
  <footer>
   cli class="list-inline-item">
     <a href="mailto:gokhul19032@cse.ssn.edu.in" target="_blank">Email Us</a>
    SSNCE 2022 - PNT2022TMID53045
  </footer>
 </div>
</body>
</html>
Login.html
<!DOCTYPE html>
<html>
<head>
 <title>USER LOGIN</title>
 type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}">
 link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
```

```
<body>
<div class="flex items-center justify-center min-h-screen"> <div class="px-8 py-6 mt-4">
text-left bg-black shadow-lg">
  <h3 class="text-2xl font-bold text-center" style="color: white;">Login to your account</h3>
   <form class="regforms" action="/login" method="post">
   <div class="flasher">{{ msg }}</div></br>
   <div class="mt- -20">
     <div>
      <label class="block" style="color: white;" for="username">Username<label>
        <input type="text" id="username" name="username" placeholder="Username"
         class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
   blue-600"
         style="color: black;">
     </div>
     <div class="mt-4">
      <label class="block" style="color: white;" for="username">Password<label>
        <input type="password" id="password" name="password" placeholder="Password"
          class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
   blue-600"
         style="color: black;">
     </div>
     <div class="flex items-baseline justify-between">
      <button
               class="px-6 py-2 mt-4 text-white bg-blue-600
                                                                   roundedlg
                                                                               hover:bg-blue-
   900">Login</button>
     </div>
   </div>
   </form>
   Don't have an account yet?
```

```
<a href="register" class="font-medium text-primary-600 hover:underline dark:text-primary-
   500">Sign up</a>
   Admin Login <a href="adminlogin"
     class="font-medium text-primary-600 hover:underline dark:textprimary-500">Admin Login</a>
   </div>
 </div>
</body>
</html>
Login.html
<!DOCTYPE html>
<html>
<head>
 <title>USER LOGIN</title>
 type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}">
 k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <div class="flex items-center justify-center min-h-screen"> <div class="px-8 py-6 mt-4">
text-left bg-black shadow-lg">
   <h3 class="text-2xl font-bold text-center" style="color: white;">Login to your account</h3>
   <form class="regforms" action="/login" method="post">
    <div class="flasher">{{ msg }}</div></br>
    <div class="mt- -20">
     <div>
```

```
<label class="block" style="color: white;" for="username">Username<label>
                      <input type="text" id="username" name="username" placeholder="Username"
                         class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
        blue-600"
                        style="color: black;">
             </div>
             <div class="mt-4">
                <label class="block" style="color: white;" for="username">Password<label>
                     <input type="password" id="password" name="password" placeholder="Password"</pre>
                 class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-blue-
                                                                                                                                                                                                                                            600"
                       style="color: black;">
              </div>
              <div class="flex items-baseline justify-between">
                <but
                                          class="px-6 py-2 mt-4
                                                                                                                  text-white
                                                                                                                                                bg-blue-600
                                                                                                                                                                                     roundedlg
                                                                                                                                                                                                                    hover:bg-blue-
        900">Login</button>
             </div>
          </div>
        </form>
        Don't have an account yet?
          <a href="register" class="font-medium text-primary-600 hover:underline dark:text-primary-600 hover:underline
        500">Sign up</a>
        Admin Login <a href="adminlogin"
             class="font-medium text-primary-600 hover:underline dark:textprimary-500">Admin Login</a>
                         </div>
       </div>
</body>
</html>
```

```
Newdonor.html
<!DOCTYPE html>
<html>
<head>
  <title>DONOR REGISTRATION</title>
   link
                type="text/css"
                                       rel="stylesheet"
                                                              href=''{{
                                                                              url_for('static',
   filename='/stylesheets/dashboards.css') }}''>
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/forms.css') }}">
k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <nav>
  <div style="text-align: right;">
   <a style="color: white" href="profile">PROFILE</a>
    <a style="color: white" href="dashboard">DASHBOARD</a>
    <a type="button" href="logout">LOGOUT</a>
   </div>
 </nav>
 <!-- navbar ends -->
<!-- Donor Registration form -->
 <div>
  <form action="/regdonor" method="post">
```

```
<h2 style="text-align: center; font-size: larger;"> NEW DONOR REGISTRATION </h2>
  <fieldset>
   <div style="margin-left:25%">
<h3 class="mt-5">Full Name:</br><input type="text" name="name" placeholder="Enter Full Name"
                                                                                        required
      style="color: black; font-weight: bold;"/>
     </h3></br>
      <h3>Age:</br><input type="text" name="age" placeholder="Enter Age" pattern="[0-9]{1,3}"
   required
      style="color: black; font-weight: bold;" />
    </h3></br>
    <h3>Gender:</br></select name="gender" required style="color: black;">
      <option value="select" selected>Select gender</option>
      <option value="male">Male</option>
      <option value="female">Female</option>
      <option value="other">Other</option>
     </select>
    </h3></br>
    <h3>Mobile Number:</br><input type="text" name="phone" placeholder="Enter Mobile
  Number" pattern="[0-9]{10}"
      required style="color: black; font-weight: bold;"/>
    </h3></br>
    <h3>Address:</br><textarea name="address" rows="3" cols="50" placeholder="Enter Address"
  required
      style="color: black; font-weight: bold;"></textarea>
    </h3></br>
    <h3>City:</br><input type="city" name="city" placeholder="Enter City" required
      style="color: black; font-weight: bold;" />
    </h3></br>
    <h3>State:</br><input type="state" name="state" placeholder="Enter State" required
      style="color: black; font-weight: bold;" />
    </h3></br>
```

```
<h3>Blood group:</br><select name="bloodgp" required style="color: black;">
       <option value="select" selected>Select your blood group/option>
       <option value="O+">O+</option>
       <option value="A+">A+</option>
       <option value="B+">B+</option>
       <option value="AB+">AB+</option>
       <option value="O-">O-</option>
       <option value="A-">A-</option>
       <option value="B-">B-</option>
       <option value="AB-">AB-</option>
      </select>
     </h3></br>
     <h3>
      <label for="dop">Date of Positive Covid Test: </label></br>
      <input type="date" name="dop" required style="color: black; font-weight: bold;" /></br>
     </h3>
     < h3 >
      <label for="don">Date of Negative Covid Test: </label></br>
      <input type="date" name="don" required style="color: black; font-weight: bold;" /></br>
     </h3>
     <button class="button" type="submit"> Register As Donor </button>
    </div>
   </fieldset>
  </form>
</div>
</body>
</html>
Newrequest.html
<!DOCTYPE html>
<html>
```

```
<head>
<title>REQUEST PLASMA</title>
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/dashboards.css')}
   }}">
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/forms.css') }}">
link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
<nav>
  <div style="text-align: right;">
   ul>
    <a style="color: white" href="profile">PROFILE</a>
    <a style="color: white" href="dashboard">DASHBOARD</a>
    <a type="button" href="logout">LOGOUT</a>
   </div>
 </nav>
 <!-- navbar ends -->
<!-- Request Application form -->
<div>
  <form action="/regrequest" method="post">
   <h2 style="text-align: center; font-size: larger;">NEW PLASMA REQUEST </h2>
   <fieldset>
    <div style="margin-left:25%">
     <h3 class="mt-5"><label for="pname">Patient's Name:
```

```
</label></h3>
 <input type="text" name="pname" placeholder="Enter Full Name" style="color: black; font-
weight: bold;" required /></br>
 <h3>
  <label for="phone">Emergency Contact Number: </label></br>
  <input type="text" name="phone" placeholder="Enter Mobile
Number" pattern="[0-9]{10}" required
   style="color: black; font-weight: bold;" /></br>
 </h3>
 <h3>
  <label for="paddress">Patient's Address: </label></br>
  <textarea name="paddress" rows="3" cols="50" placeholder="Enter Address" required
   style="color: black; font-weight: bold;"></textarea></br>
 </h3>
 <h3>
  <label for="city">Patient's City: </label></br>
  <input type="city" name="city" placeholder="Enter City" required
   style="color: black; font-weight: bold;" /></br>
 </h3>
 <h3>
  <label for="state">Patient's State: </label></br>
  <input type="state" name="state" placeholder="Enter State" required
   style="color: black; font-weight: bold;"/></br>
 </h3>
 <h3>
  <label for="bloodgp">Blood Group: </label></br>
  <select name="bloodgp" style="color: black;" required>
   <option value="select" style="color: black;" selected>Select blood group required
   </option>
   <option value="O+" style="color: black;">O+</option>
   <option value="A+" style="color: black;">A+</option>
```

```
<option value="B+" style="color: black;">B+</option>
       <option value="AB+" style="color: black;">AB+</option>
       <option value="O-" style="color: black;">O-</option>
       <option value="A-" style="color: black;">A-</option>
       <option value="B-" style="color: black;">B-</option>
       <option value="AB-" style="color: black;">AB-</option>
      </select>
      </br>
     </h3>
     <button class="button" type="submit"> Apply for Plasma </button>
    </div>
   </fieldset>
  </form>
</div>
</body>
</html>
Register.html
<!DOCTYPE html>
<html>
<head>
 <title>REGISTER</title>
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/logins.css') }}">
k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
<div class="flex items-center justify-center min-h-screen"> <div class="px-8 py-6 mt-4">
text-left bg-black shadow-lg">
```

```
<h3 class="text-2xl font-bold text-center" style="color: white;">Login to your account</h3>
<form class="regforms" action="/register" method="post">
 <div class="flasher">{{ msg }}</div></br>
 <div class="mt- -20">
  <div>
   <label class="block" style="color: white;" for="username">Username<label>
     <input type="text" id="username" name="username" placeholder="Enter New Username"</pre>
      class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
blue-600"
      style="color: black;">
  </div>
  <div>
    <label class="block" style="color: white;" for="email">Email Id<label>
                <input type="text" id="email" name="email" placeholder="Enter Your Email Id"
      class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
blue-600"
     style="color: black;">
  </div>
  <div class="mt-4">
   <label class="block" style="color: white;" for="username">Password<label>
     <input type="password" id="password" name="password" placeholder="Password"</pre>
      class="w-full px-4 py-2 mt-2 border rounded-md focus:outline-none focus:ring-1 focus:ring-
blue-600"
      style="color: black;">
  </div>
  <div class="flex items-baseline justify-between">
   <but
             class="px-6
                           pv-2 mt-4 text-white
                                                      bg-blue-600
                                                                    roundedlg
                                                                                 hover:bg-blue-
900">Register</button>
  </div>
 </div>
</form>
```

```
Already have an account?
   <a href="/login" class="font-medium text-primary-600 hover:underline dark:text-primary-
   500">Login</a>
  </div>
</div>
</body>
</html>
Userprofile.html
<!DOCTYPE html>
<html>
<head>
  <title>CURRENT USER'S PROFILE</title>
 k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css') }}">
  <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <!-- navbar -->
  <nav>
   ul>
     <div style="text-align: right;">
       <a type="button" href="dashboard">DASHBOARD</a>
       <a type="button" href="logout">LOGOUT</a>
     </div>
```

```
<div class="class-container" id="container">
    <h4 style="text-align: center; color:white; fontsize:25px;">Welcome {{ msg }}!</h4>
   </div>
 </nav>
 <!-- navbar ends -->
<div class="flex justify-center mt-2">
 <caption>USER PROFILE</caption>
    {% for key,value in dictprofile.items() %}
     {{ key }} 
     {{ value }} 
    {% endfor %}
   </div>
 To make any changes to your profile, please contact our
  system administrator at gokhul19032@cse.ssn.edu.in.
</body>
</html>
Userrequest.html
<!DOCTYPE html>
<html>
<head>
 <title>CURRENT USER'S REQUESTS</title>
```

```
type="text/css" rel="stylesheet" href="{{ url for('static', filename='/stylesheets/tables.css') }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css') }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/forms.css') }}">
  <link href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
 <!-- navbar starts -->
  <div style="text-align: right;">
     <a type="button" href="dashboard">DASHBOARD</a>
     <a type="button" href="profile">PROFILE</a>
     <a type="button" href="logout">LOGOUT</a>
   </div>
  <div class="class-container" id="container">
   <h4 style="text-align: center; color:white; font-size:25px; margin-bottom: 100px;">You have made
   the following
     requests for plasma.</h4>
  </div>
  <!-- navbar ends -->
  <div class="flex justify-center mt-2">
   <caption>YOUR PAST REQUEST</caption>
     {% for header in headings %}
       {{ header }}
```

```
{% endfor %}
       {% for row in data %}
       {% for cell in row %}
      {{ cell }}
      {% endfor %}
      >
        <form action="/deletereq" method="POST" onsubmit="alert('YOU CANNOT UNDO THIS
  ACTION!')">
          <input type="hidden" name="username" value="{{ msg }}">
          <input type="hidden" name="pname" value="{{ row[0] }}">
          <button id="deletebutton" class="button" type="submit"> Delete Request </button>
        </form>
      {% endfor %}
   </div>
 Don't see a past request you made?
   It was probably closed by the administrator.
   If you think this is a mistake, please contact us at +91 XXXXX
   XXXXX.
 </body>
</html>
Viewalldonors.html
<!DOCTYPE html>
<html>
```

```
<head>
  <title>ALL REQUESTS</title>
  k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
  type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css') }}">
  href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
<body>
  <!-- navbar -->
  <111>
    <div style="text-align: right;">
      <a type="button" href="admindashboard">DASHBOARD</a>
      <a type="button" href="logout">LOGOUT</a>
    </div>
  <div class="class-container" id="container">
    <h4 style="text-align: center; color:white; font-size:25px; margin-bottom: 100px;">System has the
   following
      donors.</hd> </div>
 <!-- navbar ends -->
     <!-- requests table starts -->
     <div class="flex justify-center mt-2">
                                                     <table
     class="table">
         <caption>ALL DONORS</caption>
      {% for header in headings %}
```

```
{{ header }}
       {% endfor %}
     {% for row in data %}
     {% for cell in row %}
       {{ cell }}
       {% endfor %}
     {% endfor %}
   </div>
</body>
</html>
Viewallreqs.html
<!DOCTYPE html>
<html>
<head>
 <title>ALL REQUESTS</title>
 type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/tables.css') }}">
type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/results.css') }}">
 k type="text/css" rel="stylesheet" href="{{ url_for('static', filename='/stylesheets/forms.css') }}">
 k href="https://unpkg.com/tailwindcss@^2/dist/tailwind.min.css" rel="stylesheet">
</head>
```

```
<body>
 <!-- navbar -->
 <div style="text-align: right;">
     <a type="button" href="admindashboard">DASHBOARD</a>
     <a type="button" href="logout">LOGOUT</a>
   </div>
 <div class="class-container" id="container">
   <h4 style="text-align: center; color:white; font-size:25px; margin-bottom: 100px;">System has the
  following
     requests.</h4>
 </div>
 <!-- navbar ends -->
 <!-- requests table starts -->
 <div class="flex justify-center mt-2">
   <caption>ALL REQUESTS</caption>
     {% for header in headings %}
           {{ header }}
           {% endfor %}
       {% for row in data %}
     {% for cell in row %}
      {{ cell }}
      {% endfor %}
      >
```

```
<form action="/deletereq" method="POST" onsubmit="alert('YOU CANNOT UNDO THIS
   ACTION!')">
            <input type="hidden" name="username" value="{{ row[0] }}">
            <input type="hidden" name="pname" value="{{ row[1] }}">
            <button id="deletebutton" class="button" type="submit"> Delete Request </button>
          </form>
          <form action="/approvereq" method="POST">
            <input type="hidden" name="pname" value="{{ row[1]</pre>
   }}">
            <input type="hidden" name="phone" value="{{ row[2]</pre>
   }}">
            <input type="hidden" name="state" value="{{ row[5] }}">
            <input type="hidden" name="bgp" value="{{ row[6] }}">
            <button class="button" type="submit"> Approve Request </button>
          </form>
        {% endfor %}
          </div>
</body>
</html>
Dashboards.css
@media screen and (min-width: 801px) {
  html {
    background-image: url("https://s3.jp-tok.cloud-object-
   storage.appdomain.cloud/plasma-53045-bucket/blood.jpg");
    background-repeat: no-repeat;
    background-size: cover;
```

```
overflow-x: hidden;
  min-width: 100%;
  min-height: 100%;
}
body {
  0.7));
 height: 100vh;
  font-family: "Montserrat";
  color: #fff;
  font-size: 22px;
}
* {
       margin: 0; padding: 0;
       overflow-x: hidden;
}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  margin-left: 10px;
}
li {
  float: left;
}
```

```
li a {
  display: block;
  color: white;
                          padding: 14px 16px;
  text-align: center;
  text-decoration: none;
}
li a:hover:not(.active) {
  background-color: black;
}
.contfoot {
         display: flex; justify-content: center;
   }
.active {
  background-color: #17e3d9;
}
#head {
  justify-content: center;
  text-align: center;
  align-items: center;
  font-size: 2.5vw;
  margin-top: 40px;
  margin-bottom: 40px;
  position: relative;
  animation-name: headers;
  animation-duration: 3s;
```

```
animation-iteration-count: infinite;
}
@keyframes headers {
  0% {
    left: 0vw;
    top: 0vw;
  }
  33% {
    left: -20vw;
    top: 0vw;
        }
     66% {
    left: 20vw;
    top: 0vw;
  }
  100% {
    left: 0vw;
    top: 0vw;
  }
}
.navlist {
  text-decoration: none;
  color: #fff;
  font-size: 1.5vw;
  padding: 0.2px;
```

```
}
  .ulist {
    display: flex;
    flex-direction: row;
    list-style: none;
  }
  .item {
    float: left;
    list-style: none;
                         margin-left: 2vw; border:
1.5px solid whitesmoke;
     }
  .item:hover {
    float: left;
    list-style: none;
                         margin-left: 2vw;
    border: 0.01vw solid red;
    background-color: red;
    color: white;
  }
  #navi {
    margin-top: 2vw;
    justify-content: center;
    align-items: center;
    height: 5vw;
  .itemselect {
```

```
float: left;
  list-style: none;
                      margin-left: 2vw;
  border: 0.01vw solid red;
  background-color: red;
  color: white;
}
.bdy {
  margin-top: -7.5vw; margin-left: 2vw;
     margin-right: 2vw;
   }
#imag {
  float: left;
  margin-right: 3vw;
  width: 25vw;
  height: 25vw;
}
.class-container {
  width: 100%;
  position: relative;
  padding: 20px 0;
  transition: 0.3s ease 0s;
  background-attachment: fixed;
  background-size: cover;
}
.class-container:before {
  position: absolute;
```

```
left: 0;
  top: 0;
  width: 10%;
                   content: "";
  height: 10%;
}
.header {
         width: 100%;
     text-align: center;
     margin-bottom: 30px;
  position: relative;
}
.header__title {
  color: #fff;
  font-size: 35px;
  font-family: "Montserrat", sans-serif;
  font-weight: normal;
  margin: 0;
}
.flasher {
  background-color: light grey;
  font-weight: bold;
  color: red;
  font-family: 'Times New Roman', Times, serif;
  text-align: center;
  margin-bottom: 10px;
}
```

```
}
Forms.css
.button {
  display: inline-block;
  padding: 15px 25px;
  font-size: 24px; cursor: pointer;
text-align: center; text-decoration:
none;
     outline: none;
  color: #fff;
  background-color: #4CAF50;
  border: none;
  border-radius: 15px;
}
.button:hover {
  background-color: #3e8e41
}
\# delete button {
  background-color: red;
}
input, option {
  color: black;
}
Index.css
@media screen and (min-width: 801px) {
 html {
```

```
/* background-image: url("/static/images/blood.jpg"); */
                        background-image:
                                                           url("https://s3.jp-tok.cloud-object-
  storage.appdomain.cloud/plasma-53045-bucket/blood.jpg");
 background-repeat: no-repeat;
 background-size: cover;
 overflow-x: hidden;
    min-width: 100%; min-height: 100%;
 }
body {
 background: linear-gradient(rgba(0, 0, 0, 0.7), rgba(0, 0, 0, 0.7));
 height: 100vh;
 font-family: "Montserrat";
 color: #fff;
 font-size: 22px;
}
* {
 margin: 0;
 padding: 0;
 overflow-x: hidden;
}
ul {
 list-style-type: none;
 margin: 0;
 padding: 0;
 overflow: hidden;
 margin-left: 10px;
```

```
}
li {
 float: left;
}
 li a {
   display: block;
   color: white;
 text-align: center; padding: 14px 16px;
 text-decoration: none;
}
li a:hover:not(.active) {
 background-color: black;
}
.contfoot {
 display: flex;
 justify-content: center;
}
.active {
 background-color: #17e3d9;
#head {
 justify-content: center;
 text-align: center;
 align-items: center;
```

```
font-size: 2.5vw;
 margin-top: 40px;
 margin-bottom: 40px;
 position: relative;
 animation-name: headers; animation-duration: 3s;
                  animation-iteration-count: infinite;
 }
@keyframes headers {
 0% {
  left: 0vw;
  top: 0vw;
 }
 33% {
  left: -20vw;
  top: 0vw;
 }
 66% {
  left: 20vw;
  top: 0vw;
 }
 100% {
  left: 0vw;
  top: 0vw;
 }
}
```

```
.navlist {
 text-decoration: none;
 color: #fff;
 font-size: 1.5vw;
  padding: 0.2px;
 }
 .ulist \{
 display: flex;
 flex-direction: row;
 list-style: none;
}
.item {
 float: left;
 list-style: none; margin-left: 2vw;
 border: 1.5px solid whitesmoke;
}
.item:hover { float: left;
 list-style: none; margin-left: 2vw;
 border: 0.01vw solid red;
 background-color: red;
 color: white;
}
#navi {
 margin-top: 2vw;
justify-content: center;
 align-items: center;
```

```
height: 5vw;
 }
 .itemselect {
   float: left;
 list-style: none; margin-left: 2vw;
 border: 0.01vw solid red;
 background-color: red;
 color: white;
}
.bdy {
margin-left: 2vw;
margin-right: 2vw;
}
#imag {
 float: left;
 margin-right: 3vw;
 width: 25vw;
height: 25vw;
}
.para {
font-size: 1.5vw;
}
.paras {
 font-size: 1.2vw;
 margin-top: 20px;
```

```
}
 .footer-basic ul {
  padding: 0;
 list-style: none;
 text-align: center;
 font-size: 18px;
 line-height: 1.6;
 margin-bottom: 0;
}
.footer-basic li { padding: 0 10px;
 margin-top: 10px;
 margin-left: 10px;
}
.footer-basic .social { text-align: center;
padding-bottom: 25px;
}
.footer-basic .copyright {
 margin-top: 15px;
 text-align: center;
 font-size: 13px;
 color: #aaa;
 margin-bottom: 0;
}
 .flasher {
  background-color: lightgrey;
```

```
font-weight: bold;
  color: red;
  font-family: 'Times New Roman', Times, serif;
  text-align: center;
  margin-bottom: 10px;
 }
}
.history__img {
 max-width: 100%;
 box-shadow: 0 10px 15px rgba(0, 0, 0, 0.4);
}
.class-container {
 width: 100%;
 position: relative;
 padding: 60px 0;
 transition: 0.3s ease 0s;
background-attachment: fixed;
 background-size: cover;
}
. class-container: before \ \{\\
 position: absolute;
 left: 0;
 top: 0; width:
  100%; height:
  100%; content:
  "";
```

```
}
.header {
width: 100%;
text-align: center;
margin-bottom: 80px;
position: relative;
}
.header__title {
color: #fff;
font-size: 46px;
font-family: "Montserrat", sans-serif;
font-weight: normal;
margin: 0;
}
.header__subtitle {
color: white;
font-family: "Montserrat", sans-serif;
font-size: 16px;
letter-spacing: 5px; margin: 10px 0 0
0;
font-weight: normal;
}
Logins.css
@media screen and (min-width: 801px) { html {
       background-image: url("https://s3.jp-tok.cloud-objectstorage.appdomain.cloud/plasma-53045-
    bucket/blood.jpg");
```

```
background-repeat: no-repeat;
  background-size: cover;
  overflow-x: hidden;
  min-width: 100%;
  min-height: 100%;
}
body {
  background: linear-gradient(rgba(0, 0, 0, 0.7), rgba(0, 0, 0,
 0.7));
  height: 100vh;
  color: #fff;
  font-family: "Montserrat";
  font-size: 22px;
}
* {
  margin: 0;
  padding: 0;
  overflow-x: hidden;
}
#head {
  justify-content: center;
  text-align: center;
    align-items: center;
    font-size: 2.5vw;
    margin-top: 40px;
  margin-bottom: 40px;
```

```
position: relative;
  animation-name: headers;
  animation-duration: 3s;
  animation-iteration-count: infinite;
}
@keyframes headers {
  0% {
    left: 0vw;
    top: 0vw;
  }
  33% {
    left: -20vw;
    top: 0vw;
  }
  66% {
    left: 20vw;
    top: 0vw;
  }
  100% {
    left: 0vw;
    top: 0vw;
  }
}
.bdy {
  margin-left: 2vw;
```

```
margin-right: 2vw;
  }
  #imag {
    float: left;
    margin-right: 3vw;
    width: 25vw;
    height: 25vw;
  }
  .flasher {
    background-color: lightgrey;
    font-weight: bold;
    color: red;
    font-family: 'Times New Roman', Times, serif;
    text-align: center;
    margin-top: 10px;
    margin-bottom: 10px;
  }
}
Results.css
@media screen and (min-width: 801px) {
  html {
    background-image: url("https://s3.jp-tok.cloud-object-
   storage.appdomain.cloud/plasma-53045-bucket/blood.jpg");
      background-repeat: no-repeat;
      background-size: cover;
    overflow-x: hidden;
    min-width: 100%;
```

```
min-height: 100%;
}
body {
  background: linear-gradient(rgba(0, 0, 0, 0.7), rgba(0, 0, 0,
  0.7));
  height: 100vh;
  font-family: "Montserrat";
  color: #fff;
  font-size: 22px;
}
* {
  margin: 0;
  padding: 0;
  overflow-x: hidden;
}
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  margin-left: 10px;
}
li {
  float: left;
}
```

```
li a {
     display: block;
    color: white;
                            padding: 14px 16px;
     text-align: center;
     text-decoration: none;
  }
  li a:hover:not(.active) {
     background-color: black;
  }
}
Tables.css
.table {
  border-spacing: 0;
  margin: 1rem;
  background-color: #f5f5f5;
  margin-bottom: 40px;
}
. table\_row: nth-child(even) \ \{
  background-color: #e5e5e5;
}
.table__header {
  text-align: left;
}
.table__cell {
  color: black; padding: 8px;
```

}	