



PLASMA DONOR APPLICATION

A PROJECT REPORT

Submitted by

DEVADHARSIKA A (19EUCS027)
DHIVYADHARSHINI T (19EUCS031)
KAMALIKA M M (19EUCS057)
HARI PRASATH P (19EUCS180)

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY (An Autonomous Institution, Affiliated to Anna University Chennai - 600 025)

NOVEMBER 2022



SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution. Affiliated to Anna University, Chennai)



Kuniamuthur, Coimbatore - 641 008

BONAFIDE CERTIFICATE

Certified that this project report titled "PLASMA DONOR APPLICATION" is the bonafide work of Miss.DEVADHARSIKA A (19EUCS027), Miss.DHIVYADHARSHINI T (19EUCS031), Miss.KAMALIKA M M (19EUCS057), Mr.HARI PRASATH P (19EUCS180) who carried out the project work under my supervision.

SIGNATURE S
Dr.K. SASI KALA RANI, M.E., Ph.D.,
HEAD OF THE DEPARTMENT S

SIGNATURE
Dr.M.SUJARITHA,M.E.,Ph.D.,
SUPERVISOR

Department of Computer Science and Engineering Sri Krishna College of Engineering and Technology Kuniamuthur, Coimbatore

Submitted for the Project viva-voce examination held on	
---	--

INTERNAL EXAMINER

EXTERNAL EXAMINER

ABSTRACT

During the COVID 19 crisis, the requirement of plasma became a high priority and the donor count has become low. Saving the donor information and helping the needy by notifying the current donors list, would be a helping hand. Alternatively, now a day's plasma transplant surgery is also being performed rapidly. At this present time plasma banks are in short supply. Not only that, but the number of plasma donors is low too. And some people do not know what plasma donation is and where to donate plasma. We have set up a system to alleviate this situation and help needy people to identify plasma donors and plasma banks. 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. The main objective is to develop an Android application to build a network of people (Donors, Recipients and Health care departments) who can help each other. This application is developed to simply explore for plasma in near areas for emergency.

TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO
	ABSTRACT	III
	LIST OF FIGURES	VI
1	INTRODUCTION	1
	1.1 Project Overview	1
	1.2 Purpose	2
2	LITERATURE SURVEY	3
	2.1 Existing problem	3
	2.2 References	3
	2.3 Problem Statement Definition	5
3	IDEATION & PROPOSED SOLUTION	6
	3.1 Empathy Map Canvas	6
	3.2 Ideation & Brainstorming	7
	3.3 Proposed Solution	8
	3.4 Problem Solution fit	9
4	REQUIREMENT ANALYSIS	10
	4.1 Functional requirement	10
	4.2 Non-Functional requirements	11
5	PROJECT DESIGN	12
	5.1 Data Flow Diagrams	12
	5.2 Solution & Technical Architecture	13
	5.3 User Stories	14
6	PROJECT PLANNING & SCHEDULING	16
	6.1 Sprint Planning & Estimation	16
	6.2 Sprint Delivery Schedule	17

	6.3 Reports from JIRA	18
7	CODING & SOLUTIONING	19
	7.1 Feature 1	19
	7.2 Feature 2	26
	7.3 Feature 3	32
	7.4 Feature 4	41
	7.5 Feature 5	51
8	TESTING	58
	8.1 Test Cases	58
	8.2 User Acceptance Testing	59
9	RESULTS	61
	9.1 Performance Metrics	61
10	ADVANTAGES & DISADVANTAGES	62
11	CONCLUSION	63
12	FUTURE SCOPE	64
13	APPENDIX	65
	Source Code	65
	GitHub & Project Demo Link	105

LIST OF FIGURES

TITLE	PAGE NO.
Empathy Map	
Problem Statement & Brainstorm	
Group Ideas & Prioritize	
Problem Solution fit	
Data Flow Diagram	
Architecture diagram	
Sprint Delivery Schedule	
Sprint Report	
	Problem Statement & Brainstorm Group Ideas & Prioritize Problem Solution fit Data Flow Diagram Architecture diagram Sprint Delivery Schedule

INTRODUCTION

1.1 OVERVIEW

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. The main goal of our project is to design a user-friendly web application that is like a scientific vehicle from which we can help reduce mortality or help those who are need of plasma, plasma therapy is an experimental approach to treat those COVID-positive patients and help them recover faster. Therapy, which is considered reliable and safe. If a particular person has fully recovered from COVID19, they are eligible to donate their plasma. As we all know, the traditional methods of finding plasma, one has to find out for oneself by looking at hospital records and contacting donors have been recovered, sometimes may not be available at home and move to other places. In this type of scenario, the health of those who are sick becomes disastrous. Therefore, it is not considered a rapid process to find plasma.

1.2 PURPOSE

A user friendly and responsive interface with a quick notification system which instantly notifies the donor upon receiving a request. When the recipient requests for plasma, if there is lack of plasma at the time of request, automatically the recipient will be added to the waiting list. Later when there is availability of plasma, the recipient will be notified by email. The main purpose of the proposed system, the donor who wants to donate plasma can register and can donate the plasma to the blood bank, the recipient can request for the donor and once the donor has accepted the request, the donor can donate blood at blood bank and the recipient can also track the status of the request for plasma and can take the plasma from the blood bank.

LITERATURE SURVEY

2.1 EXISTING PROBLEM

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. Alternatively, now a day's plasma transplant surgery is also being performed rapidly. At this present time plasma banks are in short supply. Not only that, but the number of plasma donors is low too. And some people do not know what plasma donation is and where to donate plasma.

2.2 REFERENCES

- [1] Dennis O'Neil(1999). "Blood Components". Palomar College. Archived from the original on June 5,2013.
- [2] Tuskegee University(May 29, 2013)."Chapter 9 Blood".tuskegee.edu. Archived from the original on December 28, 2013.
- [3] "Ways to Keep Your Blood Plasma Healthy". Archived from the original on November 1, 2013. Retrieved November 10, 2011.

- [4] Jump up to Maton, Anthea; Jean Hopkins; Charles Wiliam McLaughlin; Susan Johnson; Maryanna Quon Warner LaHart; David LaHart; Jill D. Wright (1993), Human Biology and Health, Englewood Cliffs, New Jersey, USA.
- [5] The Physics Factbook Density of Blood.[6]Basic Biology(2015)."Blood cells".
- [6] Elkassabany NM, Meny GM, Doria RR, Marcucci C (2008). "Green Plasma Revisited". Anesthesiology 108(4);
- [7] "19th WHO Model List of Essential Medicines(April 2015)"(PDF). WHO April 2015. Retrieved May 10, 2015.
- [8] Tripathi S, Kumar V, Prabhakar A, Joshi S, Agarwal A(2015). "Passive blood plasma separation at the microscale; a review of design principles and microdevices". J. Micromech, Microeng 25(8); 083001.
- [9] Guo, Weijin; Hansson, Jonas; van der wijngaart, Wouter(2020)."Synthetic Paper Separates Plasma from Whole Blood with Low Protein Loss". Analytical Chemistry. 92(9): 6194-6199.
- [10] Mani A, Poornima AP, Gupta D(2019) "Greenish discoloration of plasma: Is it really a matter of concern?", Asian Journal of Transfusion Science.
- [11] Starr, Douglas P.(2000), Blood: An Epic History of Medicine and Commerce. New York:Quill.

2.3 PROBLEM STATEMENT DEFINITION

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. 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. An application should be developed which would take the donor details, store them and notify them upon a request.

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

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

It is a useful tool to helps teams better understand their users.

Creating an effective solution requires understanding the true problem and the person who is experiencing it.

The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

Empathy Map for Plasma Donor Application:

ls it safe? Confused Fake Scared Risk of THINK AND FEEL? expiry of Hospitals What do they SEE ? Risk of HEAR? **Pifficult** to Advertism find a plasma SAY AND DO? Is It similar to Contacting Fraudulent donation My Friend Searching family for plasm influence me to donate Difficult to & offline find plasma Supply forums the start GAIN PAIN Quick **Financial** Affordable Fears of donors Service Issues groups

Empathy Map

Fig 1.1.Empathy Map

3.2 IDEATION & BRAINSTORMING

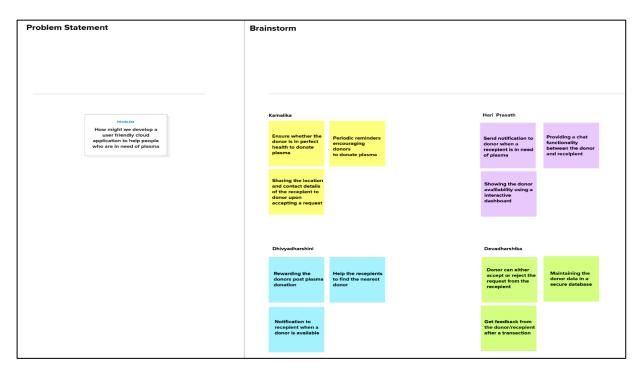


Fig 1.2.Problem Statement & Brainstorm

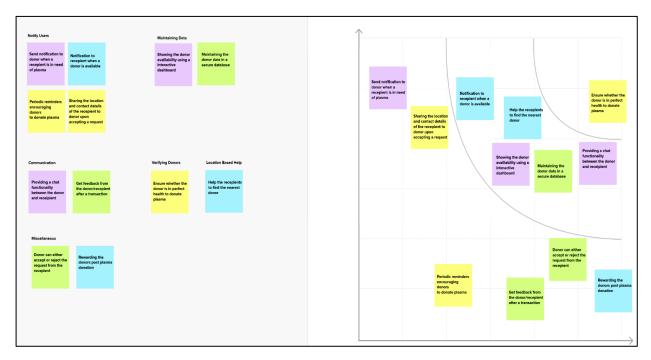


Fig 1.3.Group Ideas & Prioritize

3.3 PROPOSED SOLUTION

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. An application should be developed which would take the donor details, store them and notify them upon a request. A user friendly and responsive interface with a quick notification system which instantly notifies the donor upon receiving a request. When the recipient requests for plasma, if there is lack of plasma at the time of request, automatically the recipient will be added to the waiting list. Later when there is availability of plasma, the recipient will be notified by email. The application seamlessly connects the donor and the recipient. It will create an awareness among the people about donation of plasma which will be done in an easy way of connecting the donor and the recipient. And for sure the patient will be satisfied. Revenue can be generated by selling ad space to health product advertisers and by donation based monetization. Since the app is going to be deploy in a cloud kubernetes cluster, it will continue to be efficient when large number of people uses it. There will be no down time. And it has the ability to increase or decrease IT resources as needed to meet changing demand.

3.4 Problem Solution fit

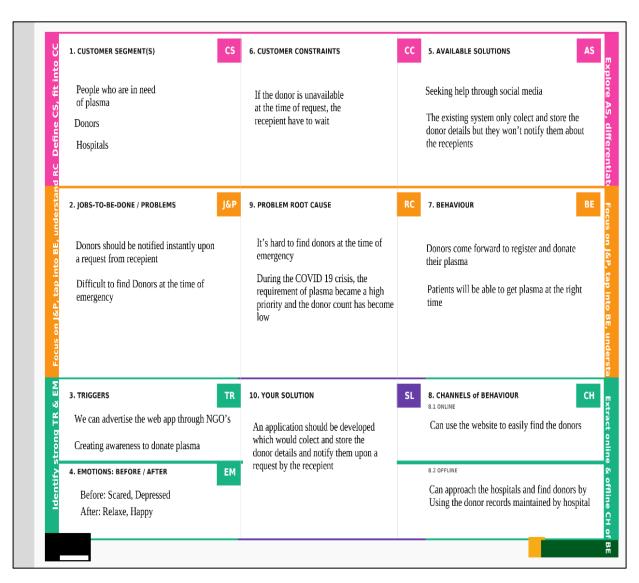


Fig 1.4.Problem Solution fit

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

Following are the functional requirements of the proposed solution.

FR	Functional	Sub Requirement (Story / Sub-Task)
No.	Requirement (Epic)	
FR-1	User Registration	Registration through Website
FR-2	User Confirmation	Confirmation via Email
FR-3	User Login	Login through registered email id
FR-4	Send Request	Patient should fill their details and make a request
FR-5	Contact Donor	Donor and Patient contact by the details shared via email

4.2 NON-FUNCTIONAL REQUIREMENTS

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

NFR	Non Functional	Description
No.	Requirement (Epic)	
NFR-1	Usability	The plasma Donor application is user friendly and does not involve any complex process
NFR-2	Security	The donor/recipient details are stored in a secured cloud based database.
NFR-3	Reliability	The application will have no down time so that you can always rely on and the information provided by it are so reliable
NFR-4	Performance	The application will work efficiently in emergency situations with an instant notification system.
NFR-5	Availability	The application will be available online 24x7
NFR-6	Scalability	The application can be accessed by multiple users at the same time and it has the ability to increase or decrease the IT resources as needed.

PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS

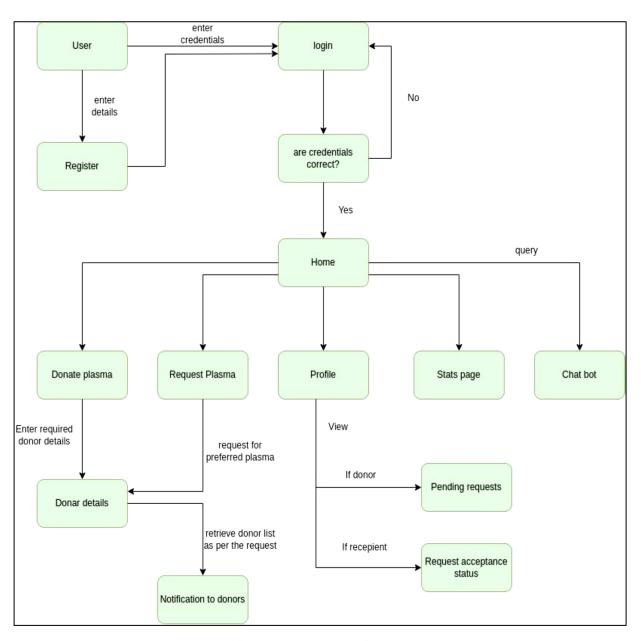


Fig 2.1.Data Flow Diagram

5.2 SOLUTION & TECHNICAL ARCHITECTURE

An application should be developed which would take the donor details, store them and notify them upon a request. A user friendly and responsive interface with a quick notification system which instantly notifies the donor upon receiving a request. When the recipient requests for plasma, if there is lack of plasma at the time of request, automatically the recipient will be added to the waiting list. Later when there is availability of plasma, the recipient will be notified by email.

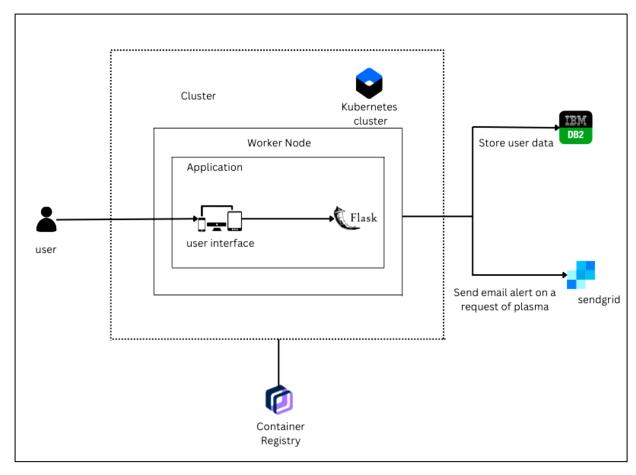


Fig 2.2. Architecture diagram

5.3 USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.		High	Sprint-1
		USN-2	As a user, I will receive confirmation emailonce I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail	I can receive confirmation notifications through Gmail	Medium	Sprint-1
	Login	USN-4	As a user, I can log into the application by entering email & password	view details in	High	Sprint-1
	Dashboard	USN-5	As a user,I can donate and request plasma.	I can receive appropriate notifications through email	High	Sprint-1
Customer (Web user)	Login	USN-6	As a user, I can register and log into	I can access into my user profile and	High	Sprint-1

			the	view details in		
			application by			
				uasiiboaiu		
			entering email			
			& password to			
			view the			
			profile			
	Dashboard	USN-7	As a user,I can		High	Sprint-1
			donate and	appropriate		
			request	notifications		
			plasma.	through email		
Customer	Application	USN-8	As a customer	I can view and	Medium	Sprint-2
Care			care executive,	address		
Executive			I can try to	their concerns		
			address user's	andquestions		
			concerns and			
			questions			
Administrator	Application	USN-9	As an	I can change	Medium	Sprint-3
	11		administrator,	\mathcal{E}		1
			I can listen to			
			feedbacks and			
			make the user			
			interface more			
			friendly and			
			make complex			
			process			
			simple.			
		LICNI 10		T 11	M - 1'	C: 4 1
		USN-10		I can help with	Medium	Sprint-1
				troubleshootin		
			I can involve	_		
			working with	•		
			the technical	experience.		
			side of			
			websites.			
Chatbot	Dashboard	USN-11	In addition the	1 0	Medium	Sprint-3
			Customer care	all the queries		
			executive,	related to our		
			chatbot can try	application		
			to address			
			user'sconcerns			
			and questions			

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can	2	High	Hari Prasath,
			register for the application by			Kamalika
			entering my email,			
			password, and			
			confirmingmy			
			password.			
Sprint-1		USN-2	As a user, I will	1	High	Dhivyadharshini,
1			receive			Devadharshika
			confirmation email			
			once I have			
			registered for the			
			application			
Sprint-1	Login	USN-3	As a user, I can log	2	High	Hari Prasath,
			into the application			Kamalika
			byentering email			
			& password			
Sprint- 2	Dashboard	USN-4	As a user, I can	3	High	Hari Prasath,
			register as a donor			Kamalika
			anddonate plasma			
Sprint- 2		USN-5	As a user, I can	2	High	Dhivyadharshini,
			request plasma			Devadharshika
Sprint- 4		USN-6	As a user I can	2	Medium	Hari Prasath,
			view the stats page			Kamalika
			which shows the			
			count of donors,			
			plasma available			
			etc.,			
Sprint- 3		USN-7	As a donor, I can	2	High	Hari Prasath
			accept or reject the			

			request			
Sprint — 4	Chatbot	USN-8	As a user, I can get	2	Medium	Hari Prasath
			answers to my			
			queriesusing the			
			chatbot			
Sprint-3	Notification	USN-9	As a donor, I will	1	High	Dhivyadharshini
			get notification via			
			email upon a			
			request			
Sprint-3		USN-10	As a recipient, I	1	High	Kamalika
			will get			
			notification once			
			myrequest is			
			accepted			

6.2 SPRINT DELIVERY SCHEDULE

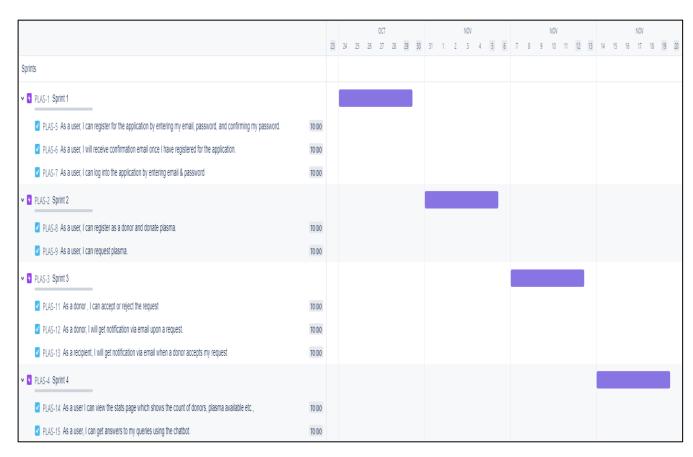


Fig 3.1. Sprint Delivery Schedule

6.3 REPORTS FROM JIRA

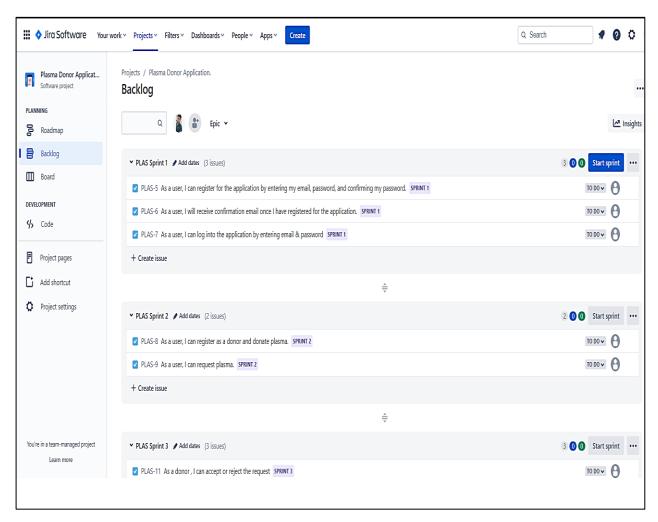


Fig 3.2. Sprint report

CODING & SOLUTIONING

7.1 FEATURE 1 – SIGN UP

signup.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Sign Up Form by Colorlib</title>
  <!—Font Icon \rightarrow
  k rel="stylesheet" href="../static/fonts/material-icon/css/material-design-iconic-
font.min.css">
  <!—Main css \rightarrow
  k rel="stylesheet" href="../static/css/register.css">
  <script>
  function validateForm() {
  let name = document.forms["form"]["name"].value;
  let email = document.forms["form"]["email"].value;
  let password = document.forms["form"]["pass"].value;
  let re_password = document.forms["form"]["re_pass"].value;
 if(validname(name) && validemail(email) && validpassword(password) &&
validrepassword(re_password, password)){
```

```
return true;
  }
 else{
  return false;
  }
  }
 function validname(name){
  console.log("Hello")
  document.getElementById("name_err").innerHTML=""
  if (name != "") {
    var letters = /^[a-zA-Z]*$/;
     if(name.match(letters))
     {
    return true;
     }
     else
     document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
     return false;
     }
   }
  else{
    document.getElementById("name_err").innerHTML="Name should not be empty"
     return false;
   }
  }
 function validemail(email){
  console.log(email)
  document.getElementById("email_err").innerHTML="";
  if (email != "") {
    var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
```

```
if(email.match(emailfor))
     {
     return true;
     }
     else
     document.getElementById("email_err").innerHTML="Invalid Email"
     return false;
     }
   }
  else{
    document.getElementById("email_err").innerHTML="Email Should not be empty"
     return false;
   }
 }
 function validpassword(password){
  document.getElementById("pass_err").innerHTML="";
  if (password != "") {
    var passwordfor = /^{?}=.^*\d)(?=.^*[!@\#\$\%^\&*])(?=.^*[a-z])(?=.^*[A-Z]).\{8,\}\;
     if(password.match(passwordfor))
     {
     return true;
     }
     else
     document.getElementById("pass_err").innerHTML="Password should be > 8 letters,
with at least a symbol, upper and lower case letters and a number "
     return false;
   }
  else{
    document.getElementById("pass_err").innerHTML="Passowrd Should not be empty"
     return false;
```

```
}
 }
 function validrepassword(re_password, password){
  document.getElementById("repass_err").innerHTML="";
  if (re_password != "") {
     if(password ===re_password)
     return true;
     }
     else
     document.getElementById("repass_err").innerHTML="Password does not match"
     return false;
     }
   }
  else{
    document.getElementById("repass_err").innerHTML="Reenter the password"
     return false;
   }
  }
   </script>
</head>
<body style="background-color: #fef8f5;">
  <div class="main">
    <!—Sign up form \rightarrow
    <section class="signup">
```

```
<div class="container">
         <div class="signup-content">
            <div class="signup-form">
              <h2 class="form-title" >Sign up</h2>
              <form action="{{ url_for('add_user') }}" onsubmit="return validateForm()"</pre>
method="POST" class="register-form" id="register-form" name="form">
                 <div class="form-group">
                   <label for="name"><i class="zmdi zmdi-account material-icons-</li>
name"></i></label>
                   <input onkeyup="validname(this.value)" type="text" name="name"</pre>
placeholder="Your Name"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                  <label style="position: static; color:red" id="name err" class="text-danger"</pre>
></label>
                 </div>
                 <div class="form-group">
                   <label for="email"><i class="zmdi zmdi-email"></i></label>
                   <input onkeyup="validemail(this.value)" type="email" name="email"</pre>
id="email" placeholder="Your Email"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                 <label style="position: static; color:red" id="email_err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group">
                   <label for="pass"><i class="zmdi zmdi-lock"></i></label>
                   <input onkeyup="validpassword(this.value)"type="password"</pre>
name="pass" id="pass" placeholder="Password"/>
```

```
</div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                 <label style="position: static; color:red" id="pass err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group">
                   <label for="re-pass"><i class="zmdi zmdi-lock-outline"></i></label>
                   <input onkeyup="validrepassword(this.value,</pre>
document.querySelector('#pass').value)" type="password" name="re_pass" id="re_pass"
placeholder="Repeat your password"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                 <label style="position: static; color:red" id="repass_err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group form-button">
                   <button name="signup" id="signup" class="form-submit"</pre>
style="background-color:#EB5D1E;" value="Sign up">Sign Up</button>
                 </div>
              </form>
            </div>
            <div class="signup-image">
              <figure><img src="../static/img/signup.jpg" alt="sing up image"></figure>
              <a href="/sign in" class="signup-image-link">I am already member</a>
            </div>
         </div>
       </div>
     </section>
  </div>
  <!—JS →
  <script src="../static/vendor/jquery/jquery.min.js"></script>
```

```
</body><!—This templates was made by Colorlib (https://colorlib.com) > </html>
```

PYTHON SNIPPET:

```
@app.route('/add_user', methods=['POST', 'GET'])
def add_user():
  if request.method == 'POST':
    try:
       name = request.form['name']
       email = request.form['email']
       password = request.form['pass']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', '', '')
       sql = "insert into users values(?,?,?)"
       param = name, email, password,
       stmt = ibm_db.prepare(conn, sql)
       ibm_db.execute(stmt, param)
       msg = "You're successfully signed up!"
    except Exception as e:
       print("exception ccurred!",e)
       msg = e
    finally:
       return render_template('post_signup.html', msg = msg)
```

7.2 FEATURE 2 – SIGN IN

signin.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Sign In</title>
  <!—Font Icon \rightarrow
  k rel="stylesheet" href="../static/fonts/material-icon/css/material-design-iconic-
font.min.css">
  <!—Bootstrap CSS →
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM" \\
crossorigin="anonymous"></script>
    <!—Main css \rightarrow
  <link rel="stylesheet" href="../static/css/register.css">
  <script>
    var request;
function sendInfo(email,password)
{
```

```
var url="{{ url_for('validate_user') }}?email="+email+"&password="+password;
if(window.XMLHttpRequest){
request=new XMLHttpRequest();
}
else if(window.ActiveXObject){
request=new ActiveXObject("Microsoft.XMLHTTP");
}
try
request.onreadystatechange=getInfo;
request.open("GET",url,true);
request.send();
}
catchI
alert("Unable to connect to server");
}
function getInfo(){
if(request.readyState==4){
var val=request.responseText;
if( val == "User does not exists" || val=="Incorrect Password"){
  console.log(val);
  document.getElementById("loading").style.display = "none"
  document.getElementById('alert').innerHTML=val;
}
else{
   console.log(val);
  document.getElementById(`body').innerHTML=val;\\
}
}
```

```
}
function validateForm() {
 var email = document.forms["form"]["email"].value;
 var password = document.forms["form"]["pass"].value;
 console.log(email+" "+password)
if( validemail(email) && validpassword(password)){
  document.getElementById("loading").style.display = "block"
   sendInfo(email,password);
}
else{
  return false
}
function validemail(email){
 document.getElementById("email_err").innerHTML="";
 if (email != "") {
  var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
   if(email.match(emailfor))
   return true;
   }
   else
   document.getElementById("email_err").innerHTML="Invalid Email"
   return false;
 }
 else{
  document.getElementById("email_err").innerHTML="Email Should not be empty"
```

```
return false;
 }
function validpassword(password){
 document.getElementById("pass_err").innerHTML="";
 if (password != "") {
 return true;
 }
 else{
  document.getElementById("pass_err").innerHTML="Passowrd Should not be empty"
   return false;
 }
}
  </script>
</head>
<body id="body" style="background-color: #fef8f5;">
  <div class="main" style="margin-top: -70px;">
    <div id="alert" class="alert alert-light text-center" role="alert" style="color: red;"> </div>
    <!—Sing in Form \rightarrow
    <section class="sign-in">
       <div class="container">
         <div class="signin-content">
            <div class="signin-image">
              <figure><img src="../static/img/signin.jpg" alt="sing up image"></figure>
              <a href="/sign_up" class="signup-image-link">Create an account</a>
            </div>
            <div class="signin-form">
              <div class="d-flex ">
                 <div style="display: none;" class="spinner-grow mt-3" id = "loading"</pre>
role="status">
                 </div>
```

```
<h2 class="form-title">Sign in</h2>
              </div>
              <form name="form">
                 <div class="form-group">
                   <label for="email"><i class="zmdi zmdi-account material-icons-</li>
name"></i></label>
                   <input onkeyup="validemail(this.value)" type="text" name="email"</pre>
id="email" placeholder="Your email"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                   <label style="position: static; color:red" id="email_err" class="text-</pre>
danger"></label>
                  </div>
                 <div class="form-group">
                   <label for="your_pass"><i class="zmdi zmdi-lock"></i></label>
                   <input onkeyup="validpassword(this.value)" type="password"</pre>
name="pass" id="pass" placeholder="Password"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                   <label style="position: static; color:red" id="pass_err" class="text-danger"</pre>
></label>
                  </div>
              </form>
              <div class="form-group form-button">
                 <button onclick="validateForm()" name="signin" id="signin" class="form-</pre>
submit" style="background-color:#EB5D1E;">Sign In</button>
              </div>
            </div>
         </div>
       </div>
     </section>
```

```
</div>
<!—JS →

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

</body><!—This templates was made by Colorlib (https://colorlib.com) →

</html>
```

PYTHON SNIPPET:

```
@app.route('/validate_user',methods = ['POST', 'GET'])
def validate_user():
  if request.method == 'GET':
   try:
       args = request.args
       email = args.get('email')
       password = args.get('password')
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', '', '')
       sql = 'select * from users where email='+'\''+email+'\''
       stmt = ibm_db.exec_immediate(conn, sql)
       dictionary = ibm_db.fetch_assoc(stmt)
       print("executed")
       print(dictionary)
       if dictionary != False:
              if(dictionary["PASSWORD"]== password):
                  print("success")
                  resp = make_response(render_template("post_signin.html"))
```

```
resp.set_cookie('email', dictionary["EMAIL"])
resp.set_cookie('name',dictionary["NAME"])
print("success")
return resp

else:
return "Incorrect Password"
else:
return "User does not exists"

except Exception as e:
print("error",e)
return reprI
```

7.2 FEATURE 3 – DONOR REGISTRATION

donor_registration.html:

```
<!doctype html>
<html lang="en">
<head>
<!—Required meta tags →
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
link href="https://fonts.googleapis.com/css?family=Roboto:400,700,900&display=swap"
rel="stylesheet">
<!—Vendor CSS Files →
<li>link href="../static/vendor/aos/aos.css" rel="stylesheet">
link href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
```

```
<link href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
<link href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
<link href="../static/css/style.css" rel="stylesheet">
  <!—Bootstrap CSS →
 k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
  <!—Style \rightarrow
  k rel="stylesheet" href="../static/css/request.css">
  <script>
 function validateForm() {
  let name = document.forms["form"]["name"].value;
  let email = document.forms["form"]["email"].value;
  let blood_group = document.forms["form"]["blood_group"].value;
  let contact_no = document.forms["form"]["contact_no"].value;
  let city = document.forms["form"]["city"].value;
  if(validname(name) && validemail(email) && validblood_group(blood_group) &&
validcontact_no(contact_no) && validcity(city)){
    return true;
    }
 else{
  return false;
  }
```

```
}
 function validname(name){
  document.getElementById("name_err").innerHTML=""
  if (name != "") {
    var letters = /^[a-zA-Z]*$/;
     if(name.match(letters))
     {
    return true;
     }
     else
     {
     document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
     return false;
     }
   }
  else{
    document.getElementById("name_err").innerHTML="Name should not be empty"
     return false;
   }
  }
 function validemail(email){
  console.log(email)
  document.getElementById("email_err").innerHTML="";
  if (email != "") {
    var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
     if(email.match(emailfor))
     {
     return true;
     }
     else
```

```
document.getElementById("email_err").innerHTML="Invalid Email"
     return false;
     }
   }
  else{
    document.getElementById("email_err").innerHTML="Email Should not be empty"
     return false;
   }
  }
 function validblood_group(blood_group){
  document.getElementById("blood_err").innerHTML="";
  if (blood_group == "") {
   document.getElementById("blood_err").innerHTML="Blood group Should not be empty"
     return false;
   }
  else{
    return true;
   }
  }
 function validcontact_no(contact_no){
  document.getElementById("contact_err").innerHTML="";
  if (contact_no == "") {
   document.getElementById("contact_err").innerHTML="Contact number Should not be
empty"
     return false;
   }
  else{
    return true;
   }
 }
```

```
function validcity(city){
 document.getElementById("city err").innerHTML="";
 if (city == "") {
  document.getElementById("city_err").innerHTML="City should not be empty"
   return false;
 }
 else{
  return true;
 }
}
 </script>
 <title>Planor</title>
</head>
<body>
<!-- ===== Header ===== →
<header id="header" class="fixed-top d-flex align-items-center shadow">
 <div class="container d-flex align-items-center justify-content-between">
  <div class="logo">
   <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
  </div>
  <nav id="navbar" class="navbar">
   ul>
    <a class="nav-link scrollto" href="/">Home</a>
    <a class="nav-link scrollto" href="#services">Services</a>
    <a class="nav-link scrollto" href="/request">Request</a>
    <a class="nav-link scrollto" href="/donor_registration">Donate</a>
    <a class="nav-link scrollto" href="/sign_in">Sign In</a>
    <a class="nav-link scrollto" href="/sign_up">Sign Up</a>
```

```
<a class="nav-link scrollto" href="/profile">My Profile</a>
     <a class="nav-link scrollto" href="/logout">Logout</a>
    <i class="bi bi-list mobile-nav-toggle"></i>
   </nav><!-- .navbar →
  </div>
 </header><!—End Header →
  {% if logged_in == True %}
 <div class="content">
  <div class="container">
   <div class="row justify-content-center">
    <div class="col-md-10">
     <div class="row justify-content-center">
      <div class="col-md-6">
       <h3 class="heading mb-4">Let's help the needy!</h3>
       <img src="../static/img/donation.png" alt="Image" class="img-fluid">
      </div>
      <div class="col-md-6">
       <form action="{{ url_for('add_donor') }}" onsubmit="return validateForm()"</pre>
method="post" id="contactForm" name="form">
         <div class="row">
```

```
<div class="col-md-12 form-group">
            <input onkeyup="validname(this.value)" type="text" class="form-control mb-3"</pre>
name="name" id="name" placeholder="Your name" value={{name}}>
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="name_err" class="text-danger"</pre>
></label>
           </div>
          </div>
         <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validemail(this.value)" type="text" class="form-control mb-3"</pre>
name="email" id="email" placeholder="Email" value = {{email}}>
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="email_err" class="text-danger"</pre>
></label>
           </div>
         </div>
         <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validblood_group(this.value)" type="text" class="form-control</pre>
mb-3" name="blood group" id="subject" placeholder="Blood group">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="blood_err" class="text-danger"</pre>
></label>
          </div>
         </div>
         <div class="row">
           <div class="col-md-12 form-group">
```

```
<input onkeyup="validcontact_no(this.value)" type="text" class="form-control</pre>
mb-3" name="contact_no" id="subject" placeholder="Contact number">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="contact_err" class="text-danger"</pre>
></label>
           </div>
          </div>
         <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcity(this.value)" type="text" class="form-control mb-3"</pre>
name="city" id="subject" placeholder="City">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="city_err" class="text-danger"</pre>
></label>
           </div>
         </div>
         <div class="row">
           <div class="col-12">
            <input type="submit" value="Register as Donor" class="btn btn-primary rounded-
0 \text{ py-2 px-4"}
           <span class="submitting"></span>
           </div>
         </div>
        </form>
        <div id="form-message-warning mt-4"></div>
        <div id="form-message-success">
         Your message was sent, thank you!
        </div>
```

```
</div>
     </div>
    </div>
   </div>
  </div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
    Please, Sign in to start donating!
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 {% endif %}
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
 </body>
</html>
PYTHON SNIPPET:
```

```
@app.route('/add_donor', methods=['POST', 'GET'])
def add_donor():
  if request.method == 'POST':
    try:
      name = request.form['name']
```

```
email = request.form['email']
      blood_group = request.form['blood_group']
       contact_no = request.form['contact_no']
       location = request.form['city']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', '', '')
      sql = "insert into donors values(?,?,?,?)"
       param = name, email,blood_group,contact_no, location,
      stmt = ibm_db.prepare(conn, sql)
      ibm_db.execute(stmt, param)
       msg = "You're successfully registered as donor"
    except Exception as e:
      print("exception ccurred!",e)
      msg = e
    finally:
      return render_template('donor_registration_status.html', msg = msg)
```

7.2 FEATURE 4 – REQUEST

request.html:

```
<!doctype html>
<html lang="en">
<head>
<!---Required meta tags ->
```

```
<meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <link href="https://fonts.googleapis.com/css?family=Roboto:400,700,900&display=swap"</pre>
rel="stylesheet">
<!—Vendor CSS Files →
<link href="../static/vendor/aos/aos.css" rel="stylesheet">
k href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
k href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
k href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
<link href="../static/css/style.css" rel="stylesheet">
  <!—Bootstrap CSS →
 <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"</pre>
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
  <!—Style \rightarrow
  k rel="stylesheet" href="../static/css/request.css">
  <script>
   function validateForm() {
    let name = document.forms["form"]["name"].value;
    let email = document.forms["form"]["email"].value;
    let blood_group = document.forms["form"]["blood_group"].value;
    let contact_no = document.forms["form"]["contact_no"].value;
    let city = document.forms["form"]["city"].value;
```

```
if(validname(name) && validemail(email) && validblood_group(blood_group) &&
validcontact_no(contact_no) && validcity(city)){
    return true;
    }
    else{
     return false;
    }
    }
    function validname(name){
     document.getElementById("name_err").innerHTML=""
     if (name != "") {
      var letters = /^[a-zA-Z]*$/;
       if(name.match(letters))
       {
      return true;
       }
       else
       {
       document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
       return false;
       }
     }
     else{
      document.getElementById("name_err").innerHTML="Name should not be empty"
       return false;
     }
    }
    function validemail(email){
    console.log(email)
     document.getElementById("email_err").innerHTML="";
```

```
if (email != "") {
      var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
       if(email.match(emailfor))
       {
       return true;
       }
       else
       {
       document.getElementById("email_err").innerHTML="Invalid Email"
       return false;
       }
     }
     else{
      document.getElementById("email_err").innerHTML="Email Should not be empty"
       return false;
     }
    }
   function validblood_group(blood_group){
     document.getElementById("blood_err").innerHTML="";
     if (blood_group == "") {
     document.getElementById("blood_err").innerHTML="Blood group Should not be
empty"
       return false;
     }
     else{
      return true;
     }
    }
   function validcontact_no(contact_no){
  document.getElementById("contact_err").innerHTML="";
  if (contact_no == "") {
```

```
document.getElementById("contact_err").innerHTML="Contact number Should not be
empty"
     return false;
  }
  else{
   return true;
   }
 }
 function validcity(city){
  document.getElementById("city_err").innerHTML="";
  if (city == "") {
   document.getElementById("city_err").innerHTML="City should not be empty"
     return false;
  }
  else{
   return true;
   }
 }
    </script>
  <title>Planor</title>
 </head>
 <body>
 <!-- ===== Header ===== →
 <header id="header" class="fixed-top d-flex align-items-center shadow">
  <div class="container d-flex align-items-center justify-content-between">
   <div class="logo">
    <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
   </div>
```

```
<nay id="naybar" class="naybar">
    ul>
     <a class="nav-link scrollto" href="/">Home</a>
     <a class="nav-link scrollto" href="#services">Services</a>
     <a class="nav-link scrollto" href="/request">Request</a>
     <a class="nav-link scrollto" href="/donor_registration">Donate</a>
     <a class="nav-link scrollto" href="/sign_in">Sign In</a>
     <a class="nav-link scrollto" href="/sign_up">Sign Up</a>
     <a class="nav-link scrollto" href="/profile">My Profile</a>
     <a class="nav-link scrollto" href="/logout">Logout</a>
    <i class="bi bi-list mobile-nav-toggle"></i>
   </nav><!-- .navbar →
  </div>
 </header><!—End Header →
  {% if logged_in == True %}
 <div class="content">
  <div class="container">
   <div class="row justify-content-center">
    <div class="col-md-10">
     <div class="row justify-content-center">
      <div class="col-md-6">
       <h3 class="heading mb-4">Let's make a request!</h3>
       Lorem ipsum dolor sit amet, consectetur adipisicing elit. Voluptas debitis, fugit
natus?
       <img src="../static/img/request.jpeg" alt="Image" class="img-fluid">
```

```
</div>
       <div class="col-md-6">
        <form action="{{ url_for('create_request') }}" onsubmit="return validateForm()"</pre>
method="post" id="contactForm" name="form">
         <div class="row">
          <div class="col-md-12 form-group">
           <input onkeyup="validname(this.value)" type="text" class="form-control mb-3"</pre>
name="name" id="name" placeholder="Your name" value={{name}}>
          </div>
          <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="name_err" class="text-danger"</pre>
></label>
          </div>
         </div>
         <div class="row">
          <div class="col-md-12 form-group">
            <input onkeyup="validemail(this.value)" type="text" class="form-control mb-3"</pre>
name="email" id="email" placeholder="Email" value={{email}}>
          </div>
          <div style="margin-top: -15px;">
           <label style="position: static; color:red" id="email_err" class="text-danger"</pre>
></label>
          </div>
         </div>
         <div class="row">
          <div class="col-md-12 form-group">
            <input onkeyup="validblood_group(this.value)" type="text" class="form-control</pre>
mb-3" name="blood_group" id="subject" placeholder="Blood group">
          </div>
```

```
<div style="margin-top: -15px;">
            <label style="position: static; color:red" id="blood_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcontact_no(this.value)" type="text" class="form-control</pre>
mb-3" name="contact_no" id="subject" placeholder="Contact number">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="contact_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcity(this.value)" type="text" class="form-control mb-3"</pre>
name="city" id="subject" placeholder="City">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="city_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-12">
            <input type="submit" value="Register as Donor" class="btn btn-primary rounded-
0 \text{ py-2 px-4"}
```

```
<span class="submitting"></span>
          </div>
         </div>
        </form>
        <div id="form-message-warning mt-4"></div>
        <div id="form-message-success">
         Your message was sent, thank you!
        </div>
       </div>
      </div>
    </div>
   </div>
  </div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
    Please, Sign in to make a request
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 {% endif %}
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
 </body>
```

PYTHON SNIPPET:

```
@app.route('/create request', methods=['POST', 'GET'])
def create_request():
  if request.method == 'POST':
    try:
       name = request.form['name']
       email = request.form['email']
       blood_group = request.form['blood_group']
       contact_no = request.form['contact_no']
       location = request.form['city']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', '', '')
       sql = "insert into requests (name, email, blood_group, contact_no, location)
values(?,?,?,?,?)"
       param = name, email,blood_group,contact_no, location,
       stmt = ibm_db.prepare(conn, sql)
       ibm_db.execute(stmt, param)
       msg = "You're successfully made a request!"
    except Exception as e:
       print("exception ccurred!",e)
       msg = e
    finally:
       return render_template('donor_registration_status.html', msg = msg)
```

7.2 FEATURE 5 – STATUS OF REQUEST

profile.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <!—Bootstrap CSS →
 k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
   <!—Vendor CSS Files →
 <link href="../static/vendor/aos/aos.css" rel="stylesheet">
 <link href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
 k href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
 <link href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
 <link href="../static/css/style.css" rel="stylesheet">
  <title>Profile</title>
</head>
<body>
```

```
<!-- ===== Header ===== <del>></del>
  <header id="header" class="fixed-top d-flex align-items-center shadow">
   <div class="container d-flex align-items-center justify-content-between">
    <div class="logo">
     <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
    </div>
    <nav id="navbar" class="navbar">
     \langle ul \rangle
      <a class="nav-link scrollto" href="/">Home</a>
      <a class="nav-link scrollto" href="#services">Services</a>
      <a class="nav-link scrollto" href="/request">Request</a>
      <a class="nav-link scrollto" href="/donor_registration">Donate</a>
      <a class="nav-link scrollto" href="/sign_in">Sign In</a>
      <a class="nav-link scrollto" href="/sign_up">Sign Up</a>
      <a class="nav-link scrollto" href="/profile">My Profile</a>
      <a class="nav-link scrollto" href="/logout">Logout</a>
     <i class="bi bi-list mobile-nav-toggle"></i>
    </nav><!-- .navbar →
   </div>
  </header><!—End Header →
 {% if logged_in == True %}
<div class="container" style="margin-top: 100px;">
 <div class="row">
  <div class="col-sm-4 text-center">
   <h3><b>Hello {{name}}!</b></h3>
   { email }
```

```
<!-- < div class="text-center" style="background-color: RGB(224, 224, 224); height: 350px;
width:90%;display: flex;flex-direction: column; align-items: center;">
   <div style="margin: auto;">
     Hari Prasath P
   Chennai
   Email:hariprasath.hp5@gmail.com
   Blood Group:O+
   </div>
   </div> →
  </div>
  <div class="col-sm-8">
   <div>
   <div>
    {% if pending_requestslen!=0 %}
    Pending Requests
    {% for i in range(0, pending_requestslen)%}
    <form name="form" method="post" action="{{ url_for('accept_request') }}">
    <div class=" w-100 d-flex justify-content-around align-items-center p-1 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
     <input type="hidden" value={{pending_requests[i]["ID"]}} name="id">
     <label >Request ID :{{pending_requests[i]["ID"]}}</label>
      <label >Name :{{pending_requests[i]["NAME"]}}</label>
      <label >Email :{{accepted requests[i]["EMAIL"]}}</label>
      <label>Location:{{pending_requests[i]["LOCATION"]}}</label>
      <label>Blood Group:{{pending_requests[i]["BLOOD_GROUP"]}}</label>
      <input type="submit" class="btn btn-primary" value="Accept">
    </div>
   </form>
    {%endfor%}
    {% endif %}
   </div>
```

```
<div>
    {% if accepted_requestslen!=0 %}
    Accepted Requests
    {% for i in range(0, accepted_requestslen)%}
    <div class=" w-100 d-flex justify-content-around align-items-center p-1 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
     <label >Request ID :{{accepted_requests[i]["ID"]}}</label>
       <label >Name :{{accepted requests[i]["NAME"]}}</label>
       <label >Email :{{accepted_requests[i]["EMAIL"]}}</label>
      <label>Location:{{accepted_requests[i]["LOCATION"]}}</label>
      <label>Blood Group:{{accepted requests[i]["BLOOD GROUP"]}}</label>
    </div>
    {%endfor%}
    {% endif %}
    </div>
    <div>
     {% if requests_len!=0 %}
     Requests made
      {% for i in range(0, requests_len)%}
     <div class=" w-75 d-flex justify-content-around align-items-center p-2 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
       <label > Request ID : { {requests[i]["ID"]}} < /label>
        <label >Name :{{requests[i]["NAME"]}}</label>
        <label>Location:{{requests[i]["LOCATION"]}}</label>
        <label>Blood Group:{{requests[i]["BLOOD_GROUP"]}}</label>
        <label>Status: {{requests[i]["REQUEST_STATUS"]}}</label>
     </div>
      { % endfor % }
     {% endif % }
   </div>
  </div>
```

```
</div>
</div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
    Please, Sign in to view your profile
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 {% endif %}
</body>
</html>
PYTHON SNIPPET:
   @app.route('/profile')
def profile():
   email = request.cookies.get('email')
   name = request.cookies.get('name')
   if email != None:
```

```
stmt = ibm_db.exec_immediate(conn, sql)
      requests = []
      dictionary = ibm db.fetch assoc(stmt)
      while dictionary != False:
          print(dictionary["ID"])
          requests.append(dictionary)
          dictionary = ibm_db.fetch_assoc(stmt)
      print(requests)
      sql = 'select * from donors where email='+'\''+email+'\''
      stmt = ibm_db.exec_immediate(conn, sql)
      dictionary = ibm_db.fetch_assoc(stmt)
      isDonor = False
      pending_requests = []
      if dictionary != False:
          isDonor = True
          donor_location = dictionary["LOCATION"]
          donor_bloodgroup = dictionary["BLOOD_GROUP"]
          sql = "select * from requests where
blood_group="+""+donor_bloodgroup+""+"and location="+""+donor_location+""+"and
request_status= "+"'Pending"
          stmt = ibm_db.exec_immediate(conn, sql)
          dictionary = ibm_db.fetch_assoc(stmt)
          while dictionary != False:
              pending_requests.append(dictionary)
              dictionary = ibm_db.fetch_assoc(stmt)
          print(pending requests)
      accepted_requests=[]
      if isDonor:
          sql = 'select * from requests where accepted_by='+'\''+email+'\''
```

```
stmt = ibm_db.exec_immediate(conn, sql)
dictionary = ibm_db.fetch_assoc(stmt)

while dictionary != False:
    accepted_requests.append(dictionary)
    dictionary = ibm_db.fetch_assoc(stmt)
    print(accepted_requests)

return render_template('profile.html', name =name, email = email,requests_len = len(requests) ,requests = requests, pending_requestslen = len(pending_requests),
pending_requests = pending_requests, accepted_requestslen = len(accepted_requests),
accepted_requests = accepted_requests, logged_in=True)

else:
    return render_template('profile.html', logged_in=False)
```

TESTING

8.1 TEST CASES

1	Test Cases	Result
2	Verify the user is able to see the Sign up page when the user clicks the signup button in navigation bar	Positive
3	Verify the UI elements in the Sign up page	Positive
4	Verify the user is able to register into the application by providing valid details	Positive
5	Verify the user is able to see the sign in page when the user clicks the signin button in navigation bar	Positive
6	Verify the UI elements in the Sign in page	Positive
7	Verify the user is able to login into the application by providing valid details	Positive
8	Verify the user is able to see the Donor registration page when the user clicks the donate link in navigation bar	Positive
9	Verify the UI elements in the Donor Registration page	Positive
10	Verify the user is able to register as a donor by providing valid details	Positive
11	Verify the user is able to see the request page when the user clicks the request link in navigation bar	Positive
12	Verify the UI elements in the request page	Positive
13	Verify the user is able to make a request by providing valid details	Positive
14	Verify the user gets a email notification when they sign up	Positive
15	Verify the donor gets a email notification when they make a request	Positive
16	Verify the donor and recipient gets a email notification when the donor accepts the request	Positive
17	Verify the user is able to see the stats page when the user clicks the stage page link in navigation bar	Positive
18	Verify the user is able to interact with the chatbot	Positive

8.2 USER ACCEPTANCE TESTING

1	Test case ID	Feature Type	Component	Test Scenario	Steps to Execute
					1. Enter the url and go
2	SignUpPage_TC_001	Functional	Sign Up page	Verify the user is able to see the Sign up page when the user clicks the signup button in navigation bar	2. Click the sign up link in the navigation bar.
					3. Verify the sign up page is visible or not.
					1. Enter the url and go
					2.Click the sign up link in the navigation bar.
					3. Verify the below mentioned ui elements:
					a.name text box
3	SignUpPage_TC_002	UI	Sign Up page	Verify the UI elements in the Sign up page	b. email text box.
					c. password text box.
					d. repeat password text box.
					e. sign up button
					1. Enter the url and go
					2.Click the sign up link in the navigation bar.
4	SignUpPage TC 003	Functional	Sign Up page	Verify the user is able to register into the application by providing valid details	3.Enter valid details in the text boxes.
1	Signoprage_1c_003	Turicuoriai	Sign op page	verify the user is able to register into the application by providing valid details	4. Verify the confirmation message.
					1. Enter the url and go
5	SignInPage_TC_001	Functional	Sign In page	Verify the user is able to see the sign in page when the user clicks the signin button in navigation bar	2.Click the sign in link in the navigation bar.
L					3. Verify the sign in page is visible or not.
					1. Enter the url and go
					2.Click the sign in link in the navigation bar.
					3. Verify the below mentioned ui elements:
6	SignInPage_TC_002	UI	Sign In page	Verify the UI elements in the Sign in page	a. email text box.
					b. password text box.
					c. sign in button

					severity the below mentioned diretements.
	SignInPage_TC_002	UI	Sign In page	Verify the UI elements in the Sign in page	a. email text box.
6					b. password text box.
					c. sign in button
					1. Enter the url and go
					2.Click the sign in link in the navigation bar.
7	SignInPage_TC_003	Functional	Sign In page	Verify the user is able to login into the application by providing valid details	3.Enter valid details in the text boxes.
,	51g.1111 ugc_1 c_005	runctional	oigi iii page	Total and additional application by providing talled details	4. Verify the user is able to login.
					1. Enter the url and go
8	DonorRegistrationPage TC 001	Functional	Donor Registration Page	Verify the user is able to see the Donor registration page when the user clicks the donate link in navigation bar	Click the donate link in the navigation bar.
	0 02 2				3. Verify the donor registration page is visible or not.
					. Enter the url and go
					2.Click the donate link in the navigation bar.
					3. Verify the below mentioned ui elements:
					a. name text box
					b. email text box.
9	DonorRegistrationPage_TC_002	UI	Donor Registration Page	Verify the UI elements in the Donor Registration page	c. blood group text box.
					d. contact number text box.
					e. city text box
					f. register as donor button
					1. Enter the url and go
					Click the donate link in the navigation bar.
					3.Enter valid details in the text boxes.
10	DonorRegistrationPage_TC_003	Functional	Donor Registration Page	Verify the user is able toregister as a donor by providing valid details	4. Click the donate button.
			_	-	4. Verify the user is able to register as a donor successfully

11 RequestPage_TC_001	Functional	Request Page	Verify the user is able to see the request page when the user clicks the request link in navigation bar	Enter the url and go Click the request link in the navigation bar. Werify the request page is visible or not.
12 RequestPage_TC_002	UI	Request Page	Verify the UI elements in the request page	Enter the url and go 2. Click the request link in the navigation bar. 3. Verify the below mentioned ui elements: a. name text box b. email text box. c. blood group text box. d. contact number text box. e. city text box f. make a request button
13 RequestPage_TC_003	Functional	Request Page	Verify the user is able to make a request by providing valid details	1. Enter the url and go 2. Click the request link in the navigation bar. 3. Enter valid details in the text boxes. 4. Click the request button. 4. Verify the user is able to make a request sucessfully.
14 Notication_TC_001	Functional	Sign up page	Verify the user gets a email notification when they sign up	1. Enter the url and go 2. Go to the sign up page. 3. Enter the details and click sign up button 4. Verify if they get the email on successfull sign up
15 Notication_TC_002	Functional	Request Page	Verify the donor gets a email notification when they make a request	1. Enter the url and go 2. Go to the request page. 3. Enter the details and click make a request button 4. Verify if the donor gets the email on successfully maki request.

16	Notication_TC_003	Functional	Profile Page	Verify the donor and recipient gets a email notification when the donor accepts the request	2. Go to the profile page 3. Accept the pending request. 4. Verify if they get the email containing contact details
17	StatsPage_TC_001	Functional	Stats Page	Verify the user is able to see the stats page when the user clicks the stage page link in navigation bar	Enter the url and go Click the stats page link in the navigation bar. 3.Verify the stats page is visible or not
18	Chatbot_TC_001	Functional	Home Page	Verify the user is able to interact with the chatbot	Enter the url and go Click the chatbot icon in the home page Werify the chatbot is working or not

RESULTS

9.1 PERFORMANCE METRICS

Web application performance metrics help determine certain aspects that impact the performance of an application. There are eight key metrics, including: User Satisfaction—also known as Apdex Scores, uses a mathematical formula in order to determine user satisfaction.

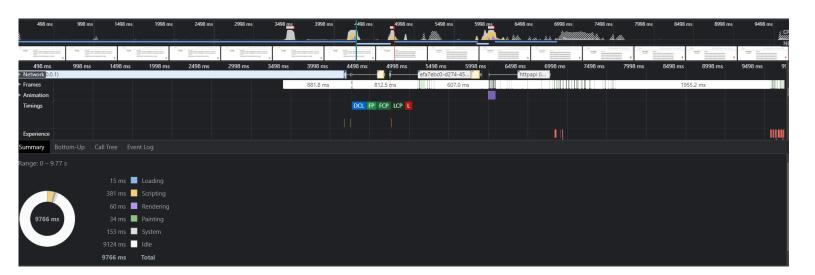


Fig 4.1. Performance Metrics

ADVANTAGES & DISADVANTAGES

ADVANTAGES

- It is a user-friendly application.
- It will help people to find plasma easily.
- Simple User Interface
- It alleviates the burden of coordinator to manage Users and resources easily.
- Compared to all other mobile applications, it incorporates provisions for Plasma donation and Plasma Requesting.
- Attracts more, number of users as it is available in the form of Mobile application instead of What's app group.
- Usage of this application will greatly reduce time in selecting the right donor.

DISADVANTAGES

- It requires an active internet connection.
- It relays on the details provided by the user.

CONCLUSION

Plasma is a liquid portion of blood; it is a mixture of water, proteins and salts. Antibodies are proteins made by the body in response to an infection. People fully rescued from COVID19 are encouraged to donate plasma, which can help to increase the lifespan of other patients because their plasma contains antigens which helps the affected person to recover faster. These immunoglobulin give your immune system a way to fight the virus when you are sick, so your plasma can be used to help others fight off illness. Individuals must fully resolve symptoms for at least 14 days prior are eligible to donate. Enhanced mobile application for plasma has been developed to help the administrator to attract more donors and recipients and make user management an easy task. This mobile application will attract more users as it is user friendly and greatly reduces scalability issues. Thus, we have successfully designed and developed the Android mobile application to ease the process of becoming a donor and recipient of PMB bank.

FUTURE SCOPE

- A chat widget to establish communication between a donor and recipient .
- To attract more users android application should also be developed in future.

APPENDIX

SOURCE CODE

signup.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Sign Up Form by Colorlib</title>
  <!-- Font Icon -->
  k rel="stylesheet" href="../static/fonts/material-icon/css/material-design-iconic-
font.min.css">
  <!-- Main css -->
  k rel="stylesheet" href="../static/css/register.css">
  <script>
  function validateForm() {
  let name = document.forms["form"]["name"].value;
  let email = document.forms["form"]["email"].value;
  let password = document.forms["form"]["pass"].value;
  let re_password = document.forms["form"]["re_pass"].value;
 if(validname(name) && validemail(email) && validpassword(password) &&
validrepassword(re_password, password)){
```

```
return true;
  }
 else{
   return false;
  }
  }
 function validname(name){
  console.log("Hello")
   document.getElementById("name_err").innerHTML=""
   if (name != "") {
    var letters = /^[a-zA-Z]*$/;
     if(name.match(letters))
     {
    return true;
     }
     else
     document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
     return false;
     }
   }
   else{
    document.getElementById("name_err").innerHTML="Name should not be empty"
     return false;
   }
 function validemail(email){
  console.log(email)
   document.getElementById("email_err").innerHTML="";
   if (email != "") {
    var emailfor = /^\mathbf{w}+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
     if(email.match(emailfor))
```

```
{
     return true;
     }
     else
     {
     document.getElementById("email_err").innerHTML="Invalid Email"
     return false;
     }
   }
  else{
    document.getElementById("email_err").innerHTML="Email Should not be empty"
     return false;
   }
 }
 function validpassword(password){
  document.getElementById("pass err").innerHTML="";
  if (password != "") {
    var passwordfor = /^{?}=.^*\d)(?=.^*[!@\#\$\%^\&*])(?=.^*[a-z])(?=.^*[A-Z]).\{8,\}\
     if(password.match(passwordfor))
     {
     return true;
     }
     else
     document.getElementById("pass_err").innerHTML="Password should be > 8 letters,
with at least a symbol, upper and lower case letters and a number "
     return false;
   }
  else{
    document.getElementById("pass_err").innerHTML="Passowrd Should not be empty"
     return false;
   }
```

```
}
 function validrepassword(re_password, password){
  document.getElementById("repass_err").innerHTML="";
  if (re_password != "") {
     if(password ===re_password)
     {
     return true;
     }
     else
     document.getElementById("repass_err").innerHTML="Password does not match"
     return false;
     }
   }
  else{
    document.getElementById("repass_err").innerHTML="Reenter the password"
     return false;
   }
  }
   </script>
</head>
<body style="background-color: #fef8f5;">
  <div class="main">
    <!-- Sign up form -->
    <section class="signup">
       <div class="container">
         <div class="signup-content">
           <div class="signup-form">
```

```
<h2 class="form-title" >Sign up</h2>
              <form action="{{ url_for('add_user') }}" onsubmit="return validateForm()"
method="POST" class="register-form" id="register-form" name="form">
                 <div class="form-group">
                   <label for="name"><i class="zmdi zmdi-account material-icons-
name"></i></label>
                   <input onkeyup="validname(this.value)" type="text" name="name"</pre>
placeholder="Your Name"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                  <label style="position: static; color:red" id="name_err" class="text-danger"</pre>
></label>
                 </div>
                 <div class="form-group">
                   <label for="email"><i class="zmdi zmdi-email"></i></label>
                   <input onkeyup="validemail(this.value)" type="email" name="email"</pre>
id="email" placeholder="Your Email"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                 <label style="position: static; color:red" id="email err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group">
                   <label for="pass"><i class="zmdi zmdi-lock"></i></label>
                   <input onkeyup="validpassword(this.value)"type="password" name="pass"</pre>
id="pass" placeholder="Password"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
```

```
<label style="position: static; color:red" id="pass_err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group">
                   <label for="re-pass"><i class="zmdi zmdi-lock-outline"></i></label>
                   <input onkeyup="validrepassword(this.value,</pre>
document.querySelector('#pass').value)" type="password" name="re_pass" id="re_pass"
placeholder="Repeat your password"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                 <label style="position: static; color:red" id="repass err" class="text-danger"</pre>
></label>
               </div>
                 <div class="form-group form-button">
                   <button name="signup" id="signup" class="form-submit"
style="background-color:#EB5D1E;" value="Sign up">Sign Up</button>
                 </div>
              </form>
            </div>
            <div class="signup-image">
              <figure><img src="../static/img/signup.jpg" alt="sing up image"></figure>
              <a href="/sign_in" class="signup-image-link">I am already member</a>
            </div>
         </div>
       </div>
    </section>
  </div>
  <!-- JS -->
  <script src="../static/vendor/jquery/jquery.min.js"></script>
</bdy><!-- This templates was made by Colorlib (https://colorlib.com) -->
```

signin.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Sign In</title>
  <!-- Font Icon -->
  k rel="stylesheet" href="../static/fonts/material-icon/css/material-design-iconic-
font.min.css">
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
    <!-- Main css -->
  k rel="stylesheet" href="../static/css/register.css">
  <script>
    var request;
function sendInfo(email,password)
{
```

```
var url="{{ url_for('validate_user') }}?email="+email+"&password="+password;
if(window.XMLHttpRequest){
request=new XMLHttpRequest();
}
else if(window.ActiveXObject){
request=new ActiveXObject("Microsoft.XMLHTTP");
}
try
request.onreadystatechange=getInfo;
request.open("GET",url,true);
request.send();
}
catch(e)
alert("Unable to connect to server");
}
function getInfo(){
if(request.readyState==4){
var val=request.responseText;
if( val == "User does not exists" || val=="Incorrect Password"){
  console.log(val);
  document.getElementById("loading").style.display = "none"
  document.getElementById('alert').innerHTML=val;
}
else{
   console.log(val);
  document.getElementById('body').innerHTML=val;\\
}
}
```

```
}
function validateForm() {
 var email = document.forms["form"]["email"].value;
 var password = document.forms["form"]["pass"].value;
 console.log(email+" "+password)
if( validemail(email) && validpassword(password)){
  document.getElementById("loading").style.display = "block"
   sendInfo(email,password);
}
else{
  return false
}
function validemail(email){
 document.getElementById("email_err").innerHTML="";
 if (email != "") {
  var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
   if(email.match(emailfor))
   return true;
   }
   else
   document.getElementById("email_err").innerHTML="Invalid Email"
   return false;
 }
 else{
  document.getElementById("email_err").innerHTML="Email Should not be empty"
```

```
return false;
 }
function validpassword(password){
 document.getElementById("pass_err").innerHTML="";
 if (password != "") {
 return true;
 }
 else{
  document.getElementById("pass_err").innerHTML="Passowrd Should not be empty"
   return false;
 }
}
  </script>
</head>
<body id="body" style="background-color: #fef8f5;">
  <div class="main" style="margin-top: -70px;">
    <div id="alert" class="alert alert-light text-center" role="alert" style="color: red;"> </div>
    <!-- Sing in Form -->
    <section class="sign-in">
       <div class="container">
         <div class="signin-content">
            <div class="signin-image">
              <figure><img src="../static/img/signin.jpg" alt="sing up image"></figure>
              <a href="/sign_up" class="signup-image-link">Create an account</a>
            </div>
            <div class="signin-form">
              <div class="d-flex ">
                 <div style="display: none;" class="spinner-grow mt-3" id = "loading"</pre>
role="status">
                 </div>
```

```
<h2 class="form-title">Sign in</h2>
              </div>
              <form name="form" >
                 <div class="form-group">
                   <label for="email"><i class="zmdi zmdi-account material-icons-</pre>
name"></i></label>
                   <input onkeyup="validemail(this.value)" type="text" name="email"</pre>
id="email" placeholder="Your email"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                   <label style="position: static; color:red" id="email_err" class="text-danger"</pre>
></label>
                  </div>
                 <div class="form-group">
                   <label for="your_pass"><i class="zmdi zmdi-lock"></i></label>
                   <input onkeyup="validpassword(this.value)" type="password"</pre>
name="pass" id="pass" placeholder="Password"/>
                 </div>
                 <div style="margin-top: -15px; margin-bottom: 10px;">
                   <label style="position: static; color:red" id="pass_err" class="text-danger"</pre>
></label>
                  </div>
              </form>
              <div class="form-group form-button">
                 <button onclick="validateForm()" name="signin" id="signin" class="form-</pre>
submit" style="background-color:#EB5D1E;">Sign In</button>
              </div>
            </div>
         </div>
       </div>
     </section>
```

```
    JS -->
    <script src="../static/vendor/jquery/jquery.min.js"></script>
    </body><!-- This templates was made by Colorlib (https://colorlib.com) -->
    </html>
```

donor_registration.html:

```
<!doctype html>
<html lang="en">
 <head>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  k href="https://fonts.googleapis.com/css?family=Roboto:400,700,900&display=swap"
rel="stylesheet">
<!-- Vendor CSS Files -->
<link href="../static/vendor/aos/aos.css" rel="stylesheet">
<link href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
<link href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
<link href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
<link href="../static/css/style.css" rel="stylesheet">
  <!-- Bootstrap CSS -->
 k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
  <!-- Style -->
  <link rel="stylesheet" href="../static/css/request.css">
  <script>
 function validateForm() {
  let name = document.forms["form"]["name"].value;
  let email = document.forms["form"]["email"].value;
  let blood_group = document.forms["form"]["blood_group"].value;
  let contact_no = document.forms["form"]["contact_no"].value;
  let city = document.forms["form"]["city"].value;
  if(validname(name) && validemail(email) && validblood_group(blood_group) &&
validcontact_no(contact_no) && validcity(city)){
    return true;
    }
 else{
  return false;
  }
  }
 function validname(name){
   document.getElementById("name_err").innerHTML=""
  if (name != "") {
    var letters = /^[a-zA-Z]*$/;
     if(name.match(letters))
     {
    return true;
```

```
}
     else
     {
     document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
     return false;
     }
   }
   else{
    document.getElementById("name_err").innerHTML="Name should not be empty"
     return false;
   }
  }
  function validemail(email){
  console.log(email)
   document.getElementById("email_err").innerHTML="";
   if (email != "") {
    var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
     if(email.match(emailfor))
     {
     return true;
     }
     else
     document.getElementById("email_err").innerHTML="Invalid Email"
     return false;
     }
   }
   else{
    document.getElementById("email_err").innerHTML="Email Should not be empty"
     return false;
   }
  }
```

```
function validblood_group(blood_group){
  document.getElementById("blood_err").innerHTML="";
  if (blood_group == "") {
   document.getElementById("blood_err").innerHTML="Blood group Should not be empty"
     return false;
  }
  else{
   return true;
  }
 }
 function validcontact_no(contact_no){
  document.getElementById("contact_err").innerHTML="";
  if (contact_no == "") {
   document.getElementById("contact_err").innerHTML="Contact number Should not be
empty"
     return false;
  }
  else{
   return true;
  }
 }
 function validcity(city){
  document.getElementById("city_err").innerHTML="";
  if (city == "") {
   document.getElementById("city_err").innerHTML="City should not be empty"
     return false;
  }
  else{
   return true;
```

```
}
}
</script>
<title>Planor</title>
</head>
<body>
<!-- ===== Header ===== -->
<header id="header" class="fixed-top d-flex align-items-center shadow">
<div class="container d-flex align-items-center justify-content-between">
  <div class="logo">
   <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
  </div>
  <nav id="navbar" class="navbar">
   \langle ul \rangle
    <a class="nav-link scrollto" href="/">Home</a>
    <a class="nav-link scrollto" href="#services">Services</a>
    <a class="nav-link scrollto" href="/request">Request</a>
    <a class="nav-link scrollto" href="/donor_registration">Donate</a>
    <a class="nav-link scrollto" href="/sign_in">SIgn In</a>
    <a class="nav-link scrollto" href="/sign_up">Sign Up</a>
    <a class="nav-link scrollto" href="/profile">My Profile</a>
    <a class="nav-link scrollto" href="/logout">Logout</a>
   <i class="bi bi-list mobile-nav-toggle"></i>
  </nav><!-- .navbar -->
</div>
</header><!-- End Header -->
 {% if logged_in == True %}
```

```
<div class="content">
  <div class="container">
   <div class="row justify-content-center">
     <div class="col-md-10">
      <div class="row justify-content-center">
       <div class="col-md-6">
        <h3 class="heading mb-4">Let's help the needy!</h3>
        <img src="../static/img/donation.png" alt="Image" class="img-fluid">
       </div>
       <div class="col-md-6">
        <form action="{{ url_for('add_donor') }}" onsubmit="return validateForm()"
method="post" id="contactForm" name="form">
         <div class="row">
          <div class="col-md-12 form-group">
            <input onkeyup="validname(this.value)" type="text" class="form-control mb-3"</pre>
name="name" id="name" placeholder="Your name" value={{name}}>
          </div>
          <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="name_err" class="text-danger"</pre>
></label>
          </div>
         </div>
```

```
<div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validemail(this.value)" type="text" class="form-control mb-3"</pre>
name="email" id="email" placeholder="Email" value = {{email}}>
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="email err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validblood_group(this.value)" type="text" class="form-control</pre>
mb-3" name="blood_group" id="subject" placeholder="Blood group">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="blood_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcontact_no(this.value)" type="text" class="form-control mb-</pre>
3" name="contact_no" id="subject" placeholder="Contact number">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="contact_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
```

```
<div class="col-md-12 form-group">
            <input onkeyup="validcity(this.value)" type="text" class="form-control mb-3"</pre>
name="city" id="subject" placeholder="City">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="city_err" class="text-danger" ></label>
           </div>
          </div>
          <div class="row">
           <div class="col-12">
            <input type="submit" value="Register as Donor" class="btn btn-primary rounded-0
py-2 px-4">
           <span class="submitting"></span>
           </div>
          </div>
        </form>
        <div id="form-message-warning mt-4"></div>
        <div id="form-message-success">
          Your message was sent, thank you!
        </div>
       </div>
      </div>
     </div>
   </div>
  </div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
```

```
Please, Sign in to start donating!
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 { % endif % }
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
 </body>
</html>
request.html:
<!doctype html>
<html lang="en">
 <head>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  k href="https://fonts.googleapis.com/css?family=Roboto:400,700,900&display=swap"
rel="stylesheet">
<!-- Vendor CSS Files -->
<link href="../static/vendor/aos/aos.css" rel="stylesheet">
<link href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
<link href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
<link href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
<link href="../static/css/style.css" rel="stylesheet">
```

```
<!-- Bootstrap CSS -->
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"</pre>
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
  <!-- Style -->
  <link rel="stylesheet" href="../static/css/request.css">
  <script>
   function validateForm() {
    let name = document.forms["form"]["name"].value;
    let email = document.forms["form"]["email"].value;
    let blood_group = document.forms["form"]["blood_group"].value;
    let contact_no = document.forms["form"]["contact_no"].value;
    let city = document.forms["form"]["city"].value;
    if(validname(name) && validemail(email) && validblood_group(blood_group) &&
validcontact_no(contact_no) && validcity(city)){
    return true;
    }
    else{
     return false;
    }
    }
    function validname(name){
     document.getElementById("name_err").innerHTML=""
     if (name != "") {
```

```
var letters = /^[a-zA-Z]*$/;
       if(name.match(letters))
       {
      return true;
       }
       else
       {
       document.getElementById("name_err").innerHTML="Name should contain only
Alphabets"
       return false;
       }
     }
     else{
      document.getElementById("name_err").innerHTML="Name should not be empty"
       return false;
     }
    }
    function validemail(email){
    console.log(email)
     document.getElementById("email_err").innerHTML="";
     if (email != "") {
      var emailfor = /^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/;
       if(email.match(emailfor))
       {
       return true;
       }
       else
       document.getElementById("email_err").innerHTML="Invalid Email"
       return false;
       }
     }
     else{
```

```
document.getElementById("email_err").innerHTML="Email Should not be empty"
       return false;
     }
    }
    function validblood_group(blood_group){
     document.getElementById("blood_err").innerHTML="";
     if (blood_group == "") {
     document.getElementById("blood err").innerHTML="Blood group Should not be empty"
       return false;
     }
     else{
      return true;
     }
    }
   function validcontact_no(contact_no){
  document.getElementById("contact_err").innerHTML="";
  if (contact_no == "") {
   document.getElementById("contact_err").innerHTML="Contact number Should not be
empty"
    return false;
  }
  else{
   return true;
  }
 }
 function validcity(city){
  document.getElementById("city_err").innerHTML="";
  if (city == "") {
   document.getElementById("city_err").innerHTML="City should not be empty"
```

```
return false;
 }
 else{
  return true;
 }
}
   </script>
 <title>Planor</title>
</head>
<body>
<!-- ===== Header ====== -->
<header id="header" class="fixed-top d-flex align-items-center shadow">
 <div class="container d-flex align-items-center justify-content-between">
  <div class="logo">
   <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
  </div>
  <nav id="navbar" class="navbar">
   \langle ul \rangle
    <a class="nav-link scrollto" href="/">Home</a>
    <a class="nav-link scrollto" href="#services">Services</a>
    <a class="nav-link scrollto" href="/request">Request</a>
    <a class="nav-link scrollto" href="/donor_registration">Donate</a>
    <a class="nav-link scrollto" href="/sign_in">SIgn In</a>
    <a class="nav-link scrollto" href="/sign_up">Sign Up</a>
    <a class="nav-link scrollto" href="/profile">My Profile</a>
    <a class="nav-link scrollto" href="/logout">Logout</a>
   <i class="bi bi-list mobile-nav-toggle"></i>
  </nav><!-- .navbar -->
```

```
</div>
 </header><!-- End Header -->
  {% if logged_in == True %}
 <div class="content">
  <div class="container">
   <div class="row justify-content-center">
     <div class="col-md-10">
      <div class="row justify-content-center">
       <div class="col-md-6">
        <h3 class="heading mb-4">Let's make a request!</h3>
        Lorem ipsum dolor sit amet, consectetur adipisicing elit. Voluptas debitis, fugit
natus?
        <img src="../static/img/request.jpeg" alt="Image" class="img-fluid">
       </div>
       <div class="col-md-6">
        <form action="{{ url_for('create_request') }}" onsubmit="return validateForm()"</pre>
method="post" id="contactForm" name="form">
         <div class="row">
          <div class="col-md-12 form-group">
           <input onkeyup="validname(this.value)" type="text" class="form-control mb-3"</pre>
name="name" id="name" placeholder="Your name" value={{name}}>
          </div>
          <div style="margin-top: -15px;">
```

```
<label style="position: static; color:red" id="name_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validemail(this.value)" type="text" class="form-control mb-3"</pre>
name="email" id="email" placeholder="Email" value={{email}}>
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="email_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validblood_group(this.value)" type="text" class="form-control</pre>
mb-3" name="blood group" id="subject" placeholder="Blood group">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="blood_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcontact_no(this.value)" type="text" class="form-control mb-
3" name="contact_no" id="subject" placeholder="Contact number">
           </div>
           <div style="margin-top: -15px;">
```

```
<label style="position: static; color:red" id="contact_err" class="text-danger"</pre>
></label>
           </div>
          </div>
          <div class="row">
           <div class="col-md-12 form-group">
            <input onkeyup="validcity(this.value)" type="text" class="form-control mb-3"</pre>
name="city" id="subject" placeholder="City">
           </div>
           <div style="margin-top: -15px;">
            <label style="position: static; color:red" id="city_err" class="text-danger" ></label>
           </div>
          </div>
          <div class="row">
           <div class="col-12">
            <input type="submit" value="Register as Donor" class="btn btn-primary rounded-0</pre>
py-2 px-4">
           <span class="submitting"></span>
           </div>
          </div>
        </form>
        <div id="form-message-warning mt-4"></div>
        <div id="form-message-success">
          Your message was sent, thank you!
        </div>
       </div>
      </div>
     </div>
```

```
</div>
  </div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
    Please, Sign in to make a request
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 {% endif %}
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"</pre>
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
 </body>
</html>
 profile.html:
 <!DOCTYPE html>
 <html lang="en">
 <head>
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
     <!-- Bootstrap CSS -->
   k href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
 rel="stylesheet" integrity="sha384-
```

```
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>
   <!-- Vendor CSS Files -->
 <link href="../static/vendor/aos/aos.css" rel="stylesheet">
 k href="../static/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
 k href="../static/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
 k href="../static/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
 <link href="../static/css/style.css" rel="stylesheet">
  <title>Profile</title>
</head>
<body>
  <!-- ===== Header ===== -->
  <header id="header" class="fixed-top d-flex align-items-center shadow">
   <div class="container d-flex align-items-center justify-content-between">
    <div class="logo">
     <h1 class="text-light"><a href="/"><span>Planor</span></a></h1>
    </div>
    <nav id="navbar" class="navbar">
     ul>
      <a class="nav-link scrollto" href="/">Home</a>
      <a class="nav-link scrollto" href="#services">Services</a>
      <a class="nav-link scrollto" href="/request">Request</a>
      <a class="nav-link scrollto" href="/donor_registration">Donate</a>
      <a class="nav-link scrollto" href="/sign_in">SIgn In</a>
```

```
<a class="nav-link scrollto" href="/sign_up">Sign Up</a>
      <a class="nav-link scrollto" href="/profile">My Profile</a>
      <a class="nav-link scrollto" href="/logout">Logout</a>
     <i class="bi bi-list mobile-nav-toggle"></i>
    </nav><!-- .navbar -->
   </div>
  </header><!-- End Header -->
 {% if logged in == True %}
<div class="container" style="margin-top: 100px;">
 <div class="row">
  <div class="col-sm-4 text-center">
   <h3><b>Hello {{name}}!</b></h3>
   {{email}}
   <!-- < div class="text-center" style="background-color: RGB(224, 224, 224); height: 350px;
width:90%;display: flex;flex-direction: column; align-items: center;">
   <div style="margin: auto;">
     Hari Prasath P
   Chennai
   Email:hariprasath.hp5@gmail.com
   Blood Group:O+
   </div>
   </div>-->
  </div>
  <div class="col-sm-8">
   <div>
   <div>
    {% if pending_requestslen!=0 %}
    Pending Requests
```

```
{% for i in range(0, pending requestslen)%}
    <form name="form" method="post" action="{{ url_for('accept_request') }}">
    <div class=" w-100 d-flex justify-content-around align-items-center p-1 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
     <input type="hidden" value={{pending_requests[i]["ID"]}} name="id">
     <label >Request ID :{{pending_requests[i]["ID"]}}</label>
       <label >Name :{{pending_requests[i]["NAME"]}}</label>
       <label >Email :{{accepted_requests[i]["EMAIL"]}}</label>
       <label>Location:{{pending_requests[i]["LOCATION"]}}</label>
       <label>Blood Group:{{pending_requests[i]["BLOOD_GROUP"]}}</label>
       <input type="submit" class="btn btn-primary" value="Accept">
    </div>
   </form>
    {%endfor%}
    {% endif %}
    </div>
    <div>
    {% if accepted_requestslen!=0 %}
    Accepted Requests
    {% for i in range(0, accepted_requestslen)%}
    <div class=" w-100 d-flex justify-content-around align-items-center p-1 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
     <label > Request ID : { {accepted requests[i]["ID"]} } </label>
       <label >Name :{{accepted_requests[i]["NAME"]}}</label>
       <label >Email :{{accepted_requests[i]["EMAIL"]}}</label>
       <label>Location:{{accepted_requests[i]["LOCATION"]}}</label>
       <label>Blood Group:{{accepted requests[i]["BLOOD GROUP"]}}</label>
    </div>
    {%endfor%}
    {% endif %}
    </div>
```

```
<div>
      {% if requests_len!=0 %}
      Requests made
      {% for i in range(0, requests_len)%}
      <div class=" w-75 d-flex justify-content-around align-items-center p-2 mb-3"</pre>
style="background-color: RGB(224, 224, 224)" >
       <label > Request ID : { requests[i]["ID"] } } </label>
        <label >Name :{{requests[i]["NAME"]}}</label>
        <label>Location:{{requests[i]["LOCATION"]}}</label>
        < label> Blood\ Group: \{\{requests[i]["BLOOD\_GROUP"]\}\} < / label>
        <label>Status: {{requests[i]["REQUEST_STATUS"]}}</label>
      </div>
      {%endfor%}
      {% endif %}
   </div>
  </div>
 </div>
</div>
 </div>
 {% else %}
 <div>
  <div class="d-flex flex-column align-items-center justify-content-center" style="height:</pre>
400px;">
    Please, Sign in to view your profile
    <a class="btn btn-dark mt-2" style="height: initial;" href="/sign_in">Sign in</a>
  </div>
 </div>
 { % endif % }
```

```
</body>
</html>
Script.py:
import ibm_db
from flask import *
app = Flask(__name__)
@app.route('/')
def home():
   return render_template('index.html')
@app.route('/sign_up')
def signUp():
   return render_template('sign_up.html')
@app.route('/sign_in')
def signIn():
   return render_template('sign_in.html')
@app.route('/request')
def requests():
   email = request.cookies.get('email')
```

name = request.cookies.get('name')

if email != None:

```
resp = make_response(render_template('request.html',email = email, name = name,
logged_in = True))
   else:
      resp = make_response(render_template('request.html',email = email, name = name,
logged_in = False))
   return resp
@app.route('/donor_registration')
def donor_registration():
   email = request.cookies.get('email')
   name = request.cookies.get('name')
   if email != None:
      resp = make_response(render_template('donor_registration.html',email = email, name =
name, logged_in = True))
   else:
      resp = make_response(render_template('donor_registration.html',email = email, name =
name, logged_in = False))
   return resp
@app.route('/profile')
def profile():
   email = request.cookies.get('email')
   name = request.cookies.get('name')
   if email != None:
      conn = ibm_db.connect(
          'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
      sql = 'select * from requests where email='+'\"+email+'\"
      stmt = ibm_db.exec_immediate(conn, sql)
      requests = []
```

```
dictionary = ibm_db.fetch_assoc(stmt)
       while dictionary != False:
          print(dictionary["ID"])
          requests.append(dictionary)
          dictionary = ibm_db.fetch_assoc(stmt)
      print(requests)
      sql = 'select * from donors where email='+\"+email+\\"
       stmt = ibm_db.exec_immediate(conn, sql)
       dictionary = ibm_db.fetch_assoc(stmt)
       isDonor = False
      pending_requests = []
      if dictionary != False:
          isDonor = True
          donor_location = dictionary["LOCATION"]
          donor_bloodgroup = dictionary["BLOOD_GROUP"]
          sql = "select * from requests where blood_group="+""+donor_bloodgroup+""+"and
location= "+""+donor location+""+"and request status= "+""Pending"
          stmt = ibm_db.exec_immediate(conn, sql)
          dictionary = ibm_db.fetch_assoc(stmt)
          while dictionary != False:
              pending_requests.append(dictionary)
              dictionary = ibm_db.fetch_assoc(stmt)
          print(pending_requests)
       accepted_requests=[]
       if isDonor:
          sql = 'select * from requests where accepted_by='+'\"+email+'\"
          stmt = ibm_db.exec_immediate(conn, sql)
          dictionary = ibm_db.fetch_assoc(stmt)
```

```
while dictionary != False:
              accepted_requests.append(dictionary)
              dictionary = ibm_db.fetch_assoc(stmt)
          print(accepted requests)
      return render_template('profile.html', name =name, email = email,requests_len =
len(requests), requests = requests, pending_requestslen = len(pending_requests),
pending_requests = pending_requests, accepted_requestslen = len(accepted_requests),
accepted_requests = accepted_requests, logged_in=True)
   else:
      return render template('profile.html', logged in= False)
@app.route('/add_user', methods=['POST', 'GET'])
def add_user():
  if request.method == 'POST':
    try:
       name = request.form['name']
      email = request.form['email']
      password = request.form['pass']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
      sql = "insert into users values(?,?,?)"
      param = name, email, password,
      stmt = ibm_db.prepare(conn, sql)
       ibm_db.execute(stmt, param)
       msg = "You're successfully signed up!"
    except Exception as e:
       print("exception occured!",e)
       msg = e
```

```
finally:
       return render_template('post_signup.html', msg = msg)
@app.route('/validate_user',methods = ['POST', 'GET'])
def validate_user():
 if request.method == 'GET':
   try:
       args = request.args
       email = args.get('email')
       password = args.get('password')
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
       sql = 'select * from users where email='+'\"+email+'\"
       stmt = ibm_db.exec_immediate(conn, sql)
       dictionary = ibm_db.fetch_assoc(stmt)
       print("executed")
       print(dictionary)
       if dictionary != False:
              if(dictionary["PASSWORD"]== password):
                  print("success")
                  resp = make_response(render_template("post_signin.html"))
                  resp.set_cookie('email', dictionary["EMAIL"])
                  resp.set_cookie('name',dictionary["NAME"])
                  print("success")
                  return resp
              else:
                  return "Incorrect Password"
       else:
          return "User does not exists"
```

```
except Exception as e:
     print("error",e)
     return repr(e)
@app.route('/add_donor', methods=['POST', 'GET'])
def add_donor():
  if request.method == 'POST':
    try:
       name = request.form['name']
       email = request.form['email']
       blood_group = request.form['blood_group']
       contact_no = request.form['contact_no']
       location = request.form['city']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
       sql = "insert into donors values(?,?,?,?,?)"
       param = name, email,blood_group,contact_no, location,
       stmt = ibm_db.prepare(conn, sql)
       ibm_db.execute(stmt, param)
       msg = "You're successfully registered as donor"
    except Exception as e:
       print("exception occured!",e)
       msg = e
     finally:
       return render_template('donor_registration_status.html', msg = msg)
```

```
@app.route('/create_request', methods=['POST', 'GET'])
def create_request():
  if request.method == 'POST':
    try:
      name = request.form['name']
      email = request.form['email']
      blood_group = request.form['blood_group']
       contact_no = request.form['contact_no']
       location = request.form['city']
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
      sql = "insert into requests (name, email, blood_group, contact_no, location)
values(?,?,?,?)"
      param = name, email,blood_group,contact_no, location,
      stmt = ibm_db.prepare(conn, sql)
       ibm_db.execute(stmt, param)
       msg = "You're successfully made a request!"
    except Exception as e:
      print("exception occured!",e)
      msg = e
    finally:
       return render_template('donor_registration_status.html', msg = msg)
@app.route('/accept_request', methods=['POST', 'GET'])
def accept_request():
  if request.method == 'POST':
```

```
try:
       id = request.form['id']
       email = request.cookies.get('email')
       conn = ibm_db.connect(
         'DATABASE=bludb;HOSTNAME=b1bc1829-6f45-4cd4-bef4-
10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=gfn00031;PWD=LITZUQj2tpFc3t0
i', ", ")
       sql = "update requests set request_status = 'Accepted', accepted_by
="+""+email+""+"where id ="+""+id+""
       stmt = ibm_db.exec_immediate(conn, sql)
    except Exception as e:
       print("exception occured!",e)
    finally:
       return redirect(url_for('profile'))
@app.route('/logout')
def logout():
   email = request.cookies.get('email')
   if email != None:
       resp = make_response(render_template('logout.html',loggedin = True))
       resp.set_cookie('name', ", expires=0)
       resp.set_cookie('email', ", expires=0)
       resp.set_cookie('dob', ", expires=0)
   else:
       resp = make_response(render_template('logout.html',loggedin = False))
   return resp
```

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

GITHUB & PROJECT DEMO LINK

Github Link:

https://github.com/IBM-EPBL/IBM-Project-14273-1659547967