# PLASMA DONOR APPLICATION

**TEAM ID: PNT2022TMID16285** 

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#### 1. INTRODUCTION

#### 1.1 PROJECT 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. Regarding the problem faced, an application is to be built which would take the donor details, store them, and inform them upon a request.

#### 1.2 PURPOSE

The scope of the work is plasma donor management scheme IBM cloud web management scheme is deployed for all admin details, user details

#### 2. LITERATURE SURVEY

In the literature survey the current blood banking and organ banking systems rely heavily on manual labor, which takes a significant amount of time and manpower. So, if the user wants to know the details of the BIO-donors, they must connect to the internet/network Collecting information about B.I.O.-donors or receivers takes more time and effort, Users do not have access to accurate information

In the current system, there are two sorts of processes: the blood donation process by donors and the blood request process by hospitals. An administrator oversees controlling the blood inventory in the blood bank in both procedures.

When a new donor comes to give blood, they are prompted to fill out their personal information during the registration process before making a donation. Following donation, the donor is given an E-donor identity card that includes their name, blood type, and a barcode that may be used as a reference for future contributions. The barcode is used to access the donor's record, which includes personal information, medical history, and donation information, including blood results. Because the Android Application is only available for usage within the organization, only B.I.O.-bank administrators have access to the donor's

information. Donors find it difficult to update their personal information in the system as a result. That is, in order for donors to update their personal information

Donors' Experiences with Blood and Organ Donation When a new donor arrives to give blood, they are asked to fill out their personal information. before making a gift, during the registration procedure Following donation, the donor is given an E-donor identity card that includes their name, blood type, and a barcode that may be used as a reference for future contributions. The barcode is used to access the donor's record, which includes personal information, medical history, and donation information, including blood results. Because the Android Application is only available for usage within the organisation, only B.I.O.-bank administrators have access to the donor's information. Donors find it difficult to update their personal information in the system as a result. That is, in order for donors to update their personal information

Donors' Experiences with Blood and Organ Donation When a new donor arrives to give blood, they are asked to fill out their personal information.

Having a manual ID card, on the other hand There are several disadvantages, such as the loss or damage of the ID Card. We can identify donors to ensure their safety. Other credentials, such as username and password, can act as a safeguard if their donors ID. card is lost or damaged while using the Android Application. Donors' Blood and Organ Donation Process when a new donor When people arrive to give blood, they are asked to fill out personal information.

The blood will subsequently be entered into the inventory by the Administrator. future requests the need for blood and organs is growing. since there is no substitute for human blood and organ Every day, blood and organs are required in hospitals. Emergency care of sick patients in preparation for organ transplantation beneficiaries, as well as to save the lives of accident patients with

the advancements in medical techniques and treatments, blood and blood products

Continue to grow Many individuals in India are dying as a result of a dearth of blood and organs; they are unable to obtain the blood and organs on time. The victims' relatives and friends begin looking for a donor to assist them, but there is no guarantee about the Donor's presence or health condition, and there are many people who are willing to help and donate others to save their lives. A variety of current methods have been progressively attempted to activate the blood and organ donation procedure. However, this is still ineffective today. We suggest using cutting-edge technology and techniques to develop a system that bridges the gap.

## 2.1 EXISTING PROBLEM

## Web-based blood information system

A system called donation keeps track of donations, examines different research parameters, and offers online information. Blood is given to patients by contacting the donor over the phone or the internet. Only an android uses it and the blood donation time cannot be specified by the donor.

MPlus / Kerala Blood Bank is an Android application for Keralites that includes a blood donor bank of Kerala, the ability to send a request to MPlus users, and the ability to respond directly to needier The G.P.S. system is not used in this application, which is only for blood donation

## Hospitals' Requests for Organs

MPlus / Kerala Blood Bank is an Android application for Keralites that includes a blood donor bank of Kerala, the ability to submit a request to MPlus users, and the ability to reply immediately to needier. The G.P.S. system is not used in this application, which is just for blood donation. Hospitals' Requests for Blood and Organs Hospital scan request for blood by calling in or emailing the

blood banks the type of blood and the quantity that is in need. The Administrator is responsible for checking the availability of the blood **This Blood Bank system** is suitable for a Single Blood Bank in "A Survey Paper on E-Blood Bank and an Idea to Use on Smartphone." All information, including Blood Group, Total Units of Blood Available, Donor Information, and so on, is maintained in a database. This system assigns a unique ID to contributors in order to maintain track of their records and retrieve information in the future. If a Seeker need blood, the Doctor will simply utilize this application on his/her Smartphone to obtain the necessary information from a Blood Bank about a certain Blood Type. The usage of GPS will improve and accelerate the search technique.

#### 2.2 REFERENCES

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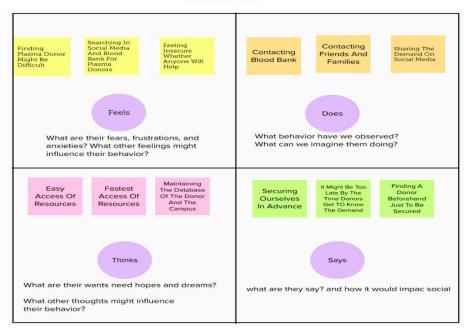
#### 2.3 PROBLEM STATEMENT DEFINITION

Patients with severe liver disorders and numerous clotting deficiencies are given plasma. When a patient needs plasma, it can be challenging to get in contact with a donor within the patient's family and friends in a timely manner. It can also be challenging to get in contact with authorized donor centers. Due to a lack of awareness regarding plasma donation, there is a demand for plasma donors, making it challenging for the affected patients to locate donors. During the COVID-19 pandemic, the need for plasma increased and the donor rates decreased in order to provide an immunity boost for COVID-affected patients It takes a long time for a patient to discover the proper donor, and it also takes time for the spreading about the need for plasma donors to disseminate on social media to a larger audience. As a result, patients cannot locate the right donor within a given time frame. Our application enables patients with severe liver illnesses, blood clotting issues, and covid to guickly and easily locate the correct donor within the allotted period. The condition of the affected patient may suffer and perhaps result in death, if the appropriate plasma donor cannot be found within a certain amount of time

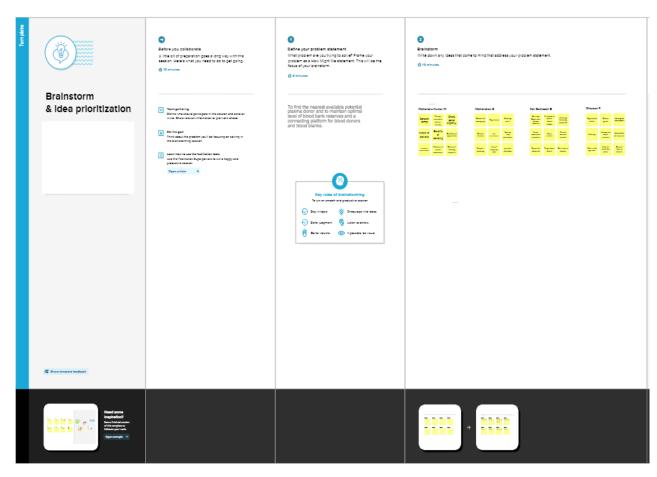
#### 3. IDEATION AND PROPOSED SOLUTION

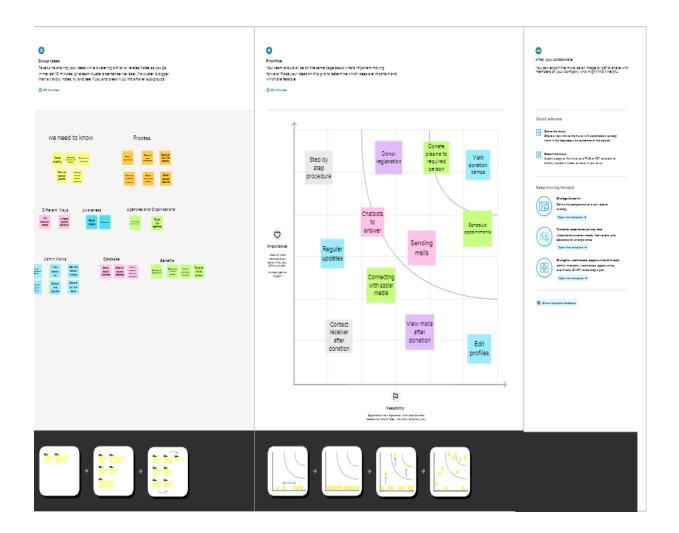
## 3.1 EMPATHY MAP CANVAS

#### ЕМРАТНУ МАР



#### 3.2 IDEATION AND BRAINSTORMING



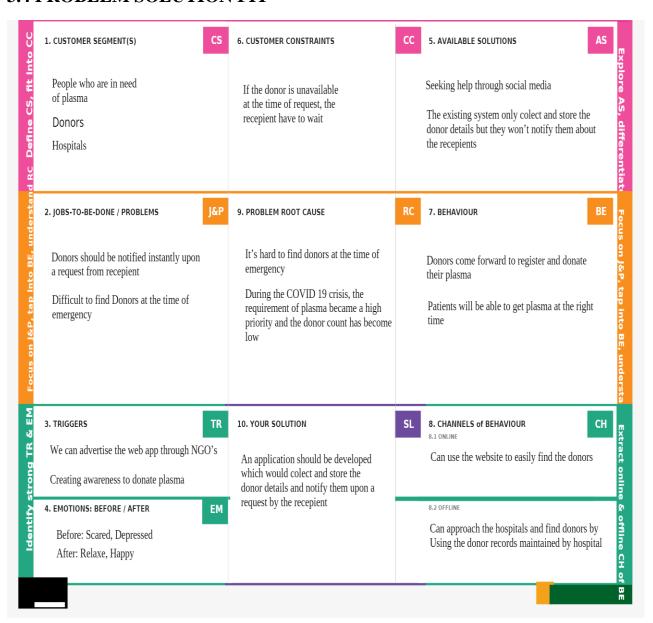


#### 3.3 PROPOSED SOLUTION

To create an application for people who want to donate their plasma for the people who need it mostly in times of emergency. The application will enable people to register themselves in the portal for donating their plasma and the recipients who need it can see their details so that they can get the plasma. When the user request for plasma transmission if there is lack of plasma at the time of request, automatically user will be marked in hold back list. Later when there is availability of plasma, the receiver waiting in hold back list will be alerted via

calling system. The application is user friendly and anyone with basic knowledge can access it. The application seamlessly connects the donor and the person who need it and also hospitals who have availability of the plasma.

#### 3.4 PROBLEM SOLUTION FIT



# 4. REQUIREMENT ANALYSIS

# **4.1 FUNCTIONAL REQUIREMENT**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Sign in / Login	Register with username, password
FR-2	Profile Registration	Register with username, password, email, blood type, age. This data will be stored in a database.
FR-3	User and donor dashboard	Display user requirements, requests for donor health certificate.
FR-4	Chatbot	A chat on the webpage to solve user queries and issues.
FR-5	Logout	Use logout option after completing job registration process.

# 4.2 NON -FUNCTIONAL REQUIREMENTS

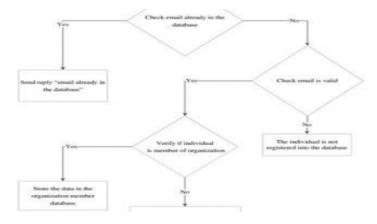
FR No.	Non-Functional Requirement	Description	
NFR-1	Usability	The webpage will be designed in such a way that any non-technical user can easily navigate through it and complete the plasma requirement registering work.	
NFR-2	Security	Using of python flask to cloud connect will provide security to the project. Database will be safely stored in DB2.	
NFR-3	Reliability	To make sure the webpage doesn't go down due to network traffic.	
NFR-4	Performance	Focus on loading the webpage as quickly as possible irrespective of the number of user/integrator traffic.	
NFR-5	Availability	The webpage will be available to all users (network connectivity is necessary) at any given point of time.	
NFR-6	Scalability	Increasing the storage space of database can increase the number of users. Add some features in future to make the webpage unique and attractive.	

## 5. PROJECT DESIGN

# **5.1 DATA FLOW DIAGRAMS**

#### Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



## 5.2 SOLUTION AND TECHNICAL ARCHITECTURE

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with our application with the help of Mobile app, Website.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	The user can login with our application, but he/she should registered earlier in our web app.	Java / Python

3.	Application Logic-2	They can also register with the help of website.	IBM Watson STT service
4.	Cloud Database	The user data will be stored and retrieved with help	IBM DB2, IBM Cloudant etc.
		of this database.	
5.	File Storage	The user documents like photos, records and much	IBM Block Storage or Other Storage
		more will be stored in cloud bucket,etc	Service or Local Filesystem
6.	External API	With the help of API, the user can search the profile	IBM API, etc.
		Based on their need.	
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud.	Local, Cloud Foundry, Kubernetes, etc.
	,		

S.No	Characteristics	Description
1.	Is it scalable?	It follows highly scalable technologies that allows application to handle increase in large user data's and workload.
2.	Is it modifyable?	It is highly modifyable and maintenance requires low cost,compared to other application.
3.	Is the System Robust?	It does not disturb the performance of the computer by not affecting the operating system. It works in minimal hardware systems.

# **5.3 USER STORIES**

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

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail	I can register the app with Gmail login.	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password	I can register & access the dashboard with Gmail Login	High	Sprint-1
	Dashboard	USN-6	As a user, I can search the blood group for which I need plasma.	I can get perfectly- matched plasma through filters.	High	Sprint-2
Customer (Web user)	Dashboard	USN-7	As a user, I can see login page and registration page for which the user logins and searches for the required blood group plasma.	I can login through Gmail and Facebook and register for my required blood group plasma.	Medium	Sprint-2
Customer Care Executive	Dashboard	USN-8	As a customer care executive, I can solve the queries of the users.	I can reply to their queries and solve their related problems.	High	Sprint-3
Administrator	Registration	USN-9	As an Administrator, I can view the database of the registered users.	I can see who are the persons registered here and their mail ids.	Medium	Sprint-4
	Dashboard	USN-10	As an Administrator, I can view how many members need what kind of blood group for plasma.	I can count the number of requirements.	Low	Sprint-4
ChatBot	Dashboard	USN-11	In addition to the customer care executive, I can solve all the queries of the donor as well as the recipient.	I can reply to all the questions that are related to our app.	Medium	Sprint-4

# 6.PROJECT PLANNING & SCHEDULING 6.1 SPRINT PLANNING & ESTIMATION

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

# **6.2 SPRINT DELIVERY SCHEDULE**

Sprint	Total Story Points	Duratio n	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	,
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	5 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

#### 7. CODING & SOLUTIONING

#### **7.1 FEATURE 1**

```
from flask import Flask, render_template, flash, request, session from flask import Flask, render_template, request, jsonify import datetime import re
```

```
import ibm_db
import pandas
import ibm_db_dbi
from sqlalchemy import create_engine
engine = create_engine('sqlite://',
             echo = False
dsn hostname = "125f9f61-9715-46f9-9399-
c8177b21803b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"
dsn_uid = "mxp37111"
dsn_pwd = "p9GRsT2qSqhJPOJM"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "bludb"
dsn_port = "30426"
dsn_protocol = "TCPIP"
dsn_security = "SSL"
```

```
dsn = (
  "DRIVER={0};"
  "DATABASE={1};"
  "HOSTNAME={2};"
  "PORT={3};"
  "PROTOCOL={4};"
  "UID={5};"
  "PWD={6};"
  "SECURITY={7};").format(dsn_driver, dsn_database, dsn_hostname,
dsn_port, dsn_protocol, dsn_uid, dsn_pwd,dsn_security)
try:
  conn = ibm_db.connect(dsn, "", "")
  print ("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host:
", dsn_hostname)
except:
  print ("Unable to connect: ", ibm_db.conn_errormsg() )
app = Flask(__name__)
app.config.from_object(__name__)
app.config['SECRET_KEY'] = '7d441f27d441f27567d441f2b6176a'
```

```
@app.route("/")
def homepage():
  return render_template('index.html')
@app.route("/AdminLogin")
def AdminLogin():
  return render_template('AdminLogin.html')
@app.route("/Register")
def Register():
  return render_template('Register.html')
@app.route("/UserLogin")
def UserLogin():
  return render_template('UserLogin.html')
@app.route("/Donor")
def Donor():
  return render_template('Donor.html')
```

```
@app.route("/RNewUser", methods=['GET', 'POST'])
def RNewUser():
  if request.method == 'POST':
    name1 = request.form['name']
    gender1 = request.form['gender']
    Age = request.form['age']
    email = request.form['email']
    address = request.form['address']
    pnumber = request.form['phone']
    uname = request.form['uname']
    password = request.form['psw']
    conn = ibm_db.connect(dsn, "", "")
    insertQuery = "INSERT INTO regtb VALUES ("" + name1 + "","" +
gender1 + "'," + Age + "'," + email + "'," + pnumber + "'," + password + "'," +
uname + "',"" + address + "')"
    insert_table = ibm_db.exec_immediate (conn, insertQuery)
    print(insert_table)
```

```
@app.route("/RNewDonor", methods=['GET', 'POST'])
def RNewDonor():
  if request.method == 'POST':
    name1 = request.form['name']
    gender1 = request.form['gender']
    Age = request.form['age']
    blood = request.form['bgrp']
    address = request.form['address']
    pnumber = request.form['phone']
    uname = request.form['uname']
    password = request.form['psw']
    conn = ibm_db.connect(dsn, "", "")
    insertQuery = "INSERT INTO dotb VALUES ("" + name1 + "","" + gender1
+ "',"" + Age + "',"" + blood + "',"" + pnumber + "',"" + password + "',"" + uname
+ "','" + address + "')"
    insert_table = ibm_db.exec_immediate (conn, insertQuery)
    print(insert_table)
```

```
@app.route("/Request")
def Request():
  conn = ibm_db.connect(dsn, "", "")
  pd_conn = ibm_db_dbi.Connection(conn)
  selectQuery = "SELECT * from dotb "
  dataframe = pandas.read_sql(selectQuery, pd_conn)
  dataframe.to_sql('Employee_Data',
            con=engine,
            if_exists='append')
  # run a sql query
  print(engine.execute("SELECT * FROM Employee_Data").fetchall())
  return render_template('ViewProduct.html', data=engine.execute("SELECT *
FROM Employee_Data").fetchall())
@app.route("/userlogin", methods=['GET', 'POST'])
def userlogin():
  error = None
  if request.method == 'POST':
    username = request.form['uname']
    password = request.form['password']
```

```
session['uname'] = request.form['uname']
    conn = ibm_db.connect(dsn, "", "")
    pd_conn = ibm_db_dbi.Connection(conn)
    selectQuery = "SELECT * from regtb where uname="" + username + "' and
password="" + password + """
    dataframe = pandas.read_sql(selectQuery, pd_conn)
    if dataframe.empty:
       data1 = 'Username or Password is wrong'
       return render_template('goback.html', data=data1)
    else:
      print("Login")
       selectQuery = "SELECT * from regtb where uname="" + username + ""
and password="" + password + """
       dataframe = pandas.read_sql(selectQuery, pd_conn)
       dataframe.to_sql('Employee_Data',
             con=engine,
             if_exists='append')
       # run a sql query
       print(engine.execute("SELECT * FROM Employee_Data").fetchall())
```

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

```
def main():
  app.run(debug=True, use_reloader=True)
if __name__ == '__main__':
  main()
7.2 FEATURE 2
<a href="http://www.w3.org/1999/xhtml">
<head>
 <title>Plasma Donor Application</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta charset="utf-8">
<meta name="keywords" content="Cat Club Responsive web template,</pre>
Bootstrap Web Templates, Flat Web Templates, Android Compatible web
template,
Smartphone Compatible web template, free webdesigns for Nokia, Samsung,
LG, SonyEricsson, Motorola web design" />
<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
window.scrollTo(0,1); } </script>
<link href='//fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'</pre>
type='static/css'>
```

```
link
href="//fonts.googleapis.com/css?family=Raleway:100,100i,200,200i,300,300i,
400,400i,500,500i,600,600i,700,700i,800,800i,900,900i" rel="stylesheet">
link
href='//fonts.googleapis.com/css?family=Roboto+Condensed:400,700italic,700,
400italic,300italic,300' rel='stylesheet' type='static/static/text/css'>
<script src="static/js/jquery-1.11.1.min.js"></script>
<script src="static/js/bootstrap.js"></script>
<script type="text/javascript">
  jQuery(document).ready(function ($) {
     $(".scroll").click(function (event) {
       event.preventDefault();
       $('html,body').animate({ scrollTop: $(this.hash).offset().top }, 1000);
     });
  });
</script>
  <script src="https://kit.fontawesome.com/a076d05399.js"</pre>
crossorigin="anonymous"></script>
  <style>
     a{
       text-decoration: none;
       color: black;
     }
     nav{
       background: grey;
       height: 80px;
       width: 100%;
     }
   nav ul{
```

```
float: right;
 margin-right: 20px;
nav ul li{
  display: inline-block;
  line-height: 60px;
  margin: 0 5px;
}
nav ul li a{
  color: white;
  font-size: 17px;
  padding: 7px 13px;
  border-radius: 3px;
  text-transform: uppercase;
}
a.active,a:hover{
  background: #1b9bff;
  transition: .5s;
}
.checkbtn{
  font-size: 30px;
  color: white;
  float: right;
  line-height: 80px;
  margin-right: 40px;
  cursor: pointer;
```

```
display: none;
}
#check{
  display: none
}
@media (max-width: 952px){
  nav ul li a{
    font-size: 16px;
  }
@media (max-width: 858px){
  .checkbtn{
    display: block;
  }
  ul{
    position: fixed;
     width: 100%;
    height: 100vh;
    background: #2c3e50;
    top: 80px;
    left: -100%;
    text-align: center;
    transition: all .5s;
  }
  nav\;ul\;li\{
    display: block;
    margin: 50px 0;
```

```
line-height: 30px
       }
       nav ul li a{
          font-size: 20px;
       }
       a:hover,a.active{
          background: none;
          color: #0082e6;
       }
       \#checkchecked \sim ul{
          left: 0;
       }
     }
  </style>
  </head>
<body>
<h1 align= 'center'>
                                             <a href="index.html">Plasma
Donor Application</a>
                                       </h1>
  <nav> <input type="checkbox" id="check" >
     <label for="check" class="checkbtn">
     <i class="fas fa-bars"></i></label>
     \langle ul \rangle
```

```
<a href="/">Logout</a>
              <form id="form1" runat="server" method="post" action="/userlogin">
<div>
 
                   
             
             
             
 <strong>User Login Here..!</strong>
```

```
 
  
  
  
 >
 UserName
<input id="uname" type="text" name="uname" />
 
  
 >
 Password
>
 <input id="password" type="password" name="password" />
```

```
 
  
  
  
  
  
 >
 <input id="Submit1" type="submit" value="submit" />&nbsp;
 <input id="Reset1" type="reset" value="reset" />
```

```

 
  
 
  
  
 
  
 </div>
```

```
</form>
   <!-- copyright -->
      <!-- //copyright -->
      <script src="static/js/responsiveslides.min.js"></script>
      <script src="static/js/SmoothScroll.min.js"></script>
<script type="text/javascript" src="static/js/move-top.js"></script>
<script type="text/javascript" src="static/js/easing.js"></script>
      <!-- here stars scrolling icon -->
      <script type="text/javascript">
         $(document).ready(function () {
           /*
           var defaults = {
           containerID: 'toTop', // fading element id
           containerHoverID: 'toTopHover', // fading element hover id
           scrollSpeed: 1200,
           easingType: 'linear'
           };
           */
           $().UItoTop({ easingType: 'easeOutQuart' });
         });
      </script>
<!-- //here ends scrolling icon -->
</body>
</html>
```

#### 8. TESTING

#### 8.1 TEST CASES

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

Characteristics of a good test case:

• Accurate: Exacts the purpose.

• Economical: No unnecessary steps or words.

• Traceable: Capable of being traced to requirements.

• Repeatable: Can be used to perform the test over and over.

• Reusable: Can be reused if necessary.

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

4	User Login Form	User name	Login	Login success.
		and		
		password		

#### 8.2 USER ACCEPTANCE TESTING

When a new software version was introduced in my system, first the vendor did a preliminary round of testing before submitting it to my Med info-Laboratory Information System team for validation. I then prepared a training session for the Super Users and assigned them validation tasks. When the validation was completed and accepted by me, then the software was submitted to the Hospital Information System HIS department, which conducted its own final acceptance training. Following this, transfusion medicine staff were trained before the new software went live.

#### 9. RESULTS

## **Plasma Donor Application**

HOME ADMIN LOGIN USER LOGIN REGISTER REQUSET DONOR

# Plasma Donor Application

		DONOR	LOGOUT
User Logi			
UserName	admin		
Password			
	submit reset		

Activate Windows
Go to Settings to activate Windows.

Plasma Donor Application						
	HOME	ADMIN LOGIN	USER LOGIN	NEW USER		
Dono	r Registra	tion				
Name						
Gender	O Male	Female				
Age						
Blood Group						
Phone Number						
Address						
User Name	admin					
Passwrod	••••		Activate Wir	ndows o activate Windows.		
	Submit	Recet				

#### 10. ADVANTAGES & DISADVANTAGES

- 1.user friendly
- 2. Identify and formulate the problem
- 3. Identify the requirements, objective, and preferences
- 4. Determine project plan
- 5. Determine the feasibility of plan

#### 11. CONCLUSION

We design the plasma donar project for web-based application using flask technology Plasma is the most essential thing to save a life. By donating blood, we can save many lives. It is also important to remember that any one of us may need blood at some point in our lives, making blood donation is an essential duty of our citizenry. In today's world where people are busy with their lifestyle and those who are eager to donate blood but are not able to, can plan to donate blood by sitting at home just by one click with our application. This application will make revolutionary changes to the medical system as people will be able to donate blood and serve mankind. It can also help people to know about the benefits about blood donation and that their small contribution can help one person to save his/her lives as soon as possible in a quick and well managed manner.

#### 12. FUTURE SCOPE

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

## 13. APPENDIX

## **SOURCE CODE**

```
<a href="http://www.w3.org/1999/xhtml">
<head>
 <title>Plasma Donor Application</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta charset="utf-8">
<meta name="keywords" content="Cat Club Responsive web template,</pre>
Bootstrap Web Templates, Flat Web Templates, Android Compatible web
template,
Smartphone Compatible web template, free webdesigns for Nokia, Samsung,
LG, SonyEricsson, Motorola web design" />
<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
window.scrollTo(0,1); } </script>
k href='//fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='static/css'>
link
href="//fonts.googleapis.com/css?family=Raleway:100,100i,200,200i,300,300i,
400,400i,500,500i,600,600i,700,700i,800,800i,900,900i" rel="stylesheet">
link
href='//fonts.googleapis.com/css?family=Roboto+Condensed:400,700italic,700,
400italic,300italic,300' rel='stylesheet' type='static/static/text/css'>
<script src="static/js/jquery-1.11.1.min.js"></script>
<script src="static/js/bootstrap.js"></script>
<script type="text/javascript">
  jQuery(document).ready(function ($) {
    $(".scroll").click(function (event) {
       event.preventDefault();
       $('html,body').animate({ scrollTop: $(this.hash).offset().top }, 1000);
```

```
});
  });
</script>
  <script src="https://kit.fontawesome.com/a076d05399.js"</pre>
crossorigin="anonymous"></script>
  <style>
     a{
       text-decoration: none;
       color: black;
     }
     nav{
       background: grey;
       height: 80px;
       width: 100%;
     }
   nav ul{
       float: right;
      margin-right: 20px;
     }
     nav ul li{
       display: inline-block;
       line-height: 60px;
       margin: 0 5px;
     }
     nav ul li a{
       color: white;
       font-size: 17px;
```

```
padding: 7px 13px;
  border-radius: 3px;
  text-transform: uppercase;
}
a.active,a:hover{
  background: #1b9bff;
  transition: .5s;
}
.checkbtn{
  font-size: 30px;
  color: white;
  float: right;
  line-height: 80px;
  margin-right: 40px;
  cursor: pointer;
  display: none;
#check{
  display: none
}
@media (max-width: 952px){
  nav ul li a{
     font-size: 16px;
  }
@media (max-width: 858px){
  . check btn \{\\
```

```
display: block;
}
ul\{
  position: fixed;
  width: 100%;
  height: 100vh;
  background: #2c3e50;
  top: 80px;
  left: -100%;
  text-align: center;
  transition: all .5s;
}
nav ul li{
  display: block;
  margin: 50px 0;
  line-height: 30px
}
nav ul li a{
  font-size: 20px;
}
a:hover,a.active{
  background: none;
  color: #0082e6;
}
#checkchecked ~ ul{
```

```
left: 0;
      }
    }
  </style>
  </head>
<body>
<h1 align= 'center'>
                                             <a
href="index.html">Plasma Donor Application</a>
                                       </h1>
  <nav> <input type="checkbox" id="check" >
    <label for="check" class="checkbtn">
    <i class="fas fa-bars"></i></label>
    \langle ul \rangle
                                                        <1i><a
href="/AdminHome">Home</a>
                                                        <1i><a
href="/NewProduct">NewProduct</a>
                                                        <1i><a
href="/ProductInfo">ProductInfo</a>
                                                        <1i><a
href="/ASalesInfo">SalesInfo</a>
                      <a href="/">Logout</a>
                                                  <form id="form1" runat="server" method="post" action="/adminlogin">
```

```
<div>
  <h2 align="center"><span>User Details </span></h2>
  <tr>
    
    
    
    
     
   <div
align="center" class="style6">Name</div>
    <div
align="center" class="style6">Gender </div>
    <div
align="center" class="style6">Age </div>
    <div
align="center" class="style6">Email </div>
    <div
align="center" class="style6">Mobile</div>
    {% for item in data%}
<div align="center"><span
class="style1">{{item[1]}}</span></div>
 <span</td>
class="style1">{{item[2]}}</span></div>
```

```
<div align="center"><span
class="style1">{{item[3]}}</span></div>
 <span</td>
class="style1">{{item[4]}}</span></div>
 <span</td>
class="style1">{{item[5]}}</span></div>
{%endfor%}
 
  
  
  
  
 
     
    
  </div>
 </form>
  <!-- copyright -->
        <div class="copyright">
           <div class="container">
              © All rights reserved | Design by <a
href="#">Plasma Donor Application</a>
           </div>
```

```
</div>
              <!-- //copyright -->
              <script src="static/js/responsiveslides.min.js"></script>
              <script src="static/js/SmoothScroll.min.js"></script>
<script type="text/javascript" src="static/js/move-top.js"></script>
<script type="text/javascript" src="static/js/easing.js"></script>
              <!-- here stars scrolling icon -->
              <script type="text/javascript">
                $(document).ready(function () {
                   var defaults = {
                   containerID: 'toTop', // fading element id
                   containerHoverID: 'toTopHover', // fading element hover id
                   scrollSpeed: 1200,
                   easingType: 'linear'
                   };
                   */
                   $().UItoTop({ easingType: 'easeOutQuart' });
                 });
              </script>
<!-- //here ends scrolling icon -->
</body>
</html>
<a href="http://www.w3.org/1999/xhtml">
<head>
```

```
<title>Plasma Donor Application</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta charset="utf-8">
<meta name="keywords" content="Cat Club Responsive web template,</pre>
Bootstrap Web Templates, Flat Web Templates, Android Compatible web
template,
Smartphone Compatible web template, free webdesigns for Nokia, Samsung,
LG, SonyEricsson, Motorola web design" />
<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
window.scrollTo(0,1); } </script>
<link href='//fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'</pre>
type='static/css'>
link
href="//fonts.googleapis.com/css?family=Raleway:100,100i,200,200i,300,300i,
400,400i,500,500i,600,600i,700,700i,800,800i,900,900i" rel="stylesheet">
link
href='//fonts.googleapis.com/css?family=Roboto+Condensed:400,700italic,700,
400italic,300italic,300' rel='stylesheet' type='static/static/text/css'>
<script src="static/js/jquery-1.11.1.min.js"></script>
<script src="static/js/bootstrap.js"></script>
<script type="text/javascript">
  iQuery(document).ready(function ($) {
     $(".scroll").click(function (event) {
       event.preventDefault();
       $('html,body').animate({ scrollTop: $(this.hash).offset().top }, 1000);
     });
  });
</script>
```

```
<script src="https://kit.fontawesome.com/a076d05399.js"</pre>
crossorigin="anonymous"></script>
  <style>
     a{
       text-decoration: none;
       color: black;
     }
     nav{
       background: grey;
       height: 80px;
       width: 100%;
     }
   nav ul{
       float: right;
      margin-right: 20px;
     }
     nav ul li{
       display: inline-block;
       line-height: 60px;
       margin: 0 5px;
     }
     nav ul li a{
       color: white;
       font-size: 17px;
       padding: 7px 13px;
       border-radius: 3px;
       text-transform: uppercase;
```

```
}
a.active,a:hover{
  background: #1b9bff;
  transition: .5s;
}
.checkbtn{
  font-size: 30px;
  color: white;
  float: right;
  line-height: 80px;
  margin-right: 40px;
  cursor: pointer;
  display: none;
}
#check{
  display: none
@media (max-width: 952px){
  nav ul li a{
    font-size: 16px;
  }
}
@media (max-width: 858px){
  .checkbtn{
    display: block;
  }
  ul\{
```

```
position: fixed;
  width: 100%;
  height: 100vh;
  background: #2c3e50;
  top: 80px;
  left: -100%;
  text-align: center;
  transition: all .5s;
}
nav ul li{
  display: block;
  margin: 50px 0;
  line-height: 30px
}
nav ul li a{
  font-size: 20px;
}
a:hover,a.active{
  background: none;
  color: #0082e6;
}
#checkchecked ~ ul{
  left: 0;
}
```

}

```
</style>
  </head>
<body>
<h1 align= 'center'>
                                        <a
href="index.html">Plasma Donor Application</a>
                                   </h1>
 <nav> <input type="checkbox" id="check" >
   <label for="check" class="checkbtn">
   <i class="fas fa-bars"></i></label>
   \langle ul \rangle
                                                  <1i><a
href="/">Home</a>
                                                  <a
href="/Request">Request</a>
                    <a href="/">Logout</a>
                                             <form id="form1" runat="server" method="post" action="/adminlogin">
  <div>
    <h2 align="center"><span>Your Personal Details </span></h2>
```

```
 
    
    
     
   <div
align="center" class="style6">Name</div>
    <div
align="center" class="style6">Gender </div>
    <div
align="center" class="style6">Age </div>
     <div
align="center" class="style6">Email </div>
    {% for item in data%}
<div align="center"><span
class="style1">{{item[1]}}</span></div>
 <div align="center"><span
class="style1">{{item[2]}}</span></div>
 <span</td>
class="style1">{{item[3]}}</span></div>
 <span</td>
class="style1">{{item[4]}}</span></div>
```

```
{%endfor%}
  
  
  
  
  
  
      
     
   </div>
  </form>
  <!-- copyright -->
          <div class="copyright">
              <div class="container">
                  © All rights reserved | Design by <a
href="#">Plasma Donor Application</a>
              </div>
          </div>
          <!-- //copyright -->
          <script src="static/js/responsiveslides.min.js"></script>
          <script src="static/js/SmoothScroll.min.js"></script>
<script type="text/javascript" src="static/js/move-top.js"></script>
<script type="text/javascript" src="static/js/easing.js"></script>
```

```
<!-- here stars scrolling icon -->
              <script type="text/javascript">
                $(document).ready(function () {
                  var defaults = {
                  containerID: 'toTop', // fading element id
                  containerHoverID: 'toTopHover', // fading element hover id
                  scrollSpeed: 1200,
                  easingType: 'linear'
                   };
                  */
                  $().UItoTop({ easingType: 'easeOutQuart' });
                });
             </script>
<!-- //here ends scrolling icon -->
</body>
</html>
<a href="http://www.w3.org/1999/xhtml">
<head>
 <title>Plasma Donor Application</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta charset="utf-8">
<meta name="keywords" content="Cat Club Responsive web template,</pre>
Bootstrap Web Templates, Flat Web Templates, Android Compatible web
template,
```

```
Smartphone Compatible web template, free webdesigns for Nokia, Samsung,
LG, SonyEricsson, Motorola web design" />
<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
window.scrollTo(0,1); } </script>
k href='//fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='static/css'>
link
href="//fonts.googleapis.com/css?family=Raleway:100,100i,200,200i,300,300i,
400,400i,500,500i,600,600i,700,700i,800,800i,900,900i" rel="stylesheet">
link
href='//fonts.googleapis.com/css?family=Roboto+Condensed:400,700italic,700,
400italic,300italic,300' rel='stylesheet' type='static/static/text/css'>
<script src="static/js/jquery-1.11.1.min.js"></script>
<script src="static/js/bootstrap.js"></script>
<script type="text/javascript">
  jQuery(document).ready(function ($) {
     $(".scroll").click(function (event) {
       event.preventDefault();
       $('html,body').animate({ scrollTop: $(this.hash).offset().top }, 1000);
     });
  });
</script>
  <script src="https://kit.fontawesome.com/a076d05399.js"</pre>
crossorigin="anonymous"></script>
  <style>
     a{
       text-decoration: none;
       color: black;
```

```
}
 nav{
   background: grey;
   height: 80px;
   width: 100%;
 }
nav ul{
   float: right;
  margin-right: 20px;
 }
 nav ul li{
   display: inline-block;
   line-height: 60px;
   margin: 0 5px;
 }
 nav ul li a{
   color: white;
   font-size: 17px;
   padding: 7px 13px;
   border-radius: 3px;
   text-transform: uppercase;
 }
 a.active,a:hover{
   background: #1b9bff;
   transition: .5s;
 }
```

```
.checkbtn{
  font-size: 30px;
  color: white;
  float: right;
  line-height: 80px;
  margin-right: 40px;
  cursor: pointer;
  display: none;
}
#check{
  display: none
}
@media (max-width: 952px){
  nav ul li a{
    font-size: 16px;
  }
@media (max-width: 858px){
  . check btn \{\\
    display: block;
  }
  ul{
    position: fixed;
     width: 100%;
    height: 100vh;
    background: #2c3e50;
    top: 80px;
```

```
left: -100%;
          text-align: center;
          transition: all .5s;
       }
       nav ul li{
          display: block;
          margin: 50px 0;
          line-height: 30px
       }
       nav ul li a{
          font-size: 20px;
        }
       a:hover,a.active{
          background: none;
          color: #0082e6;
       \#checkchecked \sim ul{
          left: 0;
       }
     }
  </style>
  </head>
<body>
<h1 align= 'center'>
```

```
<a
```

```
href="index.html">Plasma Donor Application</a>
                        </h1>
 <nav> <input type="checkbox" id="check">
  <label for="check" class="checkbtn">
  <i class="fas fa-bars"></i></label>
  \langle ul \rangle
                                   <a
href="/">Home</a>
             <a href="/">Logout</a>
                               <form id="form1" runat="server" method="post" action="/userlogin">
 <div>
```

```
<strong>User Login Here..!</strong>

 
  
  
  
 >
 UserName
>
 <input id="uname" type="text" name="uname" />
```

```
>
  Password
 <input id="password" type="password" name="password" />
  
   
   
   
   
   
   
  >
  <input id="Submit1" type="submit" value="submit" />&nbsp;
  <input id="Reset1" type="reset" value="reset" />
```

```
 
            
           </div>
  </form>
   <!-- copyright -->
             <!-- //copyright -->
             <script src="static/js/responsiveslides.min.js"></script>
             <script src="static/js/SmoothScroll.min.js"></script>
<script type="text/javascript" src="static/js/move-top.js"></script>
<script type="text/javascript" src="static/js/easing.js"></script>
             <!-- here stars scrolling icon -->
             <script type="text/javascript">
               $(document).ready(function () {
                 /*
                 var defaults = {
                 containerID: 'toTop', // fading element id
                 containerHoverID: 'toTopHover', // fading element hover id
                 scrollSpeed: 1200,
                 easingType: 'linear'
                  };
                  */
```

```
$().UItoTop({ easingType: 'easeOutQuart' });
                });
             </script>
<!--/here ends scrolling icon -->
</body>
</html>
<a href="http://www.w3.org/1999/xhtml">
<head>
 <title>Plasma Donor Application</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta charset="utf-8">
<meta name="keywords" content="Cat Club Responsive web template,</pre>
Bootstrap Web Templates, Flat Web Templates, Android Compatible web
template,
Smartphone Compatible web template, free webdesigns for Nokia, Samsung,
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<script type="application/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
window.scrollTo(0,1); } </script>
k href='//fonts.googleapis.com/css?family=Pacifico' rel='stylesheet'
type='static/css'>
link
href="//fonts.googleapis.com/css?family=Raleway:100,100i,200,200i,300,300i,
400,400i,500,500i,600,600i,700,700i,800,800i,900,900i" rel="stylesheet">
link
href='//fonts.googleapis.com/css?family=Roboto+Condensed:400,700italic,700,
400italic,300italic,300' rel='stylesheet' type='static/static/text/css'>
<script src="static/js/jquery-1.11.1.min.js"></script>
```

```
<script src="static/js/bootstrap.js"></script>
<script type="text/javascript">
  jQuery(document).ready(function ($) {
     $(".scroll").click(function (event) {
       event.preventDefault();
       $('html,body').animate({ scrollTop: $(this.hash).offset().top }, 1000);
     });
  });
</script>
  <script src="https://kit.fontawesome.com/a076d05399.js"</pre>
crossorigin="anonymous"></script>
  <style>
     a{
       text-decoration: none;
       color: black;
     }
     nav{
       background: grey;
       height: 80px;
       width: 100%;
     }
   nav ul{
       float: right;
      margin-right: 20px;
     }
     nav ul li{
       display: inline-block;
       line-height: 60px;
```

```
margin: 0 5px;
}
nav ul li a{
  color: white;
  font-size: 17px;
  padding: 7px 13px;
  border-radius: 3px;
  text-transform: uppercase;
}
a.active,a:hover{
  background: #1b9bff;
  transition: .5s;
}
.checkbtn{
  font-size: 30px;
  color: white;
  float: right;
  line-height: 80px;
  margin-right: 40px;
  cursor: pointer;
  display: none;
}
#check{
  display: none
@media (max-width: 952px){
```

```
nav ul li a{
    font-size: 16px;
  }
}
@media (max-width: 858px){
  . check btn \{\\
    display: block;
  }
  ul\{
    position: fixed;
    width: 100%;
    height: 100vh;
    background: #2c3e50;
    top: 80px;
    left: -100%;
    text-align: center;
    transition: all .5s;
  }
  nav ul li{
    display: block;
    margin: 50px 0;
    line-height: 30px
  }
  nav ul li a{
    font-size: 20px;
```

```
}
       a:hover,a.active{
         background: none;
         color: #0082e6;
       }
      #checkchecked ~ ul{
         left: 0;
       }
    }
  </style>
  </head>
<body>
<h1 align= 'center'>
                                                <a
href="index.html">Plasma Donor Application</a>
                                          </h1>
  <nav> <input type="checkbox" id="check" >
    <label for="check" class="checkbtn">
    <i class="fas fa-bars"></i></label>
    \langle ul \rangle
                                                            <1i><a
href="/">Home</a>
                                                            <1i><a
href="/AdminLogin">AdminLogin</a>
                                                            <1i><a
href="/UserLogin">User Login</a>
```

```
<form id="form1" name="form1" method="post" action="/RNewUser">
         <div align="center" ><h2> <strong>New User
Registration</strong> </h2> </div>
     Name
  <input name="name" type="text" id="name" required
pattern="[A-Za-z]{3,32}"/>
  Gender
  <input name="gender" type="radio" value="male" required />
   Male
   <input name="gender" type="radio" value="female" />
   Female
```

```
Age
  <input name="age" type="text" id="age" required size="3" />
  Email Id
  <input name="email" type="email" id="email" required />
 Phone Number 
  <input name="phone" type="text" id="phone" required size="10"
pattern="[0-9]{10}"/>
 Address
  <textarea name="address" id="address" required></textarea>
  User Name
  <input name="uname" type="text" id="uname" required/>
```

```
Passwrod
   <input name="psw" type="password" id="psw" required/>
   
   <input name="btn" type="submit" id="btn" value="Submit" />
   <input type="reset" name="Submit2" value="Reset" />
  </form>
        <!-- copyright -->
            <div class="copyright">
                <div class="container">
                      © All rights reserved | Design by <a
href="#">Plasma Donor Application</a>
                </div>
            </div>
            <!-- //copyright -->
            <script src="static/js/responsiveslides.min.js"></script>
            <script src="static/js/SmoothScroll.min.js"></script>
<script type="text/javascript" src="static/js/move-top.js"></script>
<script type="text/javascript" src="static/js/easing.js"></script>
            <!-- here stars scrolling icon -->
            <script type="text/javascript">
              $(document).ready(function () {
                var defaults = {
```

```
containerID: 'toTop', // fading element id
containerHoverID: 'toTopHover', // fading element hover id
scrollSpeed: 1200,
easingType: 'linear'
};
*/

$().UItoTop({ easingType: 'easeOutQuart' });

});
</script>
<!-- //here ends scrolling icon -->
</body>
</html>
```

## **GITHUB LINK**

https://github.com/IBM-EPBL/IBM-Project-17453-1659670859

## PROJECT DEMO LINK

https://drive.google.com/file/d/1c3e5xQRDNq9GkrMNo8ukRWs\_wyuXiIiz/view?usp=share\_link