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|  |  |
| --- | --- |
| Date | 17 September 2022 |
| Team ID | PNT2022TMID07853 |
| Project Name | Plasma Donor Application |
| Team Members | Udhayakumar M(leader)  Mehesh P  Sneha T  Padma chandini T |

# **INTRODUCTION**

**1.1 Project overview:**

Plasma is used by pharmaceutical companies to make plasma-derived medicinal products (PDMPs). PDMPs are used to treat conditions such as immune deficiencies and bleeding disorders. Several PDMPS are included in the WHO Model Lists of Essential Medicines. According to the WHO, self-sufficiency driven by voluntary (non-remunerated) plasma donations is an important national goal to ensure an adequate supply is secured to meet the needs of the population. Australia, New Zealand, the UK, the Netherlands, and France only allow public or not-for-profit sectors to collect plasma for fractionation. Each of the 5 countries have toll or contract agreements with 1 private commercial plasma fractionator to manufacture PDMPs from the plasma collected within their respective countries. None of these countries pay plasma donors. Donors are only permitted to donate every 2 weeks (24 to 26 times per year) in these 5 countries. Austria, the Czech Republic, Germany, and the US allow both public and non-for-profit sectors, as well as commercial private plasma collection centres, to operate in the country. Private, not-for-profit, or public plasma collection centres in these 4 countries offer monetary compensation and other in-kind incentives to plasma donors. While the Czech Republic limits plasma donation to every 2 weeks, a much higher frequency of donation is allowed in other countries; up to 50 times per year in Austria, 60 times per year in Germany, and more than 100 times per year in the US. Austria, the Czech Republic, Germany, and the US (which allow commercial private plasma collectors to operate and pay donors) are 100% self-sufficient in immune globulins. These 4 countries collect the most plasma, which is from paid donors. In 2017, Austria, the Czech Republic, Germany, and the US collected 75 litres per 1,000 people, 45 litres per 1,000 people, 36 litres per 1,000 people, and 113 litres per 1,000 people of plasma for fractionation, respectively. Countries that do not pay donors including Australia, New Zealand, the UK, the Netherlands, and France are dependent to some extent on US and European Union donors who are paid for the supply of plasma or imported PDMPs.

**1.2 Purpose**:

To satisfy the Applicant by Donating the plasma who are under the critical situation .This may save many people lives who utilize this application in an efficient manner. The limited literature search conducted for the Environmental Scan did not identify publications on events of disease transmission through PDMPs manufactured from either paid or non-renumerated donors’ plasma, the impact of plasma collection centres (including those that do or do not pay donors) on the collection of whole blood or other blood components, or the long-term costs associated with plasma self-sufficiency on the health care system. Registered hospitals can check the availability of required plasma and can send request to the nearby banks and also order for donors whose blood type match up with the required blood type. The location of nearest plasma donation centres, the banks and hospitals which request for the availability of plasma are traced by GPS tracking.

## **2.LITERATURE SURVEY**

**Ideation Phase**

**Literature Survey**

|  |  |
| --- | --- |
| Date | 17 September 2022 |
| Team ID | PNT2022TMID07853 |
| Project Name | Plasma Donor Application |

# Introduction

Applying optimization methods to healthcare management and logistics is a developing research area with numerous studies. Specifically, facility location, staff rostering, patient allocation, and medical supply transportation are the main themes analysed.

Optimization approaches have been developed for several healthcare related problems, ranging from the resource management in hospitals to the delivery of care services in a territory. However, optimization approaches can also improve other services in the health system that have been only marginally addressed, yet. One of them is the Blood Donation (BD) system, aiming at providing an adequate supply of blood to Transfusion Centres (TCs) and hospitals. Blood is necessary for several treatments and surgeries, and still a limited resource.

The need for blood is about ten million units per year in the USA, 2.1 in Italy and 2 in Turkey; moreover, people still die in some countries because of inadequate supply of blood products (World Health Organization 2014). Hence, BD plays a fundamental role in healthcare systems, aiming at guaranteeing an adequate blood availability to meet the demand and save lives. In Western countries, blood is usually collected from donors, i.e., unpaid individuals who give blood voluntarily. Blood is classified into groups (A and subgroups, B, 0 or AB) and based on the Rhesus factor (Rh+ or Rh-), and each donor should be correctly matched with the patient who receives his/her blood. Moreover, as it may transmit diseases, blood must be screened before utilization.

# 

# References

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.NO** | **TITLE** | **Authors** | **Abstract** | **Drawbacks** |
| 1 | Developing a plasma donor application using Function-as- a-service in AWS | Aishwarya R Gowri *Jain University, Department of MCA, computer science* | A plasma is a liquid portion of the blood, over 55% of human blood is plasma.  Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish antibodies that fights the infection.  In this project plasma donor application is being developed by using AWS services. The services used are AWS Lambda, API gateway, DynamoDB, AWS Elastic Compute Cloud with the help of these AWS services, it eliminates the need of configuring the servers and reduces the | * Internet: It would require an internet connection for the working of the website. * handle multiple requests at the same time |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | infrastructural costs associated with it and helps to achieve serverless computing. For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates where high but the donor count was very low and, in such situations, it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors. |  |
| 2 | Optimization of Blood Donor Information and Management System | * K. Yamini, *M. E(CSC), SVCET, Thirupachur, India* * R. Devi, *Asst. Professor, SVCET, Thirupachur, India* | Emergency situations, such as accidents, create an immediate, critical need for specific blood type. In addition to emergency requirements, advances in medicine have increased the need for blood in many ongoing treatments and elective surgeries. Despite increasing requirements for blood, only about 5% of the Indian population donates blood. In this paper we propose a new and efficient way to overcome such scenarios with our project. We have to create a new idea, just touch the button. Donor will be prompted to enter an individual’s details, like name, phone number, and blood type. After that your contact details will appear in alphabetical order on the screen; the urgent time of a blood requirement, you can quickly check for contacts matching a particular or related blood  group and reach out to them via Phone Call/SMS through | * The accuracy of the location displayed on the map was beyond the scope of this Project. * Only Android was used as a mobile operating system to test the application |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | the Blood donor App. |  |
| 3 | Blood Bank Management Information System in India | * Vikas Kulshreshtha *Research Scholar*, * Dr.Sharad Maheshwari, *Associate Professor* | A blood bank is a bank of blood or blood components, gathered as a result of blood donation, stored and preserved for later use in blood transfusion. To provide web based communication there are numbers of online web based blood bank management system exists for communicating between department of blood centers and hospitals, to satisfy blood necessity, to buy, sale and stock the blood, to give information about this blood. Manual systems as compared to Computer Based Information Systems are time consuming, laborious, and costly. This paper introduces the review of the main features, merits and demerits provided by the existing Web-Based Information System for Blood Banks. This study shows the comparison of various existing system and provide some more idea for improve the existing system. First I will give some basic introduction about blood banks then I will try to provide comparative study of some existing web based blood bank system. After that I will introduce some new idea for improving the existing techniques used in web based blood bank  system and at end I will conclude this paper | * Do not provide the better inventory solution to the end use * It requires an active internet connection. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4 | A Study on Blood Bank Management | * A. Clemen Teena, K * Sankar * S. Kannan | ‘Blood Bank Information System’ will be an information management system which helps to manage the records of donors and patients at a blood bank. The system will allow the authorized blood bank officer to login using a secret password and easily manage the records of the blood donors and the patients in need of blood | * No search filter available * UI improvem ent in Login page |

**2.1 Existing problem**

**ABOUT THE SYSTEM**

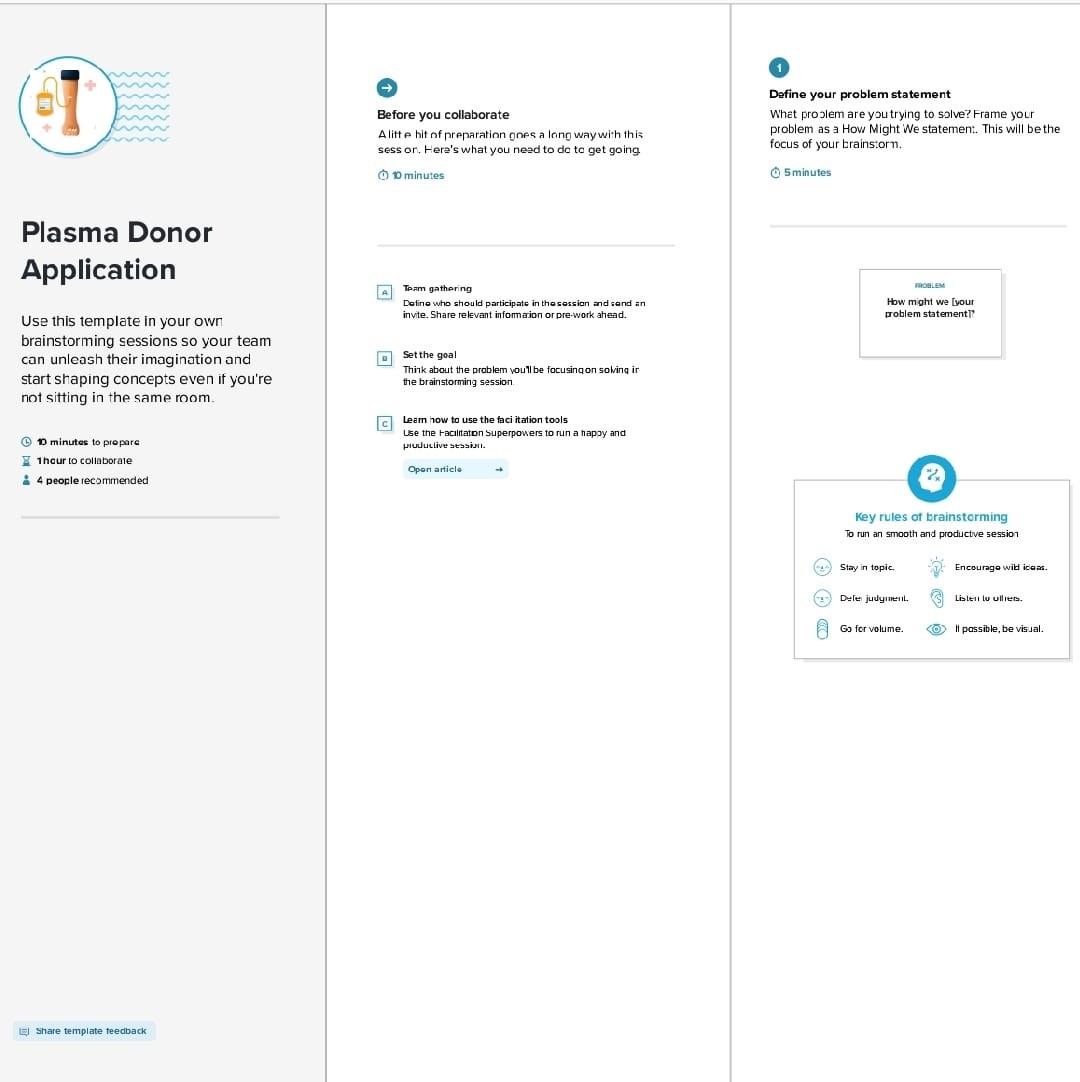
The system which was manual that is based on paper card to collect Plasma donor data, keep record of Plasma donors and disseminate results to Plasma donors, had weakness that needed IT based solutions. The system was characterized by delays and sometime failure to access historical records; errors were witnessed in entry and manual analysis of results, secrecy and confidentiality of records lacked because unauthorized persons could easily access the records.In regard to the existing plasma management system, we have taken into account a system called Raster’s web-based Plasma Management System. Plasma banks play an important role in the process of collecting blood and managing blood stocks, approving Plasma requests, updating donations and updating available Plasma. Raster’s web-based BBMS will address the issues and problems encountered in collecting information about donors, Plasma camps, inventories of blood bags, and Plasma transfusion services, etc., including donor screening, inventory management,

Plasma ordering, Plasma usage review and compatibility testing. Plasma Management system will greatly increase the safety and quality of the Plasma supply as well as provide logistics data for the optimal supply chain management.

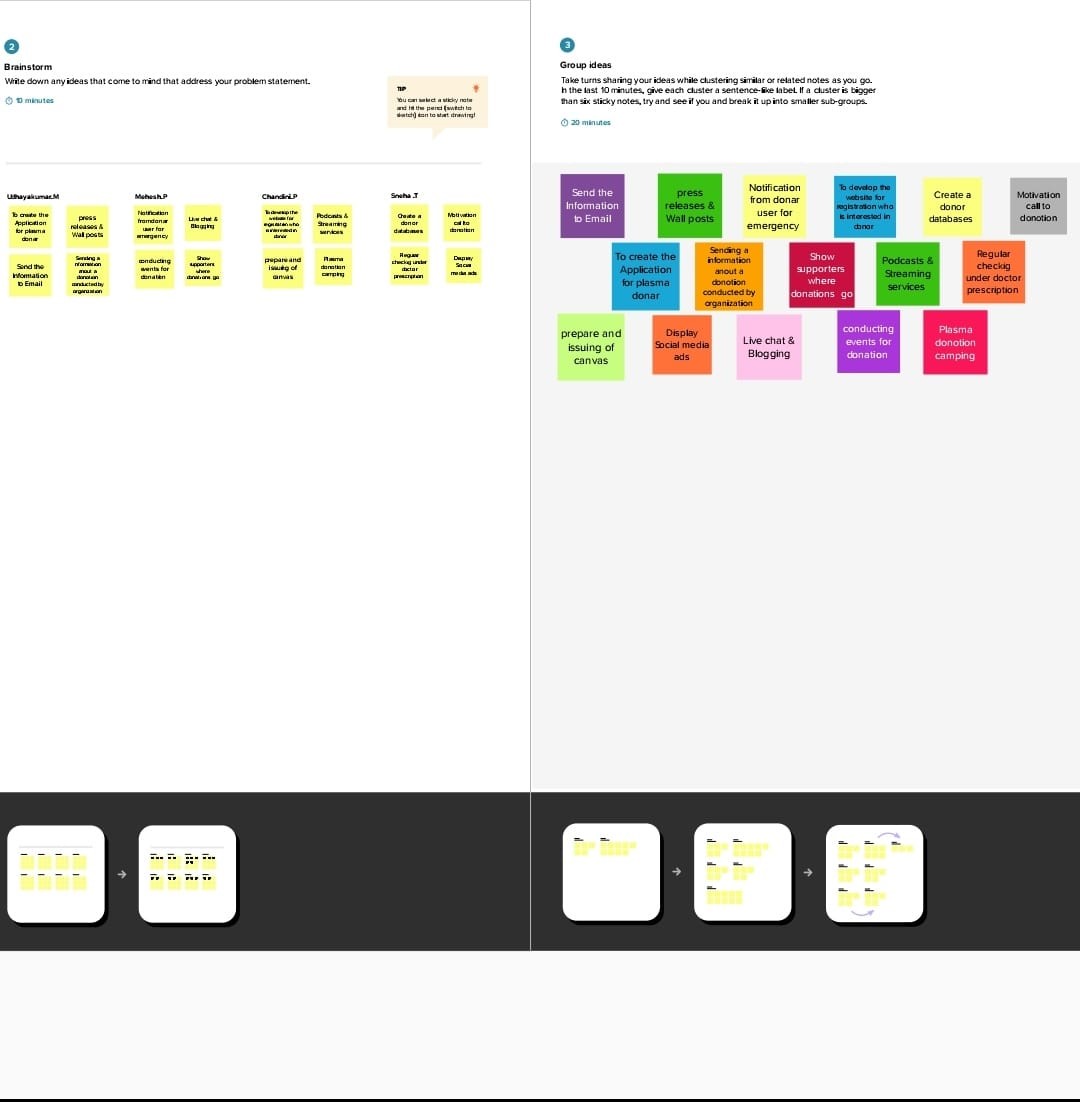
**PROBLEM STATEMENT**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **I am** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| **Statement (PS)** | **(Customer)** |  |  |  |  |
| PS-1 | Donor | To Search for | Not able to | Lack of | Worried |
|  |  | Donation | search | Technology |  |
|  |  | Centre nearby my location |  |  |  |
| PS-2 | Blood seeker | To search | Unavailable | Registration  is not | Frustrated |
|  |  | for plasma | Resources | done |  |
|  |  |  |  |  |  |
| PS-3 | Health care | To check for | No clear | Unpopularity | Tensed |
|  | professionals | Volunteers | information | Of Blood |  |
|  |  | For Plasma |  | Centre |  |
|  |  | Donation |  |  |  |
| PS-4 | Third person | create | Not | Limited | Dissatisfied |
|  | (Society) | awareness | Effective | Support |  |
|  |  | of Donation |  | In Public |  |
|  |  |  |  |  |  |

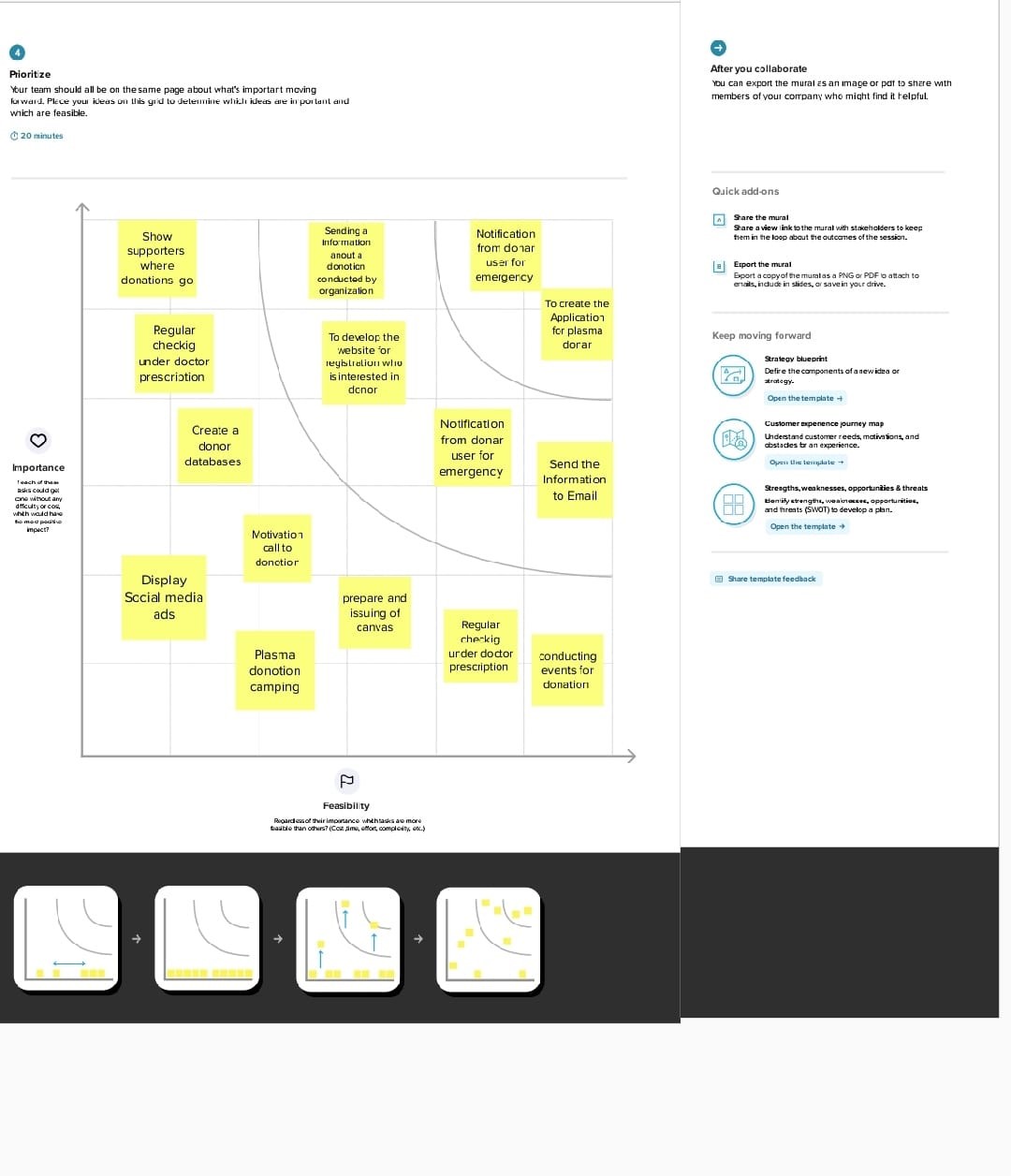
## **3. IDEATION AND PROPOSED SOLUTION**

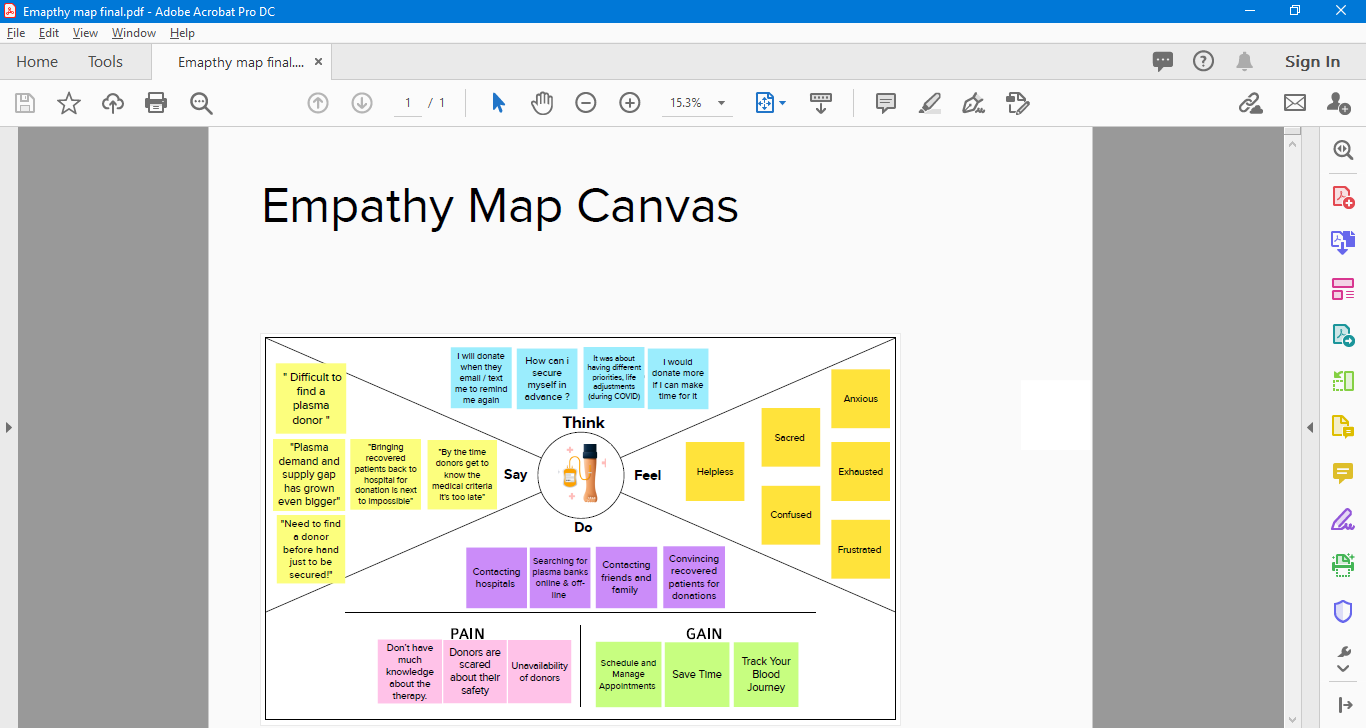


**Step-2: Idea Listing and Grouping**

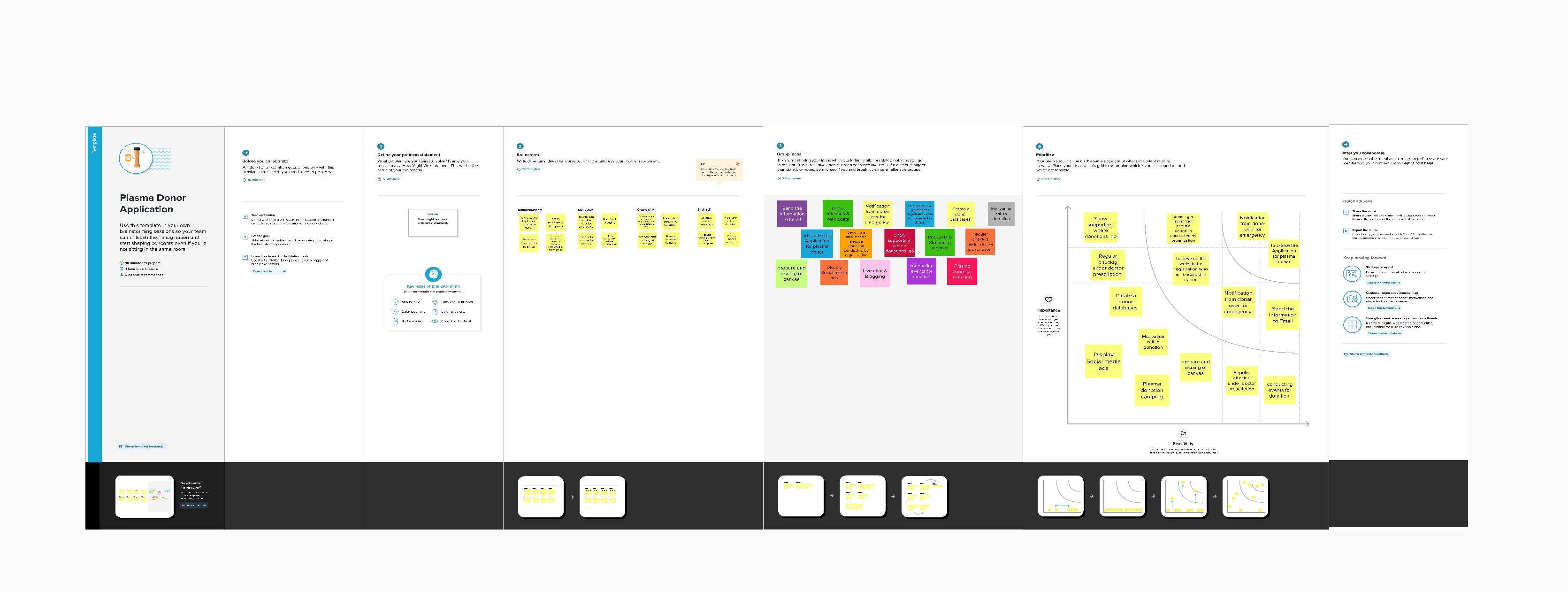


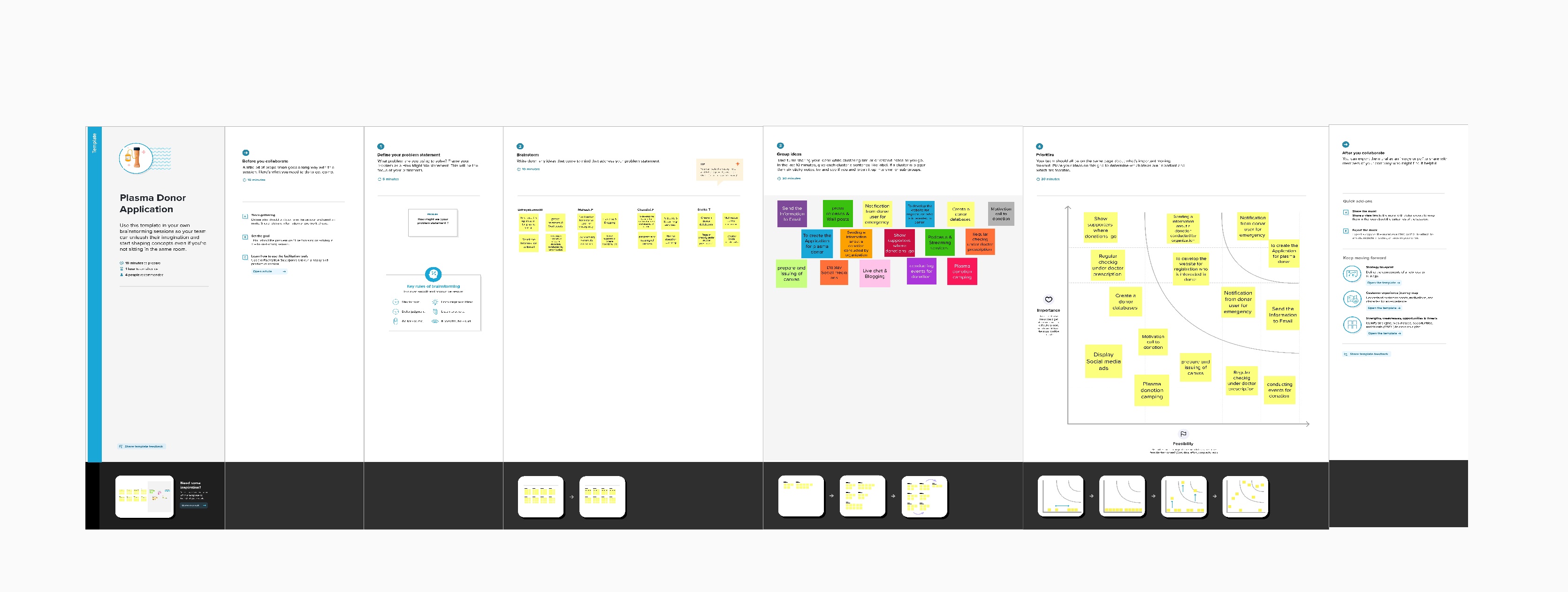
**Step-3: Idea Prioritization**





**3.2 IDEATION AND BRAINSTORMING**

****

****

**3.3 Proposed Solution :**

Project team shall fill the following information in proposed solution template.

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | To help the plasma donor and seeker by developing a cloud-based application. |
|  | Idea / Solution description | In day-to-day life requirement for plasma became high, especially during the COVID-19 crisis. But the donor count was low. Saving the donor information and helping the needy by notifying the current donors would be a helping hand. It is very difficult to find the respective blood group donors when anyone is in need. Regarding the problem faced, an application is to be built which would take the donor details store them and inform them upon request. And also for plasma donation centre, it is easy to find donors. |
|  | Novelty / Uniqueness | We help the donor to access the location of a blood centre which is nearby him/her. We Notify them by sending a confirmation emails after they get registered for the plasma donation and also we notify them once the appointment is fixed in the centre. Furthermore, the GPS map option is available to direct the donor to the centre. |
|  | Social Impact / Customer Satisfaction | By using this application, the user will experience a user-friendly and responsive interface and they get satisfaction by saving thousands of people's life. |
|  | Business Model (Revenue Model) | Donating Plasma with the help of an application makes our idea realistic. The user's information is encrypted. We maintain this app by automation for saving admin and user time. Users get profited as we take care of them even after the plasma donation by giving them hospitality details. Also, we use the Chabot to answer FAQs, as it helps the user to get immediate answers to their doubts. |
|  | Scalability of the Solution | Whatever the requirements, the application provides a clear solution for the requirements. It can handle more users who use the application at the same time. |

# **4. REQUIREMENTANALYSIS**

**4.1 Functional Requirements:**

**Following are the functional requirements of the proposed solution**

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Functional**  **Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User Login | Enter user name and password |
| FR-4 | Adding User essential data | Link Bank account  Enter Hard cash e penses Set budget limit |
| FR-5 | Alerts | EmailAlert |

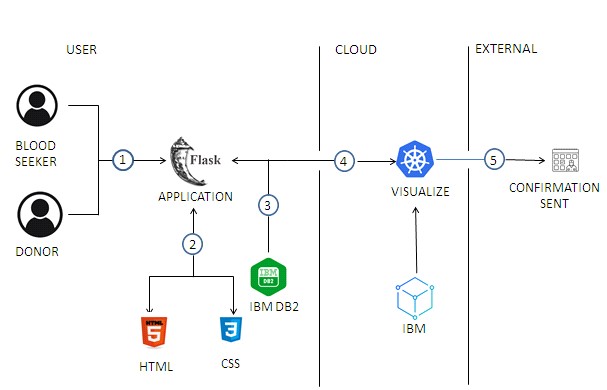
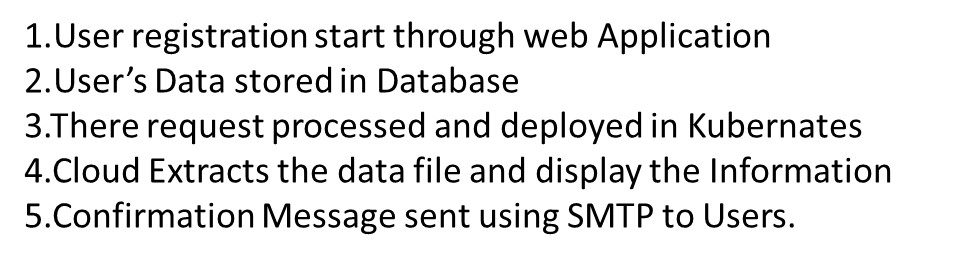
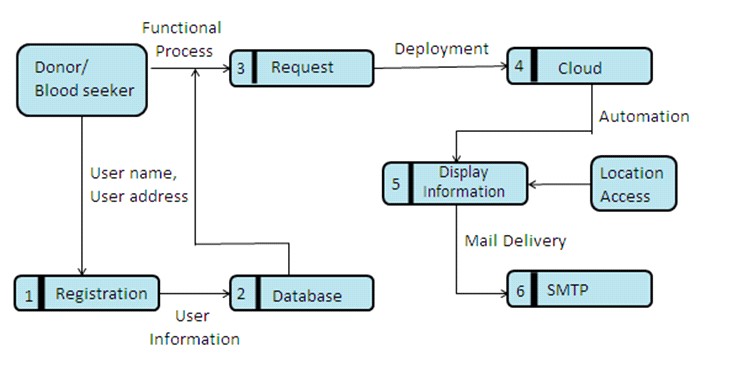
**4.2 Non-functional Requirements:**

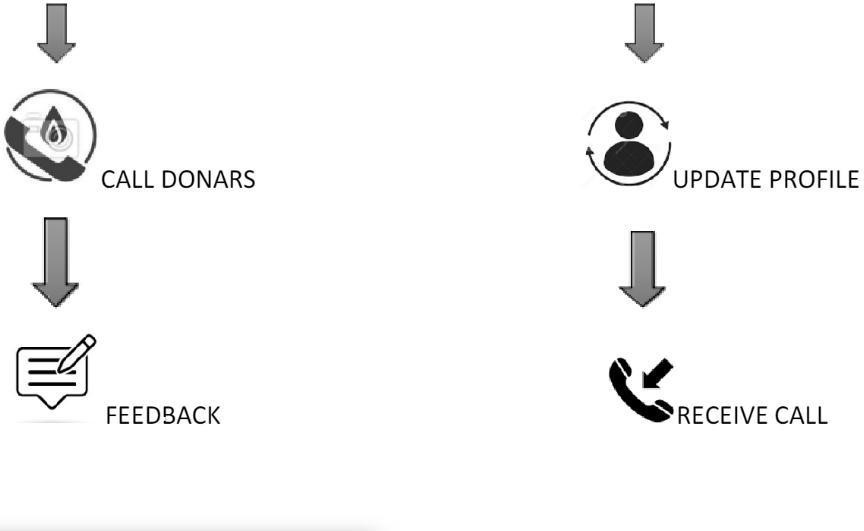
**Following are the non-functional requirements of the proposed solution.**

|  |  |  |
| --- | --- | --- |
| **FR**  **No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | Usability | Fast and Precise Budget Planning |
| NFR-2 | Security | Resilient and data are immutable |
| NFR-3 | Reliability | Failure-free operations and proper alerts are generated. |
| NFR-4 | Performance | Instant e-mail alerts and generation of accurate expense-time graph. |
| NFR-5 | Availability | User can access all the functionality of the application for 3 months after that they need to pay for premium account with all facility. |
| NFR-6 | Scalability | This application can be further upscaled by having a separate section for  Auditing/Accounting. |

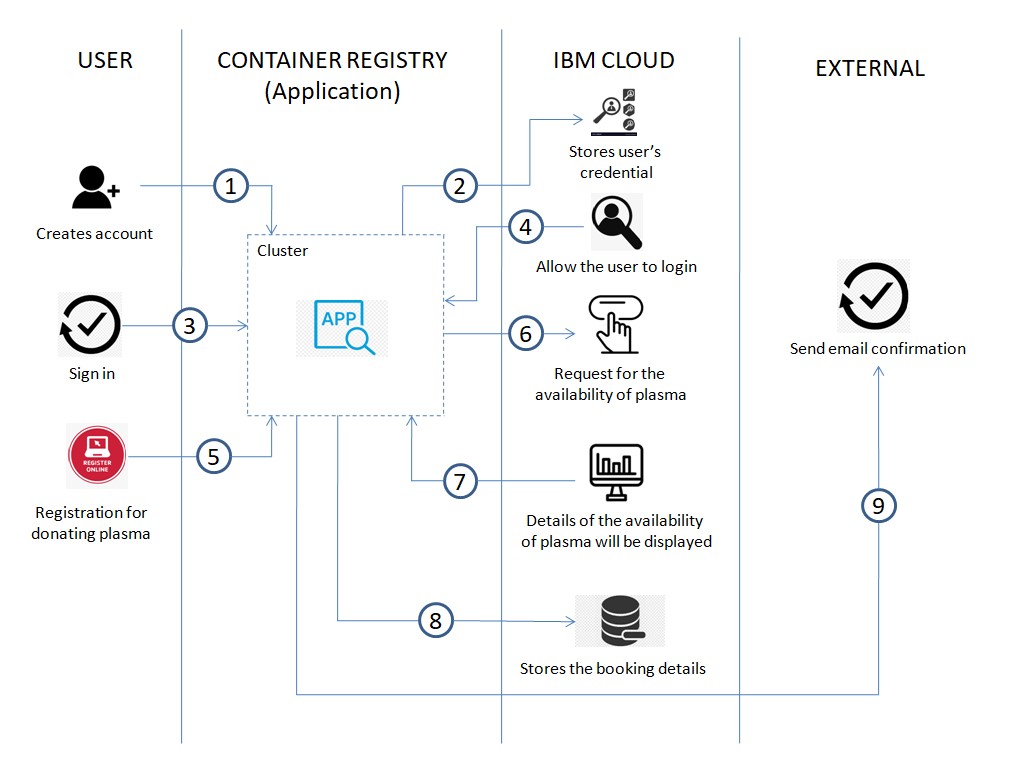
# **5.Project Design**

**5.1 Data Flow Diagrams:**





**5.2 Technical Architecture:**



**Table-1: Components & Technologies:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Description** | **Technology** |
| 1. | User Interface | User creates account and view details. | HTML, CSS, JavaScript, Python Flask. |
| 2. | Application maintenance | To keeps track of your container applications that are deployed into the cloud. Also restarts orphaned containers, shuts down containers when they’re not being used, and automatically provisions resources like memory, storage, and CPU when necessary. | Kubernetes |
| 3. | Chatbot | Chatbot to answer user’s queries. | IBM Watson Assistant |
| 4. | Confirmation Email | Sending a confirmation email to users once they have registered for donation. | SendGrid |
| 5. | Data maintenance | For storing, maintaining, modifying and retrieving the user’s details. | MySQL |
| 6. | Cloud Database | For storing the booking details, and user’s details. | IBM DB2 |

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Characteristics** | **Description** | **Technology** |
| 1. | Open-Source Frameworks | Python flask micro framework is used. | Python Flask |
| 2. | Security Implementations | Mandatory Access  Control (MAC) and kubernetes is used. | SHA-256, Encryptions, IAM Controls, OWASP, Kubernetes. |

**Table-2: Application Characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
| 3. | Scalable Architecture | 3 – Tier architecture is used. | Web Server – HTML, CSS, JavaScript.  Application Server – Python Flask.  Database Server – IBM  DB2. |
| 4. | Availability | Using Load Balancer to distribute network traffic across servers. | IBM Load Balancer |
| 5. | Performance | Request and respond facility within a second.  User-friendly API. | IBM Content Delivery Network. |

**5.3 Uses Stories**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **User Type** | **Functional**  **Requirement**  **(Epic)** | **User**  **Story**  **Number** | **User Story / Task** | **Acceptance criteria** | **Priority** | **Release** |
| Custom | Registration | USN-1 | As a user, | I can access | High | Spint-1 |
| er |  |  | I can | my account / |  |  |
| (Mobile |  |  | register | dashboard |  |  |
| user) |  |  | For the  Application by entering  my email, password, and confirming my password. |  |  |  |
|  |  | 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  G mail | I can  receive  confirmati  on email  and click confirm | Medi um | Sprint-1 |
|  | Login | USN-5 | As a user, I can log into the application  By entering email & password | I can enter into my  account | High | Sprint-1 |
|  | Dashboard | USN-6 | As a user,  Display all details about plasma  application | I can donate or get details about the plasma | High | Sprint-2 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Customer (Web  user) | Application | USN-7 | As a user, I  can register,  login and see details about plasma | I can access the donor details and  Availability of plasma | High | Sprint-3 |
| Customer  Care  Executive | Update  Plasma  storage | USN-8 | Can keep  track of the availability of Plasma | I can provide applications for customer needs | High | Sprint-4 |
| Administrator | Verify donor  details | USN-9 | To add the donor plasma details in application | Can  control all  details in  this application | Medi um | Sprint-3 |
| Customer | Verify | USN-1 | To design | Can satisfy | Medi | Sprint-4 |
| Care | Customer  Feedback | 0 | the | the | um |  |
| Executive |  |  | application | customer |  |  |
|  |  |  | that  meets user’s  desires | expectations |  |  |
| Customer  Care  Executive | Control all Plasma  details | USN-1 1 | Make sure to check the availability of plasma in the application | Can alert  notification through email  and SMS | High | Sprint-2 |

**6. PROJECT PLANNING AND SCHEDULING**

**6.1 SPRINT PLANNING AND ESTIMATION**



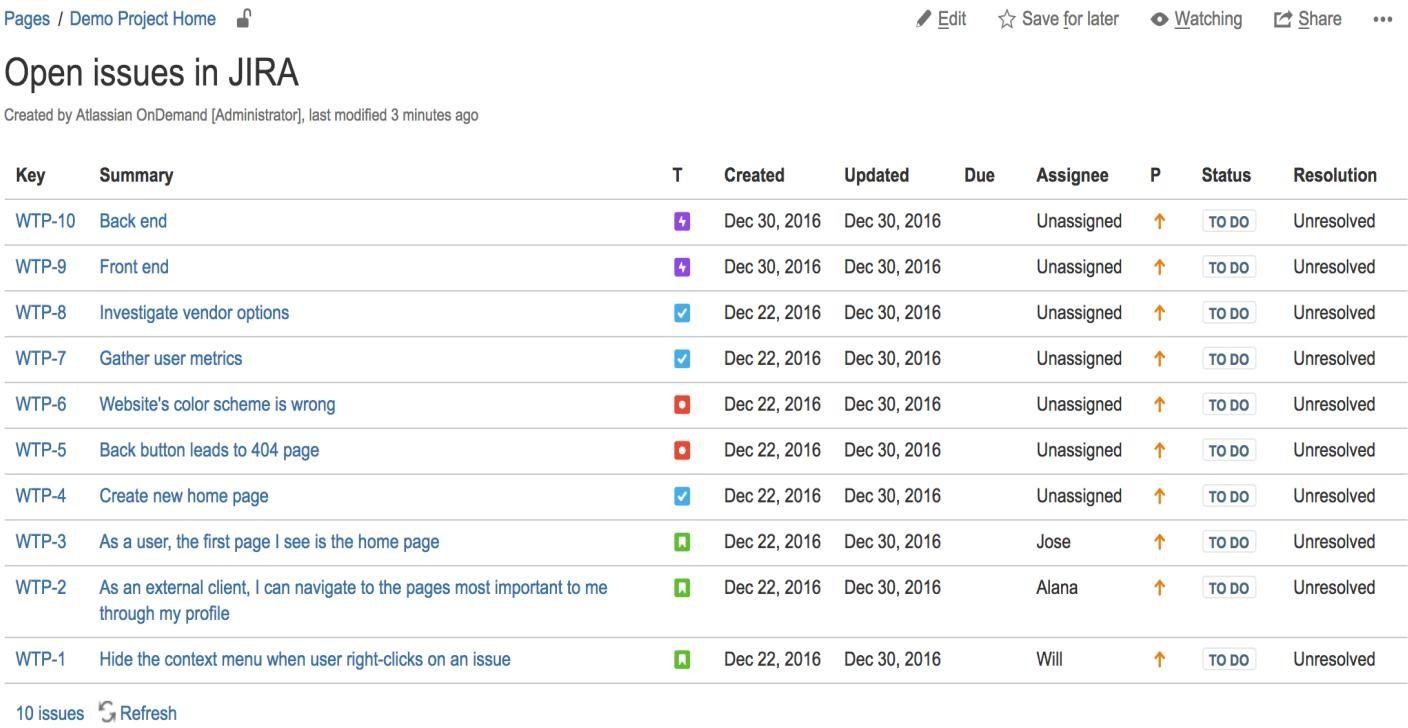
**6.2 REPORTS FROM JIRA:**

When JIRA sends either standard notifications or user invitations to a mail server, they are listed as when the applicant in need of plasma.

The mail server is receiving a constant stream of concurrent multiple email notifications from the same sender which, in turn, triggers security measures on the server which handle these messages, And this application is widely used in Health care industry.

**Resolution**

* + Check the base url of JIRA to see if it is set as a direct ip address with port number.
  + Example: **http://10.10.10.10:8080**
  + Some email servers (such as Microsoft Outlook) will consider messages from non-DNS urls as phishing attempts. You can correct this behaviour by setting JIRA's base url to a url address such as [**http://my-jira.com.**](http://my-jira.com/)
  + Sometimes when certain mail servers receive multiple emails from the same sender security measures are triggered that will then list those emails as phishing messages. For this, it is best to check with the local mail server administrator for further assistance and confirmation.



**7. CODING AND SOLUTIONING**

**7.1 FEATURE 1**

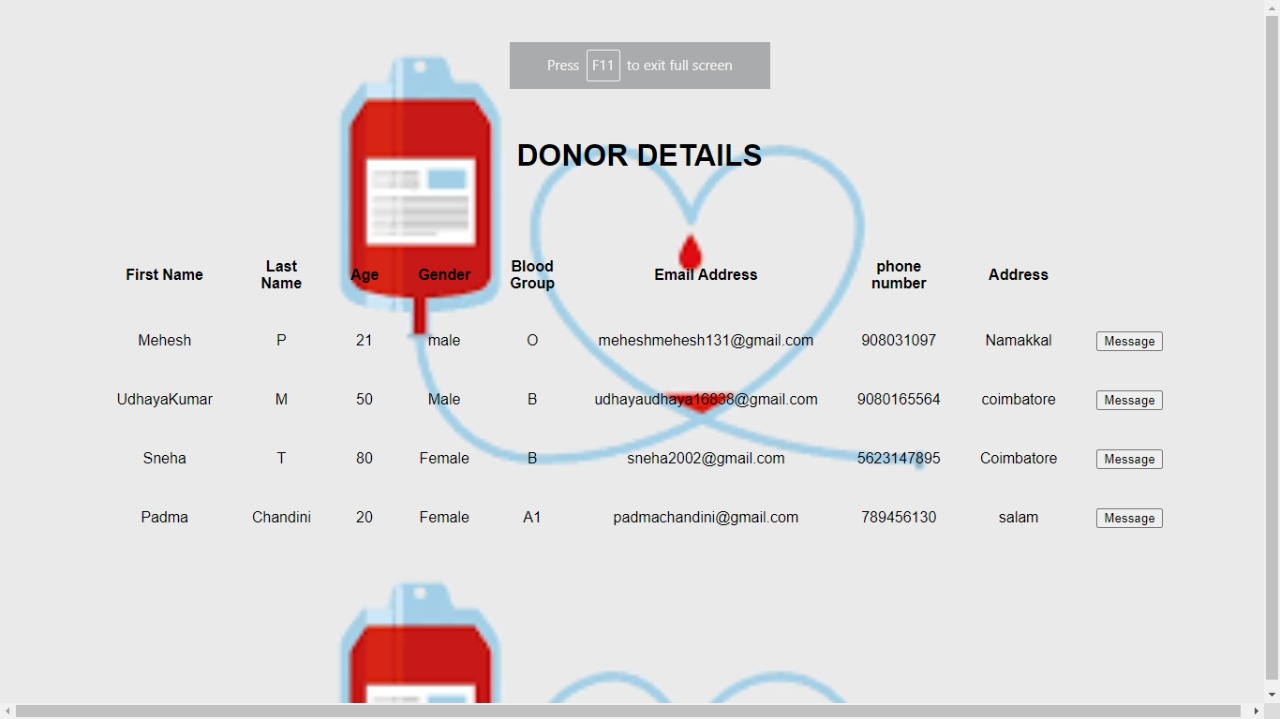


**EXPLANATION:**

The Chatbot is integrated with the home page so that the user can pass their queries in it

and it will answered for the necessary request.

**7.1 FEATURE 2**

****

**EXPLANATION:**

When the user request for plasma for the needed blood group, the available donor details

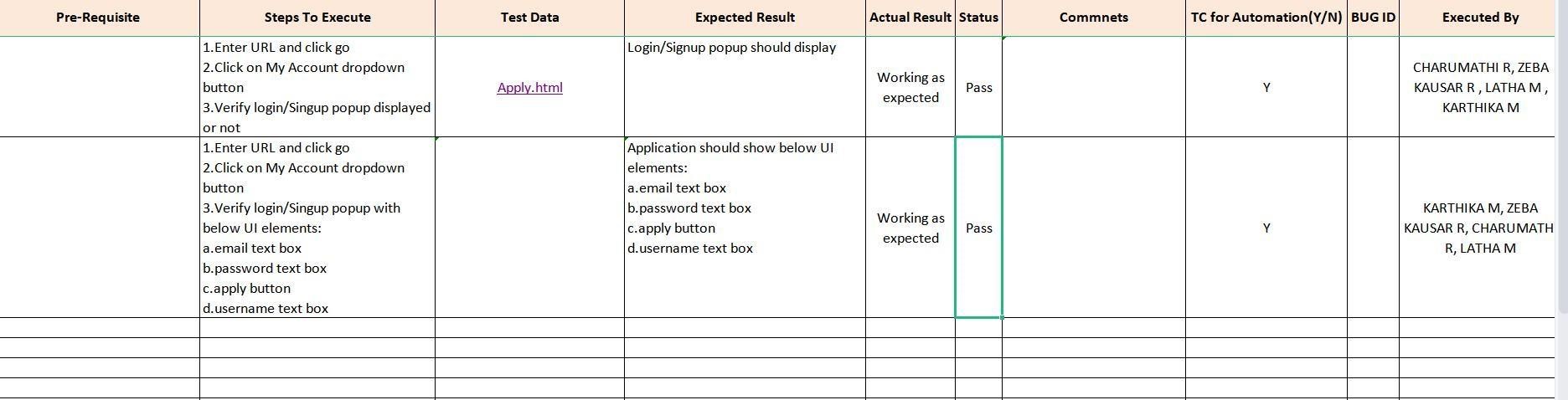
are sent to the user as a notification.

## **8.TESTING**

**8.1 TEST CASE:**

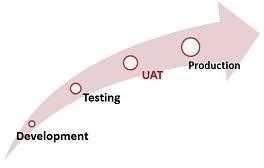
For the URL verifier module in the ISOT phishing detection system, phishing detection is done using 16 different heuristic rules. In the system, 11 main classes were defined, and 1 class was defined with 5 sub-classes. This covers all 16 heuristic rules. To test the system, 15 test cases were designed using assertion methods. Ten test cases were designed to test the 10 main classes and 5 test cases were designed to test the class with five sub-classes. The getter-setter method was used to test the class with five sub-classes. The getter method is used to obtain or retrieve a variable value from the class, and the setter method is used to store the variables.

The class with five sub-classes checks the 5 different heuristic rules, length of the URL, number of dots and slashes in the URL, presence of @ symbols in the URL, IP address mentioned in the URL, and the presence of special character such as ',', '\_', ';' in the URL. Initially, only a single test case was created for the class with five sub-classes, but it was failing as this class has five methods as shown. After applying the getter setter method, all the test cases passed without any issues. The test results assert Not Null() is used to check if the input URL is not empty, and assert Array Equals() is used to compare the result from the detection method with the expected result.



**8.2 USER ACCEPTANCE TESTING:**

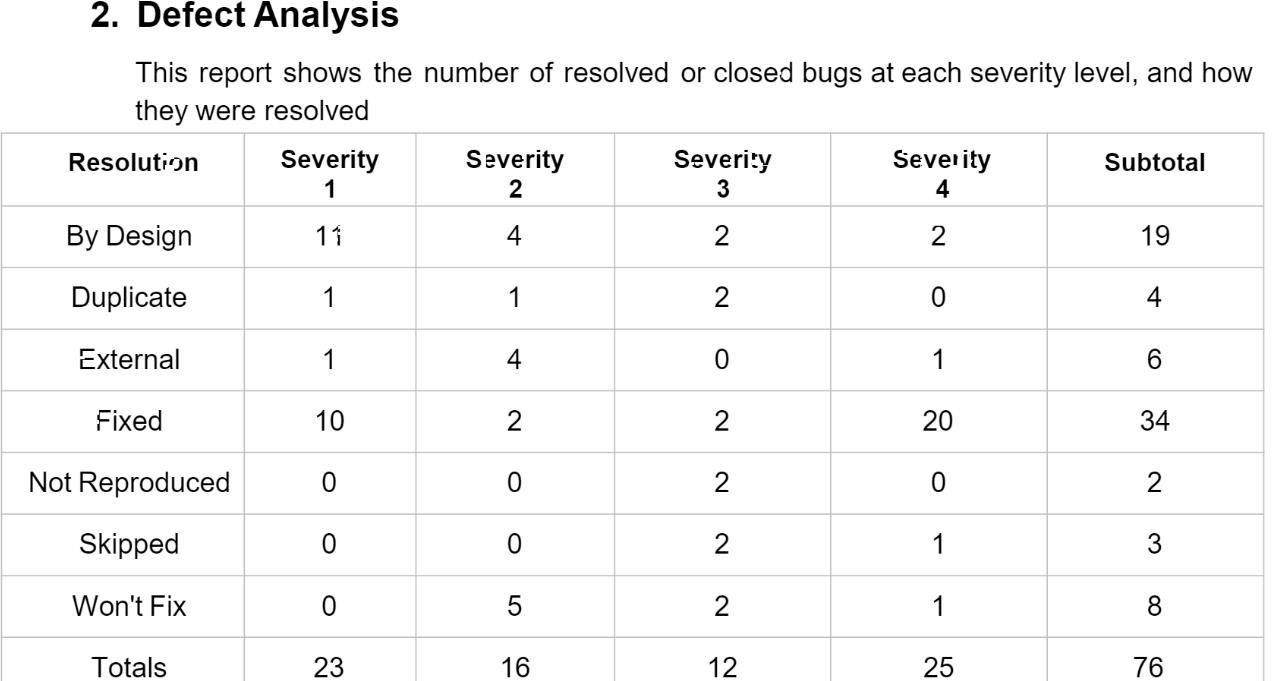
User Acceptance Testing (UAT) is a type of testing performed by the end user or the client to verify/accept the software system before moving the software application to the production environment. UAT is done in the final phase of testing after functional, integration and system testing is done.

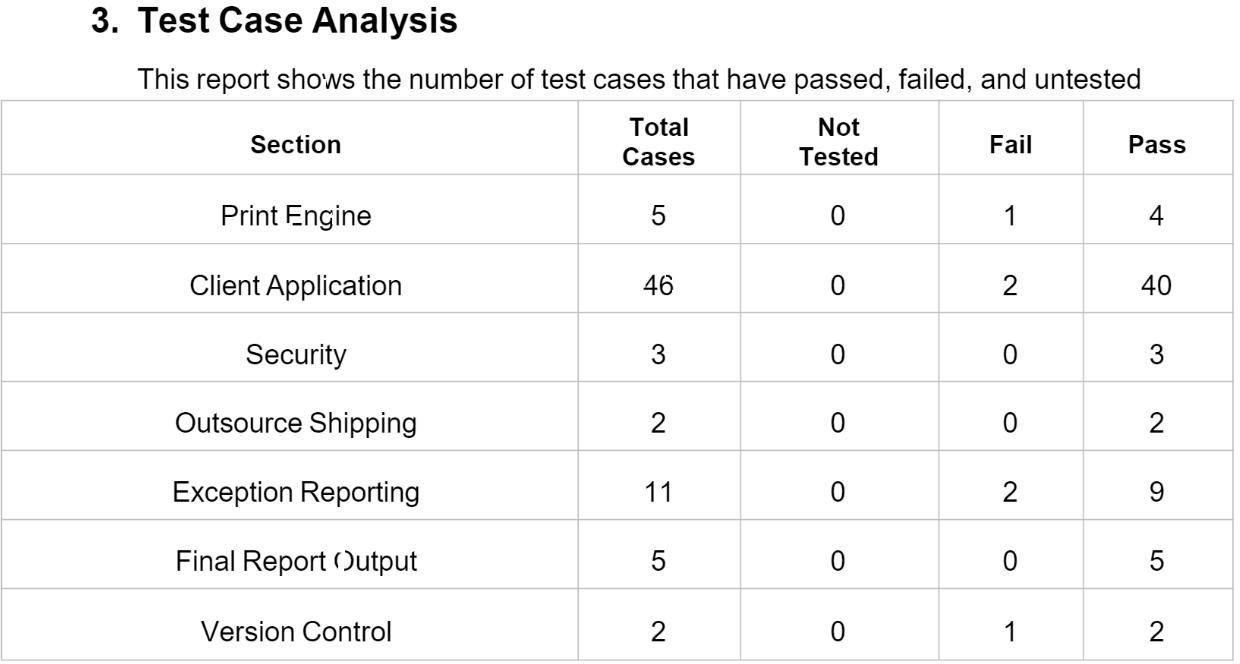


The main **Purpose of UAT** is to validate end to end business flow. It does not focus on cosmetic errors, spelling mistakes or system testing. User Acceptance Testing is carried out in a separate testing environment with production-like data setup. It is kind of black box testing where two or more end-users will be involved.

UAT is performed by –

* Client
* End users

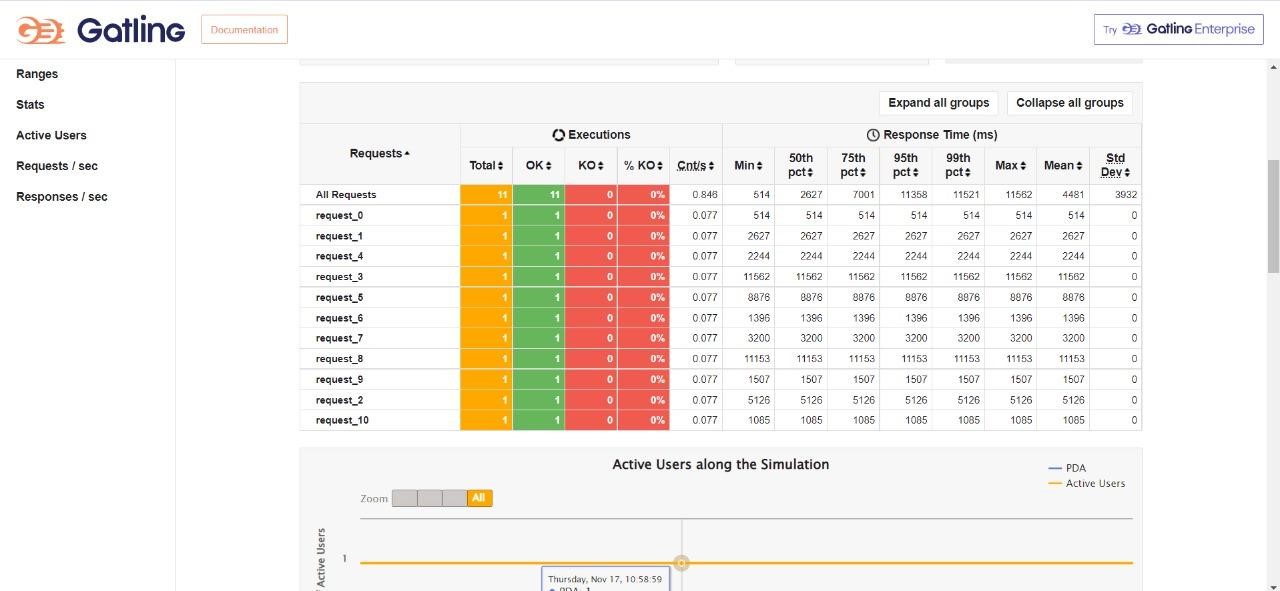


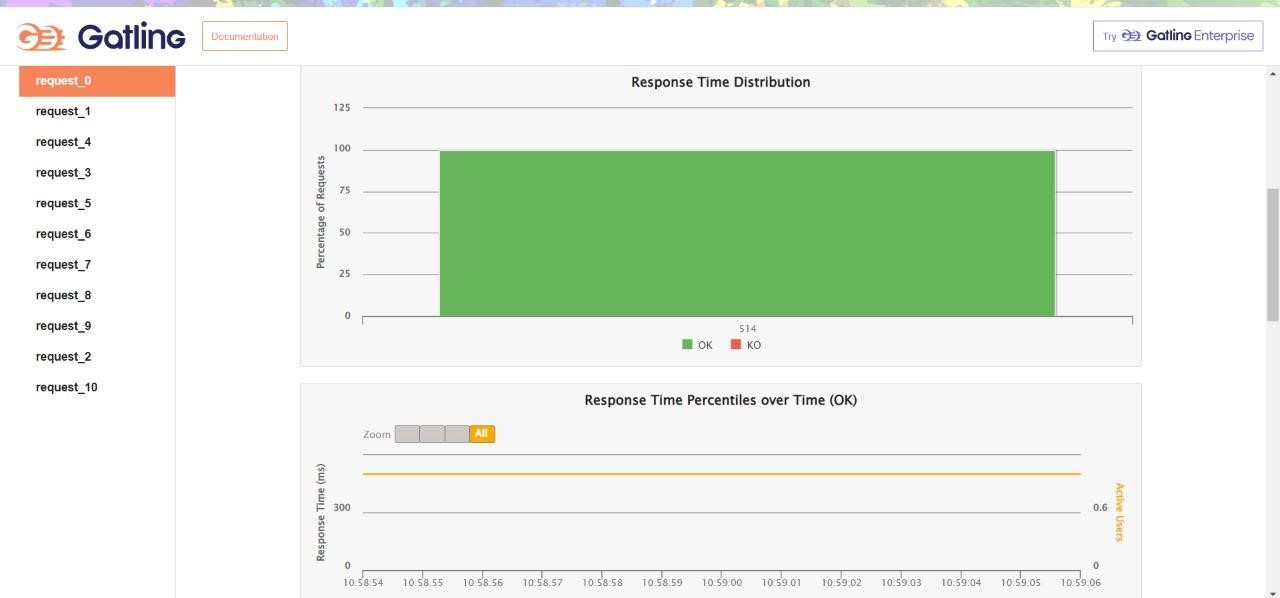


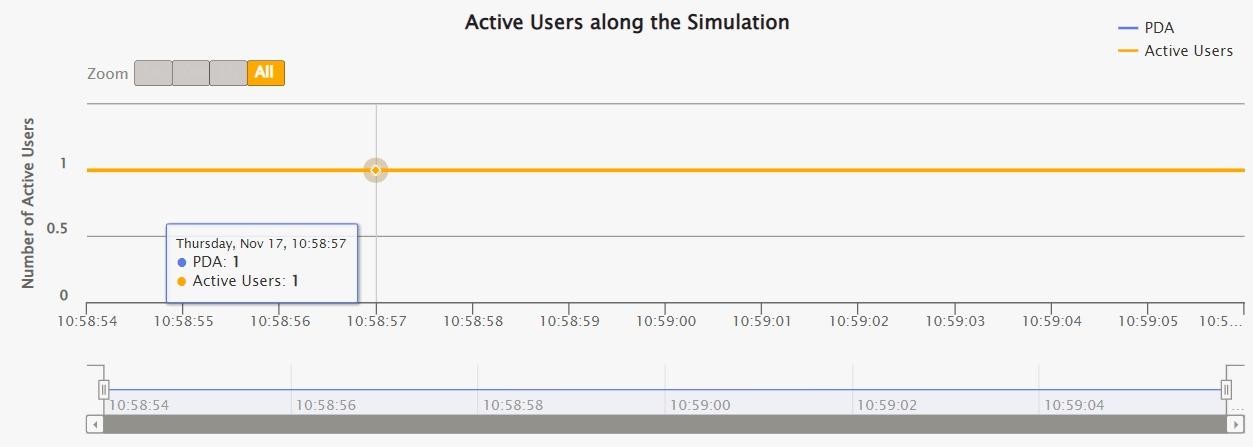
### 9. RESULTS

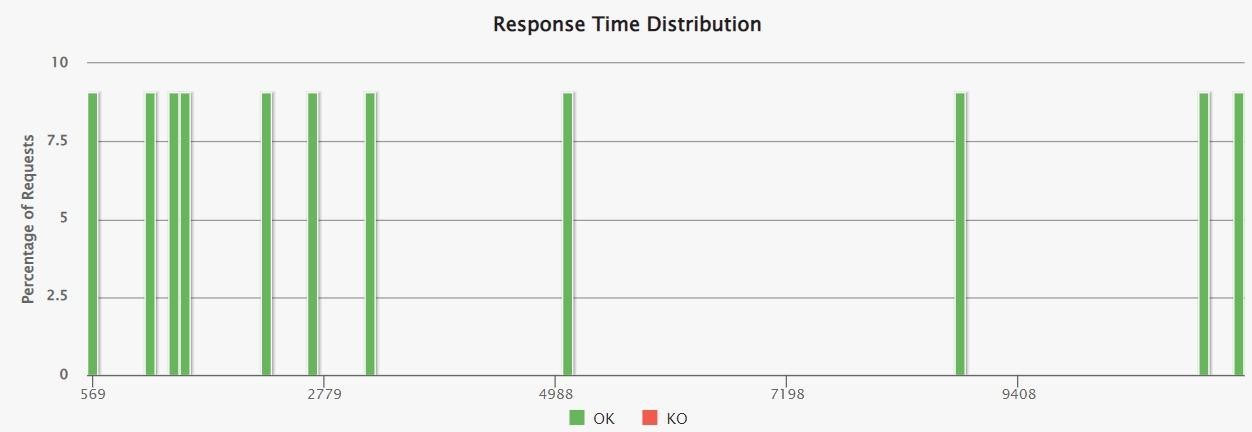
**9.1 PERFORMANCE METRICS**

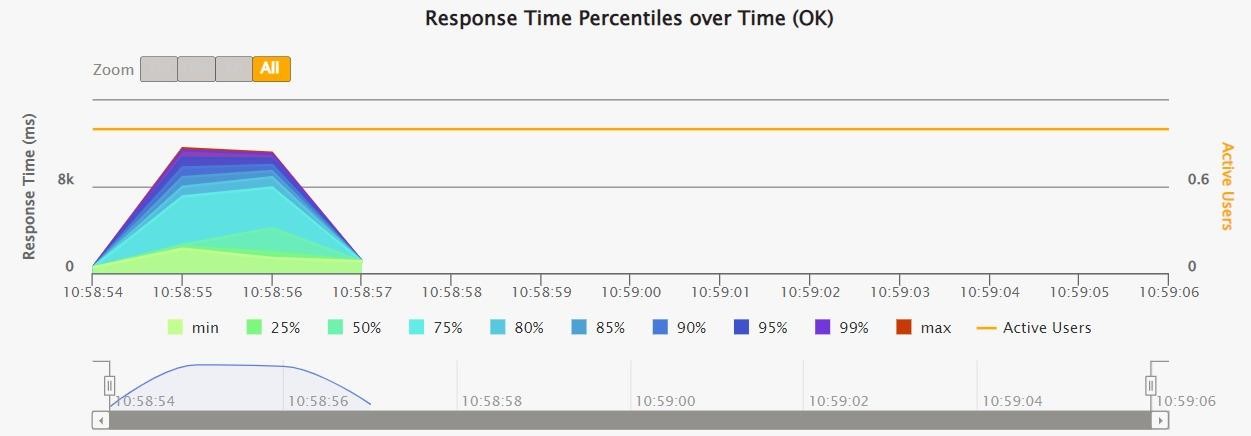


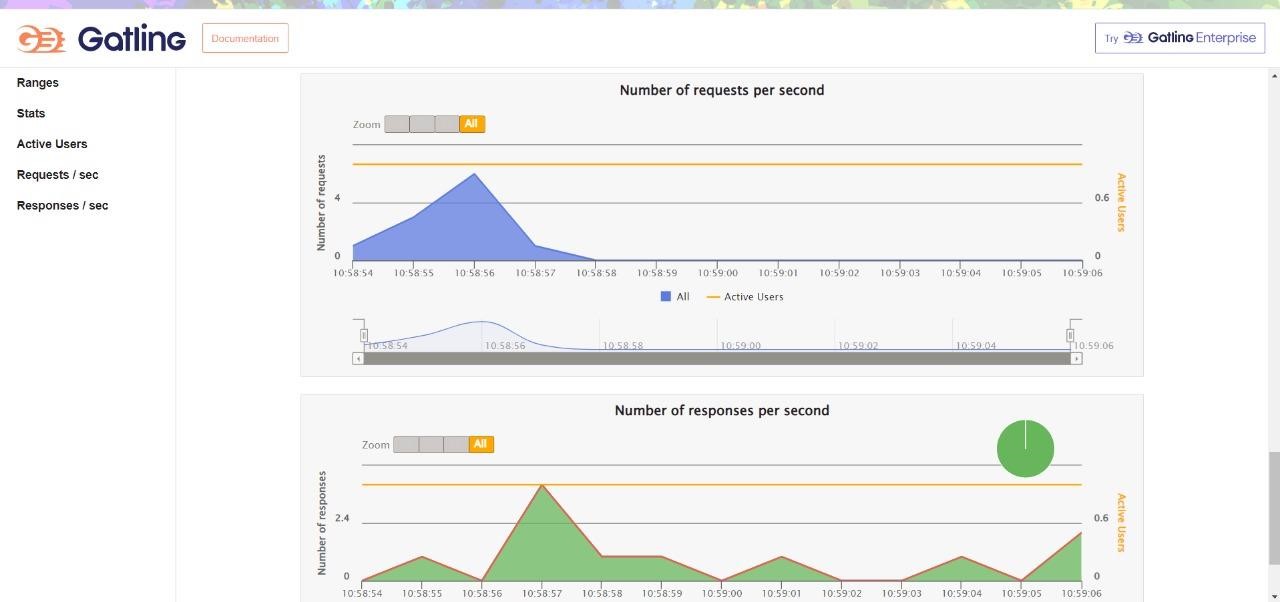




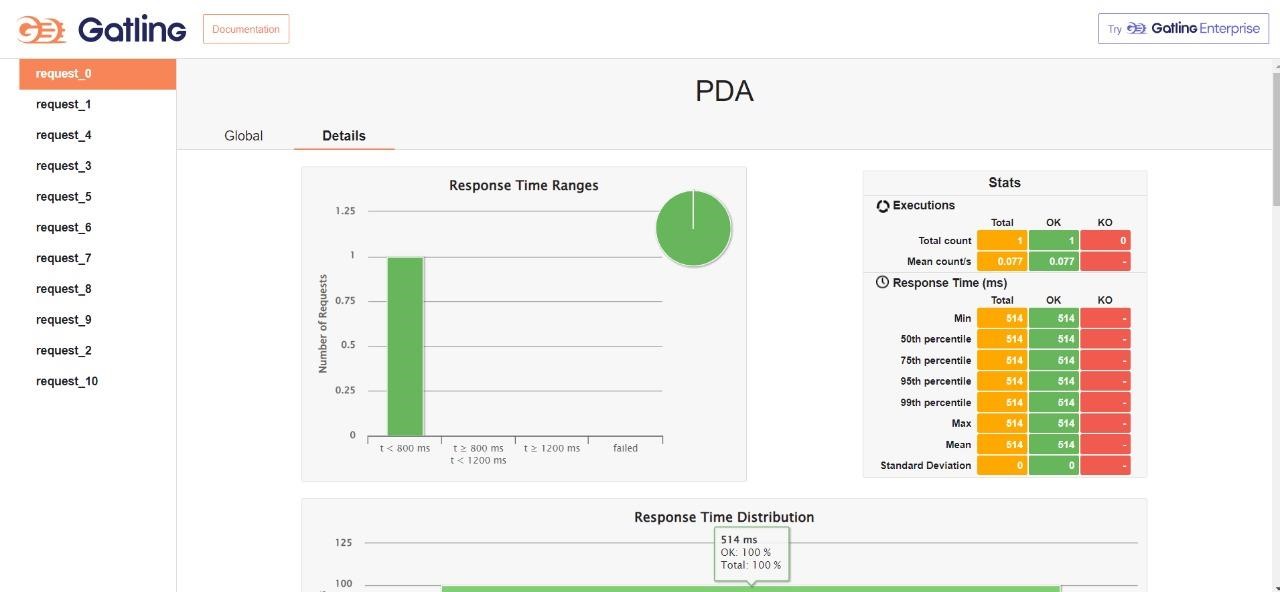


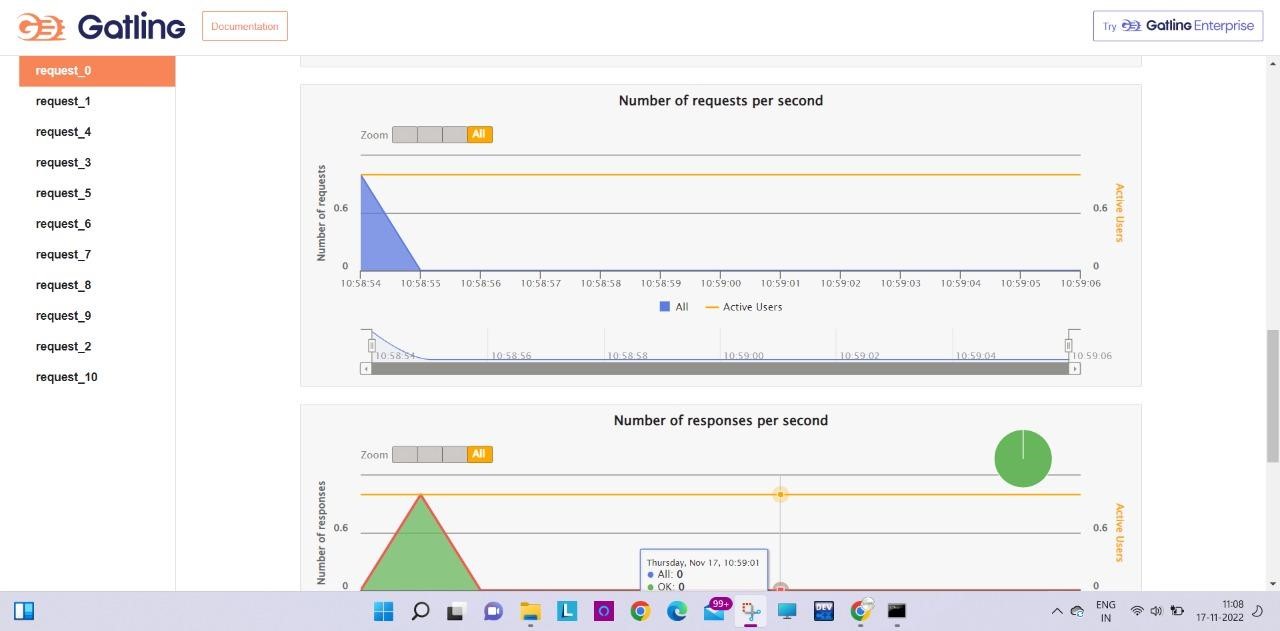












### 10.ADVANTAGES

* The project is identified by the merits of the system offered to the user. The merits of this project are as follows:
* It’s a web-enabled project.
* This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
* The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.
* Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover, there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.
* User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him. From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can sat that the project is user friendly which is one of the primary concerns of any good project.
* Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database:
* The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
* Training for simple computer operations is necessary for the users working on the system. .
* Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.
* Allocating of sample results becomes much faster because at a time the user can see the records of last years.
* Easier and faster data transfer through latest technology associated with the computer and communication.
* Through these features it will increase the efficiency, accuracy and transparency,

**DISADVANTAGES:**

The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.

Training for simple computer operations is necessary for the users working on the system.

### 11. CONCLUSION

It has been a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of not only programming in ASP.NET and VB.NET web based application and no some extent Windows Application and SQL Server, but also about all handling procedure related with **“Blood Bequeath Federal”.** It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently. Technology is introducing new innovations day by day, thus reducing the time required to do things. The proposed system can be used to reduce the time required to deliver required blood to the needy in cases of emergency. The Web application can be used by the people interested in donating their blood by locating their nearest blood bank. The web application provides a way of communication and synchronization between the hospitals and the blood banks. It also provides them with the facility of communicating with the nearby donors in emergency. The database is a vital aspect of the system. The database of the hospitals and the blood banks must be checked for consistency on regular basis for smooth working of the system.

### 12. FUTURE ENHANCEMENT

The proposed system uses Google Maps which provides the user with an efficient way of locating the nearby donors/blood banks. The Web application is developed using Xampp server which is an open-source software, while the web application for the hospitals and the blood banks is also developed using open-source tools, hence the system developed is quite feasible. A module is a software component or part of a program that contains one or more routines. One or more independently developed modules make up a program. An enterprise-level software application may contain several different modules, and each module serves unique and separate business operations. Modules make a programmer's job easy by allowing the programmer to focus on only one area of the functionality of the software application. Modules are typically incorporated into the program (software) through interfaces.

Software applications include many different tasks and processes that cohesively serve all paradigms within a complete business solution. Early software versions were gradually built from an original and basic level, and development teams did not yet have the ability to use prewritten code. For example, Systems, Applications and Products in Data Processing (SAP) - an enterprise resource planning (ERP) software - is comprised of several large modules (for example, finance, supply chain and payroll, etc.), which may be implemented with little or no customization. A classic example of a module-based application is Microsoft Word, which contains modules incorporated from Microsoft Paint that help users create drawings or figures.This module consists of the process of how the requests from recipients for the required blood are served. The Blood Bank first checks whether the request is a valid one. After validation it checks the hospital’s database to ensure that the required amount of blood is not available in that hospital and after the request is served. The blood bank module also consists of requesting the blood when urgently needed from other banks and from the registered donors who have kept their status as available for further contact.

#### · Supporting visual impaired persons

·Online testing human healthy such as blood pressure, temperature, etc.

·Supporting all nation and nationalities languages.

· To do using digital signature technologies to make the system more secure.

· The system has to include video demo

### 13. APPENDIX

**13.1 SOURCE CODE:**

**HTML FILES:**

about.html:

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>About Us Section</title>  <meta charset="utf-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <link rel="stylesheet" href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css">  <link rel="stylesheet" type="text/css" href="about.css">  </head> <body>  <div class="section">  <div class="container">  <div class="content-section"> <div class="title">  <h1>About Us</h1> </div>  <div class="content">  <h3>PLASMA DONAR APPLICATION</h3>  <p>A Donation of Blood[PLASMA] means a few minutes to you, but a Lifetime for somebody else <br> Plasma Donation is The Act Of Giving Blood To Someone Who Needs It.  It Is Not Just About Giving Blood, But It Is An Act Of Kindness That Saves The Lives Of Hundreds Of People. These Fifteen Minutes  Of Your Life Can Save Someone’s Entire Life. You Can’t Even Imagine That Donating One Bag Of Blood Can Be So Beneficial To The Human Race. <br>Donating The Blood Without Expecting Or Asking For Any Money Or Gesture Is A Great Act Of Kindness, And If You  Are 18 Years Old Or Above, You Should Definitely Take Part In This Act Of Kindness.</p> <div class="button">  <a href="home.html">GO BACK</a> </div>  </div>  <div class="social">  <a href=""><i class="fab fa-facebook-f"></i></a>  <a href=""><i class="fab fa-twitter"></i></a>  <a href=""><i class="fab fa-instagram"></i></a> </div>  </div>  <div class="image-section"> <img src="https://encrypted-  tbn0.gstatic.com/images?q=tbn:ANd9GcT3JjYmyc2JpZbgTS\_FmqFHqc702I4whfjpICXJpsjtAt2Ig6MZwAhwOQNfhoZaEmEiYD4&usqp=CAU"> </div>  </div> </div>  </body>  </html> |

Contact.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale="> <title>Contact Us Page</title>  <link rel="stylesheet" href="contact.css">  <script src="https://kit.fontawesome.com/c32adfdcda.js" crossorigin="anonymous"></script>  </head>  <body>  <form action="home.html" method="POST">  <section>  <div class="section-header">  <div class="container">  <h2>Contact Us</h2>  <p>Welcome Donor!! <br> “We make a living by what we get, but we make a life by what we give.” — Winston Churchill <br> Do you feel you don’t have much to offer? You have the most precious resource of all: the ability to save a life by donating blood! Help share this invaluable gift with someone in need.</p>  </div>  <div class="container">  <div class="row">  <div class="contact-info">  <div class="contact-info-item">  <div class="contact-info-icon">  <i class="fas fa-home"></i>  </div>  <div class="contact-info-content">  <h4>Address</h4>  <p>1222 clkz road,<br/> sardar, ponmar, <br/>55060</p> </div>  </div>  <div class="contact-info-item">  <div class="contact-info-icon">  <i class="fas fa-phone"></i>  </div>  <div class="contact-info-content">  <h4>Phone</h4>  <p>959-795-9722</p>  </div>  </div>  <div class="contact-info-item">  <div class="contact-info-icon">  <i class="fas fa-envelope"></i>  </div> |
| <div class="contact-info-content">  <h4>Email</h4>  <p>clkz1902@gmail.com</p>  </div>  </div>  </div>  <div class="contact-form">  <form action="" id="contact-form">  <h2>Send Message</h2>  <div class="input-box">  <input type="text" required="true" name="">  <span>Full Name</span>  </div>  <div class="input-box">  <input type="email" required="true" name="">  <span>Email</span>  </div>  <div class="input-box">  <textarea required="true" name=""></textarea>  <span>Type your Message...</span>  </div>  <div class="input-box">  <input type="submit" value="Send" name="">  </div>  </form>  </div>  </div> </div>  </section>  </form>  </body>  </html> |

dd.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en"> <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <link href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&display=swap" rel="stylesheet">  <title>Tabs</title>  </head>  <body>  <div class="mytabs"> |
| <input type="radio" id="tabfree" name="mytabs" checked="checked">  <label for="tabfree">DO's</label>  <div class="tab"> <h2>DO's</h2>  <p>\*Get a full night’s sleep.  <br>\*Have adequate food, including iron-rich foods as they help to maintain the hemoglobin level.  <br>\*Make sure you’re drinking enough water before donating blood. <br>\*Make sure you haven’t had a cold or flu in at least 72 hours.  <br>\*Don’t smoke for at least two hours prior to donating blood.  <br>\*Don’t consume alcohol a day before blood donation.  <br>\*Review the most recent qualifying conditions for donors.  <br>\*Carry your donor identity card or any other form of identification.<br>\*Eat well-balanced meals for the next 24 hours to replenish your body. <br>\*Wait at least five minutes after the process is completed before getting up.<br>  Ensure to eat after blood donation. \*Let the stomach be not empty.<br>  \*Increase fluid intake for the next 24 to 48 hours as it might take around 24 hours for the body to get the fluids retrieved post blood donation.<br>  </p>  </div>  <input type="radio" id="tabsilver" name="mytabs">  <label for="tabsilver">DON'Ts</label>  <div class="tab">  <h2>DON'Ts</h2>  <p>\*Avoid consuming fizzy beverages or aerated drinks. <br>\*Do not stand for long periods of time.<br>\*For roughly five hours, avoid strong lifting or pulling with the donated arm.<br>  \*Avoid smoking for four hours, and alcohol for 24 hours.<br>  \*Ensure to share your medical history to safeguard the patient who will receive the blood.</p> </div> |
| </div>  </body> |
| <style> body { background: url(https://media.istockphoto.com/id/1256555401/vector/blood-donation-  concept.jpg?s=612x612&w=0&k=20&c=OKESllI31Ny0H4CTABQgayI230R2o4tvCEE8RkSULpI=); font-family: 'Roboto', sans-serif;  }  .mytabs { display: flex; flex-wrap: wrap; max-width: 600px; margin: 50px auto; padding: 25px;  }  .mytabs input[type="radio"] { display: none;  }  .mytabs label { padding: 25px; background: #e2e2e2; font-weight: bold;  } |

.mytabs .tab { width: 100%; padding: 20px; background: #fff; order: 1; display: none;

}

.mytabs .tab h2 { font-size: 3em;

}

.mytabs input[type='radio']:checked + label + .tab { display: block;

}

.mytabs input[type="radio"]:checked + label { background: #fff;

}

</style>

</html>

feedback.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8" />  <meta name="viewport" content="width=device-width, initial-scale=1.0" />  <title>Document</title>  <link rel="stylesheet" href="feedback.css" />  </head>  <body>  <!-- Design by Ildiesign - https://dribbble.com/shots/7292664-Survey-UI-Design -->  <!-- Icons by - https://www.flaticon.com/authors/roundicons -->  <div id="panel" class="panel-container">  <strong  >How satisfied are you with our<br /> application's performance?</strong  >  <div class="ratings-container">  <div class="rating">  <img src="https://img.lovepik.com/element/40217/1896.png\_300.png" alt=""  />  <small>Unhappy</small>  </div>  <div class="rating">  <img src="https://www.seekpng.com/png/detail/148-1483501\_black-and-white-clipart-blood-drops-blood-drop.png" alt=""  />  <small>Neutral</small>  </div>  <div class="rating active">  <img src="https://t4.ftcdn.net/jpg/00/46/20/51/360\_F\_46205198\_EccZ6zI5FClChBM0J73hUHgT3d1Wzre3.jpg" alt=""  /> |
| <small>Satisfied</small>  </div>  </div>  <button class="btn" id="send">Send review</button> </div>  </body>  <script src="feedback.js"></script>  </html> |

home.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en"> <head>  <meta charset="UTF-8">  <title>Plasma Donor Application</title>  <link rel="stylesheet" href="{{ url\_for('static', filename='CSS/style.css') }}">  </head>  <body>  <script> window.watsonAssistantChatOptions = { integrationID: "3b214ae8-6eba-404e-85be-63772e4c2fef", // The ID of this integration. region: "eu-gb", // The region your integration is hosted in. serviceInstanceID: "3b4bf0dd-e329-4199-99b4-25f9ba1ee227", // The ID of your service instance.  onLoad: function(instance) { instance.render(); }  }; setTimeout(function(){ const t=document.createElement('script');  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" + (window.watsonAssistantChatOptions.clientVersion  || 'latest') + "/WatsonAssistantChatEntry.js"; document.head.appendChild(t);  });  </script>  <div class="wrapper">  <nav class="navbar">  <img class="logo" src="https://encrypted-  tbn0.gstatic.com/images?q=tbn:ANd9GcT3vWar9GzZ7P\_FvxBCUBma85tTYmqoLn4Jyw&usqp=CAU">  <ul>  <li><a class="active" href="#">Home</a></li>  <li><a href="{{url\_for('about')}}">About</a></li>  <li><a href="{{url\_for('dd')}}">Do's & Don't</a></li> <li><a href="{{url\_for('contact')}}">Contact</a></li>  <li><a href="{{url\_for('feedback')}}">Feedback</a></li>  </ul>  </nav>  <div class="center">  <h1>Welcome Donor</h1>  <h2>Donate Blood & Save Life</h2>  <div class="buttons">  <a href="{{url\_for('login')}}"><button>LOGIN</button></a>  <a href="{{url\_for('register')}}"><button class="btn2">REGISTER</button></a>  </div>  </div>  </body>  </html> |

last.html:

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width,initial-scale=1.0">

<title>Thank you!</title>

<link rel="stylesheet" href="last.css">

</head>

<body>

<center>

<form action="home.html" method="POST">

<div class="popup">

<img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSrl42fK0JaxplyqUelE9NzcMXlgPJsCTqQBw&usqp=CAU"> <h2>Thank you!</h2>

<p>Your Details have been successfully submitted.Thanks!</p>

<a href="home.html"><button type="button">OK</button></a>

</div>

</div>

</form>

</body>

</center>

</html>

login.html:

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>Login Form</title>  <link rel="stylesheet" type="text/css" href="fontawesome/css/all.min.css">  <link rel="stylesheet" type="text/css" href="{{ url\_for('static', filename='CSS/Login.css') }}">  </head>  <script> window.watsonAssistantChatOptions = { integrationID: "3b214ae8-6eba-404e-85be-63772e4c2fef", // The ID of this integration. region: "eu-gb", // The region your integration is hosted in.  serviceInstanceID: "3b4bf0dd-e329-4199-99b4-25f9ba1ee227", // The ID of your service instance.  onLoad: function(instance) { instance.render(); }  };  setTimeout(function(){ const t=document.createElement('script');  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +  (window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js"; document.head.appendChild(t);  });  </script>  <body>  <form action="signin.html" method="POST">  <div class="container"> |

<div class="header">

<h1>Login</h1>

</div>

<div class="main">

<form>

<span>

<i class="fa fa-user"></i>

<input type="text" placeholder="Username" name="">

</span><br>

<span>

<i class="fa fa-lock"></i>

<input type="password" placeholder="password" name="">

</span><br>

<a href="{{url\_for('signin')}}"><button>SIGN IN</button></a>

</form>

</form>

</div>

</div>

</body>

</html>

msgsent.html:

<!DOCTYPE html>

<html>

<head>

<center>

<meta name="viewport" content="width=device-width,initial-scale=1.0">

<title>Thank you!</title>

<link rel="stylesheet" href="msgsent.css">

</head>

<body>

<form action="home.html" method="POST">

<div class="popup">

<img src="https://cdn.dribbble.com/users/14268/screenshots/8778221/crowdrise\_2.png?compress=1&resize=400x300">

<h2>Be Calm & Wait Patiently...</h2><br>

<p>Message been sent successfully!!</p>

<a href="home.html"><button type="button">OK</button></a>

</div>

</div>

</form>

</body>

</center>

</html>

regdonor.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Registration Form</title>  <link rel="stylesheet" href="regdonor.css">  </head>  <body>  <div class="wrapper">  <div class="title"> DONOR DETAILS  </div>  <div class="form">  <div class="inputfield">  <label>First Name</label>  <input type="text" class="input">  </div>  <div class="inputfield">  <label>Last Name</label>  <input type="text" class="input">  </div>  <div class="inputfield">  <label>Age</label>  <input type="Age" class="input">  </div>  <div class="inputfield">  <label>Gender</label>  <div class="custom\_select">  <select>  <option value="">Select</option>  <option value="male">Male</option>  <option value="female">Female</option> </select>  </div>  </div> |
| <div class="inputfield">  <label>BloodGroup</label>  <div class="custom\_select">  <select>  <option value="">Select</option>  <option value="O">O</option>  <option value="A">A</option>  <option value="B">B</option>  </select>  </div>  </div> |
| <div class="inputfield">  <label>Email Address</label>  <input type="text" class="input">  </div> |
| <div class="inputfield">  <label>Phone Number</label>  <input type="text" class="input"> </div>  <div class="inputfield">  <label>Address</label>  <textarea class="textarea"></textarea> </div>  <div class="inputfield">  <label>Postal Code</label>  <input type="text" class="input"> </div>  <div class="inputfield terms">  <label class="check">  <input type="checkbox">  <span class="checkmark"></span>  </label>  <p>Agreed to terms and conditions</p> </div>  <div class="inputfield">  <a href="last.html"><input type="submit" value="Register" class="btn"></a>  </div>  </div>  </div>  </body>  </html> |

register.html:

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>Sign Up</title>  <link rel="stylesheet" type="text/css" href="{{ url\_for('static', filename='CSS/register.css') }}">  </head>  <script> window.watsonAssistantChatOptions = { integrationID: "3b214ae8-6eba-404e-85be-63772e4c2fef", // The ID of this integration.  region: "eu-gb", // The region your integration is hosted in. serviceInstanceID: "3b4bf0dd-e329-4199-99b4-25f9ba1ee227", // The ID of your service instance.  onLoad: function(instance) { instance.render(); }  }; setTimeout(function(){ const t=document.createElement('script');  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +  (window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js"; document.head.appendChild(t);  });  </script>  <body>  <form action="home.html" method="POST">  <form>  <h1>Sign Up</h1>  <input type="text" name="" placeholder="Username"> |
| <input type="password" name="" placeholder="Password">  <input type="password" name="" placeholder="Confirm Password">  <input type="text" name="" placeholder="Gender"> <input type="text" name="" placeholder="Age">  <input type="email" name="" placeholder="Email">  <input type="phone" name="" placeholder="Mobile no">  <a href="{{url\_for('home')}}"><button>SIGN UP</button></a>  </form>  </form>  </body>  </html> |

request.html:

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <title>Donor Details</title>  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <link rel="stylesheet" type="text/css" href="request.css"> </head>  <body>  <form action="msgsent.html" method="POST"> |

<h1 align="center">DONOR DETAILS</h1>

|  |
| --- |
| <table table>  <tr align="center">  <th>First Name</th>  <th>Last Name</th>  <th>Age</th> <th>Gender</th>  <th>Blood Group</th>  <th>Email Address</th>  <th>phone number</th>  <th>Address</th>  </tr>  <tr align=center>  <td>samba</td>  <td>rafiq</td>  <td>36</td>  <td>Female</td>  <td>O</td>  <td>rafiqsamba1902@gmail.com</td>  <td>623-598-1255</td>  <td>Mahalakshmi Nagar</td> <td>  <div class="container">  <a href="msgsent.html"><button class=".btn">Message</button></a> </div> |
| </td>  </tr>  <tr align=center>  <td>Joseph</td>  <td>Austin</td>  <td>40</td>  <td>Male</td>  <td>B</td>  <td>joaus56@gmail.com</td>  <td>987-123-6548</td>  <td>Agaramthen</td> <td>  <div class="container">  <a href="msgsent.html"><button class=".btn">Message</button></a>  </div>  </td>  </tr>  <tr align=center>  <td>Catherine</td>  <td>Gerald</td>  <td>25</td>  <td>Female</td>  <td>B</td>  <td>cath22@gmail.com</td>  <td>895-263-7745</td>  <td>Selaiyur</td> <td>  <div class="container">  <a href="msgsent.html"><button class=".btn">Message</button></a>  </div>  </td>  </tr>  <tr align=center>  <td>Charu</td>  <td>Kumar</td>  <td>20</td>  <td>Female</td> <td>A1</td>  <td>charu1902@gmail.com</td>  <td>959-795-9722</td>  <td>Chromepet</td> <td>  <div class="container">  <a href="msgsent.html"><button class=".btn">Message</button></a>  </div>  </td>  </tr> </table > |

<br><br>

</table>

</form>

</body>

</html>

signin.html:

|  |
| --- |
| <!DOCTYPE html>  <html lang="en" dir="ltr"> <head>  <meta charset="utf-8">  <meta http-equiv="X-UA-Compatible" content="IE=edge" />  <meta name="viewport" content="width=device, initial-scale=1.0" />  <link rel="stylesheet" href="signin.css">  <title></title>  </head>  <style> body{ background-image: url('https://png.pngtree.com/background/20210710/original/pngtree-blood-donation-poster-background-  material-picture-image\_1005808.jpg'); background-repeat: no-repeat; background-attachment: fixed; background-size: 100%, 100%; }  </style>  <body>  <div class="container">  <a href="regdonor.html"><button class="btn btn--primary btn1--block">REGISTER AS DONOR</button></a>  <a href="request.html"><button class="btn btn--secondary btn2--block">REQUEST FOR PLASMA</button></a>  </div>  </body>  </html> |

**CSS FILES:**

about.css

|  |
| --- |
| @import url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400&display=swap');  \*{ margin:0px; padding:0px; box-sizing: border-box; font-family: 'Poppins', sans-serif;  }  .section{ width: 100%; min-height: 100vh; background-color: red;  }  .container{ width: 80%; display: block; margin:auto; padding-top: 100px;  }  .content-section{ float: left; width: 55%; }  .image-section{ float: right; width: 40%;  }  .image-section img{ width: 100%; height: auto;  }  .content-section .title{ text-transform: uppercase; font-size: 28px;  }  .content-section .content h3{ margin-top: 20px; color:black; font-size: 21px;  }  .content-section .content p{ margin-top: 10px; font-family: handwritten; font-size: 18px; line-height: 1.5;  }  .content-section .content .button{ margin-top: 30px;  }  .content-section .content .button a{ background-color: #3d3d3d; padding:12px 40px; text-decoration: none; color:#fff; font-size: 25px; |
| letter-spacing: 1.5px;  }  .content-section .content .button a:hover{ background-color: black; color:#fff;  }  .content-section .social{ margin: 40px 40px;  }  .content-section .social i{ color:black; font-size: 30px; padding:0px 5px;  }  .content-section .social i:hover{ color:#3d3d3d;  }  @media screen and (max-width: 768px){  .container{ width: 80%; display: block; margin:auto; padding-top:50px;  }  .content-section{ float:none; width:100%; display: block; margin:auto;  }  .image-section{ float:none; width:100%;  }  .image-section img{ width: 100%; height: auto; display: block; margin:auto;  }  .content-section .title{ text-align: center; font-size: 19px;  }  .content-section .content .button{ text-align: center;  }  .content-section .content .button a{ padding:9px 30px;  }  .content-section .social{ text-align: center;  } |

}

contact.css

|  |
| --- |
| @import url('https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700&display=swap');  \* {  padding: 0; margin: 0; box-sizing: border-box; font-family: 'Poppins', sans-serif;  } |

body {

min-height: 100vh; width: 100%; display: flex; justify-content: center; align-items: center; background-image: url(https://tse3.mm.bing.net/th?id=OIP.7D6IFnQ5eYDNiEDr-AQ9WQHaDs&pid=Api&P=0); background-size: cover; background-position: center; position: relative;

}

body::after {

content: ""; position: absolute; top: 0; left: 0; height: 100%; width: 100%; background-color: rgba(0,0,0,0.8);

}

section {

position: relative; z-index: 3; padding-top: 50px; padding-bottom: 50px;

}

.container { max-width: 1080px; margin-left: auto; margin-right: auto; padding-left: 20px; padding-right: 20px;

}

.section-header { margin-bottom: 50px; text-align: center;

}

.section-header h2 { color: #FFF; font-weight: bold; font-size: 3em; margin-bottom: 20px;

}

.section-header p {

|  |
| --- |
| color: #FFF;  } |
| .row {  display: flex; flwx-wrap: wrap; align-items: center;  justify-content: space-between;  } |

.contact-info { width: 50%; }

.contact-info-item { display: flex; margin-bottom: 30px; }

.contact-info-icon { height: 70px; width: 70px; background-color:white; text-align: center; border-radius: 50%; }

.contact-info-icon i { font-size: 30px; line-height: 70px; }

.contact-info-content { margin-left: 20px; }

.contact-info-content h4 { color: red; font-size: 1.4em; margin-bottom: 5px; }

.contact-info-content p { color: white; font-size: 1em; }

.contact-form { background-color: black; padding: 40px; width: 45%; padding-bottom: 20px; padding-top: 20px; }

.contact-form h2 { font-weight: bold; font-size: 2em; margin-bottom: 10px; color: black;

}

.contact-form .input-box { position: relative; width: 100%; margin-top: 10px;

}

.contact-form .input-box input,

.contact-form .input-box textarea{ width: 100%; padding: 5px 0; font-size: 16px; margin: 10px 0; border: none; border-bottom: 2px solid #333; outline: none; resize: none;

}

.contact-form .input-box span { position: absolute; left: 0; padding: 5px 0; font-size: 16px; margin: 10px 0; pointer-events: none; transition: 0.5s; color: #666;

}

.contact-form .input-box input:focus ~ span,

.contact-form .input-box textarea:focus ~ span{ color: #e91e63; font-size: 12px; transform: translateY(-20px);

}

|  |
| --- |
| .contact-form .input-box input[type="submit"]  { width: 100%; background: red; color: black; border: none; cursor: pointer; padding: 10px; font-size: 18px; border: 1px solid red; transition: 0.5s;  } |
| .contact-form .input-box input[type="submit"]:hover  { background: #FFF; color: red;  } |
| @media (max-width: 991px) { section { padding-top: 50px; padding-bottom: 50px;  }  .row { |
| flex-direction: column;  }  .contact-info { margin-bottom: 40px; width: 100%;  }  .contact-form { width: 100%;  }  } |

feedback.css

|  |
| --- |
| @import url("https://fonts.googleapis.com/css?family=Muli&display=swap");  @import url("https://fonts.googleapis.com/css?family=Monserrat&display=swap");  \* {  box-sizing: border-box;  } |

body {

background-color: #fef9f2; font-family: "Monserrat", sans-serif; display: flex; justify-content: center; align-items: center; height: 100vh;

}

.panel-container { background-color: #fff; box-shadow: 0 0 10px rgba(0, 0, 0, 0.7); border-radius: 4px; font-size: 90%; display: flex; flex-direction: column; justify-content: center; align-items: center; padding: 30px; max-width: 400px; text-align: center;

}

.panel-container strong { line-height: 20px; }

.panel-container p { margin: 25px 0; line-height: 20px; }

.ratings-container { display: flex;

|  |
| --- |
| margin: 20px 0; border: 0; border-radius: 4px; color: black; cursor: pointer; padding: 12px 30px;  transition: 5s;  } |

.rating { cursor: pointer; flex: 1; padding: 20px; margin: 10px 5px;

}

|  |
| --- |
| .rating.active,  .rating:hover { border-radius: 4px; box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);  color: red; cursor: pointer; padding: 12px 30px;  transition: 5s;  } |

.rating img { width: 40px;

}

.rating small { color: #555; display: inline-block; margin: 10px 0 0;

}

.rating.active small,

.rating:hover small { color: black;

}

.btn { background-color: #302d2b; border: 0; border-radius: 4px; color: #fff; cursor: pointer; padding: 12px 30px;

transition: 5s; }

.fa-heart { color: red; font-size: 30px; margin-bottom: 10px;

}

last.css

|  |
| --- |
| \*{ margin: 0; padding: 0; box-sizing: border-box; font-family: 'poppins',sans-serif; background-image: url(); }  .container{ width: 100%; height: 100vh; background: #3c5077; display: flex; align-items: center; justify-content: center;  } |

.btn{ padding: 10px 60px; background: #fff; border: 0; outline: none; cursor: pointer; font-size: 22px; font-weight: 500; border-radius: 30px; }

.popup{ width: 400px; background: #fff; border-radius: 6px; position: absolute; top: 50%; left: 50%; transform: translate(-50% , -50%); text-align: center; padding: 0 30px 30px; color: #333; }

.popup img{ width:100px; margin-top: -50px; border-radius: 100%; align-items: center; box-shadow: 0 2px 5px rgba(0,0,0,0.2); }

.popup h2{ align-items: center; font-size: 38px; font-weight: 500; margin: 30px 0 10px; }

.popup button{ width: 100%; margin-top: 50px; padding: 10px 0; background: red; color: #fff; border: 0; outline: none; font-size: 18px; border-radius: 4px; align-items: center; cursor: pointer; box-shadow: 0 5px 5px rgba(0,0,0,0.2);

}

login.css

|  |
| --- |
| body{ font-family: sans-serif; background-image: url(https://static.vecteezy.com/system/resources/previews/007/119/937/non\_2x/world-blood-donor-concept-freevector.jpg); background-repeat: no-repeat; overflow: hidden; background-size: cover; }  .container{ width: 380px; margin: 7% auto; border-radius: 25px; background-color: rgba(0,0,0,0.2); box-shadow: 0 0 17px #333;  } |

.header{ text-align: center; padding-top: 75px; }

header h1{ color: red; font-size: 45px; margin-bottom: 80px; }

.main{ text-align: center; }

.main input, button{ width: 300px; height: 40px; border: none; outline: none; padding-left: 40px; box-sizing: border-box; font-size: 15px; color: #333; margin-bottom: 48px;

}

.main button{ padding-left:0; background-color: red; letter-spacing: 1px; font-weight: bold; margin-bottom: 50px; }

.main button:hover{ box-shadow: 2px 2px 5px #555; background-color: #7799d4; }

.main input:hover{ box-shadow: 2px 2px 5px #555; background-color: red; }

.main span{ position: relative; }

.main i{ position: absolute; left: 15px; color: #333; font-size: 16px; top: 2px;

}

msgsent.css

|  |
| --- |
| \*{ margin: 50; padding: 50; box-sizing: border-box;  background-image: url(https://static.vecteezy.com/system/resources/previews/001/874/132/original/abstract-geometric-whitebackground-free-vector.jpg); font-family: 'poppins',sans-serif; }  .container{ width: 50%; height: 50vh; background: #3c5077; display: flex; align-items: center; justify-content: center;  } |

.btn{ padding: 10px 60px; background: #fff; border: 0; outline: none; cursor: pointer; font-size: 22px; font-weight: 500; border-radius: 30px; }

.popup{ width: 400px; background: #fff; border-radius: 6px; position:absolute; top: 50%; left: 50%; transform: translate(-50% , -50%); text-align: center; padding: 0 30px 30px; color: #333; }

.popup img{ width:250px; margin-top: -50px; border-radius: 50%; align-items: center; box-shadow: 0 2px 5px rgba(0,0,0,0.2); }

.popup h2{ align-items: center; font-size: 38px; font-weight: 500; margin: 30px 0 10px;

}

|  |
| --- |
| .popup button{ width: 100%; margin-top: 50px; padding: 10px 0; background: grey; color: #fff; border: 0; outline: none; font-size: 18px; border-radius: 4px; align-items: center; cursor: pointer;  box-shadow: 0 5px 5px rgba(0,0,0,0.2);  } |

regdonor.css

|  |
| --- |
| @import url('https://fonts.googleapis.com/css?family=Montserrat:400,700&display=swap');  \*{ margin: 0; padding: 0; box-sizing: border-box; font-family: 'Montserrat', sans-serif;  } body{ padding: 0 10px;  background-image: url('https://png.pngtree.com/thumb\_back/fh260/back\_our/20190621/ourmid/pngtree-aids-red-ribbon-banner-posterbackground-image\_182671.jpg'); background-repeat: no-repeat; background-attachment: fixed; background-size: 100%, 100%; margin: 0; padding: 0;  }  .wrapper{ max-width: 500px; width: 100%; background: transparent; margin: 20px auto; box-shadow: 1px 1px 2px rgba(0,0,0,0.125); padding: 30px;  } |

.wrapper .title{ font-size: 24px; font-weight: 700; margin-bottom: 25px; color: red; text-transform: uppercase; text-align: center;

}

.wrapper .form{ width: 100%;

}

.wrapper .form .inputfield{ margin-bottom: 15px; display: flex; align-items: center;

}

|  |
| --- |
| .wrapper .form .inputfield label{ width: 200px; color: black; margin-right: 10px;  font-size: 14px;  } |

.wrapper .form .inputfield .input,

.wrapper .form .inputfield .textarea{ width: 100%;

|  |
| --- |
| outline: none; border: 1px solid red; font-size: 15px; padding: 8px 10px; border-radius: 3px; transition: all 0.3s ease;  } |

.wrapper .form .inputfield .textarea{ width: 100%; height: 125px; resize: none;

}

.wrapper .form .inputfield .custom\_select{ position: relative; width: 100%; height: 37px;

}

.wrapper .form .inputfield .custom\_select:before{ content: ""; position: absolute; top: 12px; right: 10px; border: 8px solid; border-color: red transparent transparent transparent; pointer-events: none;

}

|  |
| --- |
| .wrapper .form .inputfield .custom\_select select{  -webkit-appearance: none; -moz-appearance: none; appearance: none;  outline: none; width: 100%; height: 100%; border: 0px; padding: 8px 10px; font-size: 15px; border: 1px solid red; border-radius: 3px;  } |

.wrapper .form .inputfield .input:focus,

.wrapper .form .inputfield .textarea:focus,

.wrapper .form .inputfield .custom\_select select:focus{ border: 1px solid black;

}

|  |
| --- |
| .wrapper .form .inputfield p{ font-size: 14px; color: black;  }  .wrapper .form .inputfield .check{ width: 15px; height: 15px; position: relative; display: block; cursor: pointer;  } |
| .wrapper .form .inputfield .check input[type="checkbox"]{ position: absolute; top: 0; left: 0; opacity: 0;  }  .wrapper .form .inputfield .check .checkmark{ width: 15px; height: 15px; border: 1px solid black; display: block; position: relative;  }  .wrapper .form .inputfield .check .checkmark:before{ content: ""; position: absolute; top: 1px; left: 2px; width: 5px; height: 2px; border: 2px solid; border-color: transparent transparent black black; transform: rotate(-45deg); display: none;  }  .wrapper .form .inputfield .check input[type="checkbox"]:checked ~ .checkmark{ background: black;  } |

.wrapper .form .inputfield .check input[type="checkbox"]:checked ~ .checkmark:before{ display: block;

}

|  |
| --- |
| .wrapper .form .inputfield .check{ width: 15px; height: 15px; position: relative; display: block; cursor: pointer;  }  .wrapper .form .inputfield .check input[type="checkbox"]{ position: absolute; top: 0; left: 0; opacity: 0;  }  .wrapper .form .inputfield .check .checkmark{ width: 15px; height: 15px; border: 1px solid black; display: block; position: relative;  }  .wrapper .form .inputfield .check .checkmark:before{ content: ""; position: absolute; top: 1px; left: 2px; width: 5px; |
| height: 2px; border: 2px solid; border-color: transparent transparent black black; transform: rotate(-45deg); display: none;  }  .wrapper .form .inputfield .check input[type="checkbox"]:checked ~ .checkmark{ background: red;  } |

.wrapper .form .inputfield .check input[type="checkbox"]:checked ~ .checkmark:before{ display: block;

}

|  |
| --- |
| .wrapper .form .inputfield .btn{ width: 100%;  padding: 8px 10px;  font-size: 15px; border: 0px; background: red; color: black; cursor: pointer; border-radius: 3px; outline: none;  } |

.wrapper .form .inputfield .btn:hover{ background: #ffd658;

}

.wrapper .form .inputfield:last-child{ margin-bottom: 0;

}

|  |
| --- |
| @media (max-width:420px) {  .wrapper .form .inputfield{ flex-direction: column; align-items: flex-start;  }  .wrapper .form .inputfield label{ margin-bottom: 5px;  }  .wrapper .form .inputfield.terms{ flex-direction: row;  }  } |

register.css

|  |
| --- |
| \*{ margin: 0; padding: 0; font-family: sans-serif; box-sizing: border-box;  }  body{ display: flex; justify-content: center; align-items: center; flex-direction: column; height: 100%; width: 100%; background-image: linear-  gradient(rgba(0,0,0,0.5),rgba(0,0,0,0.5)),url(https://png.pngtree.com/thumb\_back/fh260/background/20220217/pngtree-red-simpleillustration-public-welfare-publicity-background-of-world-blood-donation-image\_952530.jpg); background-position: cover; background-size: cover; position: absolute;  } |

form{ margin-top: 50px; text-align: center; }

input{ display: block; width: 350px; height: 40px; margin: 20px; border: none; outline: none; font-size: 20px; border-bottom: 1px solid black; background-size: cover; background: transparent; color: black; }

|  |
| --- |
| button{ width: 350px; height: 40px; font-size: 20px; background-color: red; border-radius: 30px; color: black; margin-top: 20px; transition: .5s;  }  .buttons button:hover{ background: #cc0000;  } |
| form h1{ margin-bottom: 30px; color: black;  } |

::placeholder{ color: black;

}

request.css

|  |
| --- |
| \*{ margin: 110; padding: 110; font-family: sans-serif; box-sizing: border-box;  }  body{ display: flex; justify-content: center; align-items: center; flex-direction: column; height: 100%; width: 100%; background-image: linear-  gradient(rgba(0,0,0,1),rgba(0,0,0,1)),url(https://static.vecteezy.com/system/resources/previews/007/849/061/original/world-blooddonor-background-free-vector.jpg); background-position: absolute; background-size: cover; position: absolute;  }  table{ margin-top: 50px; text-align: left; width: 40px;  border-spacing: 40px; }  .btn{ width: 5%; height: 20px; font-size: 15px; margin: 1rem 0; background-color: red; border-radius: 30px; color: white; cursor: pointer; display: inline-block; position: fixed; transition: .5s  }  .btn .btn--block:hover{ background: white;  transition: 0.2s;  } table h1{ |

margin-bottom: 50px; color: white; }

::placeholder{ color: white;

}

signin.css

|  |
| --- |
| body{ margin: 0; padding: 0;  }  .btn{ border-radius: 40px; border: 0; font-size: 1.8rem; font-weight: 600; margin: 1rem 0; padding: 2rem 3rem; text-transform: uppercase; white-space: nowrap; cursor: pointer;  }  .btn--primary{ background: transparent; color: rgb(0, 15, 0);  }  .btn--primary:hover{ background: transparent ;  }  .btn--secondary{ background: transparent; color: rgb(0, 0, 1);  }  .btn--secondary:hover{ background: transparent;  }  .btn1--block:hover{ color: #fafffa; }  .btn2--block:hover{ color: #fafffa;  }  .btn1--block{ width: 50%; display: inline-block; position: fixed; left: 5%; top: 37%; }  .btn2--block{ width: 50%; display: inline-block; |
| position: fixed; left: 50%; top: 37%;  }  #container{ text-align: center;  }  @media screen and (min-width: 1024px) {  .btn { font-size: 1.8rem;  }  } |

style.css

|  |
| --- |
| @import url('https://fonts.googleapis.com/css?family=Roboto:250&display=swap');  \*{ padding: 0; margin: 0;  }  .wrapper{ background: url(https://img.lovepik.com//back\_pic/05/64/03/535b618c44b9dde.jpg\_wh860.jpg) no-repeat; background-size: cover; height: 100vh;  }  .navbar{ position: fixed; height: 80px; width: 100%; top: 0; left: 0; background: rgba(0,0,0,0.4);  }  .navbar .logo{ width: 140px; height: auto; padding: 20px 100px;  }  .navbar ul{ float: right; margin-right: 20px;  }  .navbar ul li{ list-style: none; margin: 0 8px; display: inline-block; line-height: 80px;  }  .navbar ul li a{ font-size: 20px; font-family: 'Roboto', sans-serif; color: white; padding: 6px 13px; text-decoration: none; transition: .4s;  }  .navbar ul li a.active,  .navbar ul li a:hover{ |

|  |
| --- |
| background: red; border-radius: 2px;  }  .wrapper .center{ position: absolute; left: 50%; top: 55%; transform: translate(-50%, -50%); font-family: sans-serif; user-select: none;  }  .center h1{ color: red; font-size: 70px; width: 900px; font-weight: bold; text-align: center;  margin-top: 1px;  }  .center h2{ color: red; font-size: 70px; font-weight: bold; margin-top: 100px; width: 985px; text-align: center;  }  .center .buttons{ margin: 35px 280px;  }  .buttons button{ height: 50px; width: 150px; font-size: 18px; font-weight: 600; color: #ffb3b3; background: red; outline: none; cursor: pointer; border: 1px solid #cc0000; border-radius: 25px; transition: .4s;  }  .buttons .btn2{ margin-left: 25px; }  .buttons button:hover{ background: #cc0000;  } |

**PHP FILES:**

register.php

|  |
| --- |
| <?php if (isset($\_POST['signup'])) { if (isset($\_POST['Username']) && isset($\_POST['Password']) && isset($\_POST['Gender']) && isset($\_POST['Age']) && isset($\_POST['Email']) && isset($\_POST['Mobile no'])) {  $username = $\_POST['Username'];  $password = $\_POST['Password'];  $gender = $\_POST['Gender'];  $age = $\_POST['Age'];  $email = $\_POST['Email'];  $phoneCode = $\_POST['Mobile no'];  $host = "localhost";  $dbUsername = "root";  $dbPassword = "";  $dbName = "test";  $conn = new mysqli($host, $dbUsername, $dbPassword, $dbName); if ($conn->connect\_error) { die('Could not connect to the database.');  } else {  $Select = "SELECT email FROM register WHERE email = ? LIMIT 1";  $Insert = "INSERT INTO register(Username, Password, Gender, Age, Email, Mobile no) values(?, ?, ?, ?, ?, ?)";  $stmt = $conn->prepare($Select);  $stmt->bind\_param("s", $email);  $stmt->execute();  $stmt->bind\_result($resultEmail);  $stmt->store\_result();  $stmt->fetch();  $rnum = $stmt->num\_rows; if ($rnum == 0) {  $stmt->close();  $stmt = $conn->prepare($Insert);  $stmt->bind\_param("ssssii",$Username, $Password, $Gender, $Age, $Email, $Mobile no); if ($stmt->execute()) { echo "New record inserted sucessfully.";  } else { echo $stmt->error;  }  } else { echo "Someone already registers using this email.";  }  $stmt->close();  $conn->close();  }  } else { echo "All field are required."; die();  }  } else { echo "Signup button is not set";  }  ?> |

**JS FILES:**

feedback.js

|  |
| --- |
| const ratingsEl = document.querySelectorAll(".rating"); const sendBtn = document.querySelector("#send"); const panel = document.querySelector("#panel");  ratingsEl.forEach((el) => { el.addEventListener("click", () => { ratingsEl.forEach((innerEl) => { innerEl.classList.remove("active");  }); |
| el.classList.add("active");  });  }); |
| sendBtn.addEventListener("click", () => { panel.innerHTML = `  <i class="fas fa-heart"></i>  <strong>Thank you, Donor!</strong>  <p>We'll use your feedback to improve our application's performance.</p>  <a href="home.html"><button class="btn">Done</button></a>  `;  }); |

**PYTHON FILES:** app.py

|  |
| --- |
| from flask import Flask, render\_template, request, redirect, url\_for, session  import ibm\_db import bcrypt conn = ibm\_db.connect("DATABASE=bludb;HOSTNAME=19af6446-6171-4641-8aba-  9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;  UID=dkz79110;PWD=VnQyUFTQ0JNLLLGq",'','') |

app = Flask(\_\_name\_\_) app.secret\_key=b'\_5#y2L"F4Q8z\n\xec]/'

|  |
| --- |
| @app.route('/home', methods=['POST','GET']) def home():  return render\_template("home.html") |
| @app.route('/sigin', methods=['POST','GET']) def signin():  return render\_template("signin.html") |
| @app.route('/login',methods=['POST','GET']) def login():  if request.method=='POST':  username = request.form['username'] password = request.form['password'] |

print("entered into post")

|  |
| --- |
| if not username or not password:  return render\_template('login.html', error='please fill all fields')  sql = "select \* from user where username=? and password=?" stmt = ibm\_db.prepare(conn,sql) ibm\_db.bind\_param(stmt,1,username) ibm\_db.bind\_param(stmt, 2, password) ibm\_db.execute(stmt) dic = ibm\_db.fetch\_assoc(stmt) print(login) if login:  return redirect(url\_for('signin')) |
| else:  return redirect(url\_for('login')) |

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

|  |
| --- |
| if request.method=='POST':  username = request.form['username'] password = request.form['password'] confirmpassword = request.form['confirm password'] gender = request.form['gender'] age = request.form['age'] email = request.form['email'] mobileno = request.form['mobile no'] |
| if not username or password or confirmpassword or gender or age or email or mobileno:  return render\_template('register.html', error = 'Please fill all the fields')  hash=bcrypt.hashpw(password.encode('utf-8'),bcrypt.gensalt()) |
| query = "SELECT \* FROM user WHERE username=? OR password=?" stmt = ibm\_db.prepare(conn,query) ibm\_db.bind\_param(stmt,1,username) ibm\_db.bind\_param(stmt,2,password) ibm\_db.execute(stmt) isuser=ibm\_db.fetch\_assoc(stmt) if not isuser:  sql = "INSERT INTO user(username, password, confirmpassword, gender, age, email, mobileno) VALUES(?,?,?,?,?,?,?)" prep\_stmt = ibm\_db.prepare(conn,sql) ibm\_db.bind\_param(prep\_stmt,1,username) ibm\_db.bind\_param(prep\_stmt,2,password) ibm\_db.bind\_param(prep\_stmt,3,confirmpassword) ibm\_db.bind\_param(prep\_stmt,4,gender) ibm\_db.bind\_param(prep\_stmt,5,age) ibm\_db.bind\_param(prep\_stmt,6, email) ibm\_db.bind\_param(prep\_stmt,7, mobileno) ibm\_db.execute(prep\_stmt) return redirect(url\_for('home'))  else:  return render\_template('register.html',error='Invalid details')  return render\_template('login.html', name='home') |

@app.route('/registerfordonor',methods=['POST','GET']) def registerfordonor():

|  |
| --- |
| if request.method=='POST':  firstname = request.form['firstname'] lastname = request.form['lastname'] age1 = request.form['age1'] bloodgroup = request.form['bloodgroup'] gender1 = request.form['gender1'] donatedbefore = request.form['donatedbefore'] address1 = request.form['address1'] anyhealthissues = request.form['anyhealthissues'] sql1 = "insert into DONORDETAILS values(?,?,?,?,?,?,?,?)" prep\_stmt1 = ibm\_db.prepare(conn,sql1) ibm\_db.bind\_param(prep\_stmt1,1,firstname) ibm\_db.bind\_param(prep\_stmt1,2,lastname) ibm\_db.bind\_param(prep\_stmt1,3,age1) ibm\_db.bind\_param(prep\_stmt1,4,bloodgroup) ibm\_db.bind\_param(prep\_stmt1,5,gender1) ibm\_db.bind\_param(prep\_stmt1,6, donatedbefore) ibm\_db.bind\_param(prep\_stmt1,7, address1) ibm\_db.bind\_param(prep\_stmt1,8, anyhealthissues) ibm\_db.execute(prep\_stmt1) return redirect(url\_for('home'))  elif request.method=='GET':  return render\_template('register') |

@app.route('/requestfordonor',methods=['POST','GET']) def requestfordonor():

|  |
| --- |
| if request.method=='POST':  username = request.form['username'] gender1 = request.form['gender1'] age1 = request.form['age1'] bloodgroup = request.form['bloodgroup'] email = request.form['email'] mobileno = request.form['mobileno'] |
| if not username or gender1 or age1 or bloodgroup or email or mobileno:  return render\_template('request.html', error = 'Please fill all the fields') |
| query = "select \* from donordetails where username=? or bloodgroup=?" stmt = ibm\_db.prepare(conn,query) ibm\_db.bind\_param(stmt,1,username) ibm\_db.bind\_param(stmt,2,bloodgroup) ibm\_db.execute(stmt) isuser=ibm\_db.fetch\_assoc(stmt) if not isuser:  return render\_template('request.html', success='Request sent successfully.')  else:  return render\_template('request.html',error='Invalid details')  return render\_template('home.html', name='home')  if (\_\_name\_\_)=='\_\_main\_\_': app.run(debug=True) |

db.py

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| --- |
| import ibm\_db conn = ibm\_db.connect("DATABASE=bludb;HOSTNAME=19af6446-6171-4641-8aba-  9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt; UID=dkz79110;PWD=VnQyUFTQ0JNLLLGq",'','') print(conn) print("connection successful..") |

**13.2 GITHUB LINK:**

https://github.com/IBM-EPBL/IBM-Project-30622-1660150952

**PROJECT DEMO LINK:**

https://drive.google.com/drive/folders/11mfW1LTvzUEu9ljR5Xtt2Z8yVyTvEsh9