TEAM ID	PNT2022TMID04545
PROJECT NAME	PLASMA DONOR APPLICATION
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PLASMA DONOR APPLICATION

ABSTRACT

The study of people's motivations and barriers to donating has made a significant contribution to our understanding of the entire blood donation habit.

Even though whole blood donation has been thoroughly researched over the past 60 years, we still know relatively little about plasma donation in unpaid, voluntary settings.

However, there has been a steady rise in the demand for plasma-derived products over the past few years, and blood collection organisations must change to satisfy this demand.

This article seeks to cover the main factors that encourage and discourage whole blood donation and contrast them with those that we already understand about plasma donation.

The evidence at hand reveals parallels between these activities, but also distinctions that point to the need for additional study.

CHAPTER 1
INTRODUCTION

1.1 PROJECT OVERVIEW

Plasma protein treatments (PPTs) are used to treat a range of illnesses. Numerous of these are fatal, chronic, unusual, and frequently hereditary illnesses.

PPTs, which are derived from human plasma, replace any missing or insufficient proteins. For the length of their lives, patients typically need to receive these treatments as frequent infusions or injections.

PPTs are regarded as sole-source biologic goods since there are no generic or chemical alternatives.

1.2PURPOSE

Our project's main objective is to create a user-friendly web application that functions as a scientific vehicle from which we can help decrease mortality or assist those affected by COVID19 by donating plasma from patients who have recovered without officially sanctioned antiretroviral therapy. In preparation for a fatal COVID19 infection, plasma therapy is an experimental approach to treat those COVID-positive patients and aid in their quicker recovery.

Therapy, which is regarded as trustworthy and secure. Any anyone who has fully recovered from COVID19 is qualified to give plasma.

We are all aware that in order to find plasma using the conventional means, one must seek through hospital records, contact donors who have been recovered, and occasionally travel.

The blood bank can apply for the donor and add the units they need once the donor has accepted the request. The hospital can also send the request to the blood bank that urgently needs the plasma for the patient and can take the plasma from the blood bank. This is the main goal of the proposed system. Donors who want to donate plasma can simply upload their covid19 traced certificate and can donate the plasma to the blood bank.

CHAPTER 2

LITERATURE SURVEY

2.1 EXISTING PROBLEM

The blood bank can apply for the donor and, once the donor has accepted the request, the blood bank can add the units they need. The hospital can also send the request to the blood bank that urgently needs the plasma for the patient and can take the plasma from the blood bank. The main goal of the proposed system is to allow donors who want to donate plasma to do so by simply uploading their covid19 traced certificate.And there is no correct contact for the blood group is available .Thus there is a need for matching the perfect donor

2.2 REFERENCES

Antoine Beurel,Florence Terrade,J.P.Lebaudy and Bruno Danic "Determinants of plasma donation"on September 2017 published a paper on the conference. The major contribution of Human Sciences in the understanding of the whole blood donation behavior has been through the study of individuals' motivations and deterrents to donate. However, if whole blood donation has been very widely studied in the last sixty years, we still know very little about plasma donation in voluntary non-remunerated environments. Yet, the need for plasma-derived products has been strongly increasing for some years, and blood collection agencies have to adapt if they want to meet this demand. Current evidence shows similarities between both behaviors, but also differences that indicate a need for further research regarding plasma donation.

S Delépine-Farvacques , Florence Terrade, B Danic , J-P Lebaudy "Commitment in plasmapheresis donation: A study of determinants among regular donors in plasmapheresis" 2017 Mar 21.The purpose of this study, based on the Theory of Planned Behavior, is to identify and ultimately better understand what determines the loyalty and regularity of donors involved in plasmapheresis donation.There is a survey conducted among 16 regular plasmapheresis donors, by the way of semi structed individual interviews.The level of commitments of these regular donor is considered as a level of appropriation. A better understanding of the determinants of plasmapheresis donors should lead us to more effective awareness of new potential donors, thereby increasing recruitment and retention. Due to the increasing need for plasma-derived products, the main problem of this study is closely related to both ethical and socio-economic aspects.

Rachel Thorpe , Barbara M Masser , Lilly Nguyen , Tanya E Davison" Understanding donation frequency: insights from current plasma donors" 2019 Dec 17. Experienced plasma donors try to maintain a donation practice in the context of busy lives, often by adopting a flexible approach to the frequency of donation. Their knowledge of the benefit of their donations is key to their continued giving, but most identified limitations to donating more often. Some involved health issues and more research is needed to understand donors' perspectives on the impact of donation on their health.

Nayan Das, MD. Asif Iqbal "Nearest Blood & Plasma Donor Finding: A Machine Learning Approach" 2020 23rd In te rn a tio n a l C o n feren ce o f C om puter and I n f orm ation Technology (IC C IT).Due to lack of blood, people could not save themselves or their friends and

family members.A bag of blood can save a precious life. Statistics show that a large amount of blood is needed annually due to major operations, traffic accidents, blood disorders, including anemia, hemophilia, and acute viral infections like D engue etc. And approx. 85 million people need one or more blood transfusions for treatment. Voluntary blood donors 1000 population in some countries is a matter of course, like Switzerland (113/1,000), Japan (70/1,000), while others have disappointing results like India 4/1000 and B anglades has 5/1000. Recently, the life-threatening COVID-19 virus has been spreading around the world a globe that is more vulnerable for older people those with a pre-existing medical condition Nearest blood or plasma donors the same group in a certain area can be explored in less time and more efficiently.

Kalpana Devi Guntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay Mallisetti "instant plasma donor recipientconnector webapplication" The world is suffering from the COVID 19 crisis and no vaccine has been found yet. But there is another scientific way we can help reduce mortality or help people affected by COVID19 by donating plasma from recovered patients. In the absence of an approved antiviral treatment plan for the fatal COVID-19 infection, plasma therapy is an experimental approach to treat patients positive for COVID-19 and help speed their recovery. Therapy is considered competent. In the referral system, a donor who wants to donate plasma can donate by uploading their COVID19 certificate and the blood bank can see the donors who have uploaded the certificate and the donors can request and the hospital can register/log in and search for the necessary items. plasma from a blood bank and can apply for a blood bank and receive plasma from a blood bank blood bank.

HarapanHarapan,NaoyaItoh,AmandaYufika,WiraWinardi,SynatKeam,HayphengTe,DewiMegawati[ij]ZinatulHayati,Abram L.Wagner" Coronavirus disease 2019 (COVID-19)". In early December 2019, an outbreak of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) occurred in the city of Wuhan, Hubei Province, China. On January 30, 2020, the World Health Organization declared the outbreak a public health emergency of international concern. As of February 14, 2020, 49,053 laboratory-confirmed cases and 1,381 deaths have been reported worldwide. The perceived risk of the disease has led many governments to introduce various control measures. We conducted a literature search of publicly available information to summarize knowledge about the pathogen and the current epidemic. In this review of the literature, the causative agent, pathogenesis and immune response, epidemiology, diagnosis, treatment and management of the disease, control and prevention strategies are evaluated.

Sean T. H. Liu, Hung-Mo Lin, Ian Baine, Ania Wajnberg, Jeffrey P. Gumprecht, Farah Rahman, Denise Rodriguez, Pranai Tandon, Adel Bassily-Marcus, Jeffrey Bander, Charles Sanky, Amy Dupper,Allen Zheng" Convalescent plasma treatment of severe COVID-19: a propensity score–matched control study"published a paper on September 2020. Convalescent plasma, donated by people who have recovered from COVID-19, is a cell-free component of blood that contains antibodies, including those that specifically recognize SARS-CoV-2. These antibodies, when transfused into patients infected with SARS-CoV-2, are thought to have an antiviral effect, suppressing the replication of the virus before the patients develop their own humoral immune response. Convalescent plasma is potentially effective against COVID-19, but is sufficiently potent that randomized controlled trials are needed.

2.3 PROBLEM STATEMENT DEFINITION

The need for plasma surged significantly during the COVID 19 crisis since there were no vaccines available to treat the infected patients. Finding a plasma donor in such a case was extremely difficult, and determining which donors are eligible to donate plasma as well as whether they had previously been infected and have recovered was a difficult effort. Obtaining the donor information was crucial because one of the treatments for infected patients included plasma therapy.

CHAPTER 3

IDEATION & PROPOSED SOLUTION

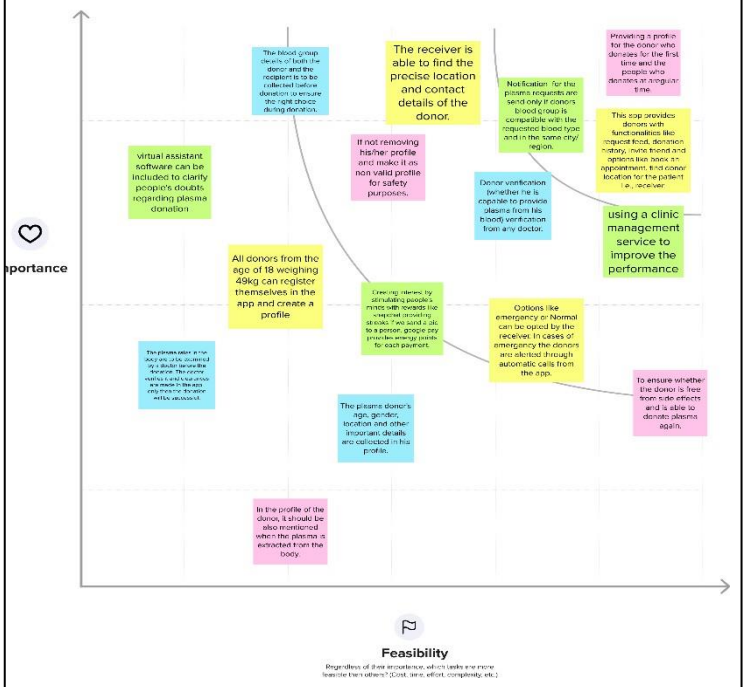
3.1 EMPATHY MAP CANVAS

3.2 IDEATION & BRAINSTORMING

A group problem-solving technique that involves the sharing of original ideas. This method calls for a lengthy, rambunctious conversation in which eachgroup member is urged to think aloud and offer as many ideas as they can based on their varied knowledge. Brainstorming blends informal problem-solving

techniques with lateral thinking, a technique for coming up with fresh ideas and approaches to problems.

PRIORITIZE



GROUP IDEAS

DONOR REGISTRATION

All donors from the age of 18 weighing 49kg can register themselves in the app and create a profile

Providing a profile for the donor who donates for the first time and the people who donates at aregular time.

The plasma donor's age, gender, location and other important details are collected in his profile.

APP INTERFACE

virtual assistant software can be included to clarify people's doubts regarding plasma donation

This app provides donors with functionalities like request feed, donation history, invite friend and options like book an appointment, find donor location for the patient i.e., receiver.

using a clinic management service to improve the performance

SAFETY PRECAUTION

To ensure whether the donor is free from side effects and is able to donate plasma again.

Donor verification (whether he is capable to provide plasma from his blood) verification from any doctor.

The plasma rates in the body are to be examined by a doctor before the donation. The doctor verifies it and clearances are made in the app, only then the donation will be successful.

If not removing his/her profile and make it as non valid profile for safety purposes.

The blood group details of both the donor and the recipient is to be collected before donation to ensure the right choice during donation.

FEATURES

Creating interest by stimulating people's minds with rewards like snapchat providing streaks if we send a pic to a person, google pay provides energy points for each payment.

The receiver is able to find the precise location and contact details of the donor.

This app provides donors with functionalities like request feed, donation history, invite friend and options like book an appointment, find donor location for the patient i.e., receiver.

In the profile of the donor, it should be also mentioned when the plasma is extracted from the body.

3.3 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Many major medical conditions are treated by plasma. One of the most well-known techniques known as plasma treatment, plasma is used to cure various incurable diseases. As there were no vaccines available to treat the infected patients duringthe Covid-19 emergency, the need for plasma increased dramatically. Plasma therapy had a high probability of recovery but a very low donor count, therefore it was crucial to learn more about the donors in these circumstances. It would be helpful to save the contributor information and let clients know about the recurring donors because it can help them find the crucial information more quickly.
2.	Idea / Solution description	This system's goal is to develop a web application to link plasma donors and patients. Patient of this application may post request plasma donation or request for plasma. The fundamental solution is to establish a centralised system is that a admin will keep track of current and previous Plasma Donation Events and also keep track of the location of the donor's plasma using google map. The recommendation solution is as follows: Application contains three roles: i)Admin ii)Patient iii)Donor Admin : • Admin can login using their credentials. • Admin can view the request. • Admin can delete the request. • Admin can add volunteers. Patient :

		• If the patient is new ,Patient must register first and then login • The patient can request specific blood type and quantity • Patient can view the accepted status by donor • Patient can contact the donor directly Donor: • If the donor is new he/she must register first and then login to the page • Upload vaccination certificates • View blood request • Accept/reject blood request • View the previous donation status • View blood donation campaigns posted by registered blood banks • Download E-certificate after donation Blood bank: • Hospitals and blood bank centres can Login /Register • Patients can find donor's personal details. • View blood type and quantity stored. • Track blood Storage
3.	Uniqueness	Users can effortlessly grasp the person interface. packages are available whenever, anywhere. customers can use this software to make inquiries and contact donors immediately asking them to donate plasma if they urgently need plasma for treatment but plasma is not available at close by hospitals can. Hospitals also can post appeals to donors. all people who wants to donate blood or don't know how to donate blood can store lots of lives with this app that is easy to use. today, lots of them have smartphones where they are able to download this app and store their lives.

4.	Social Impact / Customer Satisfaction	the entirety is accessible on line because we live in a modern-day age. in spite of the fact that there are numerous applications, there is no legitimate form for donating plasma. even though lots of them would love to donate blood and plasma, they're not aware of the procedure or how to make contributions. The capacity to give plasma is made to be had via this application. Plasma donations are being made everywhere, and although many human beings breakthrough to do so, the plasma isn't constantly prepared to be used It boosts the amount of donors.
5.	Business Model (Revenue Model)	To construct an android utility with a purpose to assist humans to get blood in emergency situations like herbal disasters using capabilities like geo-tag . To motivate humans for blood donation and to assist sufferers receive blood in emergency situations, we have designed an utility to conquer all the troubles which the cutting-edge offline as well as online systems face. If in emergency a affected person calls for blood, using this application we'll now not just be capable of contact Blood financial institution and Hospitals however can also are seeking for help from person registered Donors
6.	Scalability of the Solution	Instead of scouring the entire world for plasma donors, this APP enables users to find donors while sitting at home.When there is an emergency, plasma requests that everyone sends a message. When a donor is prepared to donate, the recipient is informed. Receiver may get in touch with the donor. This software helps donors find potential donors quickly and easily by letting them know if they are eligible to donate.

3.4 PROBLEM SOLUTION FIT

	1.CUSTOMER SEGMENT CS - The recipient who are in need of plasma. - The NGO's & hospital managements.	**6.CUSTOMER CONSTRAINTS** CC - There is no connection details between the customers. - Unavailability of plasma at the needed time.	**5.AVAILABLE SOLUTIONS** AS - Seeking help through social media. - Existing system involves, only the collection of donor data and will not notify the about the recipient.	
	2.JOBS TO BE DONE/PROBLEMS - Establish a connection between the donor and the recipient. - Notify donors at the correct time. - Demand has increased.	**9.PROBLEM ROOT CAUSE** - 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.	**7.BEHAVIOUR** - The recipient will get the plasma at the right time. - The donors whose details, stored in database during registration will be notified.	
	3.TRIGGERS TR - We can advertise the web app through the NGO's and through the pharmaceutical companies. **4.EMOTIONS: BEFORE/AFTER EM** **- Before : Anxiety, Stress, Scared** **- After : Relaxed, Happy**	**10.YOUR SOLUTION** SL - Finding the respective donor and notify them through email for the requests.	**8.CHANNELS OF BEHAVIOUR** CH **- The donor will register and they will be notified through the mail.** **- It will acts as a communication channel.**	

CHAPTER 4
REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through website
FR-2	User Confirmation	Confirmation via Email
FR-3	User Login	Login through registered email id
FR-4	Send Request	If plasma required then donor get the notification
FR-5	Contact Donor	Contact donor directly if emergency

4.1 NON - FUNCTIONAL REQUIREMENT

NFR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The plasma Donor application is user friendlyand easy to access
NFR-2	**Security**	The users/donor details are stored in thecloud and it is secured with the user email id andpassword
NFR-3	**Reliability**	The system have the ability to work all thetimes without failure apart from network failure. The contact list of the donor are provided

NFR-4	**Performance**	The plasma donor application works well in every emergency situation. The easy interactive withthe user and less interrupts
NFR-5	**Availability**	The plasma Application is an online webapplication and it monitor 24/7
NFR-6	**Scalability**	The application offers multiple users and it is designed to protect the users information and details.

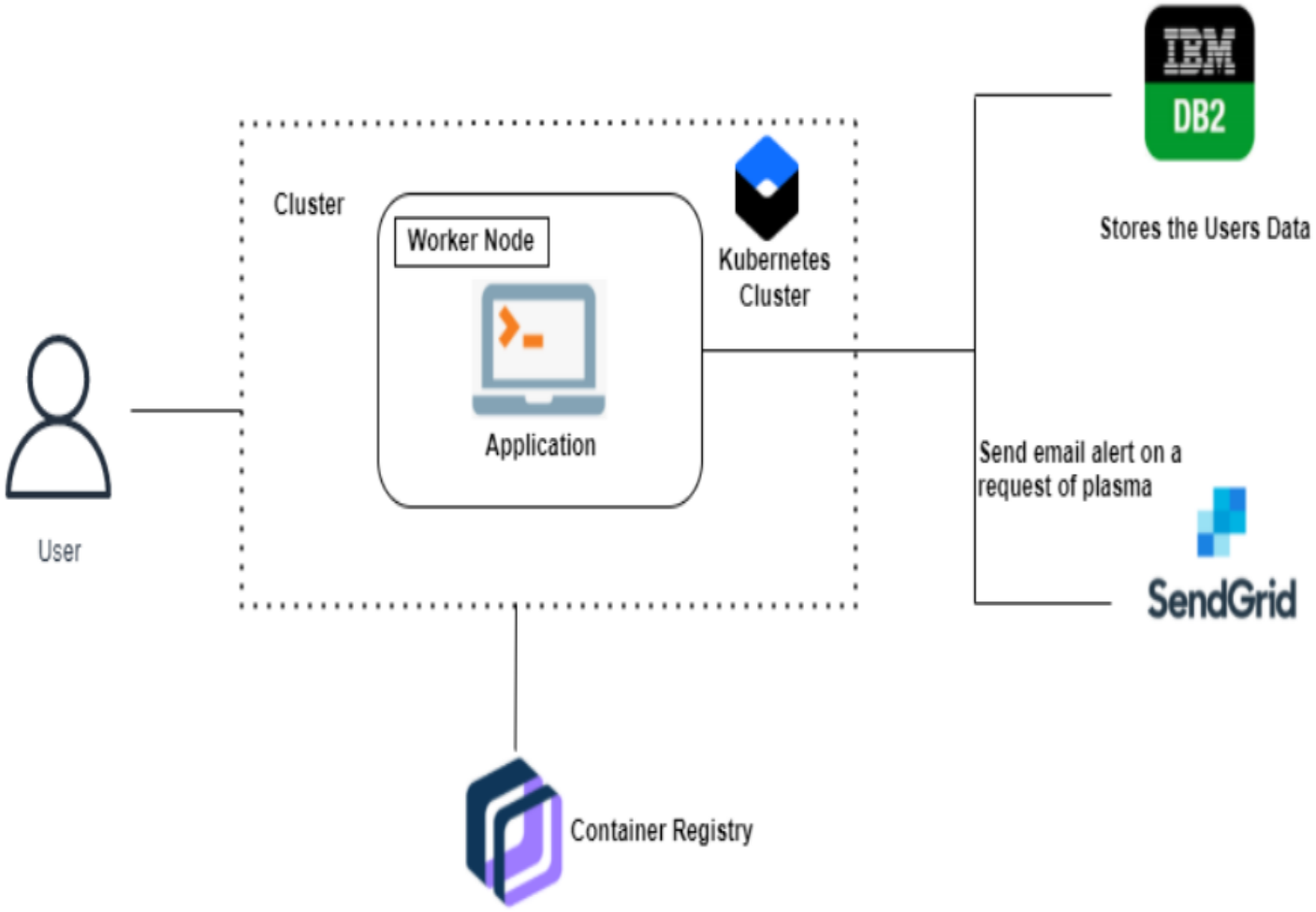
CHAPTER 5

PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A data flow diagram (DFD), which includes all the login information and other data that can be entered by the user on the application, demonstrates how the flow of information is carried out in an application.

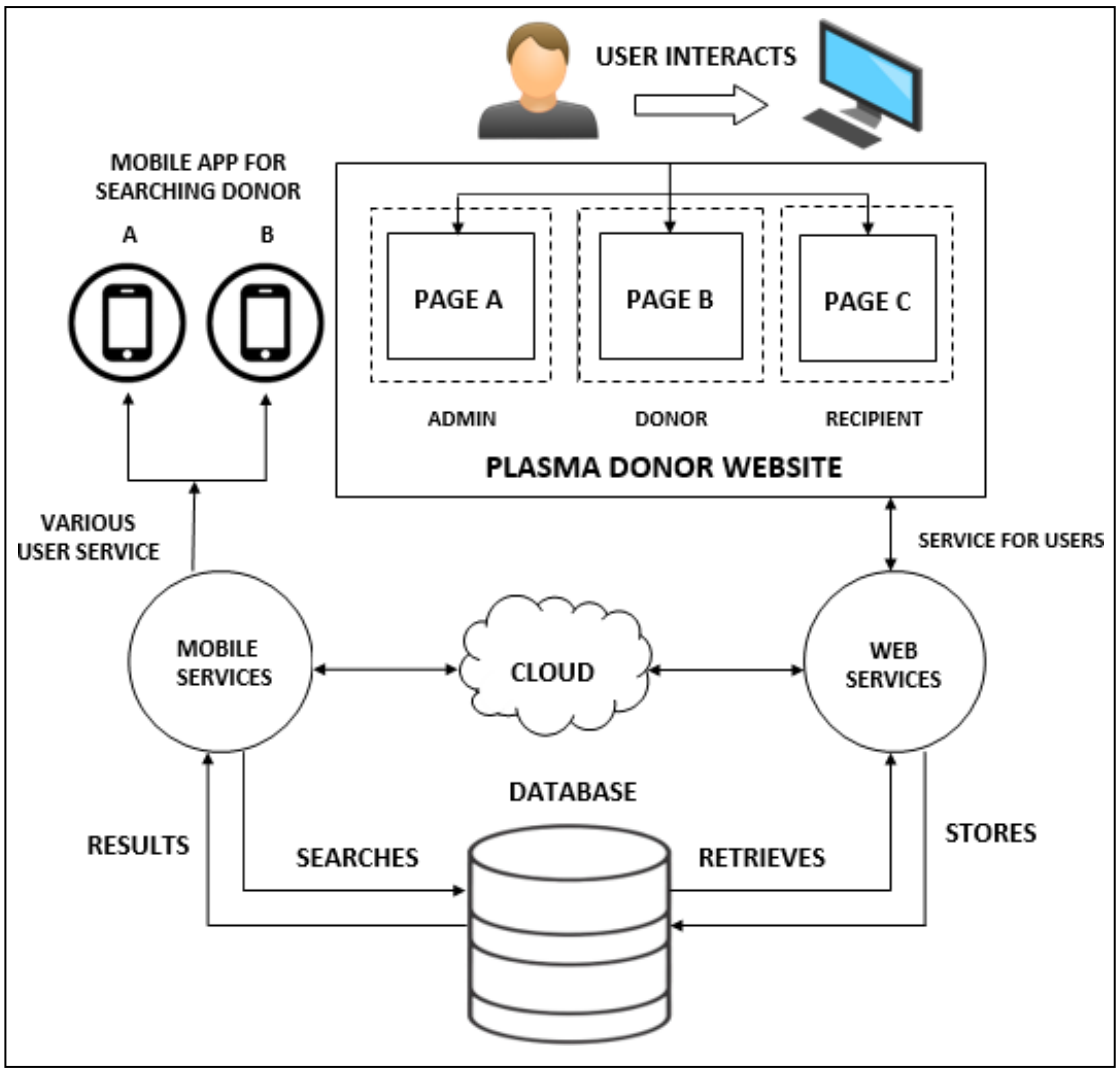
One kind of data flow diagram is a straightforward, multi-level DFD that gradually delves deeper into the data processing process, although more complex, hand-drawn process overviews can also be found. The developed model can be used to comprehend the flow of a project. The connections between them will be executed using the IBM database and cloud services.



5.2 ARCHITECTURES

5.2.1 SOLUTION ARCHITECTURE

A data flow diagram (DFD) illustrates every step of how information flows through an application. Solution architecture is the process of developing solutions using established procedures, rules, and best practises with the goal of ensuring that the created



solution is compatible with the enterprise architecture in terms of information architecture, system portfolios, integration needs, and other factors. Applications and information systems can be created and developed utilising a combination of roles, procedures, and documentation to solve particular business objectives, needs, or challenges is shown in the above figure.

5.2.2 TECHNICAL ARCHITECTURE

Technical architecture (TA), a subset of IT architecture, is used to design computer systems. It requires developing a technological blueprint for the positioning, interacting, and dependency of all components in order to satisfy system-relevant needs. Over the past ten years, the term "architecture" has become widely used in the field of information technology. Given that the majority of organisations must redesign their IT infrastructure to include modern trends like cloud computing and software as a service, this shouldn't be shocking (SaaS).

5.3 USER STORIES

User Type	**Functional Requirement(Epic)**	**User Story Number**	**User Story / Task**
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.
		USN-2	As a user, I will receive confirmationemail-once I have registered for the application
		USN-3	As a user, I can register for the Application-through the Gmail
	Login	USN-4	As a user, I can log into the application by entering email & password
	Dashboard	USN-5	As a user, I can send the proper requests To-donate and obtain plasma.
Customer (Web user)	Login	USN-6	As a user, I can register and log into the application by entering email & password to-view the profile
	Dashboard	USN-7	As a user, I can send the proper requests To-donate and obtain plasma.
Customer Care Executive	Application	USN-8	As a customer care executive, I can try to address user's concerns and questions

Administrator	Application	USN-9	As an administrator I can help with user-facing aspects of a website, like its appearance , navigation and use of media.
		USN-10	As an administrator, I can involve working with the technical side ofwebsites.
User Type	Functional Requirement(Epic)	User Story Number	User Story / Task
Chatbot	Dashboard	USN-11	In addition the Customer Care-executive , chatbot can try to address user's concerns and questions

CHAPTER 6

PROJECT PLANNING AND SCHEDULING

6.1SPRINT PLANNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration and Login	USN-1	• To create the user and admin login functionality. • Creating plasma request by admin functionality	20	High	Dharanidharan K,Adithya B
Sprint-2	Cloud and database	USN-2	• Connecting flask app with database[IBMDB2] • implementation of chatbot.	20	High	Aravinth, Aananthakumar
Sprint-3	Deployment in DevOps, Mailing	USN-3	Creating images with docker, deploying Kubernetes and Addthe mailing service.	20	High	Dharanidharan, Aananthakumar
Sprint-4	Testing and Deployment to user	USN-4	To make sure that the software is handy to users.	20	High	Adithya, Aravinth

6.2 SPRINT DELIVERY SCHEDULE

Project Tracker:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
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	05 Nov2022
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

Sprint velocity

Sprint 1 = 20/6 = 3.66

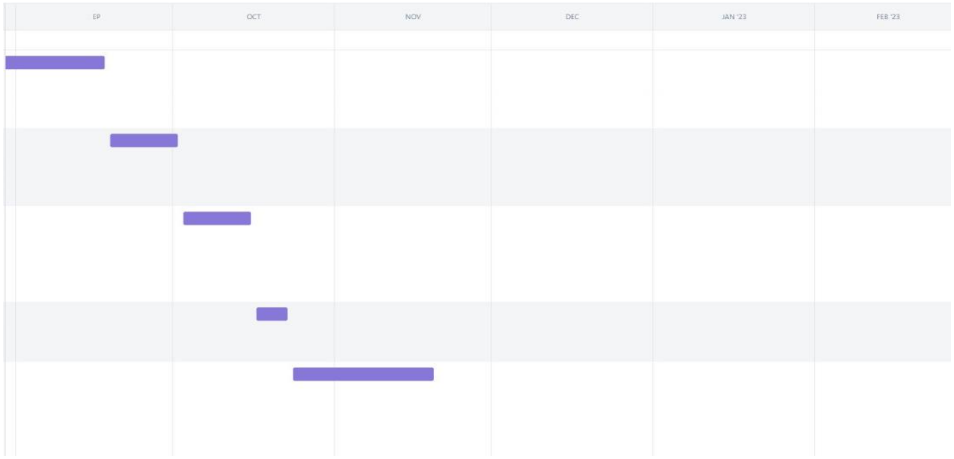
Sprint 2 = 20/6 = 3.66

Sprint 3 = 20/6 = 3.66

Sprint 4 = 20/6 = 3.66

6.3 REPORT FROM JIRA

Jira is a piece of software used for project management and issue tracking. The program, which was developed by the Australian software company Atlassian, is frequently used by agile development teams to keep track of bugs, stories, epics, and other tasks.

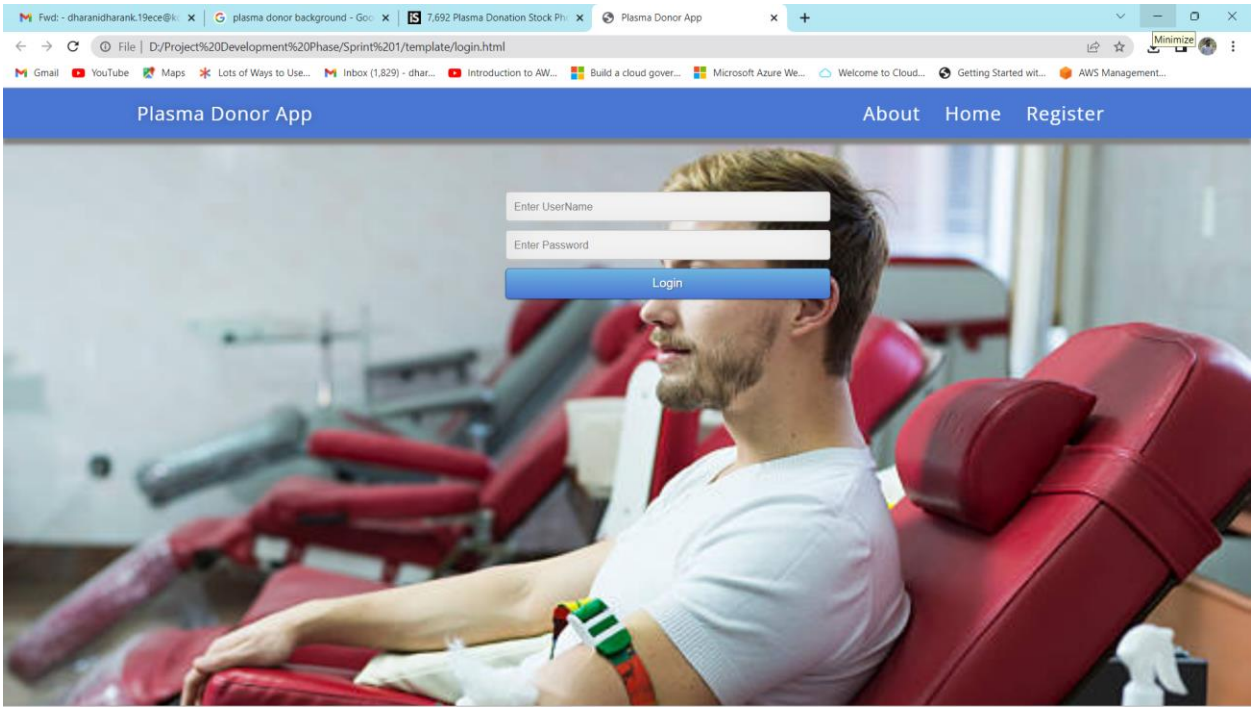


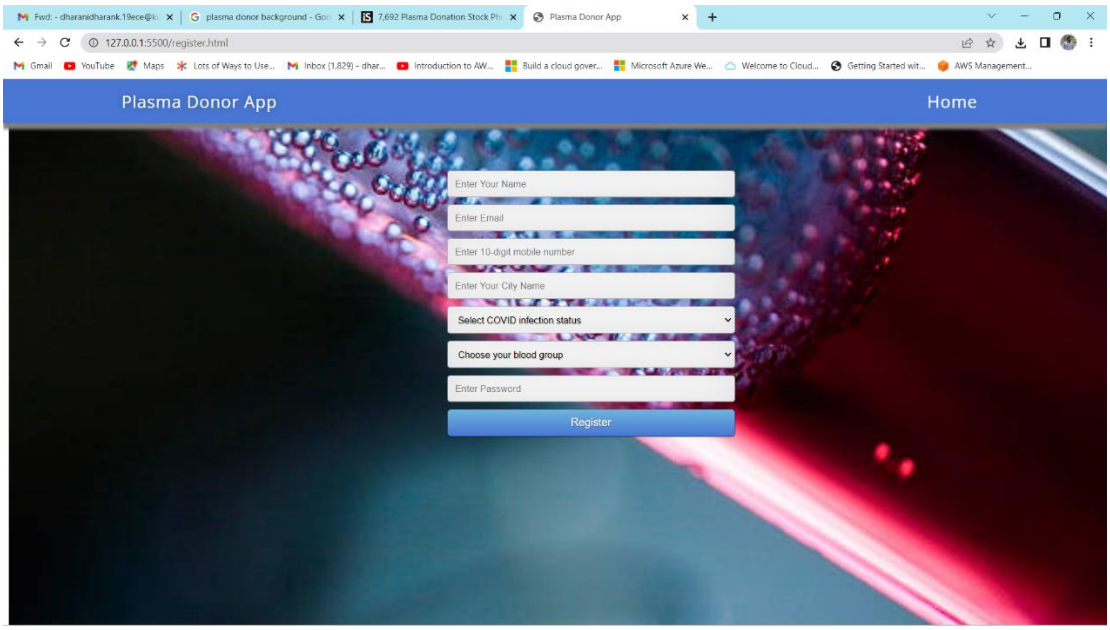
CHAPTER 7

CODING & SOLUTIONING

7.1 FEATURE 1

For creating an application we need a software tools like spyder,ibm_cloud.On the Ibm Cloud we need to use Database ,Docker,Kubernetes etc.The main thing is we need to create a web page which contain Login page ,Register page and redirecting to home page

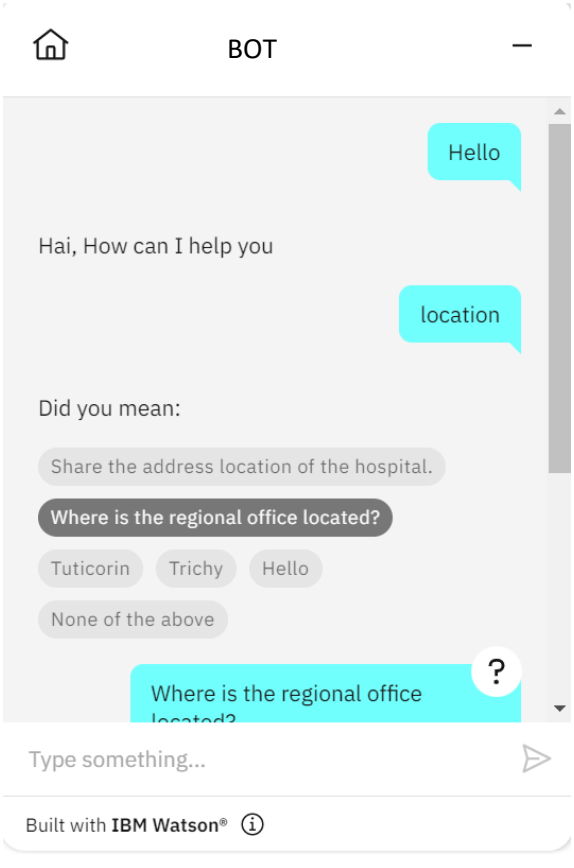


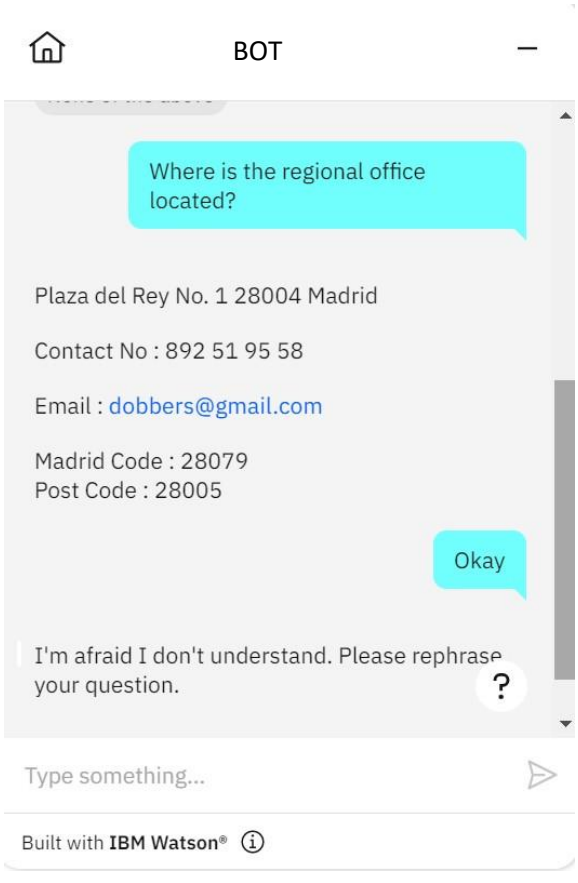


7.2 FEATURE 2

For the benefit of the users, chatbots have been introduced into the model and trained on FAQs which will reduce the work of the user as well as customer care persons.

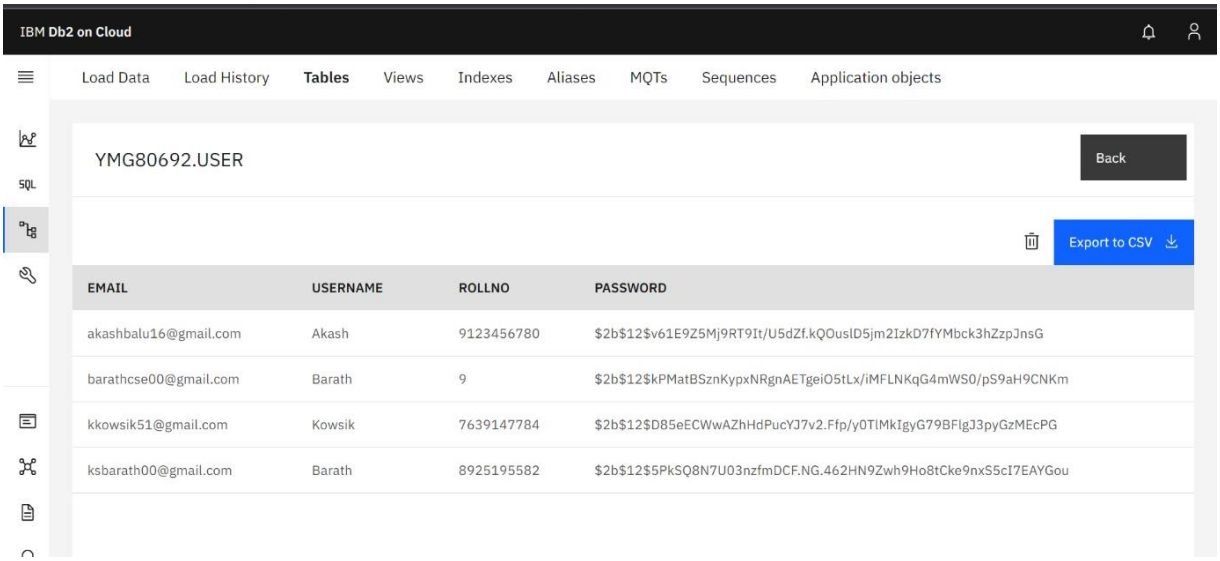
7.3 DATABASE SCHEMA





User Database Details

Create table USER(Email varchar(30) Not null,UserName Varchar(25),Rollno Integer ,Password Varchar(30));



Register Table

Create table Register(Username varchar(30),Email varchar(30) , Phone_number ,City Varchar(20),Covid_Status varchar(20),Blood_Group varchar(10) , Password varchar(20));

Value insertion

Insert into register (Username ,email,phone_number ,city , covid_status,Blood_group,password)Values (‘akashbalu16’,’ akashbalu16@gmail.com’ ,’Erode’, ‘Not affected’,’A1B+’,**********);

CHAPTER 8

TESTING

8.1TEST CASES

S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Voluem Changes	Risk Score	Justification
1	Plasma Donor	Existing	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes
2	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	ORANGE	As we have seen the changes
3	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes
4	Plasma Donor	Existing	Low	No Changes	High		>5 to 10%	GREEN	As we have seen the changes
5	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes

NFT - Detailed Test Plan				
S.No	Project Overview	NFT Test approach	Assumptions/Dependencies/Risks	Approvals/SignOff
1	Plasma Donor Login Page	LOAD	Page slow down.It may not be accessible	Adithya B,Dharanidharan K
2	Donor page	STRESS	Page slow down.It may not be accessible	Aravinth S,Ananthakumar S
3	Request Page	STRESS	Page slow down.It may not be accessible	Dharanidharan K,Adithya B

End Of Test Report								
S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	Approvals/SignOff
1	Plasma Donor Login P	LOAD	Not met because of logi	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K
2	Donor Page	STRESS	Not met because donor	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K
3	Request Page	STRESS	Not met because reques	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result
Index_TC_OO1	Functional	Home Page	Verify the links for redirection to the login and registration page .		1.Enter URL and click go 2.Click on Login/registration button 3.Verify login/Singup page displayed or not		Login/Signup page should display	Working as expected
Index_TC_OO2	UI	Home Page	Verify the UI elements in Index page		1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link e.Last password? Recovery password link		Application should show below UI elements: a.Login button b.Registration button c.Testimonial cards	Working as expected
LoginPage_TC_001	UI	Login page	Verify the UI elements in Login/Signup popup		1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box c.login button		Application should show below UI elements: a.Login button b.Textbox for entering email c.Textbox for entering password	Working as expected
LoginPage_TC_002	Functional	Login page	Verify user is able to log into application with Valid credentials		1.Enter URL and click go 2.Click on Login button 3.Enter Valid email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: barath@gmail.com password: barath	User should navigate to user account homepage	Working as expected

8.2 USER ACCEPTANCE TESTING

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	0	0	0	0	0
Duplicate	0	0	0	0	0
External	1	0	0	1	1
Fixed	0	2	0	0	2
Not Reproduced	0	0	0	0	0
Skipped	1	0	0	0	0
Won't Fix	0	0	0	0	0
Totals	2	2	0	1	3

Section	Total Cases	Not Tested	Fail	Pass
Login	3	0	0	3
Registration	4	0	0	4
Dashboard	2	0	0	2
Plasma request	3	0	1	2
Donor registration	2	0	0	2
Security	2	0	0	2

CHAPTER 9

RESULTS

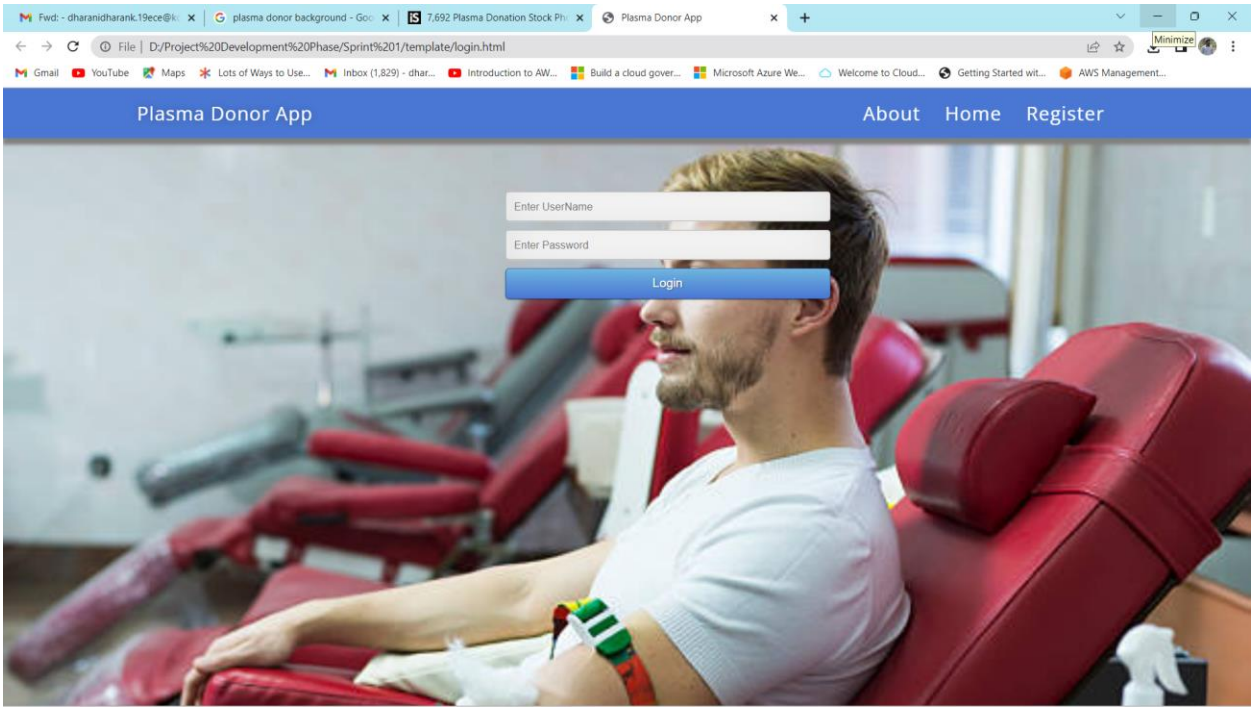
9.1 PERFORMANCE METRICS

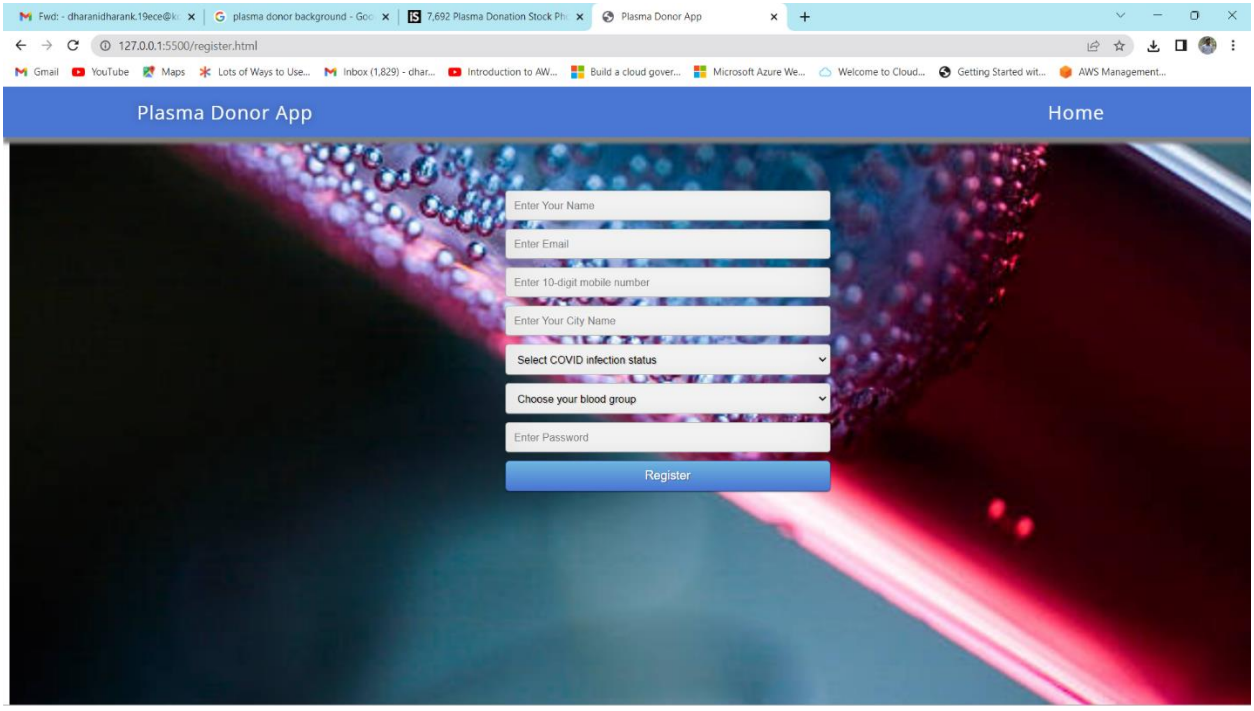
S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Voluem Changes	Risk Score	Justification
1	Plasma Donor	Existing	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes
2	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	ORANGE	As we have seen the changes
3	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes
4	Plasma Donor	Existing	Low	No Changes	High		>5 to 10%	GREEN	As we have seen the changes
5	Plasma Donor	New	Low	No Changes	Moderate		>5 to 10%	GREEN	As we have seen the changes

NFT - Detailed Test Plan				
S.No	Project Overview	NFT Test approach	Assumptions/Dependencies/Risks	Approvals/SignOff
1	Plasma Donor Login Page	LOAD	Page slow down.It may not be accessible	Adithya B,Dharanidharan K
2	Donor page	STRESS	Page slow down.It may not be accessible	Aravinth S,Ananthakumar S
3	Request Page	STRESS	Page slow down.It may not be accessible	Dharanidharan K,Adithya B

End Of Test Report								
S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	Approvals/SignOff
1	Plasma Donor Login P	LOAD	Not met because of logi	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K
2	Donor Page	STRESS	Not met because donor	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K
3	Request Page	STRESS	Not met because reques	PASS	NO-GO		CLOSED	Adithya B,Dharanidharan K

OUTPUT PAGES





CHAPTER 10

ADVANTAGES AND DISADVANTAGES

10.1ADVANTAGES

- The patient can use this plasma donor application to locate several donors.
- The donors will get notified if there is any need for plasma.
- Patients can use the application to obtain plasma; they are not required togo to the donors' location to receive assistance.
- The request process is completely an online one.

10.2 DISADVANTAGES

- Despite what people may believe given the prevalence of false donationrequests, trust cannot be easily established.
- We don’t know about the availability suppose if we need a blood AB-ve goup suppose if no one register for that group means we cant do anything
- In urgent time if person gives blood to some and his name is on that register page also we have to search for someone
- Regular update is required

CHAPTER 11

CONCLUSION

Recent months have seen a spike in the number of plasma request posts on social media sites including Facebook, Twitter, and Instagram. It's curious that a lot of individuals want to donate plasma when there is a need, but they can't find out whether there are any plasma donation requests in their area. The lack of a platform that would link patients with nearby blood donors is the reason behind this. When a patient needs plasma donation, our application takes care of the problem and contacts approved hospitals. Finding appropriate plasma donors who can locally accept plasma request posts is made easier with the help of this tool. This web application can be used by clinics to continue the plasma donation process. In order to host contribution camps and raise public awareness, data collected through this application can be utilised to analyse the ratio of regional requests to donations. If a request for plasma is made, the web service will notify the registered donors. The message informs the donor of any requests contained in the application, saving time and letting the donor be aware of the request. After receiving the notification, the donor could visit the clinic to give plasma. The tool streamlines and enhances efficiency while saving the requester's time and allowing them to identify numerous donors by making the donor search online. The project model was successful with the slogan "The right message at the right time will impact the lives of many. The customer journey map and the ideas obtained during the ideation phase will determine the client's needs and requirements, which will determine how the project will operate.

CHAPTER 12

FUTURE SCOPE

The application's email capability can be used to email the donor and alert them of the request in the system whenever a patient requests plasma.

In a similar vein, a follow-up email might be issued to make sure the donation is easily remembered. Other features, such as contribution camp updates and a donation leftover, can be added to the application.

CHAPTER 13

APPENDIX

Source-code

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">

</head>
<body>
<div class="background-image"></div>
  <!-- <div class="header">
  <div>Plasma Donor App</div>
    <ul>



      <li><a href="/register.html">Register</a></li>
      <li><a class="active" href="/login">Home</a></li>
      <li><a href="about.html">About</a></li>
    </ul>
  </div> -->
<center><h2>PLASMA DONOR APP</h2></center>
<p>About Plasma Donor</p>

<div class="row">
  <div class="column">
    <div class="card">
      <h3>what is plasma?</h3>
      <p>Plasma is the clear, straw-colored liquid portion of blood that remains
after red blood cells, white blood cells, platelets and other cellular components
are removed</p>

    </div>
  </div>

  <div class="column">
    <div class="card">
      <h3>What is donor</h3>
      <p>Plasma is the clear, straw-colored liquid portion of blood that remains
after red blood cells, white blood cells, platelets and other cellular components
are removed</p>
```

```
    </div>
  </div>

  <div class="column">
    <div class="card">
      <h3>Blood Donor</h3>
      <p>A person who gives blood for use in transfusion.</p>
      <p>From the blood plasma will be seperated.And then collected plasma will
be used for the covid 18 persons</p>
    </div>
  </div>

  <div class="column">
    <div class="card">
      <h3>Use of our portal</h3>
      <p> It is an initiative to connect, digitize and streamline the workflow of
blood banks across the nation, you can get nearby camps, bloodbanks</p>
      <p>we will provide you the details of blood details and donor contacts</p>
    </div>
  </div>
</div>

</body>
<style>
  * {
    margin: 0;
    padding: 0;
  }
  .background-image {
    background-image: url('');
    background-size:cover;
    background-repeat: no-repeat;
    height: 100vh;
  }
</style>
</html>

<!DOCTYPE html>
<html >

<head>
  <meta charset="UTF-8">
  <title>Plasma Donor App</title>
```

```
    <link href='https://fonts.googleapis.com/css?family=Pacifico'
rel='stylesheet' type='text/css'>
    <link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet'
type='text/css'>
    <link href='https://fonts.googleapis.com/css?family=Hind:300'
rel='stylesheet' type='text/css'>
    <link href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300'
rel='stylesheet' type='text/css'>
    <link rel="stylesheet" href="{{ url_for('static', filename='style1.css') }}">
    <link rel="stylesheet" href="style.css">

<style>
.login{
top: 20%;
}
</style>
</head>

<body>
    <div class="bg-img">
<div class="header">
<div>Plasma Donor App</div>
    <ul>



        <li><a class="active" href="/login">Home</a></li>
    </ul>
</div>
 <div class="login">


    <form action="{{ url_for('register')}}"method="post">
        <input type="text" name="name" placeholder="Enter Your Name"
required="required" style="color:black"/>
        <input type="email" name="email" placeholder="Enter Email"
required="required" style="color:black"/>
        <input type="text" name="phone" placeholder="Enter 10-digit mobile
number" required="required" style="color:black"/>
        <input type="city" name="city" placeholder="Enter Your City Name"
required="required" style="color:black"/>
        <select name="infect">

                    <option value="select" selected>Select COVID infection
status</option>
```

```
                    <option value="infected">Infected</option>
                    <option value="uninfected">Uninfected</option>
        </select>
        <select name="blood">
                    <option value="select" selected>Choose your blood
group</option>
                    <option value="O Positive">O Positive</option>
                    <option value="A Positive">A Positive</option>
                    <option value="B Positive">B Positive</option>
                    <option value="AB Positive">AB Positive</option>
                    <option value="O Negative">O Negative</option>
                    <option value="A Negative">A Negative</option>
                    <option value="B Negative">B Negative</option>
                    <option value="AB Negative">AB Negative</option>
        </select>
        <input type="password" name="passw" placeholder="Enter Password"
required="required" style="color:black"/>
        <button type="submit" class="btn btn-primary btn-block btn-
large">Register</button>

    </form>

 <br><br>
<div style="color:black">
 </div>
 </div>
 <style>
    .bg-img{
        background-
image:url('https://media.istockphoto.com/id/94916381/photo/blood-
test.jpg?s=612x612&w=0&k=20&c=m_FZ1lpR3u6cVPDfnyT3gPmZmO4LhQGzCjdeDdhN02k=') ;
        background-size:cover;
        background-repeat: no-repeat;
        height: 100vh;
    }
 </style>
</div>

</body>
</html>
Footer
```

APP.PY

```
# -*- coding: utf-8 -*-
"""
Created on Mon Sep 26 14:27:20 2022

@author: user
"""



from flask import Flask,render_template, request,redirect,url_for,session
import ibm_db
import re


app=Flask(__name__)
app.secret_key= 'a'


conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32731;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=nms09877;PWD=0AEuG3bImXTyoxfU",'','')




# def home():
#     return render_template('home.html')



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

```
global userid
msg = ''


if request.method == 'POST' :
    username = request.form['user']
    password = request.form['passw']
    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)
    account = ibm_db.fetch_assoc(stmt)
    print (account)
    if account:
        session['loggedin'] = True
        session['id'] = account['USERNAME']
        userid=  account['USERNAME']
        session['username'] = account['USERNAME']
        msg = 'Logged in successfully !'
        return render_template('display.html', msg = msg)
    else:
        msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)
```

```
@app.route('/register', methods =['GET', 'POST'])
def register():
    msg = ''
    if request.method == 'POST' :
        username = request.form['name']
        email = request.form['email']
        phone_number = request.form['phone']
        city = request.form['city']
        covid_status = request.form['infect']
        blood_group = request.form['blood']
        password = request.form['passw']
        sql = "SELECT * FROM user WHERE username =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            msg = 'Account already exists !'
        elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
            msg = 'Invalid email address !'
        elif not re.match(r'[A-Za-z0-9]+', username):
            msg = 'name must contain only characters and numbers !'
        else:
            insert_sql = "INSERT INTO  user VALUES (?, ?, ?, ? , ? , ? , ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prep_stmt, 1, username)
            ibm_db.bind_param(prep_stmt, 2, email)
```

```
        ibm_db.bind_param(prep_stmt, 3, phone_number)
        ibm_db.bind_param(prep_stmt, 4, city)
        ibm_db.bind_param(prep_stmt, 5, covid_status)
        ibm_db.bind_param(prep_stmt, 6, blood_group)
        ibm_db.bind_param(prep_stmt, 7, password)
        ibm_db.execute(prep_stmt)
        msg = 'You have successfully registered !'
    elif request.method == 'POST':
        msg = 'Please fill out the form !'
    return render_template('register.html', msg = msg)


@app.route('/display', methods =['GET', 'POST'])
def display():
    if request.method == 'POST':
        blood_group = request.form['blood']
        city = request.form['city']
        sql = 'SELECT * FROM user WHERE blood_group = ? and city = ? '
        prep_stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(prep_stmt, 1, blood_group)
        ibm_db.bind_param(prep_stmt, 2, city)
        ibm_db.execute(prep_stmt)
        data = ibm_db.fetch_assoc(prep_stmt)
        print("datadisplay",data)
        msg = 'Data Fetch successful'
        return render_template('display.html',data = data)
    return render_template('display.html')
```

```
@app.route('/logout')
def logout():
   session.pop('loggedin', None)
   session.pop('id', None)
   session.pop('username', None)
   return render_template('login.html')

if __name__ == '__main__':
   app.run(host='0.0.0.0')
```