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INTRODUCTION

PROJECT OVERVIEW

During the COVID 19 crisis, the requirement of plasma became a high priority and the donor count has become low. Saving the donor information and helping the needy by notifying the current donors list, would be a helping hand. In regard to the problem faced, an application is to be built which would take the donor details, store them and inform them upon a request

PURPOSE

The main goal of our project is to design a user-friendly web application we can help reduce mortality or help those affected by COVID19 by donating plasma from patients who have recovered without approved antiretroviral therapy planning for a deadly COVID19 infection, plasma therapy is an experimental approach to treat those COVID - positive patients and help them recover faster. Therapy, which is considered reliable and safe. If a particular person has fully recovered from COVID19, they are eligible to donate their plasma.

LITERATURE SURVEY

EXISTING PROBLEM

Plasma is rich in nutrients and salts. These are important in keeping the body alert and functioning properly. Losing some of these substances through plasma donation can lead to an electrolyte imbalance. This can result in **dizziness, fainting, and lightheadedness**.

REFERENCE

Several experiments have been carried out over the years by different groups of researchers. Here are some of the following groups:

[1] Denuis O'Neil (1999). "Blood component" Archived from the original on June 5, 2013. Normally, certain amount of human body weight comes from blood. For adults, it

is 4-6 litres of blood. This essential liquid plays an important role in transporting oxygen and nutrients to cells and removing carbon dioxide, ammonia and other waste products. Blood is a very common tissue composed of over 4000 different types of components.

[2] ways to keep your plasma healthy, Original Archived November 1, 2013, Accessed November 11, 2011. Plasma donation is one of the most accepted practices for saving lives, While earning a few dollars. The whole process can take some time, but it's well worth it once you experience it a few times. Accepting money in exchange for plasma is welcome. It's a move when you feel like you're not just a hero, but you're adding value to yourself. The term "healthy" does not mean only in the absence of disease. It also means that you are healthy enough.

1. Ripathis S, Kumar V, Prabhakar A, Joshi S, Agarwal A (2015). "Micro scale Passive Plasma Separation: A Review of Design Principles and Micro devices," J. Micromech Micro 25 (8): 083001; Plasma separation is of great importance in the fields of diagnosis and healthcare. Due to the lagging transition to micro scale, these recent trends are a rapid shift towards shrinking complex macro processes.

PROBLEM STATEMENT DEFINITION



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	patient	Use the plasma donor application	I'm not convenient to use the application	I'm expecting more specification, if more specification is add	Enthusiastic
PS-2	donor	Donate plasma, but I cant donate	2 weeks before only I had donated the blood for plasma	Continuously I'm receiving the notification/mail for requirement	Hatred

IDEATION & PROPOSED SOLUTION

EMPATHY MAP

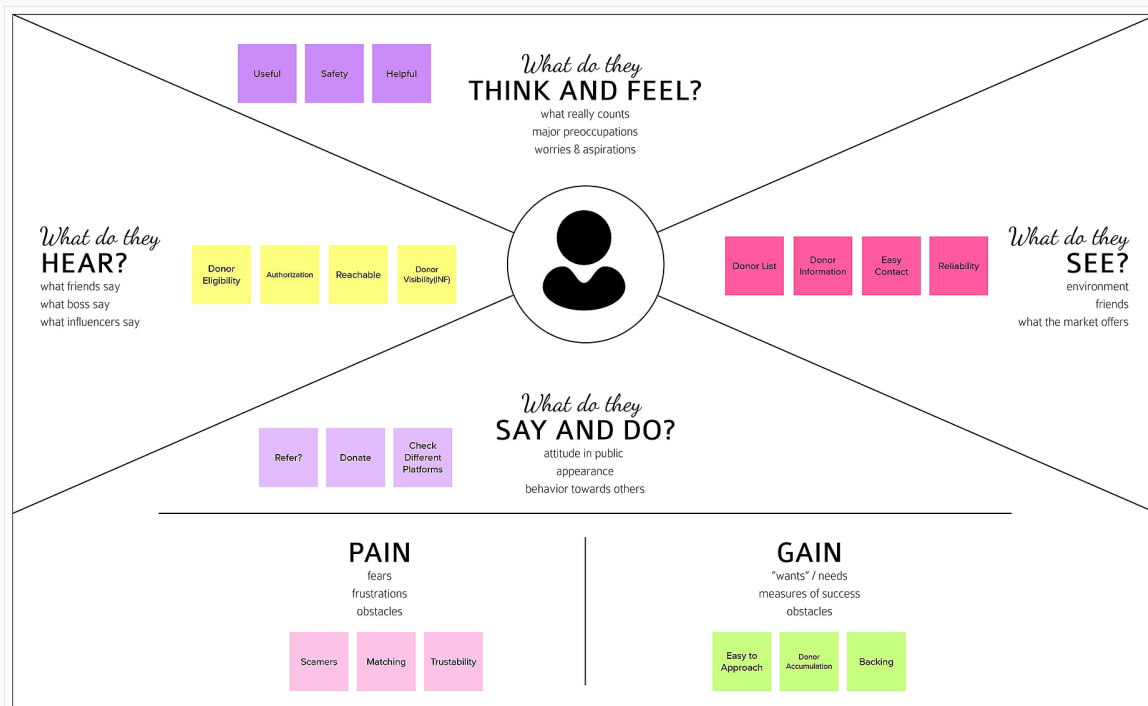
Edit this template
Right-click to unlock

Empathy Map Canvas

Gain insight and understanding on solving customer problems.

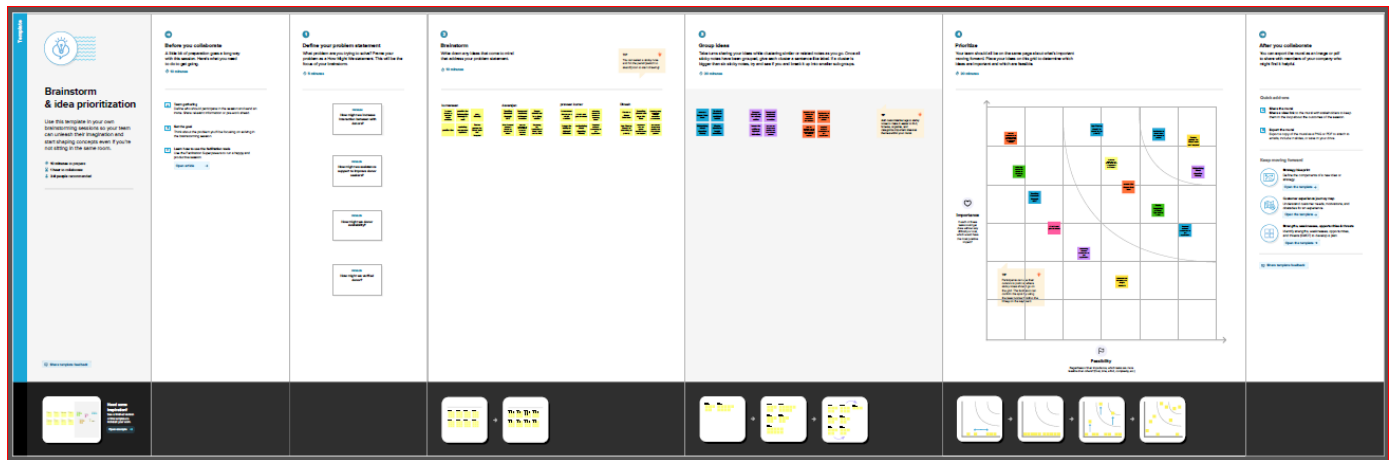
1

Build empathy and keep your focus on the user by putting yourself in their shoes.



Share your feedback

IDEATION & BRAINSTORM



PROPOSED SOLUTION

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	I'm trying to use the plasma donor application but I'm not convenient to use the application because I'm expecting more specification, if more specifications are added, which makes me feel enthusiastic
2.	Idea / Solution description	The suggestion which are said by the user will be noted and the apt suggestions will be added
3.	Novelty / Uniqueness	Everyone will have different ideas and different queries but the most

		important suggestions will be added upon the application
4.	Social Impact / Customer Satisfaction	Almost Customer will be satisfied on the problem, if once again the problem occurs, it can be easily recovered
5.	Business Model (Revenue Model)	On the revenue bases, this donor application will be profit for Hospital, NGO's and private organizations
6.	Scalability of the Solution	The problem of the donor was solved and also as per the user flexibility the requirements can be modified

PROBLEM SOLUTION FIT

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) -The user/customer who belonging to the medical department	6. CUSTOMER CONSTRAINTS -There is no foundation of using this application because the user/customer who is having knowledge of this application can work on it easily	5. AVAILABLE SOLUTIONS - The suggestion made by the user/customer are important in these kinds of application - In the such cases the most important suggestion of the user/customer are developed and made available in updates	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS -The user/customer found inconvenient in this plasma donor application that the user expecting more specification could be added if possible	9. PROBLEM ROOT CAUSE -The user/customer is new to use this application -The user/customer have no knowledge about this application -When the user/customer missed out the proper guidance about how to use handle this application	7. BEHAVIOUR - The user/customer is new to use this application - The user/customer have no knowledge About this application - When the user/customer missed out the proper guidance about how to use handle this application	
Identify strong TR & EM	3. TRIGGERS TR -The awareness of the application motivates the users to use this application	10. YOUR SOLUTION SL - The suggestion which made by the user/customer user will be noted and the apt suggestions will be added in further updates	8. CHANNELS of BEHAVIOUR CH ONLINE - Awareness videos/content made the donor to donate the plasma OFFLINE - To encourage and motivate the medical field-oriented personal to use the application	
	4. EMOTIONS: BEFORE / AFTER EM Before – when the users/customers expected specification not met makes them enthusiastic After – As the users/customers who recovered from there errors they will becomes comfortable and friendly with this environment			

CUSTOMER SEGMENT(S)

The user/customer who belonging to the medical department

JOBS-TO-BE-DONE / PROBLEMS

The user/customer found inconvenient in this plasma donor application that the user expecting

TRIGGERS

The awareness of the application motivates the users to use this application

EMOTIONS: BEFORE / AFTER

Before – when the users/customers expected specification not met makes them enthusiastic.

After – As the users/customers who recovered from there errors they will becomes comfortable and friendly with this environment

AVAILABLE SOLUTIONS

The suggestion made by the user/customer are important in these kinds of application. In the such codes the mos

CUSTOMER CONSTRAINTS

There is no foundation of using this application because the user/customer who is having knowledge of this application can work on it easily

BEHAVIOUR

The user/customer is new to use this application

The user/customer have no knowledge about this application

When the user/customer missed

CHANNELS of BEHAVIOUR

ONLINE

Awareness videos/content made the donor to donate the plasma

OFFLINE

To encourage and motivate the medical field-oriented personal to use the application

PROBLEM ROOT CAUSE

The user/customer is new to use this application

The user/customer have no knowledge about this application

When the user/customer missed

YOUR SOLUTION

The suggestion which made by the user/customer user will be noted and the apt suggestions will be added in further updates

REQUIREMENT ANALYSIS

FUNCTIONAL REQUIREMENT

S.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 using Registered email Id

FR-4	Sent Request	If plasma is required, the receiver will contact the donor
FR-5	Contact Donor	Contact the donor directly if a phone number is given

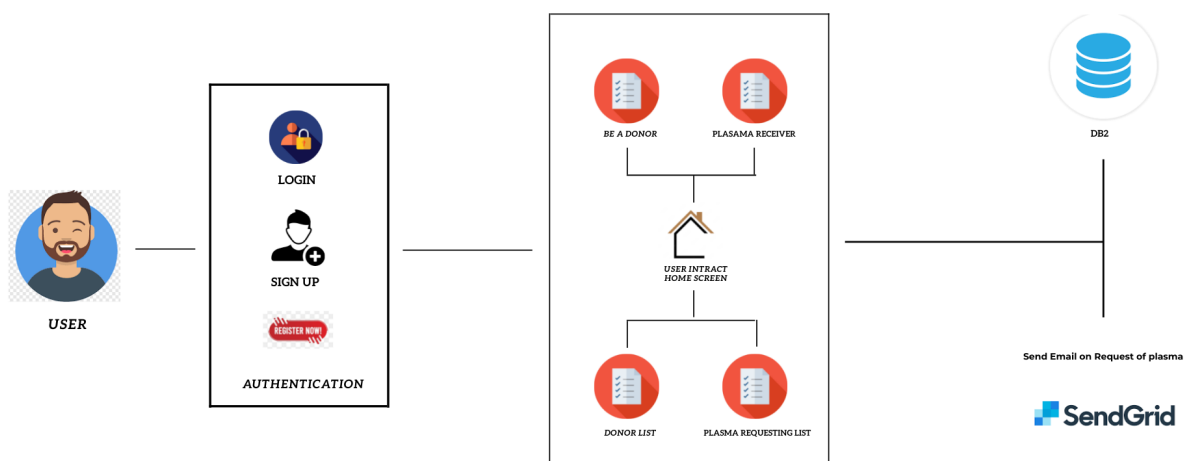
NON - FUNCTIONAL REQUIREMENTS

S.No	Non-Functional Requirement (Epic)	Sub Requirement (Story / Sub Task)
FR-1	Usability	The user interface of the plasma Donor system must be well-designed and welcoming
FR-2	Security	Data storage is required by security systems, just like it is by many other applications. Databases are able to keep all the donor information that is viewed by applications. It must be secured with email Id and password.
FR-3	Reliability	The system has the ability to work all the times without failures apart from network failure. A donor can have the faith on the system. The authorities will keeps the privacy of all donors in a proper manner

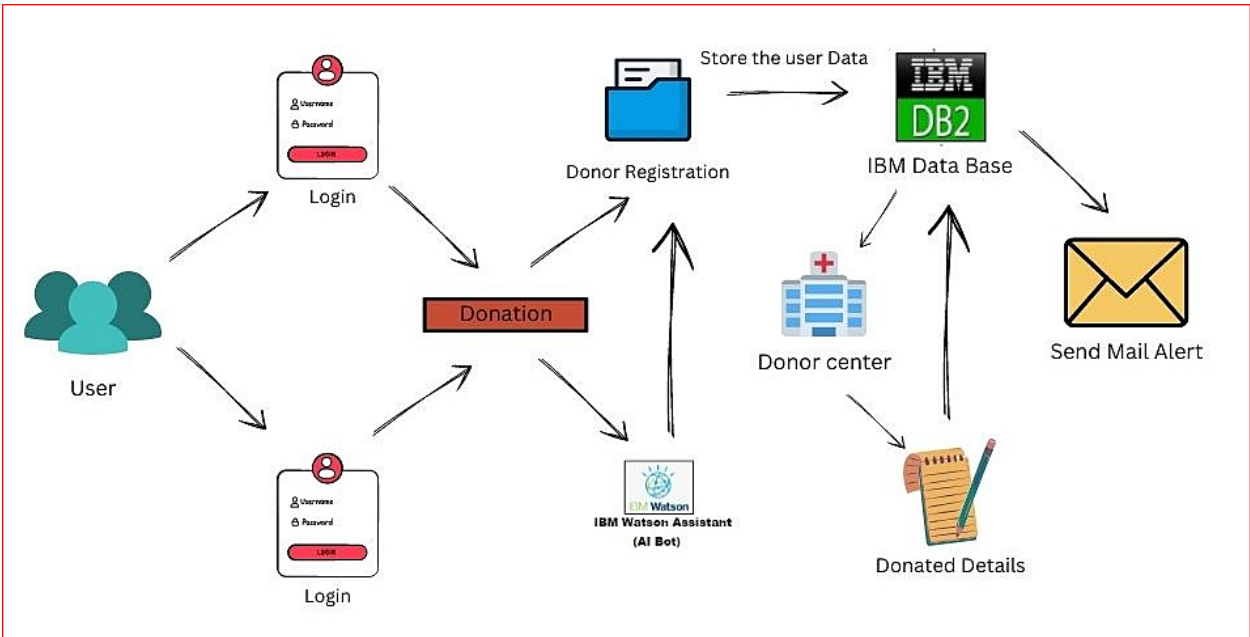
FR-4	Performance	The Plasma donor System must perform well in different scenarios. The system is interactive and delays involved are less.
FR-5	Availability	The system, including the Online components, should be available 24/7
FR-6	Scalability	The system offers the proper resources for issue solutions and is designed to protect sensitive information during all phases of operation

PROJECT DESIGN

DATA FLOW DIAGRAM



SOLUTION & TECHNICAL ARCHITECTURE



USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint -1

		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint -1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint -2
		USN-4	As a user, I can register for the application through Gmail	I can register the app with email account.	Medium	Sprint -1
	Login	USN-5	As a user, I can log into the	I can register & access user	High	Sprint -1

			application by entering email & password	profile/account with Gmail account		
--	--	--	--	------------------------------------	--	--

	Requesting/ recipient	USN-6	As a recipient, I can request the blood group for which I need plasma.	I can get plasma through Donation centre while plasma is available.	High	Sprint -2
Customer (Web user)	Profile	USN-7	As a user, I can see registration page, login page and chat bot for which the user can access to donate and to request for the required blood group plasma	I can login through email and social media account for registration.	Medium	Sprint -2
Customer Care Executive	Help desk /User support	USN-8	As a customer care executive, I can solve the queries of the users.	I can reply to their queries and solve their related problems.	High	Sprint -3

Administrator	Registration	USN-9	As an Administrator, I can view the database of the registered users.	I can check and verify the persons who are the registered their mail Id's and information's.	Medium	Sprint-4
	Dashboard	USN-10	As an Administrator, I can view how many members requested for what kind of blood group for plasma.	I can check the number of requirements and monitor the availability.	Low	Sprint-4
Chabot	User-Interface	USN-11	In addition to the customer care executive, I can solve all the queries of the donor as well as the recipient.	I can reply to all the Questions which are asked by the users that are related to the service we provided.	Medium	Sprint-4

PROJECT PLANNING & SCHEDULING

SPRINT PLANNING & ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Team Members
Sprint-1	Registration	USN-1	A User can register and create the user account	High	Praveen Kumar, Dinesh
Sprint-1	login	USN-2	A User can sign-in to the application by entering the registered email id and password	High	Kumaresan,devarajan
Sprint-1	Admin Register	USN-3	An admin can register through the admin registry	High	Praveen Kumar, Dinesh
Sprint-1	Register Admin Via Script	USN-4	Creating an Admin Account using a python script. As for security reasons we should implement a separate python scrip	High	Devarajan,kumaresan
Sprint-2	Implementing Authentication System	USN-5	creating an authentication system for both admin and users using flask application	High	Kumaresan,devarajan
Sprint-2	Creating Tables	USN-6	Creating Db2 account and creating the tables in DB2 in IBM cloud db2	High	Devarajan,kumaresan
Sprint-2	Creating SSL certificate and integrating	USN-7	Creating the SSL certificate to connect db2 via python code	High	Devarajan,kumaresan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Team Members
	with python code				
Sprint-2	Creating dashboard	USN-8	Admin and Donor can interact with our application.	High	Praveen Kumar, Dinesh
Sprint-3	Plasma request and donor acknowledge feature	USN-9	Admin can create plasma requests which will be shown in the user portal	High	Kumaresan,devarajan
Sprint-3	Creating dashboard for admin	USN-10	Admin dashboard, admin can view the total request has been requested for plasma by the recipient/user.	High	Devarajan,kumaresan
Sprint-3	Integrating the Watson chatbot	USN-11	Users can use the chatbot for basic clarification using the chatbot	High	Praveen Kumar, Dinesh
Sprint-3	Integration with SendGrid	USN-12	The source/verification mail for both user(donor and recipient)	High	Praveen Kumar, Dinesh
Sprint-4	Docker installation	USN-13	Installing Docker CLI	High	Kumaresan, devarajan
Sprint-4	Creating docker image	USN-14	Setting up the docker environment and creating the	High	Devarajan, Kumaresan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Team Members
			docker image file		
Sprint-4	Kubernetes	USN-15	creating pods in Kubernetes and uploading it in IBM cloud	High	Devarajan, Kumaresan
Sprint-4	End-to-End Testing	USN-16	Implementing End-to-End testing	High	Kumaresan, devarajan

SPRINT DELIVERY SCHEDULE

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	24 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	31 Nov 2022	20	05 Oct 2022
Sprint-3	20	6 Days	07 Nov 2022	07 Nov 2022	20	12 Oct 2022
Sprint-4	20	6 Days	14 Nov 2022	14 Nov 2022	20	19 Oct 2022

Reports from JIRA

[HU-1] sprint-1 Created: 19/Nov/22 Updated: 19/Nov/22 Due: 29/Oct/22	
Status:	Done
Project:	Plasma Donor
Components:	None
Affects versions:	None
Fix versions:	None

Type:	Task	Priority:	High
Reporter:	Dinesh	Assignee:	Praveen kumar
Resolution:	Unresolved	Votes:	0
Labels:	None		
Σ Remaining Estimate:	Not Specified	Remaining Estimate:	Not Specified
Σ Time Spent:	Not Specified	Time Spent:	Not Specified
Σ Original Estimate:	Not Specified	Original estimate:	Not Specified

Sub-tasks:	Key	Summary	Type	Status	Assignee
	USN-1	Registration	Sub-task	Done	Dinesh, Praveen Kumar
	USN-2	login	Sub-task	Done	Kumaresan , Devarajan
Rank:	0 hzzzzz:				

Description
Sprint-1
Generated at Sat Nov 19 11:35:55 UTC 2022 by Dinesh using Jira 1001.0.0-SNAPSHOT#100210-sha1:9b34d7cc56ccedf37042f403595483f2079121f4.

[HU-2] sprint-2 Created: 19/Nov/22 Updated: 19/Nov/22 Due: 05/Nov/22	
Status:	Done
Project:	Plasma Donor
Components:	None
Affects versions:	None
Fix versions:	None

Type:	Task	Priority:	High
Reporter:	Dinesh	Assignee:	Dinesh
Resolution:	Unresolved	Votes:	0
Labels:	None		
Σ Remaining Estimate:	Not Specified	Remaining Estimate:	Not Specified
Σ Time Spent:	Not Specified	Time Spent:	Not Specified
Σ Original Estimate:	Not Specified	Original estimate:	Not Specified

Sub-tasks:	Key	Summary	Type	Status	Assignee
	USN-3	Implementing System	Sub-task	Done	Kumaresan, Devarajan
	USN-4	Creating Tables	Sub-task	Done	Kumaresan, Devarajan
	USN-5	Creating SSL certificate and integrating with python code	Sub-task	Done	Kumaresan, Devarajan
	USN-6	Creating dashboard	Sub-task	Done	Praveen kumar,Dinesh
Rank:	0 i00007:				

Description
sprint-2
Generated at Sat Nov 19 11:35:35 UTC 2022 by Dinesh using Jira 1001.0.0-SNAPSHOT#100210-sha1:9b34d7cc56ccedf37042f403595483f2079121f4.

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[HU-3] sprint-3 Created: 19/Nov/22 Updated: 19/Nov/22 Due: 12/Nov/22	
Status:	Done
Project:	Plasma Donor
Components:	None
Affects versions:	None
Fix versions:	None

Type:	Task	Priority:	High
Reporter:	Dinesh	Assignee:	Devarajan
Resolution:	Unresolved	Votes:	0
Labels:	None		
Σ Remaining Estimate:	Not Specified	Remaining Estimate:	Not Specified
Σ Time Spent:	Not Specified	Time Spent:	Not Specified
Σ Original Estimate:	Not Specified	Original estimate:	Not Specified

Sub-tasks:	Key	Summary	Type	Status	Assignee
	USN-7	Plasma request and donor acknowledge feature	Sub-task	Done	Kumaresan, Devarajan
	USN-8	Creating dashboard for admin	Sub-task	Done	Kumaresan, Devarajan
	USN-9	Integrating the Watson chat bot	Sub-task	Done	Praveen Kumar, Dinesh
	USN-10	Integration with SendGrid	Sub-task	Done	Praveen Kumar, Dinesh
Rank:	0j0000f:				

Description

Sprint-3
Generated at Sat Nov 19 11:35:13 UTC 2022 by Dinesh using Jira 1001.0.0-SNAPSHOT#100210-sha1:9b34d7cc56ccedf37042f403595483f2079121f4.

[HU-4] sprint-4 Created: 19/Nov/22 Updated: 19/Nov/22 Due: 19/Nov/22	
Status:	Done
Project:	Plasma Donor
Components:	None
Affects versions:	None
Fix versions:	None

Type:	Task	Priority:	High
Reporter:	Dinesh	Assignee:	kumaresan
Resolution:	Unresolved	Votes:	0
Labels:	None		
Σ Remaining Estimate:	Not Specified	Remaining Estimate:	Not Specified
Σ Time Spent:	Not Specified	Time Spent:	Not Specified
Σ Original Estimate:	Not Specified	Original estimate:	Not Specified

Sub-tasks:	Key	Summary	Type	Status	Assignee
	USN-11	Docker installation	Sub-task	Done	Devarajan, Kumaresan
	USN-12	Creating docker image	Sub-task	Done	Devarajan, Kumaresan
	USN-13	Kubernetes	Sub-task	Done	Devarajan, Kumaresan
	USN-14	End-to-End Testing	Sub-task	Done	Devarajan, Kumaresan
Rank:	0j0000n:				

Generated at Sat Nov 19 11:34:55 UTC 2022 by Dinesh using Jira 1001.0.0-SNAPSHOT#100210-sha1:9b34d7cc56ccedf37042f403595483f2079121f4.

CODING & SOLUTIONING

Sendinblue

Sendinblue is a cloud-based SMTP provider that allows you to send email without having to maintain email servers. Sendinblue manages all of the technical details, from scaling the infrastructure to ISP outreach and reputation monitoring to whitelist services and real time analytics.

Send provides two ways to send email: through our SMTP relay or through our Web API. Sendinblue provides client libraries in many languages. This is the preferred way to integrate with SendGrid. If you choose to use Sendinblue without a client library, the Web API is recommended in most cases as it is faster, provides some benefit with encoding, and tends to be easier to use. SMTP provides many features by default, but is harder to setup

Web API

- The Web API has some advantages over SMTP:
- If your ISP blocks all outbound mail ports and your only option is HTTP.
- If there is high latency between your site and ours, the Web API might be quicker since it does not require as many messages between the client and server.
- If you do not control the application environment and cannot install and configure an SMTP library.
- If you build a library to send email, developing against a web API provides quicker development.

SMTP Relay

- If you are integrating SendGrid with an existing application, setting up the application to use our SMTP relay is easiest, as it only requires modifying SMTP configuration.
- Change your SMTP username and password to your SendGrid credentials.
- Set the server host name to `smtp.sendgrid.net`

- Use ports 25 or 587 for plain/TLS connections and port 465 for SSL Connections

CODE

```
import sib_api_v3_sdk
from sib_api_v3_sdk.rest import ApiException
# Instantiate the client\
SID_KEY = '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'
# Define the campaign settings\
subject= "Plasma",
sender={"email":"devvijaya959@gmail.com","name":"My-Plasma"}

type= "classic",
# Content that will be sent\
html_content= '<html><body><h3> An account is created using the following email </h3><p> the <a > link </a></p></body></html>'
# Select the recipients\
receiver=[{"email":"ashvinachu097@gmail.com"}]
def sendinblue(SID_KEY,SID_SENDER,receiver,subject,html_content):
    configuration = sib_api_v3_sdk.Configuration()
    configuration.api_key['api-key'] = SID_KEY
    api_instance = sib_api_v3_sdk.TransactionalEmailsApi(sib_api_v3_sdk.ApiClient(configuration))
    subject = subject
    sender = SID_SENDER
    replyTo = SID_SENDER
    html_content = html_content
    to = receiver
    params = {"parameter":"My param value","subject":"New Subject"}
    send_smtp_email = sib_api_v3_sdk.SendSmtpEmail(to=to, reply_to=replyTo,html_content=html_content,
sender=sender, subject=subject)
    try:
        api_response = api_instance.send_transac_email(send_smtp_email)
        print(api_response)
```

except ApiException as e:

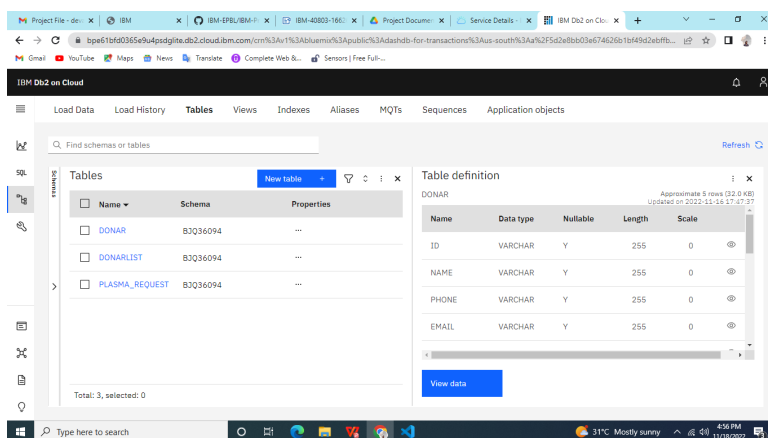
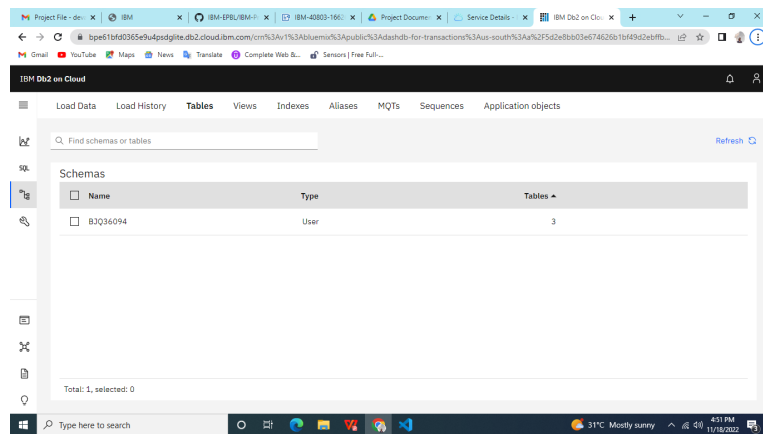
```
print("Exception when calling SMTPApi->send_transac_email: %s\n" % e)
```

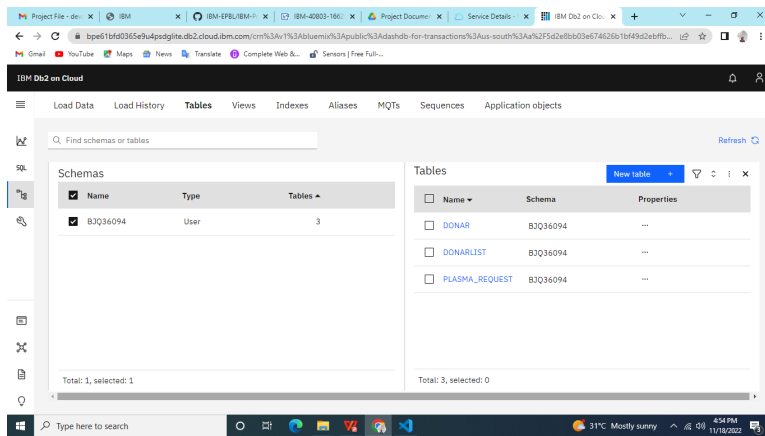
subject="Congratulations You have created your account Please verify your account "def verify(token):

```
data = jwt.decode(token, "Hello", algorithms='HS256')
```

```
return data["email"]
```

Database Schema





TESTING

Test cases

			NFT - Risk Assessment						
S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Volumen Changes	Risk Score	Justification
1	Login page	Existing	Low	No Changes	Low	Nil	No Changes	GREEN	No changes
2	Signup page	Existing	Low	No Changes	Low	Nil	No Changes	GREEN	No changes
3	Donor list	New	Moderate	No Changes	Moderate	Nil	No Changes	ORANGE	As we have seen the chnages
4	Profile page	Existing	Moderate	No Changes	Moderate	Nil	No Changes	ORANGE	As we have seen the chnages
5	plasma Request	New	Moderate	No Changes	Moderate	Nil	No Changes	ORANGE	As we have seen the chnages
6	Request list	New	Moderate	No Changes	Moderate	Nil	No Changes	ORANGE	As we have seen the chnages
			NFT - Detailed Test Plan						
			S.No	Project Overview	NFT Test approach	umptions/Dependencies/R	Approvals/SignOff		
			1	Login Page	Test passed	No risk	Approved		
			2	Donar page	Test passed	No risk	Approved		
			3	Request list	Test passed	Depends upon feed posted	Approved		
			4	profile page	Test passed	Depends upon hr	Approved		
			5	plasma page	Test passed	Depends upon user	Approved		
			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	Passed	Requirments satisfied	No Changes/No failures	Go	No recommendation	Closed	Approved	

User Acceptance Testing

Acceptance Testing

UAT Execution & Report Submission

1. Purpose of Document

The purpose of the Document is to briefly explain the test coverage and open issues of the [PLASMA DONOR APPLICATION] project at the time of the release to User Acceptance Testing (UAT) .

2. Defect Analysis

The report shows that the number of resolved or closed bugs at each severity level, and how they were resolved.

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	4	3	2	1	10
Duplicate	1	1	0	0	2
External	1	2	1	0	4
Fixed	7	5	5	2	19
Not Reproduced	0	2	2	2	6
Skipped	1	1	2	1	5
Won't fix	2	0	1	1	4
total	16	14	13	7	50

The defect analysis was resolved by,

- Reviewing the code and establishing checkpoints.
- Debugging window.

- By working in pairs and conducting team window.
- By developing action plans to cope with specific issues.
- Defect resolution process.
- Prioritize and resolving defect.
- Validating the corrective action presented.

3. Test case Analysis

The report shows that the number of test cases that have passed, failed, and untested.

Section	Test cases	Not Tested	Fail	Pass
Home Page	2	1	0	2
Admin page	2	0	0	2
Become a donor	5	0	0	5
Search donor	6	0	0	6
Dashboard	2	0	0	2
Change password	2	0	0	2

RESULT

Authentication Module

- Sign Up

New user or donor can create an account to use in the blood/plasma donor application and create a password for account verification and create an identity.

- Sign In

Donor Sign In to the account for viewing or editing location details and any other personal information.

- Account Verification

If donor changes their password or if they forget the password then we have to verify their account using mail verification.

Service Provider Module

- Add New Donor

User can be able to register to add donor details.

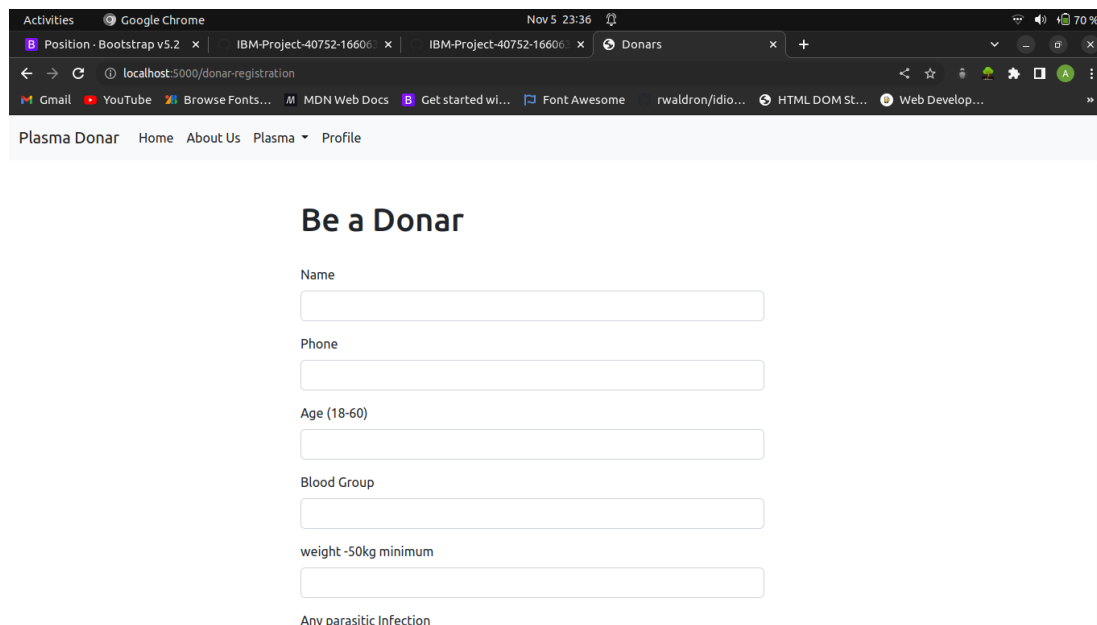
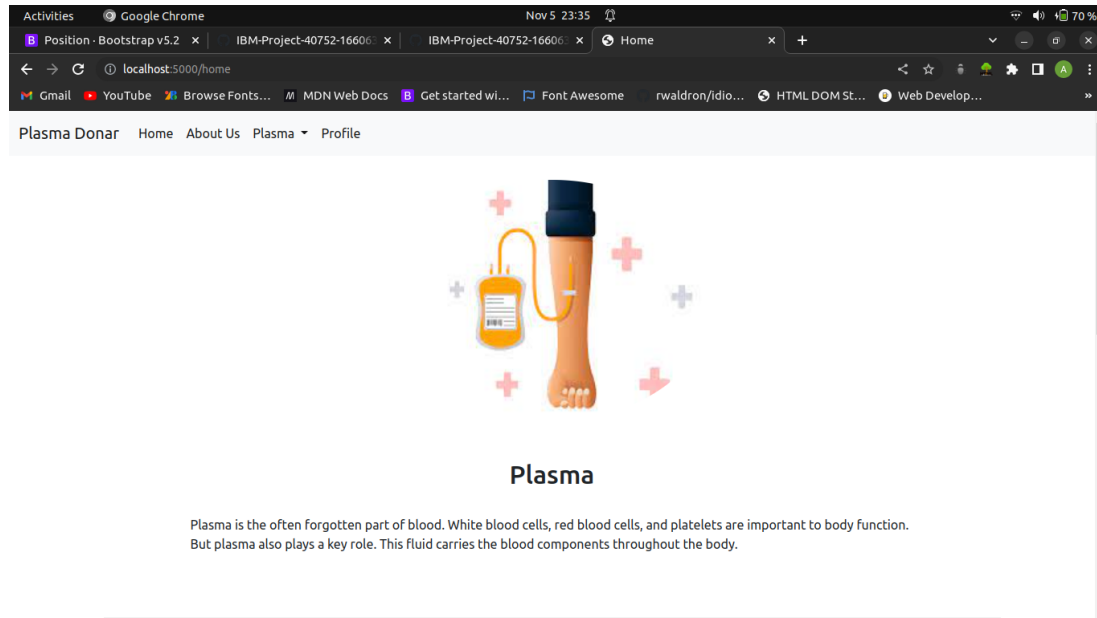
- List All Donor

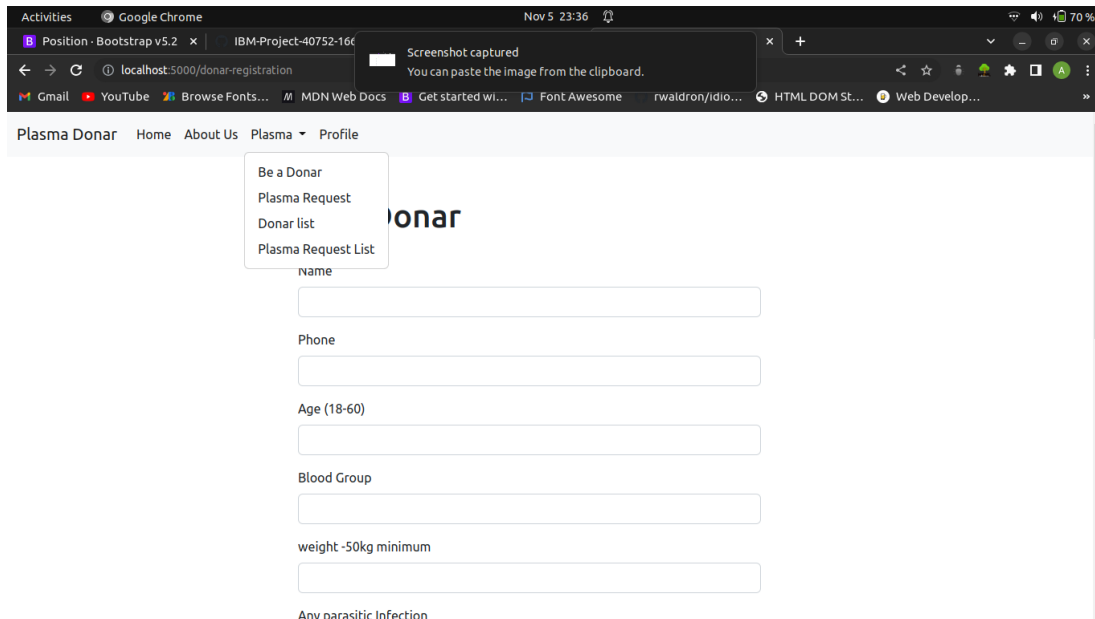
User can be able to view all Donor who all use our Plasma Donor Application.

- Edit Customer Plan Details

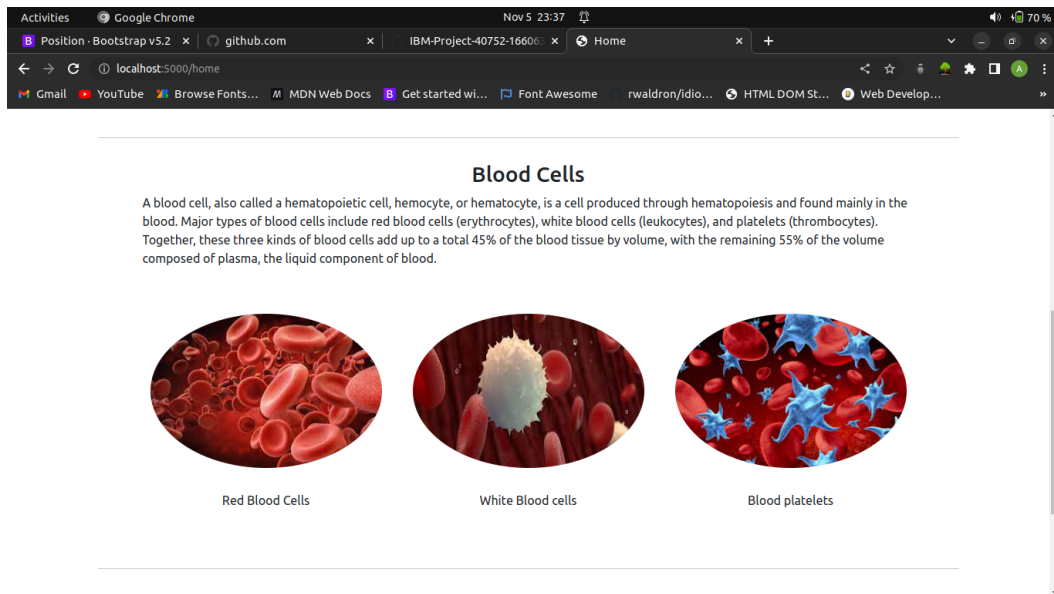
User can be able to edit the existing Donor details as the Donor wish

Screen Layouts





Name	Age	Blood Group	Gender	Contact	E-mail
Deva	20	o+	male	999999999	deva@mail.com
Praveen	20	o+	male	999999999	deva@mail.com
Deva	20	o+	male	999999999	deva@mail.com



ADVANTAGES & DISADVANTAGES

Advantages

- **Speed**

This website is fast and offers great accuracy as compared to manual registered keeping.

- **Maintenance**

Less maintenance is required

- **User Friendly**

It is very easy to use and understand. It is easily workable and accessible for everyone.

- **Fast Results**

It would help you to provide plasma donors easily depending upon the availability of it.

Disadvantages

- **Internet**

It would require an internet connection for the working of the website.

- ***Auto- Verification***

It cannot automatically verify the genuine users

CONCLUSION

Although the government is carrying out Covid vaccination campaigns on a large scale, the number of vaccines produced is not enough for all the population to get vaccinated at present. And with the corona positive cases rising every day, saving lives has become the prime matter of concern. As per the data provided by WHO more than 3 million people have died due to the Corona virus. However, apart from vaccination, there is another scientific method by which a covid infected person can be treated and the death risk can be reduced. This plasma therapy is an experimental approach to treat corona positive patients and help them recover. This plasma therapy is considered to be safe & promising. A person who has recovered from Covid can donate his/her plasma to a person who is infected with the coronavirus.

This system proposed here aims at connecting the donors & the patients by an online application. By using this application, the users can either raise a request for plasma donation or requirement. Both parties can Accept or Reject the request. User has to Upload a Covid Negative report to be able to Donate Plasma. This system is used if anyone needs a Plasma Donor Blood and Plasma donation is a kind of citizen's social responsibility in which an individual can willingly donate blood/plasma via our app. This Application has been created with the concept and has sought to make sure that the donor gives blood/plasma to community. This model is made user friendly so anybody can view and maintain his/her account. This application will break the chain of business through blood/plasma and help the poor to find donor at free of cost. This project will help new blood/plasma banks improve their services and progress from traditional to user-friendly frameworks.

FUTURE SCOPE

Plasma Application can be developed to further improve user accessibility via integrating this application with various social networks application program interfaces (APIs). Consequently, users can login and sign up using various social networks. This would increase number of donors and enhances the process of blood donation.

User interface (UI) can be improved in future to accommodate global audience by supporting different languages across countries. Data scraping can be done from different social networks and can be shown in the Blood/Plasma Request Feeds. Appointments can be synchronized with Google and Outlook calendars for the ease of users.

Donor and Beneficiary Stories feature aims to create a sense of belonging to the community. Donors will be able to view and share personal experiences about their donation; Beneficiaries can share their experiences of receiving blood transfusion which contributed to their improved health and lives.

Live Check-in Process feature aims to provide a better experience with regards to the waiting time when the user is in the process of donation. We Hypothesise that a more efficient experience will help the user look forward to his blood/plasma donation appointments.

APPENDIX

GitHub and Source code Link - <https://github.com/IBM-EPBL/IBM-Project-40803-1660635268>

Source code - <https://github.com/IBM-EPBL/IBM-Project-40803-1660635268/tree/main/Project%20Development%20Phase/Sprint%20-%204>