Project Report Format

1. **INTRODUCTION**
   1.1 Project Overview

   A simple web application for plasma donation using HTML, CSS, Python Flask Framework.

   1.2 Purpose

   Plasma is the liquid part of your blood that carries cells and proteins throughout the body. It's made up of mostly water (92%+), but contains vital proteins and antibodies such as albumin, gamma globulin, and anti-hemophilic factor along with mineral salts, sugars, fats, hormones, vitamins, carbon dioxide, and oxygen.According to The American Red Cross, plasma serves four important functions in our bodies: Helps maintain blood pressure and volume.Supplies critical proteins for blood clotting and immunity against certain diseases.Carries electrolytes such as sodium and potassium to our muscles.Helps maintain a proper pH balance in the body, which supports cell function.The Plasma Protein Therapeutics Association (PPTA) says that "plasma often is referred to as the 'gift of life' because it's the essential starting material needed to manufacture therapies that help thousands of people worldwide with rare, chronic diseases to live healthier, productive and fulfilling lives."

2. **LITERATURE SURVEY**
   2.1 Existing problem
   2.2 References
   2.3 Problem Statement Definition

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Blood Donor	Donate Plasma / Blood	Limited Number of people receives plasma	No enough plasma bank is available and can locate easily	Bad and Helpless
PS-2	Doctor	Locate a Plasma Donor	No donor can be found easily near me	No specific app or web services found for plasma donation	Frustrated and unstated situation

3. **IDEATION & PROPOSED SOLUTION**
   3.1 Empathy Map Canvas

Empathy Map
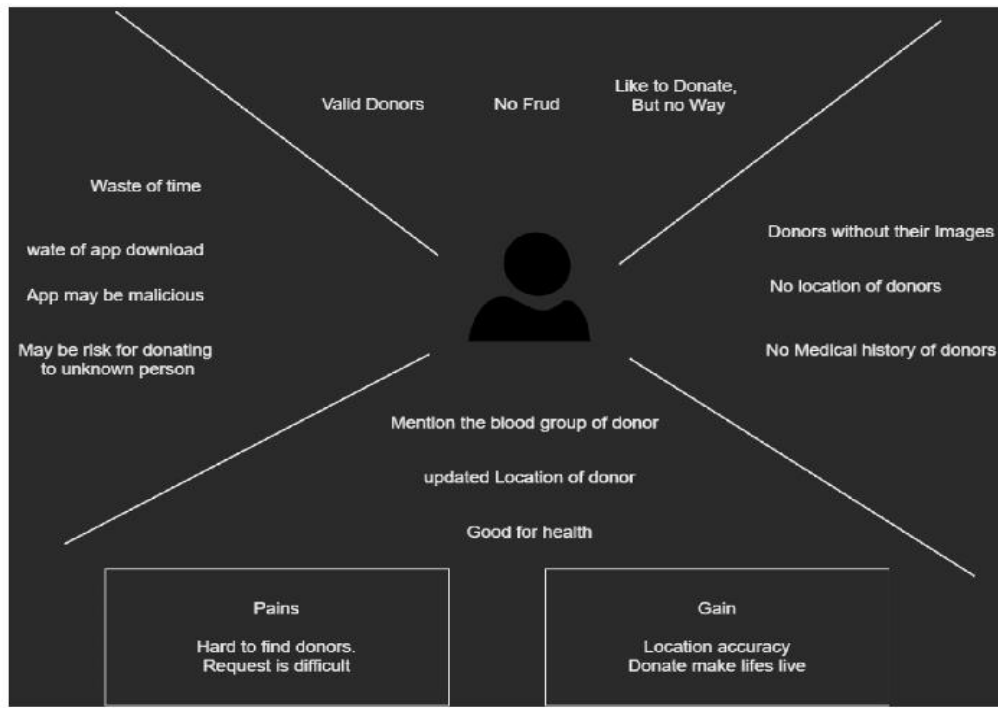
3.2 Ideation & Brainstorming

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Problem Statement : Plasma Donor Application.

Step-2: Brainstorm, Idea Listing and Grouping

Aashish Raj : Have an idea to build a Mobile or windows Application

Hari Rajan : To build a responsive layout

Abuthahir : To have a vaild data in appliucation

Akash : to verify the user and other details

3.3 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop a web or mobile application for plasma donation.
2.	Idea / Solution description	A web application can be developed to implement plasma donation website using IBM DB2, flask, etc,
3.	Novelty / Uniqueness	Using latest technology lasts in market, reach high among people, and meets their needs. Real Time applications help people to donate and receive plasma easily.
4.	Social Impact / Customer Satisfaction	Plasma is one of the needs nowadays. So, plasma donation will help other patients. Developing a application may help the needy to receive plasma or donate plasma.
5.	Business Model (Revenue Model)	The application development has no cost for development. Hence It is not paid application. It can be made as paid app for other private company.
6.	Scalability of the Solution	The solution used to build the application is unique and lasts in market. So the solution scalability is high

3.4 Problem Solution fit

4. **REQUIREMENT ANALYSIS**

4.1 Functional requirement

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Application
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Verification using user credentials
FR-4	User dashboard	User details page
FR-5	Donor page	List of donors with their details

4.2 Non-Functional requirements

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	It is very easy to use. This app make the user to search the donor very easily
NFR-2	Security	This application makes the credentials secure and keeps the data in database.
NFR-3	Reliability	This app runs good at every situations
NFR-4	Performance	This application performance will be good as this application needs only very minimal requirement.
NFR-5	Availability	This is easily available at play store for all devices.
NFR-6	Scalability	It is easily scalable.

5. PROJECT DESIGN

5.1 Data Flow Diagrams
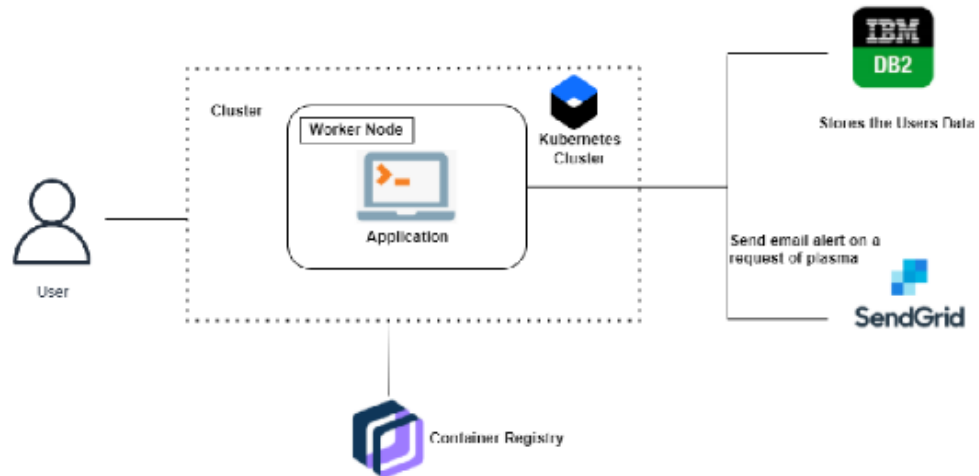
5.2 Solution & Technical Architecture
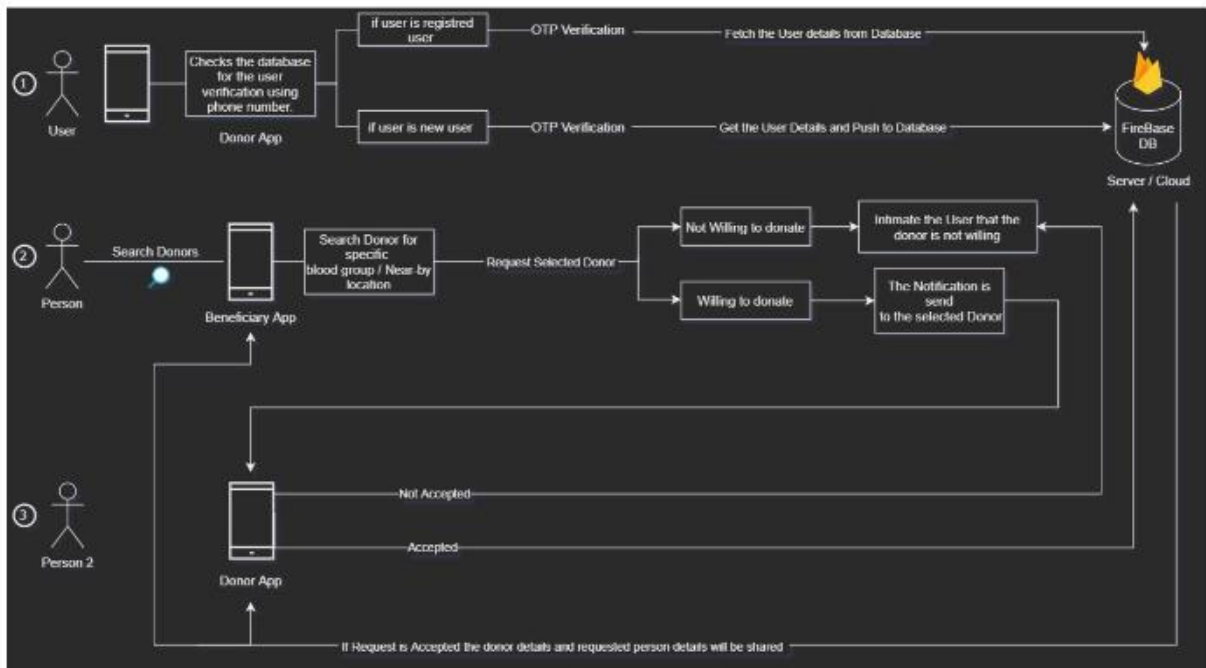
5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	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
	Login	USN-3	As a user, I can log into the application by entering email & password	Password is verified	High	Sprint-1
	Dashboard	USN-1	As a user, after successful login the first page of application is dashboard		High	Sprint-2
Customer (Web 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
	Login	USN-3	As a user, I can log into the application by entering email & password	Password is verified	High	Sprint-1
	Dashboard	USN-1	As a user, after successful login the first page of application is dashboard		High	Sprint-2
Customer Care Executive	Login	USN-1	Executive, I can log into the dashboard by entering login credentials	Password is verified	High	Sprint-2
Administrator	Login	USN-1	Admin, I can log into the dashboard by entering login credentials	Password is verified	High	Sprint-2

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation
6.2 Sprint Delivery Schedule

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint EndDate (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

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

Sprint duration – 6 days
Velocity of the team = 20 points

$$\text{Average velocity (AV)} = \frac{\text{Velocity}}{\text{Sprint duration}}$$

$$AV - 20/6 - 3.34$$

Average Velocity = 3.34

Burndown Chart:

       A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.
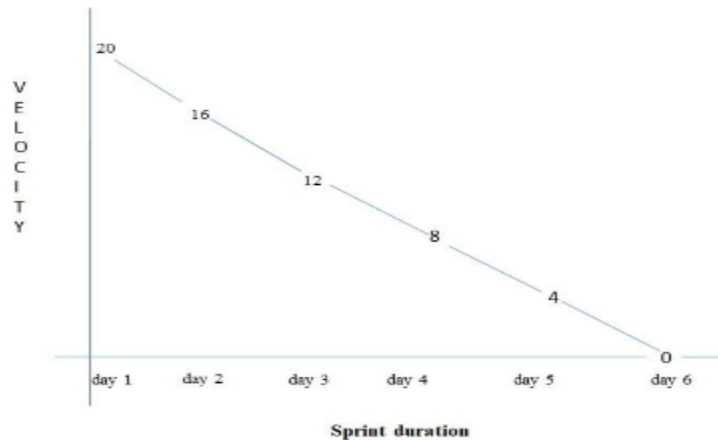
6.3 Reports from JIRA

7. CODING & SOLUTIONING (Explain the features added in the project along with code)

7.1 Feature 1
    New User Login & sign in

7.2 Feature 2
    Donate Plasma using web application

7.3 Database Schema (if Applicable)

8. TESTING

8.1 Test Cases

8.2 User Acceptance Testing

9. RESULTS

9.1 Performance Metrics

10. ADVANTAGES & DISADVANTAGES

It has ore advantages as this is a web application and it can be very use full to everyone. It helps people in emergec

11. CONCLUSION

12. FUTURE SCOPE

13. APPENDIX

Source Code

GitHub & Project Demo Link

https://drive.google.com/file/d/1y2oAPrVAZ7Wh8knkdFQef632EgAX6Mxf/view?usp=share_link