

## **Literature Survey**

### **1.Blood and Plasma Transmission application.**

#### **OBJECTIVE:**

Blood or plasma transmission is one of the most effective treatments for critical diseases like Covid 19. Nowadays, voluntary blood donation has become the major source of blood supply. Several mobile applications are currently available to establish the initial communication between blood donors and receivers. Recommending the right potential donor during a blood search can save the life of a critical patient with an immediate response from the donor. However, the requirement of an advanced recommendation system has not been addressed by any of the existing mobile applications. In our research work, we have designed a real-time, intelligent, and rational recommendation system using sentiment analysis of the user's feedback, response rate of the donor, and the current geo-location information and finally develop a cross-platform application for blood collection and distribution system. To process and generate features from the user feedback, we have designed a Bi-directional LSTM-based deep learning model. The quality of the recommendation of the potential donors has significantly improved. Moreover, we have conducted rigorous requirement analysis from real users and evaluated the performance of our application through both indoor and outdoor testing.

#### **Reference:**

S. N. Diba, Blood donation application with implementation of machine learning, 2018.

## **2. BLOOD BANK MANAGEMENT SYSTEM**

The goal of the project is to develop a web application for blood banks to manage information about their donors and blood stock. The main objectives of this website development can be defined as follows:

- 1.To develop a system that provides functions to support donors to view and manage their information conveniently.
- 2.To maintain records of blood donors, blood donation information and blood stocks in a centralized database system.
- 3.To inform donors of their blood result after their donation.
- 4.To support searching, matching and requesting for blood convenient for administrators.
- 5.To provide a function to send the e-mail directly to the donor for their user account and the hospital, the availability of the blood bag.

## **3. Plasma Donation Website using MERN stack.**

### **OBJECTIVE:**

The main goal of our project is to make it easier for the COVID-19 patients to get a plasma donor easily as well as donate plasma if they have recovered. The system targets two types of users: the people who want to donate plasma and the people who need plasma. The user can also view the total active cases, nearby vaccine centers, hospitals address. The main objective of developing the website is to make it easier for the COVID-19 patients to get a plasma donor easily and as soon as possible.

