YIELDING USE OF WEB TECHNOLOGY TO ESCALATE BLOOD BANK MANAGEMENT SYSTEMS

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Abstract : Transfusion of blood and blood components is a longtime standard way of treating patients who are deficient in one or more blood constituents and is, therefore, an important a part of health care. A intro mission service could be a complex organization requiring careful design and management. Essential functions of a introduction service are donor recruitment, blood collection, testing of donor blood, component preparation and provide of those components to the patients. The organization of a intro mission service should receive the utmost attention and look after the sleek functioning of varied components of the service. The goal of introduction service is to produce effective blood and blood components that are as safe as possible and capable meet the patients' needs. The swift developments in information technology particularly within the fields of wireless communications and web services are greatly changing the way people interact with one another. However, the evolution within the field of wireless technologies has led to not only providing end-users enjoyment in utilizing automated systems but also accustomed communicating information among one another. Web services provide a medium through which different languages on different platforms can communicate with one another in a very standard way. By using these technologies, we've got enabled our system to figure not only on mobile platforms but also on servers and PCs connected to the web. We have also provided a customer's payment gateway where the top users' can make payments using their MasterCard & open-end credit.

IndexTerms - **Javascript, Web Development, Reactjs , Git, Nosql**

1. INTRODUCTION

The proposed work may make the procedure of blood donation centers fewer tedious. during this there are different modules for a contributor, recipient, and blood donation center. Giver must enlist himself to utilize this enhanced blood donation framework. The beneficiary likewise must enroll themselves at a blood donation centre to test the blood accessibility. The blood donation center administration offers functionalities for fast access to benefactor records gathered from different parts of the state. It empowers observing the outcomes and execution of the blood gift movement to such an extent that significant and quantifiable targets of the association may be checked.

1.1 Overview

● Our vision is to design an single page web application for keeping track of blood stock , blood bank directory and blood donation camps acrosss the nation .

● A web application that will help blood donors and blood receivers in reaching out each other and conducting extracurricular social activities like blood donatio camps and fund raising .

1.2 Need

This application is to reduce the turn around time interaction among theblood donors and blood receivers which decreased during the pandemic when everyone was at their home and had less contact with the other and also to help them in their extracurricular social activities by implementing module-like raising funds and raising blood donation camps and to give them alerts regarding various events and extracurricular social activities .

1.3 Literature survey

We conducted literature reviews on two papers published in different journals. The two papers are as follows:

There is some research on the automation of blood donor databases. Because for efficient blood donor different factors are to be considered and different researchers used different factors in the recruitment process. AlRashdi et al (2018) assessed some factors in the blood donation process that influence the levels of recruitment for blood donations. In Saudi Arabia few people intend to give voluntary blood transfer and most of the past donors had to donate in unavoidable situations.

We expect to make a web application known as GPS based online blood Bank Management system using DMS. This app has the client's area that can be followed utilizing the GPS framework.

Alfouzan (2014) did research to measure the level of knowledge on blood donation, to identify positive and negative attitudes, find the obstacles, and suggest some motivational factors moreover some education program arrangements to increase awareness of the range of people. Bani accessed the reasons for gender gap sampling donors who stopped donation at least two years before the study and also analyzed the frequency of donation. The paper by Vikas Kulshrestha describes the benefits of management information systems in the blood banks. The paper is basically focused on the building an effective blood bank management information system. It discusses the beneficiaries of the blood bank management information system. In the paper, they have bought a new solution for blood bank management which is called the Centralized Blood Bank Repository (CBBR). This new system will be a web application hosted on an Apache webserver. Here the system is deployed in a centralized server while being accessed to it and collecting data from browsers on different devices in distributed areas. The patients can receive fast and accurate healthcare services from senior doctors, and meanwhile, doctors are able to timely check the feedback from their patients.Since the applications like Online

Social Networks (OSNs) currently dominate the internet users, it is unsurprisingly that the security and privacy preservation of these applications has been paid great attention so even we are trying to make an application like that. Healthcare applications are very sensitive applications and medical data are very critical and complex to be secure than other types of data and applications because it needs to be highly secured. There are many types of threats that can affect healthcare applications which differ in their causes and differ in their solutions.

1.4 Existing System

● The existing system is a traditional application de-centralized which reloads on every activity done by the visitor causing more load on the servers and resulting in a higher turn around time with the output causing the web page to be solitary performance . de-centralization led to lack of inter-connectivity between the blood banks , their was no support and feature for restricting professsional donors and performing extra social activities like raising a blood donation camp or to raise funds for a needy in the existing system

2.PROPOSED SYSTEM

2.1 Objectives

● A single page web app which will help visitors with blood stock , blood bank directory and blood donation camps across the nation and other general queries regarding blood donation .

● Providing users , donor event alerts so that they don't miss on any informative and social activities

● General queries of users like donations , conversation on conducting social activities , team formations, etc.

3. SYSTEM DESIGN

3.1 Flowchart
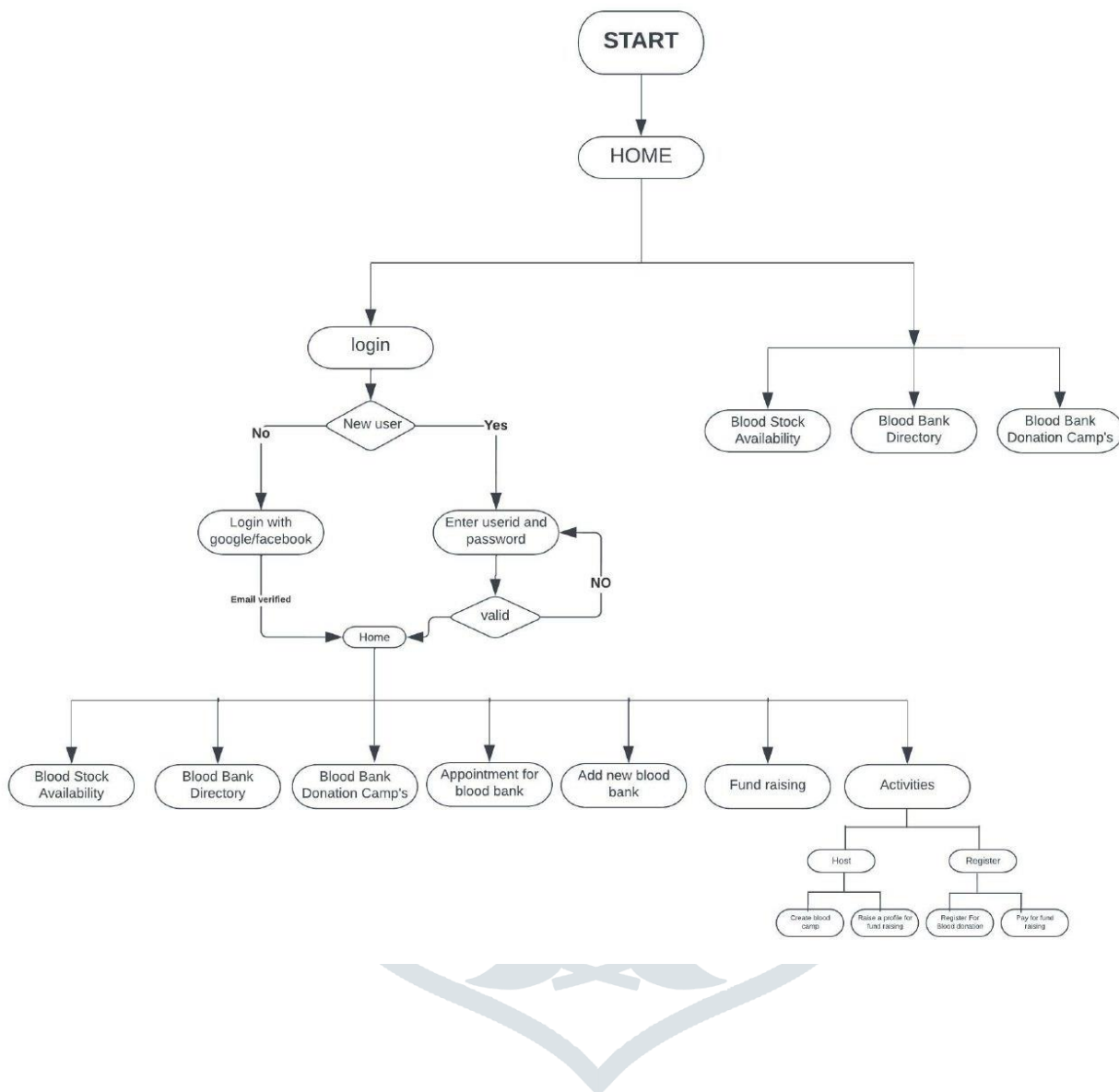
4. ADVANTAGES

● Students can interact with each others
● Can share study material
● Students will be able to ask questions on any educational topics and give answers
   on this platform.
● Reduction in the communication gap.
● Public discussion forum

6.LIMITATIONS

● Blood bank directory updated monthly
● Visitors can raise funds and donation camps only after authentication

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8. CONCLUSION

We have proposed a web-based application "Yielding use of Web Technology to Escalate Blood Bank Management System" using the MERN technology. Our website allows users to navigate through various options available in Nation It will help the end-users to choose a Blood Bank depending on their location and their need of blood type. This online web application will receive the requests from the users and directly relay it to the Blood bank management staff. Our website is basically focusing on reducing the blood wastage of subsequent Bloodbank by providing them with a platform to deliver their excess amount of blood online and make a good cause out of it, maintaining the customer feedback for each Blood bank service.
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9. REFERENCES

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