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Blood Bank Management System

[1]Yogesh Saraf, [2]Prof. S. B. Ghawate, [3]Ritesh Wankhade, [4]Rutvij Ware, [5]Prathmesh Jadhav

[1,2,3,4,5]Dept. of Computer Engineering, Sinhgad Academy of Engineering, Pune, Maharashtra, India

Abstract:

It is essential for all living things to have blood on hand when they are in need in times of need. There are numerous electronic blood donation centers that are available to provide a more convenient means of communication between blood donors and medical facilities. It is not possible for the beneficiary to interact directly with an online blood donation outlet. There is a very serious disadvantage to the current system, and that is its actual drawback. The real flaw with the current system is that it has a very big disadvantage. The suggested study then addresses the parts of the improved framework from a variety of perspectives, including the data being saved, data for future applications, and the sorts of blood groups being donated and received.

Keywords: Blood Bank Management System, Donors, Management information system.

I. INTRODUCTION

Due to the sheer number of people in India, the demand for blood is constantly increasing. The Requisite for the blood is important for treatments in hospitals and other medical facilities, particularly in cases of emergencies. The main goal of a blood bank is to receive blood from multiple donors, to screen its database of blood groups and to provide the sufficient blood at any time required to the hospital during disaster. Blood banks manager who manages the details i.e., Processes accessible data.

This process is known as Management Information System. Current frameworks are time-consuming, costly, and labor-intensive. This is the system's biggest flaw. In addition to improving existing blood banks, the innovative concepts could lead to a move away from the traditional desktop to a portable architecture. Further elements of the improved framework are included in the study, including the data that will be kept and data for future applications, as well as blood group types being provided and received. To enhance the performance of the current system, which is designed to store, retrieve, and analyze information concerning administration and inventory management within a blood, we intend to automate the blood management system in a blood bank which shall be benefits to all stakeholders.

During an emergency, cloud-based technologies may prove to be useful in delivering blood to patients across the globe. We have presented and Android-based blood bank application based on cloud computing. We are currently developing a mobile phone application that will help Turhan locate and contact the nearest blood donor volunteer and that will allow for further communication in an emergency with that donor. The maintenance data of available blood of mismatched groups and donors in close by region may play an important role for the convenient treatment of patients in emergency condition. As a result of apprehensions regarding health effects and a lack of information being delivered by the general mass, there will be a limited number of donors participating in blood donation in many countries because they have concerns regarding the benefits and the minimal risks involved in donating blood. Blood banks and welfare organizations may use this opportunity to recognize individual blood donors to prepare strategies to ensure the successful organization of blood donation camps in a manner that minimizes the risk and expense involved

II. LITERATURE SURVEY

1. Paper Name: Benefits of Management Information System in Blood Bank.

Author: Vikas Kulshreshtha and Sharad Maheshwari

Description: This paper discusses about the benefits of management information system in blood bank. Management information system plays an important role in the development of the projects. In today's world of information most of the systems are transforming into the management information system. [1]

2. Paper Name: Android Based Health Application in Cloud Computing for Blood Bank

Author: Sayali Dhond, Pradnya Randhavan, Bhagyashali Munde, Rajnandini Patil, and Vikas Patil

Description: In many emergency situations, such as accidents, there is an immediate need for specific blood type. Despite increasing requirements for blood, only about 5% of the Indian population donates blood.[5]

3. Paper Name: Android Blood Donor Life Saving Application in Cloud Computing

Author: T.Hilda Jenipha and R.Backiyalakshmi

Desription: Emergency situations, such as accidents, create an immediate, critical need for specific blood type. In addition to emergency requirements, advances in medicine have increased the need for blood in many on-going treatments and elective surgeries. Despite increasing requirements for blood, only about 5% of the Indian population donates blood.[6]

III. SYSTEM DESIGN

Blood is important, as it saves countless lives across the world a variety of conditions. The database serves as the foundation of the blood bank information system. Cloud databases are used by web services and mobile services.

Smart Phone services: Smart phone services were utilized to locate the donor using mobile app.

Database: Databases are stored on the cloud. Web and mobile services have exploited all the information. Donor and acceptor must be properly updated.

A blood data framework is simply a repository for blood data. Blood has been collected, and the blood items have been stored. The Major goal of the E-Blood architecture is to connect all the state blood collects into a solitary system, permission, storage, and flow of various live data and data by employing calculating technology.

Platform may compile all a user's information into accessible reports to aid basic leadership with anything from viable giver screening to optimal blood dissemination in the field. The data saved on the calculating gadgets may aid general society for any simple access to the status of blood availability in structure with the goal of putting a request or telling blood aggregation in nearby blood bank (especially unusual collections) preserve a profitable life. The word blood donation center refers to a facility where people may donate blood.

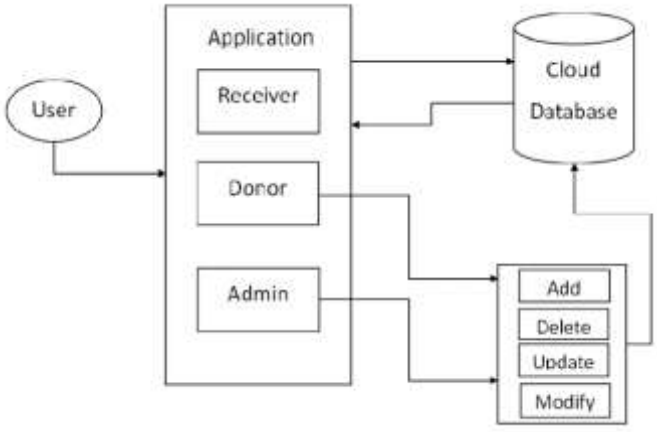

Fig. System Design

IV. CONCLUSION

Blood bank services are improved with the use of modern technology and information systems. The system is beneficial for both requester and donor too. Through this system, the gap between donor and requester has been reduced and their communication has been enhanced. In this way, blood will be delivered on time to the requester when necessary. As a result of the system's services, safety and lives of patients will be enhanced and the health sector will benefit

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