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Life Treasure Blood Portal by Using Java

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Abstract— A blood bank is a place where we grater blood as a result of blood donation, stored and preserved for later use in blood transfusion no doubt. There are many online web-based blood bank management systems to satisfy the requirement of donor and receivers. There we are going to modify the existing System as this paper includes the key features, merits and demerits in existing web-based blood bank. This study shows the comparison between various existing systems and provides more idea to improve the existing system

In this paper, we present s "Life Treasure Blood Portal" that is a based-on java. To develop this system, we are using different kind of technology, like html, Ajax, JSP, CSS, bootstrap, Servlet , Java-Script, JDBC. This system will monitor the record of blood donation in real time and given the analytical report like which city has more number of blood donor, which any has more number of blood receiver which blood group is more donated etc. So, there I am going to introduce this system and in at the end I will conclude.

Keywords— blood bank, Life treasure blood portal , HTML, CSS , BOOTSTRAP , JSP , SERVLET, JAVA, repository transfusion

I. INTRODUCTION

Blood plays a most important role in medical & health care world. There is an expectation that blood will always to there when it is really needed .That's why we need a last blood supply management .So, our web application which name is "Life Treasure Blood Portal" development to facilitate the identification of blood donor by city wise and communication with them in the emergency situation.**[2]** Blood bank contributes the management of donor record .

So, in this web application we are adding profile of donor that is easily accessible by receiver of blood. **[3]** In this study we find that a web-based blood management provides case of control in distribution of blood in various parts of the country considering the Demands of hospitals that's why we are giving facility to blood receiver that he can search Donor by city wise.

[4] In this research paper proposed short message services So, we add a compound compose message through blood receiver can directly send the message to demand can communicate wish them and Vice -versa.

Timely and efficient distribution networks are key but nature blood distribution networks are yet to be established in most developing countries. Our web application is going to resolves this issue.

[5] The application also provide various information about donating blood and who are all willing to donate blood can register through this application. In proposed system blood receiver can search blood donor by city wise and vice-versa. We are adding analytical section after reading this study.

In analytical section we are going to analysis the different - different data and having analysed, it will give the report like which city has more number blood donors and which blood group is donated and it will be shown through graph on our platform.

A. Research and Motivation

In this research, our motives are to maximize the blood donation and give online platform where blood donor and blood receiver can communicate directly so blood receiver can get the blood as early as possible in efficient and safety way.

II. LITERATURE SURVEY

In this Research paper, we are giving our time to identify the challenges and solution of these challenges in blood bank management system by reviewing other research paper. We are proposing a model that name is life treasure blood portal that includes blood bank pathology and analytical section. Our system will be providing solution of the challenges exits in exiting web-based blood management system.

A. Challenges

We have found many challenges that are given below –

1) *Safety of Blood Transfusion:* There is one of biggest challenges is that how to access the safe and adequate quantity of blood for needy patient blood donor is an important measure for ensuring the safety quantity and quality. Therefore, user needs to test the blood to ensure the respectability and illnesses free of that blood [1]. The blood transfusion services have been certified ISO2008-9001 and nucleic acid testing as included in our plan has been introduced.

2) *Blood Bank Communication System:* In absence of effective communication system, blood bank's purpose cannot be fulfilled. That's why to make an efficient and effective means of communication platform among the blood bank, blood donor and recipient . [1] So we are going to develop a system that will check blood availability and give effective communication system where donor and received can communicate by easiest way without any barrier .

3) *Challenges in Authentication:* Adermin a CT al. proposed a linear model where records of new donation come into the system and some donated blood leave to the recipient are kept and proportion that can be cross matched between compatible blood types are well defined [2] Our system will be fulfilling this Adreima a CTall's proposed system .

B. Research Gaps

Having received research paper of researches, we find despite the regulatory, measures, effective blood transfusion services still remain. In this addition we find that blood is not in good circulation, especially for the needy who are in most cases exploited and eventually faced with serious health challenges due to unsafe blood transfusion leading to deadly infection and consequently death and other times, blood is totally unavailable. In view of this we proposed and implemented a working system of blood bank services which ensures patient gets quick access to the blood donor of any type whether donors replacement donor (family or friends) or compensated donor, in mutual interest is protected. Analytical section of our system analyses different find of data and gives report which is shown through graph. The implementation and technical details of our system is provided in following section .

III. RESEARCH METHODOLOGY

This research adopted a bottom-up approach for develop System. This web-based system includes three section Blood Bank, Pathology and Analytical section that will explained in other section.

A. Requirement Analysis SRS -tools Required for Solution Development

To develop this web-based application we have requirement of such kinds of things that are given below -
- Operating System- windows10
- Front end – HTML, CSS, Bootstrap, JavaScript, Ajax
- Back end – JSP, Servlet , JDBC
- Server- Apache tomcat server
- IDE- Eclipse IDE 2019-06

B. E-Blood Bank

In this section, there are two user type-
- Blood donor
- Blood receiver

Blood donor can edit, update, and delete their profile. Blood donor can also compose, message, check their inbox and sent box. Blood receiver can also do the things as same as blood donor.

C. Pathology

In this section there are two user type -
- Pathology
- Patient

Pathology can add appointment delete appoint and upload patient blood report. Patient can take appointment and download their report.

D. Analytical Section

In this section we are going to show different kind of report like which city has more number of blood donor and blood receivers through graph on our portal.

E. Data Flow Diagram

The Data Flow Diagram in below is showing the module of our web-based system which name is "Life Treasure Blood Portal and it is also showing process among the module of system .

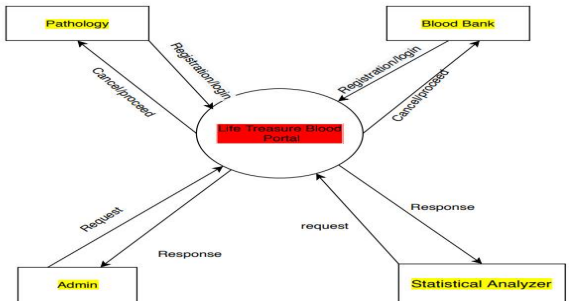

Fig. 1 0-Level DFD of Life Treasure Blood Portal

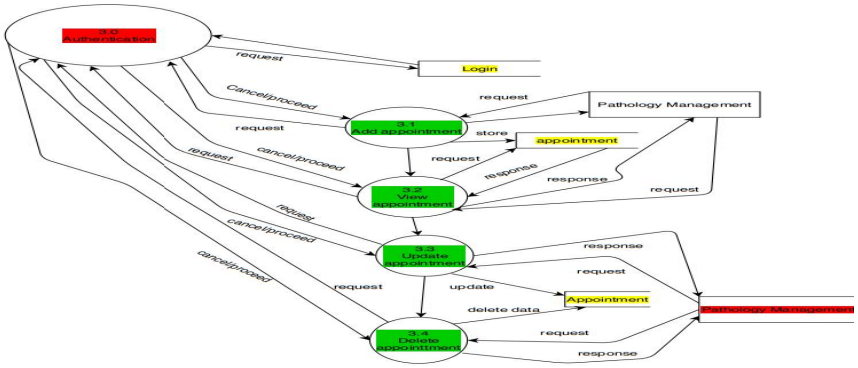

Fig. 2 1- Level DFD of Life Treasure Blood Portal

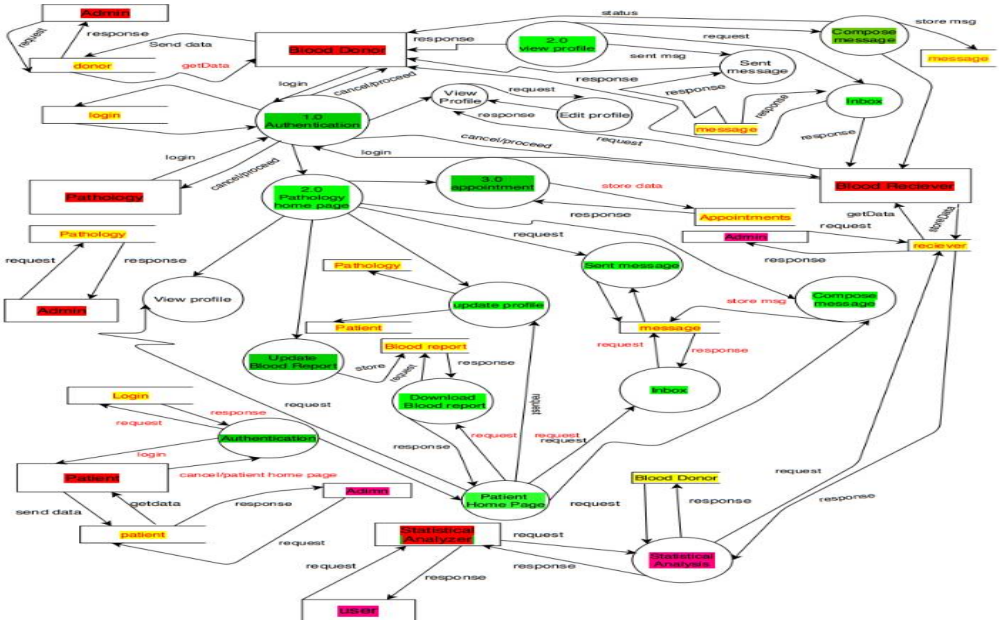

Fig. 3 2- Level DFD of Life Treasure Blood Portal

IV. IMPLEMENTATION AND RESULTS ANALYSIS

The Fig.4 shows our index page. This is our home page that includes donor registration page link, receiver registration link login, search donor, blood fact, experience, analytical report. Fig.5 shows Blood donor home page that includes view profile, edit profile, compose, inbox , sent item ,share experience. Fig.6 shows Blood Receiver home page that includes view profile, edit profile, compose ,inbox ,sent item ,share experience. Fig.7 shows the Pathology Home Page that includes view appointment, remove appointment, upload report. Fig.8 shows Patient Home Page that includes search doctor ,appointment , download report ,compose ,sent item ,inbox ,share experience.

Fig.4 Home page

Fig.5 Blood donor Home page

Fig.6 Blood Receiver Home page

Fig.7 Pathology Home page

Fig.8 Patient Home page

V. CONCLUSION AND FUTURE WORK

In view of this we proposed and implemented a working system of blood bank services which ensures patient gets quick access to the blood donor of any type whether donors , replacement donor (family or friends) or compensated donor, in mutual interest is protected. Analytical section of our system analyses different find of data and gives report which is shown through graph.We are focusing on authentication process. Analytical Report section of this web-application to give us questions to think that why this blood group is more donated in this city, what the cause behind it is.

A. Future Work

1) We are thinking to launch this application in many languages. At this time, this supports only English.

2) Having included this entire feature, we are going to add bar-code feature for every user profile .

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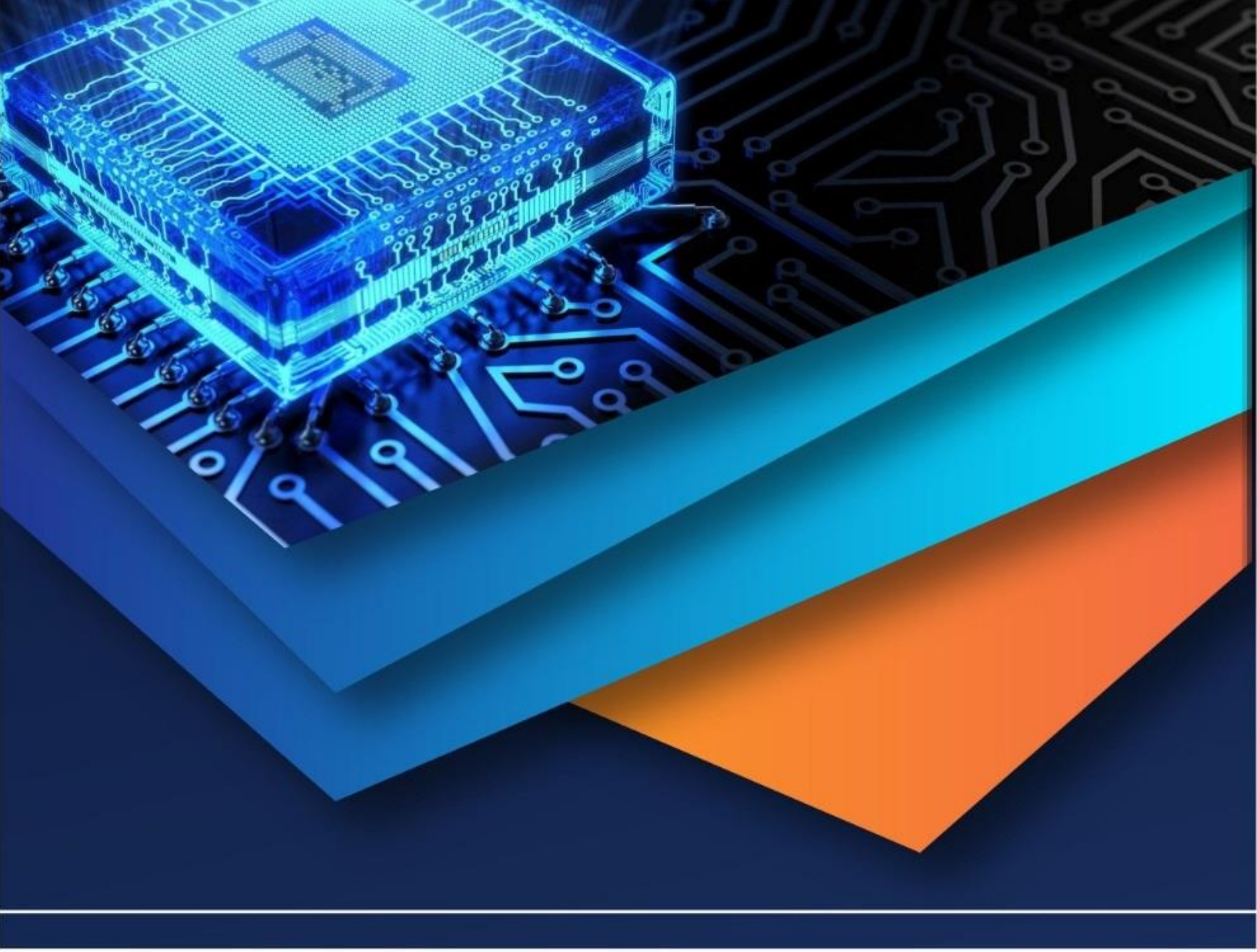

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