

BLOOD BANK MANAGMENT SYSTEM

[1]Prof. Diksha Bhave [2]Shweta Badhe [3] Siddhi Jain [4]Aaditya Kasibhotla
 [1] Prof.Diksha Bhave, Dept of Computer Engineering, SSJCOE, Dombivli, India
 [2],[3],[4] Students, Dept of Computer Engineering, SSJCOE, Dombivli, India

ABSTRACT- *The main aim of developing this system is to supply blood to the needy people. The number of persons who essentially requires blood are increasing in large number day by day. In critical or emergency situations where accident occurs or during on-going treatments and surgeries etc there is urgent need for specific blood group. It requires lot of time to make the blood available and it is inconvenient during immediate requirement situation, some rare blood groups are time consuming and difficult to arrange which are O- , AB- etc. Using this system user can search blood group available in the city and he/she can also get contact number of the donor who has the same blood group he/she needs. In order to help people who are in need of blood, this Blood Bank management system can be used effectively for getting the details of available blood groups and user can also get contact details of the blood donors having the same blood group and within the same city. So if the blood group is not available in the blood bank user can request matched donor to donate the blood to him and save someone life. Our website also provides address of nearest blood banks and donors in user's area by location tracking system like GPS.*

1. INTRODUCTION

This blood bank management system is an online website so it is easily accessible to everyone. When a person wishes to donate blood he/she have to register to the system. Donor registration is

easy, to get register to the system he have to fill up registration form. After submitting the registration form he/she can create username and password. Donor have to give information like blood group, contact number etc. donor can also change account information when he/she need it using username and password. Using this blood bank system people can search blood group available which they are required. They check it online by using our website. If in case blood group is not available in blood bank they can also get contact numbers of the persons who has the same blood group he/she needed and he/she can request the person to donate the blood for saving someone life. Our system also allow user to search online the person who have the same blood group he/she needed and if he/she find a donor in same city then we provide all details of the donor, if he/she doesn't find any donor then he/she has given the contact numbers and addresses of the Life Saving Contact Persons for another cities. Our website also provides address of nearest blood banks and donors in your city/area by location tracking system. The donor can easily locate where his/her blood group is needed. The main purpose of the our system is to make easy and automate the process of searching for blood in case of emergency and maintain the records of blood donors, receivers, blood donation programs and storage of blood in the bank.

2. PROPOSED SYSTEM

Previously, In hospitals or blood campaign hard copied data records were generated. It becomes difficult to maintain such record and find it in the case of emergency. Also it was time consuming process and requires large manpower for handling the system. So, because of these drawbacks of manual system we introduce proposed system. The system is used for maintaining all the activities of blood bank management system. The system can be expanded for the purpose of maintaining records of hospital, organ donation and other similar sectors. While developing the system, there must be scope for further modification. Proper documentation is needed so that further enhancement becomes easy. As a whole the system is concentrated to work with blood bank management system and on additional modification it can be also used as management systems of similar organizations.

Proposed system is divided into following functions:

- 1. Registration of users
- 2. Find for blood bank and donors nearby
- 3. Donate blood The purpose of the

Blood Bank Management System are as follows:

- 1.To facilitate a means for the blood bank to publicize and advertise blood donation programs.
- 2.To allow the probable receivers to make search and match the volunteer donors, and make request for the blood.
- 3.To provide an efficient donor and storage of blood management functions to the blood bank by recording the donor and blood details.
- 4.To improve the efficiency of blood storage management by alerting the blood bank staffs when the blood quantity is below it par level or when the blood storage has expired.

5.To provide synchronized and centralized donor and blood storage database. 6.To provide instant storage and retrieval of data and information.

System Requirements :

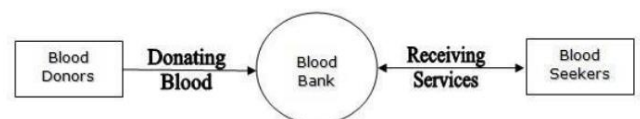
1.HARDWARE REQUIREMENTS:
 The Processor used is Intel®core™i3 at 2 GHz. The capacity of Random Access Memory (RAM) is 4GB. The capacity of the storage element of disk space is 3 GB. The monitor used is HDML monitor. Proper working keyboard of 104 keys and a mouse is required.

3.SOFTWARE REQUIREMENTS:

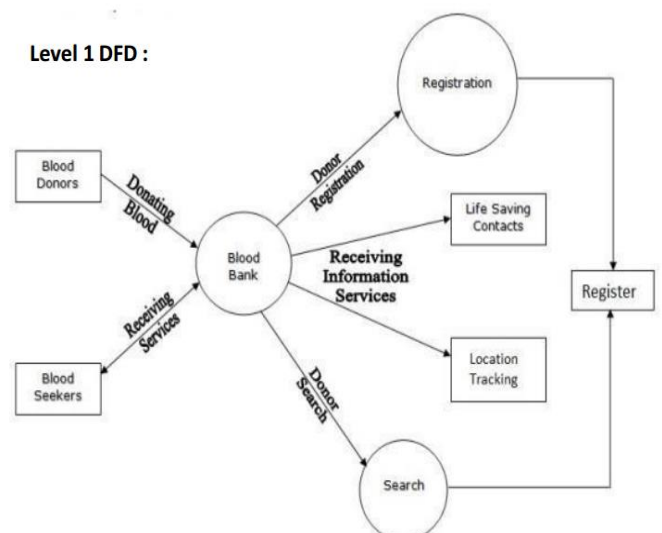
Technology used:
 1.SQL
 2.HTML
 3.CSS
 4.PHP

System Design :

Level 0 DFD :



Level 1 DFD :



Working Of The System :

Online Blood Bank management system is to facilitate services for the people who requires blood by getting help from the donors who are interested in donating blood for the people. There are five main modules in this system.

1.Donors : From this module user can create their account, when user create his account the user get a user id and password, which identifies him uniquely. From this module user can search donor for blood and can also refer/conveyance other people to become a donor. Donor can also get information like when he/she donated blood or when he/she will be able to donate blood.

2.Donor Registration : In this module, people who are interested in donating blood get registered on site and give his overall details related to them. Also there are given two fields username and password to fill such that to know authorized registered donors and they can enter the login form with username and password and can modify details if needed.

3.Modifying Donor Information : The registered donor only able to modify details; no other person can modify details as there was a login form which restricts others from entering the username and password providing high security for the details given by the donor. If at all the donor wants to modify details,they have to enter username and password. After giving the username and password it checks for the donor whether he is an existing donor or not and if the username and password matches, user can then able to modify his total details.

4.Acceptors : This module helps user to identify their blood group. When user click on donor list, it helps user to find blood group he want to search.

Donor list provides user the list of the donors with their respective blood groups.

5.Location Tracking : This module helps user to find instant location of nearby blood bank and donor. Users are able to find location of blood bank and donors when they require blood or if they want to donate blood using internet through Google Map. Users having android smartphone should have internet connectivity and through which tracking is done using Google Map.

Block Diagram :

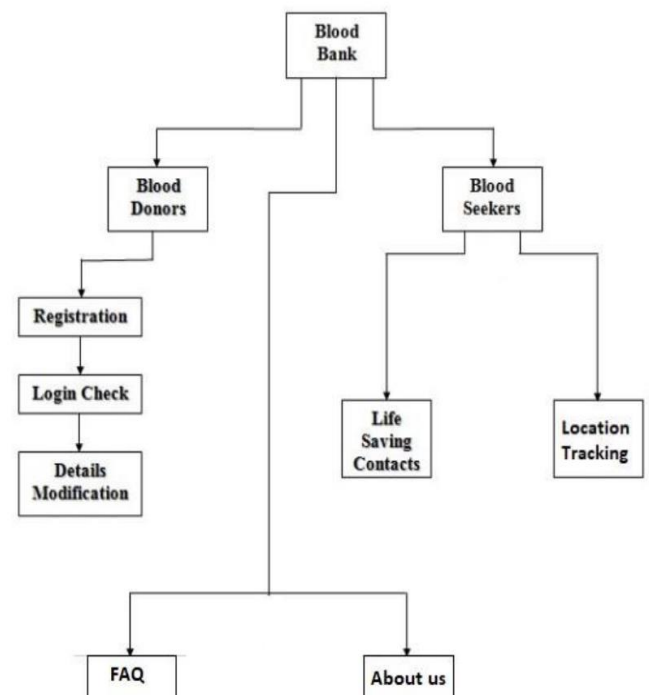


Fig : System Architecture

4.RESULTS:-



Fig : New User Registration

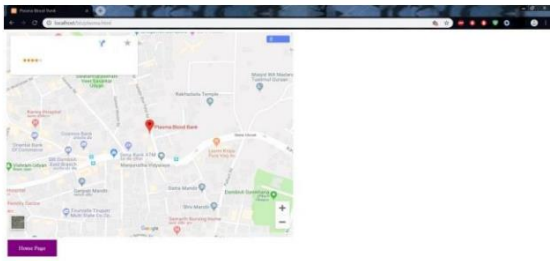


Fig : Location Tracking

Name	Email ID	Phone Number	Blood Group
Aad	aad.kashholkar19@gmail.com	9892131463	A-
Aaditya	aad.kashholkar@gmail.com	8108221178	O-
Harshadkave	madh07027@gmail.com	8404828200	O-
Prasen	prasenemula7@gmail.com	9819423222	A+
Prasen	prasenemula@gmail.com	9819423222	A-
Siddhi	siddhi@gmail.com	987654321	O-
Shiv	shiv@gmail.com	8108221178	O-
Yash	yashpatil182@gmail.com	8291711364	A+

Fig : Donor List

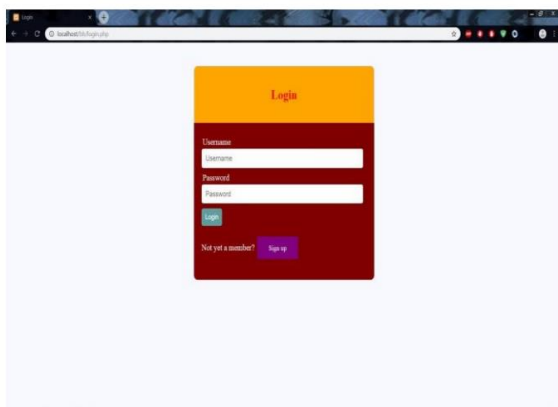


Fig : User Login

5. ADVANTAGES

1. The people in need of blood can search for the donors by giving their blood group and city name.
2. It is very flexible and user friendly.
3. The person’s time and work is reduced very much which prevails in the present system.
4. Easy and Helpful.

6. DISADVANTAGES

- 1 .Fake identity people can cause harm to the system.

2. It is difficult to maintain database of all donors as the number of donor’s increase day by day.

7. FUTURE SCOPE

1. System should check valid id proof of donor or take digital signature of the donor.
2. Big data or Hadoop can be use to maintain large volume of data.

8. CONCLUSION

- 1.The proposed system evaluates the possibility to combine the facility of donating as well as requesting blood to the blood bank in just few tap.
- 2.The user and the blood bank both can satisfy their needs whenever they require blood or if the user wants to donate blood.
- 3.It ensures instant location tracking and communication and thus it is an advantage to proposed system.
- 4.Thus the proposed system provides appropriate information in less time as compared to traditional method of searching blood banks and donors which included practices like man to man communication, hoardings, and paper pamphlets and hence, clubs with today’s high demanding blood requirement.

9. REFERENCES:

[1] Abraham Silberschatz, Henry Korth, Database System Concepts, Mc Graw Hill Education, 6th edition, 2011.
 [2] DT Editional Services, Web Technologies, Dreamtech Press, 2, 2017.
 [3] Elmasri, Navathe, Fundamentals of Database System,Pearson Education, 6th edition, 2010.