Life Saving Blood Bank

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Abstract— This bank application are going to be a saver of all existing lives just in case of emergency needs. The task of bank Application is to receive blood from various donors, to watch the blood groups database and to send the specified blood during the necessity to the hospital and patient or user just in case of emergencies. The difficulty isnt insufficient amount of donors, but finding a willing donor at the proper time. We would like to create a gaggle of interconnected people things or network of individuals who can help one another during an emergency. This application gives timely updates information regarding the donors where the administrator accesses the entire information about bank application database. Donor are going to be first prompted to enter a persons Email-id and password otherwise Sign-up with Username, mobile number, Email-id, password, confirm password and choose blood type from given blood type list and that they can click on register button Icon. Once we face urgent blood requirement, youll quickly check for blood banks or hospitals matching a specific or related blood type and reach bent them through the App. This App provides list of blood banks in your nearby or surrounding area. An outsized number of blood donors mostly use android application. Nowadays almost everyone carries a sensible phone with them, it ensures instant location tracking and communication. Only a registered person, with willingness to donate blood, are going to be ready to access the service. During this application we are using the Google Map as GPS technology which will be wont to trace the thanks to the bank. The user will get the route to succeed in the specified location and he wont need to ask manually, therefore time are often saved.

Keywords: Blood Bank

I. INTRODUCTION

A blood donation may be a process whereby an individual voluntarily has blood drawn to be used for future transfusions when in need at hospitals for treatment procedures that need them. Donation could also be of blood (blood drawn directly from the body) or of specific components of the blood; like red blood cells, white blood cells, plasma, and platelets. Blood banks often participate within the process of collecting blood and other procedures like managing stocks, approving blood requests and updating donation information. The inspiration of this project is to enhance banks in Thailand and to develop a blood bank information system which focuses on making a web system that's accessible for both donors and administrators. Donors can directly receive information regarding their previous blood donations, including their blood results and donation history, so as to simply schedule their next donations. They will also update the private information through the system, without having to contact the bank registry.

II. LITERATURE REVIEW

We have gone through the features of various social networking sites and made a list of some basic functions which are or are not available in these sites. This analysis helped us to understand which social media specially only for students we can refer to in order to add our desired features. The following information provides an overall summary for some of the project similar to the project we are building Automated blood bank system using Raspberry PI, 2018 2nd International Conference on Inventive Systems and Control (ICISC):Raspberry pi based blood bank system" proposed to bring blood donors to the one place. The aim of this system is to fulfill every blood request by using android application and raspberry pi. In the proposed system, data about the donors will be collected by using android application and raspberry pi by installing systems at places such as hospitals, blood banks etc. These data will be stored in the database. User/Patients needs to access application and needs to enter his requirements about the blood in the application the requirements are matched with the database and message will be to that particular blood donor through GSM modem.

A. Use of fuzzy TOPSIS techniques for selection of best alternatives of blood bank Supply chain, 2015 International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM):

In this paper, we develop a generalized network optimization model for the supply chain of blood. We consider a regionalized blood banking system consisting central blood banks, regional blood banks and hospitals. The various factors that affect are considered and are weighed and all are simultaneously considered by MCDM (Multiple criterion decision making) methods for selection of best alternative.

B. A Secure Cloud Computing Based Framework for the Blood bank, 2018 International Conference on Smart City and Emerging Technology (ICSCET):

A blood Bank can be defined as a bank or storage place where blood is collected, preserved and used whenever needed or demanded. Everyone is aware that the traditional blood bank management system includes paperwork. Its way of working is not efficient enough at the time of emergency situations. The main aim of creating cloud-based blood bank system is to make the blood available on time to the people, even in emergency situations. With the help of this project, the user can be able to view information about every entity related to blood bank i.e. hospitals, donors, a location of another blood bank etc. The security factor is maintained properly. Every time the new user accesses the system as a donor, he/she has to register himself/herself and provide a proof of their identity like license or government document on which the blood group of the person is mentioned. This project will consist of

the android application which can be used in the smart phones; it will contain all the information of the donor and nearby hospitals. The application will also contain a GPS (Global Positioning System) system to track the location of the nearby blood banks or hospitals. Every registered user will get the notification regarding health checkup drives, blood donation camps in particular area etc. As the person did not need to go out far, for the search of the blood banks and hospitals, this application helps to save the time to a great extent. This also helps in correct and quick decision making.

C. Computerized Central Blood Bank Management System (CCBBMS), 2018 International Conference on Computer, Control, Electrical, and Electronics Engineering (ICCCEEE):

Blood is a vital constituent in human body that is indispensable for human life, it supplies nutrient and oxygen to all body cells, because of this essential role, blood bank was introduced in this paper. Manual systems as compared to computerized systems are time consuming, costly, and human errors. A computerized central blood bank management system was developed to assist in managing donor records, monitoring blood screening and storing, moreover provide secure medical reports to improve medical service delivery. The system was designed and implemented as a web-based using My SQL data base, PHP programming language and a bar-code technique. The outcome was obtained as screens that made the recording process of donor's data and blood easer so as to ensure the efficiency of transfusion process. The system was tested in the National Blood Transfusion Center NBTC of Khartoum-Sudan, it contributed to solve errors of manual system, time consuming and retrieve data, as well as met users' acceptance.

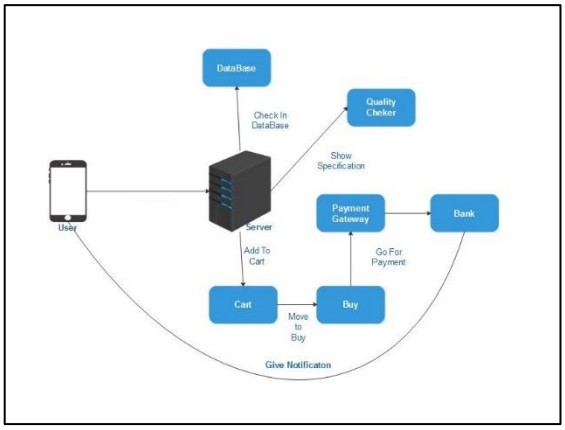
III. EXISTING SYSTEM:

Availability of blood during emergencies is highly critical for every single living thing. There are number of electronic blood donation centers for effective communication between them and medical facilities. None of the online blood donation center offers the immediate contact amongst beneficiary and them. This is the real downside of the current framework. The existing frameworks are tedious; require more labor and expensive.

A. Proposed System:

Our Proposed system is which we will have two user, first will be the user who is responsible for the purchasing and paying bill after buying the blood bank. Second will be the admin where he can monitor each user ,and also he/she can able to modify user list, as well as add products to the system. System is different from existing system, we allow user to check the location of the blood bank, so that user can able to satisfy himself before buying any blood. We are also provide a feature user can able to pay online for the product which he is buying, Payment gateway integration will be done, We planning for easy to use and more user friendly web app / android app for our user.

IV. SYSTEM ARCHITECTURE



The project starts from home page. Once you have entered the homepage you have to log-in into your system. There are admin account, student account, staff account, placement officer account and the Principal account you have to select the account you need and login into it. If the student is not having the account he/she can register and the registration will be approved by the admin. Admin have the authority to add faculty, approved post and view/delete the student/faculty .In short the admin has the control over website. A student can chat with the other students as well as other people in the website having an active account, he/she can also post anything, but the post must be approved by the admin. The Placement Officer has privileges to access any students details, view profiles and as well as communicate with staff and students. They can also create list according to branch to post job vacancy and other information related to it. The staff can view profiles of students and also add post/ event to the website.

V. PROPOSED SYSTEM

The system is also developed for the administrators, who are the main authority in the system. Administrators can add, modify, delete, and query any donation 1 information if necessary. The administrator is also responsible for responding to the hospital's blood requests and checking the stocks in the blood bank's inventory

The donor's information can only be updated by the administrators of the blood bank. A donor can update their information by calling, faxing, e-mailing, but not by themselves. This is a waste of time just for updating a piece of information and it may be troublesome for some donors. A typical membership card can easily get damaged if it is exposed to the sunlight or weather and this causes to ruin the card's barcode which is significantly important for retrieving records. If the card gets lost or stolen, the donor has to make a replacement card to keep their membership at the blood bank. The donor ID card is the only tangible evidence that contains the donor's recent donation records, if the card gets lost, donors may find it difficult to schedule their next appointment since they are not able to see the last time they had donated blood. After the process of blood donation, the donor will receive a card that only contains their name and blood type. They will not be notified of their blood result unless they request that information from the blood bank. Blood banks are required to maintain account of blood bags

in the inventory. This increases with each blood donation recorded in our system, and decreases as they are checked out upon hospital requests. Our system will need to keep the information up-to-date to ensure correctness of the inventory.

VI. CONCLUSION AND FUTURE SCOPE

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources that would generate a proper system while making the system an eye has been kept on making it as user-friendly, as Cost effective and as flexible as possible. As such one may hope that the system will be acceptable to any user will adequately meet his/her needs.

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