Blood Donor Information Filter Based on Voice Input

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Abstract- *As a seeker (a person who want a blood) for a blood transfusion, it is important for him or her to receive the safest blood possible form the blood bank . All we know that the major task is done by the Blood bank is to provide the blood to seeker when they required. A blood bank store blood in the blood bank [http://blog.bloodconnect.org/faq/]with this reference article Whole blood can be stored up to 35 days, when kept in CPDA anti coagulant solution and refrigerated at 2-4 deg C. Due to lack of storage facilities blood bank is not able to store the blood this is the major problem face by the rural area as well as urban area blood bank . In this paper we are provide the new architecture that help to find the blood donor information using Voice with some keyword and find the donor information when they required the blood . The objective of this paper to deal with the Vague Voice based donor information filter and make a particular blood group cluster with donor information .*

Keywords- Blood bank System, Data mining , Searching Algorithm ,Cloud computing, Web application .

I. INTRODUCTION

This section include the introduction of blood bank system and its major task with some statistic 2015 year in India .

Blood Bank is a center where blood are gathered from the various source as a result of blood donation, blood bank stored blood and preserved all the collected blood for later use in blood transfusion. The term "blood bank" typically refers to a division of a hospital where the storage of blood product occurs and where proper testing is performed (to reduce the risk of transfusion related adverse events). First time blood transfusions is discover and in this process donor directly give blood to seeker before coagulant and refrigerating. Prevent the coagulation of blood experiment is done by the Jon Braxton Hicks at the St Mary's Hospital London in late 19th Century but this experiment is unsuccessful , Non-direct blood transfusion was done by Albert in 1914 .so this is the brief history of blood bank .Now a 21st century we have so many latest technology that help blood bank for managing blood ,its components , etc . in the technical aspect some of the Algorithm are proposed by the researcher , Data mining concept , Cloud technology concept ,

RVD, Distribution , Association Rule ,Security Issue etc used by the Researcher . As per the report of CDSCO in year 2015 Feb ,India have the Total 2760 Blood Bank .In India daily a blood bank required the up to 8 billion Unit of blood shown in the Figure 1.1 this is the snapshot of The Hindu e-paper blog .

Figure 1.1

Figure 1.2

Figure 1.2 show the shortage of blood in the India .

In this paper we propose mobile and voice based blood donor information cluster finder service application due to availability of mobile phones to provide service in

emergency very quickly. This paper is organized as follows : Section II is include the related work analysis part here we are include the some existing work in the domain. In section III Methodology are describe this part include the description of blood donor information finding using the voice, and working architecture model are introduce .Section IV include the screen shots of Voice based blood donor application . At the last conclusion cones from the above .

II. RELATED WORK

This section of paper is include the study of some problem and its solution provide by the researcher .

[1] – In this paper, Ming jaing et al present a RFID-based blood information management system are proposed its main objective is ensuring the quality of the blood. In this paper author are increase the operation management efficiency . in the Proposed model author are used the fingerprint sensor for identifying the blood donor .GPRS General Packet Radio Service is also applied in this Process model that help to transform the real time data to bloodmobile and center via wireless internet .This paper include the introduction of RFID . in this paper author are used the record data based , in this model each donor have smart card in this card all the information are stored .this smart card have inbuilt memory card this is include the basic information about the donor and blood donation database , donor place , time etc .this process model working is registration based it means donor first register in the system this system is basically used for maintain the donor information in a card .

[2] – This paper include the introduction of blood bank management and its working concept like blood bank mainly colleting a blood , monitor the blood quality , its supply ,its distribution separation of blood components etc . the area of study is done in the Thailand . this paper goal is to make web based application to manage the blood and maintain the supply chain of blood .in this paper researcher are also maintain the inventory of blood . In this paper author introduce the some statistics of Thailand blood bank .for the development of this web application researcher are used the PHP and Sql for the back end . its database is maintain the proper information abut the number of blood unit are distribute or unit are available in the bank . in this paper researcher are make Essential data to be recorded are blood group (ABO Rh) and quantity (units) in each blood group that each hospital receives and distributes to various locations within the blood supply chain.

[3]- The objective of this paper is to make a good bridge between donor and seeker , in this paper researcher a make the direct call routing technique using the Asterisk Hardware this hardware perform the call routing function, this system is help to donor immediate get the SMS form the Data base system that are connected to system .In this paper researcher are also put the introduction of Asterisk Open Source and describe its technical aspect .This system is add the online database with automatic call routing facility .

[4]- This paper explain the service of blood bank in the Bangladesh , the purpose of this paper is implement the good blood donation service that able to assist the its management and maintain the blood donor records this system also help to control the blood distribution of blood in various area of the country basis of blood demand .In this paper author are used the concept of cellular communication system for the blood donation service in the Bangladesh .In this paper researcher proposed mobile based blood donation service .In this paper author are introduce the term m Health that is Mobile Health used the mobile telecommunication and multimedia technology system this concept is used the researcher in this paper . After the registration process donor /clients are able to make the any deal via SMS .The Blood Donation Service has been developed using SMS-based functionality.

[5]- This paper is also overcome communication between the donor and seeker and make a direct chanle in between in this paper researcher used the new concept that is Raspberry Pi B+ Kit . in this paper researcher include the technical information of kit in detail . This system is also work in the SMS sending concept in the mobile device so this project is called Automated Blood Bank .this project is asset to patients who need the blood , using the GSM based Smart card CPU person get the Information about the donor at any time .This project is only include the Donor information this system is also based on the registration .
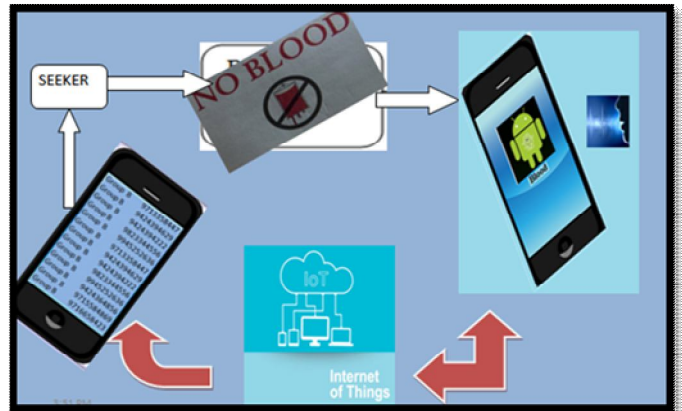
[6]- The objective of this paper is to assess the Green ability of 72 free blood donation application are proposed by the researcher group , this is a kinds of App application that all are analysis in the Energy consumptions parameter . In this paper author proposed the Green Software That Means Sustainable Software this GS is divide into six categories .so objective of this paper is consider the all sustainability dimensions in the analysis of the BD blood donation mobile Application APP green ability .In this paper author are include the various type of sustainability these are Environmental sustainability ,Economic sustainability ,Social sustainability ,Technical sustainability ,Individual sustainability, This app Application is help to find the donor information , Donor record , Blood types, Related to a center, General information.etc .

[7]As per the R.Vanitha paper researcher are used the concept of cloud for the work , in this paper author are utilize the

facilities of cloud for the blood donor information. This paper provides a complimentary capability to the recent research. This paper introduces the, B-Cloud the term B is used for the Blood. In the other word we can say author are make concept of Cloud server for storing the blood donor related information and this data easily fetch by the seeker at any time when they required. [8]A Study on Blood Bank Management is done by Clemen Teena et al.So in this study work author are concentrate at on the security issue in the conventional blood bank system , in this research work author are introduce the secure blood bank information system . all the authorized blood bank officer used this information system , in this system they are login in the system by secure password and mange the information. This paper also include the some other module like search facilities, donor information , patients information etc.M.Mostafa et al[9] In this paper author are introduce the importance of Blood Donation and Blood Transfusion Services (BTS), with the help of Mobile computing so this paper is managing the donor information using the mobile computing and cloud computing .This paper author are make the bridge between donor and blood donation center it means information is shearing form the blood donor center and health organizations across a country. In the year 2010 F.Zabihi et al [10] this work accomplished on application of CART algorithm in blood donor's classification. In this work, one of the popular data mining technique i.e. Classification is used and through the use of CART application, a model is created that determines the donor's behavior. In February 2011, the research paper presented on classifying blood donors using data mining techniques in this paper author are work with the Fuzzy sequential pattern [11] mining concept for the blood donation related information , the work is performed on blood group donor data sets using classification technique.
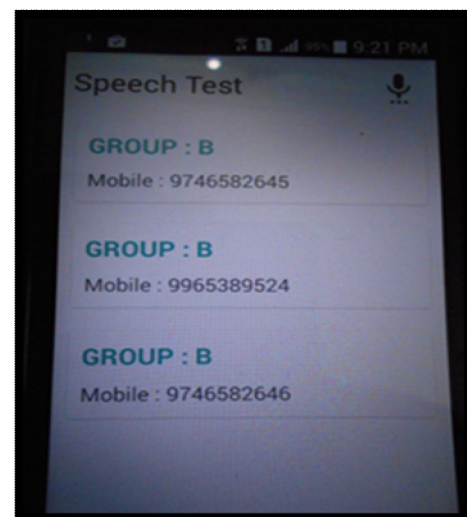
III. METHODOLOGY OF PROPOSED WORK

This section of paper is include the working architecture of Proposed model shown in the Figure 1.3.this figure show the working process of proposed system , when a seeker required the particular blood group at the time of casualty seeker used this voice based application in this proposed model seeker just ask the keyword in our model we are used "HELLO " followed by the blood group like B . so complete word is "HELLO B" when a seeker required a B group . So the Licensed blood bank is server send the 10 to 15 donor contact number to seeker . this application fetch the blood donor information from the licensed blood bank .in this application no need to type the any Massages seeker just ask for the particular blood with using the Mention key word . This application prototype model is implement in the snap shot is shown the figure 1.4 and1.5 .

Figure 1.3 Working architecture.

Figure 1.4 Implement Model

Speech Test

GROUP : B
Mobile : 9746582645

GROUP : B
Mobile : 9965389524

GROUP : B
Mobile : 9746582646

Figure 1.5 Implement Model

III. CONCLUSION

The conclusion of this work is this work help to find the donor information , optimize the wastage of blood where a lack of storage equipment . No need to required the donor registration process for using this application , a person just ask for the blood with key word and get the donor information form the licensed blood bank

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