



iJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 7 Issue: VI Month of publication: June 2019

DOI: <http://doi.org/10.22214/ijraset.2019.6004>

www.ijraset.com

Call: ☎ 08813907089

E-mail ID: ijraset@gmail.com



Blood Bank Management System

Miss. Pooja D.Dighe¹, Miss. Nikita V.Gorde², Miss. Aaysha A.Inamdar³ Miss. Dipali D.Kulal⁴, Mr. S.K.Korde⁵

^{1,2,3,4,5}Department of Computer Engineering Pravara Rural Engineering College Loni, Savitribai Phule Pune university

Abstract: *Blood is very important 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 among beneficiary and them. This is the real downside of the current framework. The existing frameworks require more labor and expensive. This paper presents a correlation between existing blood bank framework and enhanced framework to improve the effectiveness. The new considerations may increase the efficacy of current blood banks and help to upgrade from ordinary desktop framework to portable framework. The proposed work discusses the components of enhanced framework in numerous perspectives such as the data being stored, data for future applications like kind of blood groups being donated and received by the individuals.*

Keywords : *Management Information System (MIS); Blood bank; donor; acceptors; Blood Bank Information System; administrator Introduction*

I. MOTIVATION

Control pure blood bag and combating the parallel market. This will be done by controlling the whole donation process from empty blood bag till filled one whose used by anyone really need it. Passing through donation process, donor, follow him up, the application registration and campaigns.

II. PROBLEM STATEMENT

- A. The Problem is to determine how to isolate blood by user using best blood Technique.
- B. How to maintain doctor & patient recommendation about blood.
- C. How to maintain Stream dataset.

III. LITERATURE SURVEY

M.F. Ghalwash, V. Radosavljevic leveraging temporal observations to predict a patient's health state at a future period is a very challenging task. Providing such a prediction accurately allows and more successful treatment that starts before a disease completely develops. Information of early diagnosis could be extracted by use of temporal data mining methods for handling complex multivariate time series. the physicians usually prefer to use interpretable models that can be easily explained. In this study, a temporal data mining method is proposed for extracting interpretable patterns from multivariate time series data, which can be used to assist in providing interpretable early diagnosis.

Truyen Tran, Dinh Phung, Wei Luo, Svetha Venkatesh ,the recent wide adoption of electronic medical records (EMR) presents great opportunities and challenges for data mining. The EMR data is temporal, often noisy, irregular and high dimensional. This constructs a novel ordinal regression framework for predicting medical risk stratification from EMR. First, a conceptual view of EMR as a temporal image is constructed to extract a diverse set of features. after that ordinal modeling is applied for predicting cumulative or progressive risk. The challenges are a transparent predictive model that works with a large number of weakly predictive features, and at the same time, is stable against re-sampling variations. this employs sparsity methods that are stabilized through domain-specific feature interaction networks. To introduces two indices that measure the model stability against data re-sampling. Feature networks are used to generate two multivariate gaussian priors with sparse precision matrices (the laplacian and random walk).

M. S. Mohhtar, S. J. Redmond, N. C. Antoniadis, P. D. Rochford, J. J. Pretto, J. Basilakis, N. H. Lovell, and C. F. McDonald, chronic obstructive pulmonary disease (copd) is responsible for significant morbidity and mortality worldwide. Clinical research has indicated a strong association between physiological homeostasis and the onset of copd exacerbation. However, the accuracy of existing prediction methods based on statistical analysis of periodic snapshots of physiological variables is still far from satisfactory, due to lack of integration of long-term and interactive effects of the physiological variables. Developing a relatively accurate method for predicting copd exacerbation is an outstanding challenge. In this paper, a regression-based machine learning technique was developed, using trend pattern variables extracted from copd patients' longitudinal physiological records, to classify subjects into "low-risk" and "high-risk" categories.

IV. PROPOSED SYSTEM

- A. *Goal and Objectives*

- 1) Web applications for blood donation management,
- 2) Managing blood donations,
- 3) Controlling blood transfusion processes

B. Statement of Scope

- 1) *Android* : The System can be used to connect at real time and receive data on the phone. The data will be analysed and prevention measures will be applied using the data.

V. SYSTEM ARCHITECTURE

A. System Architecture

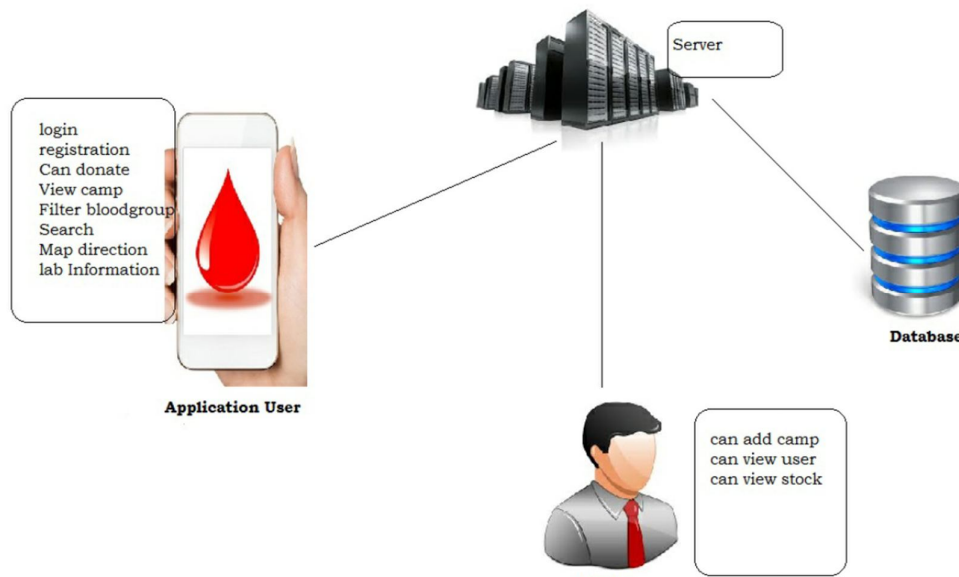


Fig: System Architecture

B. Algorithm

- 1) *Apriori Algorithm* : Apriori is an algorithm which is used for the frequent item sets. It is a bottom up approach where frequent subsets are extended one item at a time. The algorithm says Apriori because it uses prior knowledge of frequent itemset properties. We apply an iterative approach or level-wise search where k-frequent itemsets are used to find k+1 itemsets. To improve the efficiency of level-wise generation of frequent itemsets, an important property is used called Apriori property which helps by reducing the search space. All non-empty subset of frequent itemset must be frequent. The Apriori algorithm is its anti-monotonicity of support measure. Apriori assumes that All subsets of a frequent itemset must be frequent (Apriori property). If an itemset is infrequent, all its supersets will be infrequent. Apriori algorithm is a classic algorithm and is useful in mining frequent itemsets and relevant association rules. You can operate this algorithm on a database containing a large number of transactions.

VI. APPLICATIONS

- A. Donating the blood
- B. Medical area
- C. Campaign

VII. CONCLUSION

In this project, we are developing the android based management system. The proposed Android is more user-friendly and easy to use as compared to existing blood bank apps. In existing interfaces their statistics shows how many units of required blood group are available. The reports section shows the month in which blood group are being distributed and received. In this interface donor's name registration, phone no and blood groups need to be donated are included. It also includes the blood quantity to be stored in the app database. This can be called as new entry as a user may enter his/her details in the database.



While in the receiver's form this has individual's name, phone no (which a user can contact), their blood groups need to be received and the total amount of quantity. After submitting these data in the database, these fields are visible during transaction process.

REFERENCES

- [1] Vikas Kulshreshtha and Sharad Maheshwari, "Benefits of Management Information System in Blood Bank", International Journal of Engineering and Science, Vol. 1, Issue 12, PP 05-07, 2012.
- [2] J. M. Toi, S. Q. Wang, and X. J. Yuan, "Ensemble rough hypercuboid approach for classifying cancers," IEEE Transactions on Knowledge and Data Engineering, vol. 22, no. 3, pp. 381–391, 2010.
- [3] Q. Nguyen, H. Valizadegan, and M. Hauskrecht, "Learning classification models with soft-label information." Journal of the American Medical Informatics Association: JAMIA, vol. 21, no. 3, pp. 501–8, 2014.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)