
LITERATURE SURVEY

PLASMA DONOR APPLICATION



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Vanniya yuvanjae

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- A. Meiyappan, K. Loga Vignesh, R. Prasanna, T. Sakthivel - “D’WORLD: Blood Donation App Using Android”, 2019:** When the giver gives the blood, it will naturally evacuate the contributor detail for next three months. It additionally confirms with the Department of Health and Welfare to guarantee the benefactor medical case history. However, this has the drawback that in order to utilize this program, the user must have a device running the Android operating system and a live internet connection
 - B. Rishab Chakrabarti, Prof. S. M. Chitalkar - “Lifesaver E-Blood Donation App Using Cloud”, 2020:** Reduction in the errors of blood bank using most eligible donor method. Direct Communication Between donor and the person in need of blood During the Emergency situation. However, this paper has the drawback that the user-provided information is still unconfirmed
 - C. Hemmelmayr, V., Doerner, K.F., Hartl, R.F., Savelsbergh, W.P.:** Vendor managed inventory for environments with stochastic product usage. *Eur. J. Oper. Res.* 202(3), 686–695 (2010) Hirsch, R.L., Brodheim, E.: Blood distribution systems and the exchange of information between hospital blood banks and regional blood centers. *Vox Sang.* 40(3), 239–244 (1981) Hirsch, R.L., Casal, P.: Recommendations of the task force on record-keeping and blood distribution systems. *Vox Sang.* 40(3), 216–221 (1981)

Fahim Halil, Ibrahim Cebe, Jawad Rasheed, Farzad Kiani, mHealth – Blood donation application using android smartphone: mHealth is new horizons for health that offers healthcare services by utilizing the mobile devices and communication technologies. In health care services, blood donation is a complex process and consumes time to find some donor who has the compatibility of blood group with the patient. We developed android based blood donation application as mHealth solutions to establish a connection between the requester and donor at anytime and anywhere. The objective of this application is to provide the information about the requested blood and number of available donors around those localities. It assists the requester to broadcast the message.

Z. Al-Ali - “Android Based Health Application in Cloud Computing for Blood Bank”, 2018: Accessibility and availability are the criteria on which an application is designed for its success in the IT market. The drawback of this is that it necessitates precise and readily available patient records.

Aishwarya, R Gowri – “Developing a Plasma donor application using Function-as-a service in AWS”: A plasma is a liquid portion of the blood, over 55% of human blood is plasma. Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish antibodies that fight the infection. In this project plasma donor application is being developed by using AWS services. The services used are AWS Lambda, API gateway, DynamoDB, AWS Elastic Compute Cloud with the help of these AWS services, it eliminates the need of configuring the servers and reduces the infrastructural costs associated with it and helps to achieve serverless computing.

Sultan Turhan - “An Android Application for Volunteer Blood Donors”, 2015: This application helps health care centers to provide the blood as quick as possible when their stocks are insufficient. The application sends periodically actual location information of available donors to main system and the blood requests to the donors. However, this has the drawback that, in the event that blood supplies are inadequate, the only source of blood supply will be the voluntary blood donations made by visitors to the health center.

Catassi, C. A., Petersen, E. L - “The Blood Inventory Control System Helping Blood Bank Management Through Computerized Inventory Control”, Transfusion, Vol. 7, No. 60, 196: In this article, Catassi and Petersen described computerized blood bank inventory. The purpose is to control the distribution of blood bank and hospital. It is possible to monitor daily blood status.

Sultan Turhan, “An Android Application for Volunteer Blood Donors”, Computer Science & Information Technology- CSCP, pp. 23–30, 2015: The smartphone application is being developed to allow searching for voluntary donor nearby, followed by communication between donor especially on the emergency situations.

Blake, J.T.: On the use of operational research for managing platelet inventory and ordering. *Transfusion* 49(3), 396–401 (2009)

Delen, D., Erraguntla, M., Mayer, R.J., Wu, C.N.: Better management of blood supply chain with GIS based analytics. *Ann. Oper. Res.* 185(1), 181–193 (2011)

Alfonso, E., Xie, X., Augusto, V., Garraud, O.: Modeling and simulation of blood collection systems. *Health Care Manag. Sci.* 15(1), 63–78 (2012)

Axsäter, S.: Using the deterministic EOQ formula in stochastic inventory control. *Manag. Sci.* 42(6), 830–834 (1996)

Bani, M., Giussani, B.: Motivation in Italian whole blood donors and the role of commitment. *Psychol. Health Med.* 16(6), 641–649 (2011)

Belien, J., Forcé, H.: Supply chain management of blood products: a literature review. *Eur. J. Oper. Res.* 217(1), 1–16 (2012)

Blajchman, M.A., Shepherd, F.A., Perrault, R.A.: Clinical use of blood, blood components and blood products. *Can. Med. Assoc. J.* 121(1), 33–42 (1979)

computing” IBM Watson research center, 2016: Author conducted a survey of existing serverless platform P. C. P. C. A. V. I. M. Yan - “Building a chatbot with serverless in this paper from source projects, industry, academia, use cases, and key characteristics and has described the challenges and the open problems associated with it. Authors work presented a hands-on experience of serverless technologies using different services from different cloud provides such as Amazon, Google, IBM, Microsoft Azure.

WHO: Global Database on Blood Safety, 2004–2005 Report. World Health Organization, Geneva (2008) WHO: Screening Donated Blood for Transfusion Transmissible Infections

\Recommendations:

<http://www.who.int/bloodsafety/ScreeningDonatedBloodforTransfusion.pdf> (2010) World Health Organization: <http://www.who.int> (2014)

Yi, J.: Vehicle routing with time windows and time-dependent rewards: a problem from the American Red Cross. *Manuf. Serv. Oper. Manag.* 5(1), 74–77 (2003)