PLASMA DONOR APPLICATION

Batch: B2-2M4E Team Members:

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Literature Survey:

Introduction

Applying optimization methods to healthcare management and logistics is a developing research area with numerous studies. Specifically, facility location, staff rostering, patient allocation, and medical supply transportation are the main themes analysed. Optimization approaches have been developed for several healthcare related problems, ranging from the resource management in hospitals to the delivery of care services in a territory. However, optimization approaches can also improve other services in the health system that have been only marginally addressed, yet. One of them is the Blood Donation (BD) system, aiming at providing an adequate supply of blood to Transfusion Centres (TCs) and hospitals. Blood is necessary for several treatments and surgeries, and still a limited resource.

The need for blood is about ten million units per year in the USA, 2.1 in Italy and 2 in Turkey; moreover, people still die in some countries because of inadequate supply of blood products (World Health Organization 2014). Hence, BD plays a fundamental role in healthcare systems, aiming at guaranteeing an adequate blood availability to meet the demand and save lives. In Western countries, blood is usually collected from donors, i.e., unpaid individuals who give blood voluntarily. Blood is classified into groups (A and subgroups, B, 0 or AB) and based on the Rhesus factor (Rh+ or Rh-), and each donor should be correctly matched with the patient who receives his/her blood. Moreover, as it may transmit diseases, blood must be screened before utilization.

References

S.NO	TITLE	Authors	Abstract	Drawbacks

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Developing a plasma donor application using Functionas-a-service in AWS	Aishwarya R GowriJain University, Department of MCA, computer science	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 aprocess where blood is donated by recovered patients in order to establishantibodies that fights the infection. In this project plasma donorapplication is being	 the website handle multiple requests at 	•
	a plasma donor application using Function- as-a-service	a plasma donor application using Function- as-a-service GowriJain University, Department of MCA, computer science	a plasma donor application using Function-as-a-service in AWS GowriJain University, Department of MCA, computer science Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is aprocess where blood is donated by recovered patients in order to establishantibodies that fights the infection. In this project plasma	a plasma donor application using Function-as-a-service in AWS Gowri Jain University, Department of MCA, computer science Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is aprocess where blood is donated by recovered patients in order to establishantibodies that fights the infection. In this project plasma would requirean internet connection for the working of the website. handle multiple requests at thesame times. In this project plasma

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	Optimization	• K. Yamini, <i>M</i> .	Emergency situations, such	 The accuracy
2	of Blood	E(CSC), $SVCET$,	as accidents, create an	of the
	Donor	Thirupachur,	immediate, critical need for	location
	Information	India	specific blood type. In	displayed on
	and		addition to emergency	the map was
	Management	• R. Devi, Asst.	requirements, advances in	beyond the
	System	Professor, SVCET,	medicine have increased the	scope of this
	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Thirupachur, India	need for blood in many	Project.
		тиш	ongoing treatments and	Only Android
			elective surgeries. Despite	was used as a
			increasing requirements for	mobile
			blood, only about 5% of the	operating
			Indian population donates	
			blood. In this paper we	system to test the
			propose a new and efficient	application
			way to overcome such	
			scenarios with our project.	
			We have to create a new	
			idea, just touch the button.	
			Donor will be prompted to	
			enter an individual's details,	
			like name, phone number,	
			and blood type. After that	

			your contact details will appear in alphabetical order on the screen; the urgent time of a blood requirement, you can quickly check for contacts matching a particular or related blood group and reach out to them	
	DI ID		via Phone Call/SMS through the Blood donor App.	
3	Blood Bank Management Information System in India	 Vikas Kulshreshtha Research Scholar, Dr.Sharad Maheshwari, Associate Professor 	A blood bank is a bank of blood or blood components, gathered as a result of blood donation, stored and preserved for later use in blood transfusionTo provide web based communication there are numbers of online web based blood bank management system exists for communicating between department of blood centers and hospitals, to satisfy blood necessity, to buy, sale and stock the blood, to give information about this blood. Manual systems as compared to Computer Based Information Systems are time consuming, laborious, and costly. This paper introduces the review of the main features, merits and demerits provided by the existing Web-Based Information System for Blood Banks. This study shows the comparison of various existing system and provide some more idea for improve the existing system. First I will give some basic introduction about blood banks then I will try to provide comparative study of some existing web based blood bank system. After that I will introduce some new idea for improving the existing techniques used in web based blood bank	 Do not provide the better inventory solution to the end use It requires an active internet connection.
4	A.D	. D	system and at end I will conclude this paper	Tut
4	A Research Paper on	Devanjan K. Srivastava	Blood donation and transfusion has been an ever-	• Internet Connection is

	Blood	Utkarsh Tanwar	serious issue and the	mandatory
	Donation	 M.G.Krishna 	shortage of blood throughout	• There is no
	Management	Rao	the world has caused many	proper
	System	Priya Manohar	people to lose their life. The	centralized
		 Balraj Singh 	lack of a centralized system	database for
			for blood donation is	registered
			majorly responsible for	donors
			those losses. Now in the era	
			of online and digital	
			processes, the conventional methods of collecting blood	
			are absolute. An automated	
			system is required to manage	
			the centers and to showcase	
			the information to the	
			interested parties. We have	
			developed a website that	
			singlehandedly solves all	
			these issues related to blood	
			donation and reception. We	
			have designed a SQLite	
			database as an integral part	
			of the integrated framework	
			to store historical blood donation data in a	
			centralized database for	
			analytical processing. The	
			proposed system would	
			enable people to register as a	
			donor to make themselves	
			available whenever in need	
			of their blood type. We have	
			introduced a search tab to	
			search available people	
			ready to donate. In our	
			proposed system in the	
			donor registration, health- related details would be	
			updated in the blood	
			management system	
			database for all to see.	
5	A Study on	A. Clemen	'Blood Bank Information	No search
	Blood Bank	Teena, K	System' will be an	filter
	Management	 Sankar 	information management	available
		• S. Kannan	system which helps to	• UI
			manage the records of	improvem
			donors and patients at a	ent in
			blood bank. The system will	Login
			allow the authorized blood	page
			bank officer to login using a secret password and easily	
			manage the records of the	
			blood donors and the	
			patients in need of blood	
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