

Blood Bank Management System

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Abstract

Blood Bank Management System is a project designed to automate the difference operation in blood bank. This project manages and maintains the records of the donor, recipient, stock and the transaction. The modules available in this project are donor details, recipient details, stock details, transaction and other details like equipment, employee, supplier details. Donor module have the details of new and existing donor. In recipient module, it contains the details of recipient and they request for the certain blood group through hospital. In Stock details it contains the availability of blood and equipment. In equipment module it provides the details of ordered and purchased equipment. Employee modules gives the information about the employee and their designation along with the basic pay. In supplier module, we provide supplier details. Reports can be generated for donor, recipient, stock and transaction in month wise or date-to-date.

In this blood bank management system it is easy to store and retrieve the details of existing donor. This project completes the needs of the patients at the right time.

Keywords: Blood Bank Management system, Blood donation, Donor

1. INTRODUCTION

To improve the efficiency of blood stock management by alerting the blood bank staffs when the blood quantity is below its par level or when the blood stock has expired. To provide an efficient donor and blood stock management functions to the blood bank by recording the donor and blood details.

The system is used for maintaining all the process and activities of blood bank management system. The system can be extended to be used for maintaining records of hospital, organ donation and other similar sectors. While developing the system, there shall be space for further modification. There shall be a proper documentation so that further enhancement becomes easy.

2. PROPOSED SYSTEM

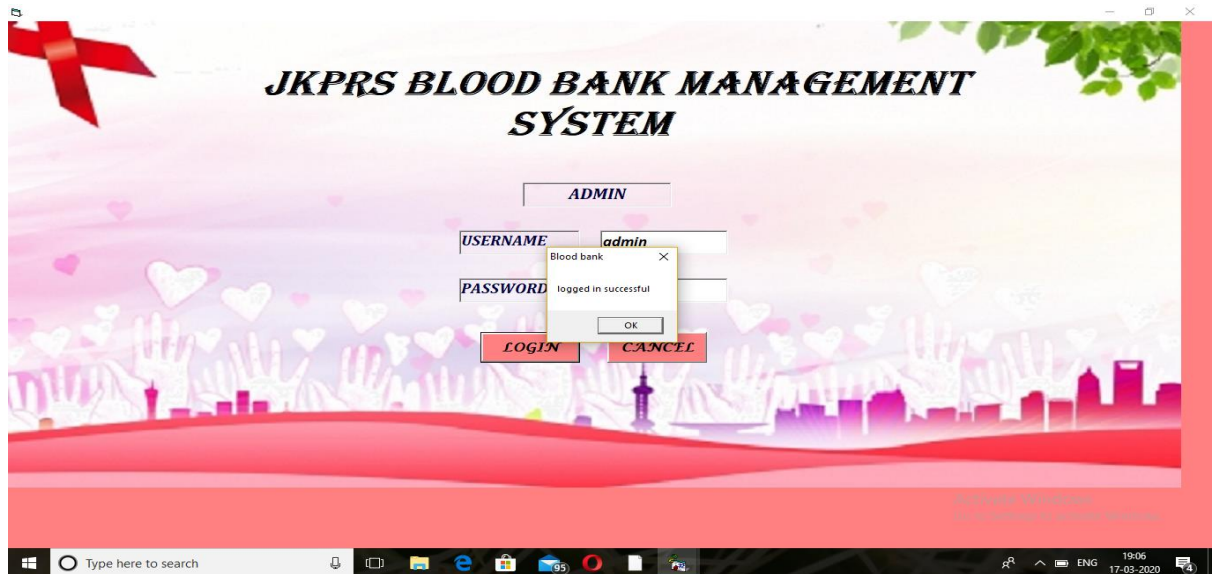
In order to overcome the drawback of existing system, the current system is developed to provide accurate information in a fraction of seconds. To maintain blood stock and equipment stock, this system is computerizes all data by storing donor details, recipient details, employee details along with salary and camp details. At the time of validation, while entering the data there won't be any duplication data. And it requires cost effective and less man power.

It provides the unique identification number at the time of **blood donation** camp which helps him for the future correspondence.

3. MODULES

3.1. Login for Admin

This module will allow the administrator to enter their respective forms.



3.2. New Donor Details

This module will enable admin to add new donor. Blood is collected from the donor and investigated for any diseases.

A screenshot of a "NEW DONAR" form. The form is overlaid on a background image of a person's arm being bled into a collection bag. The form fields are as follows:
DONAR ID: 10118
DONAR NAME: kavi
DATE OF BIRTH: 25-07-1984
AGE: 36
GENDER: MALE (selected), FEMALE
DATE: 17-03-2020
ADDRESS: villupuram
PHONE NUMBER: 9587421563
BLOOD GROUP: AB-ve (selected)
LAST DONATED DATE: 05-06-2019
DURATION: 286, 56 days
BODY WEIGHT: 55, kg m-45 to 95, f-50 to 65
HEMOGLOBIN: 14, ml m-13.5 to 17.5, f-12 to 15.5
HEMATOCRIT: 122, mm 120 to 139
NUMBER OF BAGS: 2, unit
A message box says "record is saved" with an "OK" button. At the bottom are buttons: NEW, REGISTER, EXISTING, EXIT.

3.3. Existing Donor Details

This module enables to change or alter details already existed donor.



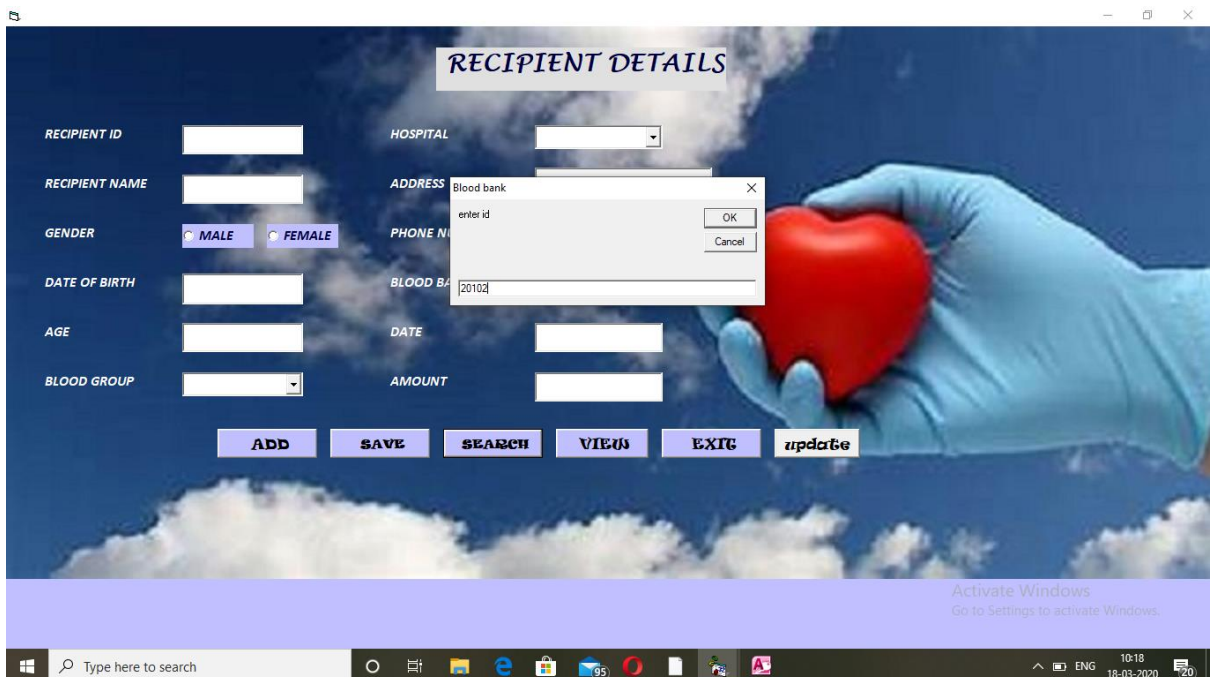
DONAR DETAILS

DONAR ID	DONAR NAME	DATE OF BIRTH	AGE	GENDER	DATE
10102	PRIYA	25-05-1997	23	female	18-02-2020
10103	JENI	12-12-1998	22	female	18-02-2020
10104	kalai	23-06-1996	24	female	18-02-2020
10105	GHJK	02-03-1990	30	female	18-02-2020
10106	FGHJK	01-02-1990	30	male	18-02-2020
10107	kadhir	12-03-1990	30	male	18-02-2020
10108	kowshi	22-08-1994	26	female	19-02-2020
10109	subha	24-03-1998	22	female	22-02-2020

BACK

3.4.Recipient Details

This module helps the recipient to receive blood from donators or from hospital and the blood can be issued.



RECIPIENT DETAILS

RECIPIENT ID:
 RECIPIENT NAME:
 GENDER: ☒ MALE ☐ FEMALE
 DATE OF BIRTH:
 AGE:
 BLOOD GROUP:

HOSPITAL:
 ADDRESS:
 PHONE N:
 BLOOD BA:
 DATE:
 AMOUNT:

Blood bank

enter id:

OK **Cancel**

ADD **SAVE** **SEARCH** **VIEW** **EXIT** **update**

3.5.Blood Stock Details

In this module blood can be stored and the details of blood can be maintained.

BLOOD STOCK DETAILS

BLOOD GROUP: **O-ve**

NUMBER OF BAGS: **0**

Buttons: **UPDATE**, **CHECK**, **EXIT**, **VIEW**

BLOOD_GROUP	NUMBER OF BAGS
O-ve	0
A+ve	23
AB+ve	21
AB-ve	30
A-ve	28
B+ve	22
B-ve	43
O+ve	46

3.6. Equipment Stock Details

This module maintains the details of equipment and allows to storing the item.

EQUIPMENT STOCK DETAILS

EQUIPMENT NAME: **THERMOMETER**

EQUIPMENT AVAILABLE: **12**

Buttons: **INSERT**, **CHECK**, **EXIT**, **VIEW**

LIST OF EQUIPMENT STOCK	
EQUIPMENT NAME	EQUIPMENT
BLOOD STORAGE REFRIGRATOR	23
TEMPERATURE CONTROLLER	21
BLOOD SHAKER	39
DIELECTRIC TUBE SEALER	40
CENTRIFUGE MACHINE	15
UNIVERSAL HOT AIR OVEN	16
BACTERIOLOGICAL INCUBATOR	25
WASH BOTTLES	50
BINOCULAR MICROSCOPE	30
BLOOD COLLECTION MONITOR	15
SCISSORS AND FORCEPS	45
BLOOD DONATION CHAIR	40
BLOOD BAGS	112
WEIGHT MACHINE	7
BLOOD PRESSURE MONITOR	16
SYRINGE AND COTTON	100
THERMOMETER	12

3.7. Camp Details

In this module details of camp where we conducted and collected the blood can be added.

Form16

CAMP DETAILS

BLOOD DONATION CAMP

DONATE BLOOD SAVE LIVES

CAMP ID	C105	CONTACT PERSON	SIVA	NO OF BEDS	1
CAMP NAME	FG	PHONE NUMBER	9876543212	NEW	SAVE
ADDRESS	CHENNAI	SCHEDULED DATE	4/11/2020	SEARCH	UPDATE
				CLOSE	CLEAR

LIST

BLOOD GROUP	NO OF BAGS
<input type="checkbox"/> B+VE	1
<input type="checkbox"/> A+VE	0
<input type="checkbox"/> O+VE	0
<input type="checkbox"/> AB+VE	0
<input type="checkbox"/> B-VE	0
<input type="checkbox"/> A-VE	0
<input type="checkbox"/> O-VE	0
<input type="checkbox"/> AB-VE	0

Windows taskbar: Type here to search, 6:40 PM 5/6/2020

3.8.Employee Details

Form19

EMPLOYEE TRANSACTION DETAILS

ENTER

BILLING

END

EMPLOYEE	
ETRANSACTION ID	TE006
DEPARTMENT ID	70104
EMPLOYEE ID	4
DESIGNATION	nurse
PAYMENT	450
DATE	06/05/2020

Windows taskbar: Type here to search, 6:02 PM 5/6/2020

This is maintained by the administrator, enables the administrator to modify the details of the employee and salary of the employees.

4. CONCLUSION

Blood Bank Management System helps to manage blood stock. Blood donation is the good thing for a individual person healthy life. This is because during the blood donation, our body will be replaced new blood cells which have a better protein, from this program awareness of

blood donation will increase. As the donor's data is saved in the system we reject those who have HIV or other infections. This system was mainly designed to reduce the manual work of updating, modifying and to search the data, thus it makes easier to user and this management system was implemented successfully.

5. REFERENCES

1. Ms.S.Meena, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 11 (2018) pp. 9965-9968
2. Ms.S. Vanithamani ,International Journal on Applications in Information and Communication Engineering, Vehicle Classification and Analyzing Motion Features, Volume 3.
3. Ms.S. Vanithamani , International Journal of Applied Engineering Research, Segmentation in Video Image Sequences Using Seeded Region Growing, Volume 13.
4. Ms.S.Meena, Mobile Phone Application To Provide A Safe Driving Using Global Positioning System, INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH, ISSN 2277-8616
5. Ms.S.Meena, Detecting And Preventing Of Malware Spread, INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH, ISSN 2277-8616
6. Ms.S.Meena, Tracking User's Currency From Ip Address For E - Commerce Websites, International Journal of Future Generation Communication and Networking, ISSN 2277-8616, Volume 13
7. Ms.S.Meena, Student Course Selection System, International Journal of Future Generation Communication and Networking, ISSN 2233-7857.
8. Ms.S.Meena, Financial Management System, International Journal of Engineering & Technology, ISSN: 2590-1892 Volume 7.
9. Ms.S.Meena, Analysis of Shortest Path Routing for Large Multi-Hop Wireless Networks, International Journal of Engineering & Technology, ISSN: 2590-1892, Volume 7.
10. Gray Cornell-Visual Basic 6.0 From The Ground Up, Tata Mcgrew Hill 1999.
11. G.V.Post-Database Management Sytem Desgining And Building Business Application, Tata Mcgraw Hill 1999.