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Blood Bank Management System

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Contents

1 Introduction

This project is developed to manage the blood stock in the "BLOOD BANK" and the blood prices are maintained in the database. New details are entered in to the project to manage blood details. Donor's details are entered and maintained in the database. Sales and purchase of the blood are entered and maintained in this project. Stock report, sales report and blood purchases reports are managed in this project.

2 Scope and Objectives

The software builds on the experience of users of IT technology in blood donation that is currently available and informs both Connecting for Health and commercial companies producing both hardware and software. The main objective behind this software is to support the automated tracking of blood from the intital ordering of a blood donation by a patient, through to the taking of a blood sample for cross matching, to administration of a blood transfusion and subsequent updates to care records. The scope of the specification includes the following scenarios:

- Routine blood transfusion
- Transfusion for special requirements (for example, cytomegalovirus(CMV) seronegative blood, irradiated blood or antigen negative blood)
- Emergency issue of blood
- Management of returned and unused blood units.

3 Problem Definition of Existing system:

Entering the details about the blood groups, members, addresses etc. And tracking the database is complicated when the details are maintained manually. This makes the maintenance of schedule erroneous.

4 Limitation of manual system

- It is time consuming.
- It leads to error prone results.
- It consumes lot of men power to better results.
- It lacks of data security.
- Retrieval of data takes lots of time.
- Percentage of accuracy is less.
- Reports takes time to produce.

5 System Functions or Modules

The features that the OBDRMS will provide are Given as follows:	
1. Login	1.1 The software provides security features through a user defined password security where only authorized user can access to the software with different authorization level according to their requirements. 1.2 Poverty Gap ratio [incidence x depth of poverty] 1.3 Share of the poorest quintile in national consumption
2. Publication of country wide blood donation event	1.1 This feature allows the blood bank admin to publicize the country wide blood donation events online 1.2 The public can see the venue and time of the blood donation event to be held.
3. Online booking and Management	1.1 The users can make online reservation on their desired place and date. 1.2 The blood centers' admins can then manage their appointments by either approving or rejecting the appointment.
4. Donor Management	1.1 The records of every donors and their history are kept in one database and thus reducing duplicate data in the database. 1.2 Donors can make blood donation in any of the blood center and their records are maintained by the software.
5. Stock management	1.1 The blood bank admins can manage the stock starting from the collection, to screening,processing, storage, transference and lastly transfusion through this system. 1.2 Moreover, there is also logging function available so that each process or workflow can be traced back to databse. 1.3 The system will also give a notification to the admin whenever the blood quantity is below its expected level.
6. Reporting	1.1 The software is able to generate reports such as the list of donors, staffs, and hospitals, the blood quantity in every blood bank, and the workflow for each blood request process.
7. Others	1.1 Other functions such as the management of involved hospitals or medical centers and other system users and their authorization levels are also available in this system.

6 Proposed System:

This system is used for maintain whole information about campus. There are three modules in this project.

- Admin
- Donor
- Receiver

6.1 Action Plan :

- Literature survey : 4 Days
- Analysis/Design : 5 Days
- Coding : 8 Days
- Review of coding : 2 Days
- Documentation : 1 Days
- Total : 3 Weeks

7 System(pc/laptop) requirements:

1. Operating system 1.1 Window XP higher .

2. IDE : 1.1 visual studio.net 2005 / 2010

3. Front end : 1.1 HTML
   1.2 CSS
4. Language : 1.1 java

5. Database : 1.1 SQL server 2000/2005

8 Hardware Requirements :

- Intel P4 1.5GHz or above
- 512MB ram
- 80GB HDD Minimum

9 Benefits :

- 1. Blood donation management
- 2. Emergency issue of blood.
- 3. Blood safety and management.
- 4. Blood component production.
- 5. Blood component storage and distribution.
- 6. Blood transfusion management.
- 7. Routine blood transfusion.
- 8. Blood procurement.
- 9. Management of returned and unused blood units.
- 10 .To provide online information flow for the management Of blood donors and recipients

10 Functional Requirements :

Donor:

Login :

1. Input
   - 1.1 Email(50) + Password(50)
2. Datatype :
   - 1.1 Email - string (Check @)
   - 1.2 Password - string
   - 1.3 Allowed charaters - A-Z,a-z,0-9,@,.
3. Process
   - 1.1 Check combination
4. Result
   - 1.1 Success
     - 1.1.1 Print Hi user; Redirect to homepage
   - 1.2 Failure
     - 1.2.1 Print Wrong email or password combination; item[1.2.2] Redirect to login page

Registration :

1. Input
   - 1.1 string
     - 1.1.1 Name
     - 1.1.2 Surname
     - 1.1.3 Age
     - 1.1.4 Blood Group
     - 1.1.5 Address
2. Process
   - 1.1 Check Empty fields
   - 1.2 If all fields are filled : Submit
3. Result
   - 1.1 Success
     - 1.1.1 Registration Successful - Redirect to homepage
   - 1.2 Failure
     - 1.2.1 Prompt (Please enter necessary details)

Edit Profile :

1. Input
   - 1.1 String :
     - 1.1.1 Name
     - 1.1.2 Surname
     - 1.1.3 Blood Group
     - 1.1.4 Address
   - 1.2 Int [1.2.1] Age
2. Process
   - 1.1 Check of any changes have been done
   - 1.2 If changes are done : Prompt Do you want to save changes
     - 1.2.1 Save changes
     - 1.2.2 Discard Changes
3. Result
   - 1.1 Profile Updated

Receiver:

Login
- 1.1 Same as Donor

Registration
- 1.1 Same as Donor

Edit Profile
- 1.1 Same as Donor

Request blood
- 1.1 Come to hospital for further instructions.

11 References

- tngovbloodbank.in
- bbmspunjabgov.in
- stackoverflow.com
- Ast. Professor Sachin Kumar (Cluster Innovation Center)