Software Requirement Specification

Blood Bank Management System

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Experiment 2
Aim: Software Requirement Specification for Blood Management System

Objective

The main objective of this specification is to support the automated tracking of blood products from the initial ordering of a blood transfusion for 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.

To allow the probable recipients to make search and match the volunteer donors, and make request for the blood.

1. Introduction

Blood sales and blood purchase are entered and maintained in this project. Blood stock reports, sales reports and blood purchase reports are managed in this project.

It will help us to find the blood group with its most efficient time to take care of the blood and it is more easy to hand over the blood to the hospitals to help people to get blood on time. This all thing is been stored and been seen in this Blood Bank Management System. To help more people trying best to do so.

1.1 Purpose

Blood Bank Management Software is designed & suitable for several Blood Bank either operating as individual organization or part of Hospital. It covers all Blood banking process from Donor recruitment, donor management, mobile sessions, component preparation, screening covering all tests, blood stock inventory maintenance, patient registration, cross matching, patient issues etc.

1.2 Document Conventions

DB	Database
DDB	Distributed Database

1.3 Intended User

Anybody can use this BBMS to Donor as well as who need blood e.g., Public, Hospitals, Blood Banks, etc.

1.4 Project Scope

The scope of the specification includes the following scenarios: Routine blood transfusion Transfusionor special requirement (for example cyptomegalovirus (CMV) sero negative blood irrdiated blood or antigen negative blood);Emergancy issue of blood; Management of returned and unused blood units.

1.5 Refrences

- http://www.academia.edu/22293120/BLOOD MANAGEMENT_SYSTEM

2.Overall Description

2.1 Product Prospective

- To provide a means for the blood bank to publicize and advertise blood donation programs.
- To provide an efficient donor and blood stock management functions to the blood bank by recording the donor and blood details.
- To improve the efficiency of blood stock management by alerting the blood bank staffs when the blood quantity is below it par level or when the blood stock has expired.
- To provide pure blood with no wastages blood is been collected in different types of packs. They are double, triple, and triple (AS), quadruple pack.
- To provide synchronized & centralized donor and blood stock database and provide immediate storage and retrieval of data and information.

2.2 Product Features

- **Login Interface**

  User should enter the valid username and password to get access to its profile.

- **Donor Profile**

  User will be able to see its Account No. , The receipts of the blood donated to the bank, Donation to the Bank, Need of the Blood to the Bank and Request for Blood.

- **Blood Stock Management**

  It will show the Blood Detailed of the specific bottle with its Full Donor Detail or Account No. if he/she is registered to the Bank.

- **Report**

  It wil be available on the Admin's Profile and will show the Availability of the Blood Groups with its no. of available bottle as per admin's choice to view the report as Month, Day, or Year.

2.3 User Classes

- System Owner: The Blood Bank
- System Users:
  - Administrators: has full privilege on the system's functions
  - Public: can view the blood donation events and donate or can make requests for donation (Donor and Recipients fall under this category).

2.4 Operating Environment

Hardware Requirements:

- Operating system : Linux
- Intel P4 1.5GHz or above.
- 512MB ram.

Software Requirements

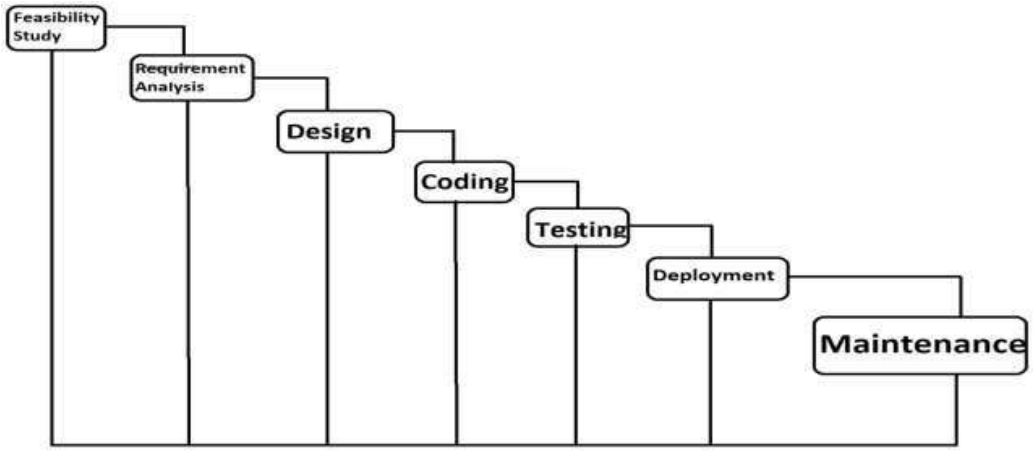
- 80GB HDD Minimum
- Front end: HTML, CSS, Javascript
- Back end: MYSQL, PHP, XAMP server

Design Constraints

- GUI in English only.

3.System Features

3.1Process Model



3.2 Features

- Easy to understandand implement. Testing in each phase.
- Documentation Available after each phase.
- Most Suitable for single projects where work products are well defined and their functioning is understood.

4.Functional Requirements

- **Login:-**

The system provides security features through username-password matching where only authorized user can access the system with different authorization level.

Admin/Donor/Hospital

Input:-Username, Password

Output: - Invalid or Update Blood Details, logout

- **Donor Profile Registration:-**

This allows healthy public to register as volunteer donor.

Input:- Donor/ Recipient Id, Name, Date of Birth, Sex, Blood Group, Address, Contact Number, Email Address, Diseases (if any),Aadhar Card No.

Output: - Successfully

Registered Blood Stock Management

- The blood bank staffs can manage the blood stock starting from the blood collection, to blood screening, processing, storage, transference and transfusion through this system. Each process or work-flow can be traced from the database. The system will also raise alert to the staff whenever the blood quantity is below its par level or when the blood in stock has expired.

Donor/Recipient Management

The records of all donors/recipient and their history are kept in one centralized database and thus reducing duplicate data in the database. The record of donation is maintained by the system.

Input:-Blood Type

Output:-No. of Blood Bottle Available=

- **Reporting:-**

The system is able to generate pre-defined reports such as the list of donors, recipients, staffs, the blood quantity in the bank and charts.

Input:-Admin Username, Admin Password

Output:-Today's Report, Month Report, Year Report

5.Non Functional Requirements

Availability

- The system should be available at all times, meaning the user can access it using application.
- In case of a of a hardware failure or database corruption, a replacement page will be shown. Also in case of a hardware failure or database corruption, backups of the database should be retrieved from the application data folder and saved by the administrator.
- It means 24 x 7 availability.

Security

- The system use SSL (secured socket layer) in all transactions that include any confidential customer information.
- The system must automatically log out all customers after a period of inactivity

Performance

- The system is interactive and the delays involved are less.
- When connecting to the server the delay is based editing on the distance of the 2 systems and the configuration between them so there is high probability that there will be or not a successful connection in less than 20 seconds for sake ofgood communication.

Reliability

- As the system provide the right tools for problem solving it is made in such a way that the system is reliable in its operations and for securing the sensitive detail.

Conclusion

Hence we studied making SRS for proposed (blood Management System) System successfully.