

K. K. WAGH POLYTECHNIC

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**Department of Computer Technology**

**(Academic year 2015-16)**

SYNOPSIS

* TITLE of PROJECT: BLOOD BANK
* PROJECT GROUP PARTNERS:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.**  **No.** | **Name of Student** | **Class &**  **Roll No.** | **E-mail ID** | **Mobile No.** |
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| 3. |  |  |  |  |
| 4. |  |  |  |  |

* INTERNAL GUIDE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* SPONSOR DETAILS:

|  |  |
| --- | --- |
| Company/Industry/Organization Details | Contact Persons Details at Sponsor |
| Name: | Name: |
| Address: | Designation:  Department: |
| Office Phone Nos.: | Mobile No: |
| e-mail ID: | e-mail ID: |
| Website: |  |

**Place: Nasik**

**Date: /09/2016**

**Abstract**

This project is aimed to developing an online Blood Donation Information. The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The Blood Donation Agent is to create an e-Information about the donor and organization that are related to donating the blood. Through this application any person who is interested in donating the blood can register himself in the same way if any organization wants to register itself with this site that can also register. More over if any general consumer wants to make request blood online he can also take the help of this site. Admin is the main authority who can do addition, deletion, and modification if required. The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned.

***Keywords:*** E-Information,

**Blood Bank**

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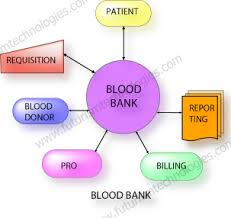
Admin is the main authority who can do addition, deletion, and modification if required The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of MS-SQL Server and all the user interfaces have been designed using the PHP technologies. The database connectivity is planned using the “SQL Connection” methodology. The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff.

The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The specification has been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration. The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as MS-SQL server 2000.

The basic constructs of table spaces, clusters and indexes have been exploited to provide higher consistency and reliability for the data storage. The MS-SQL server 2000 was a choice as it provides the constructs of high-level reliability and security. The total front end was dominated using the ASP.Net technologies. At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations.

The database connectivity was planned using the latest “SQL Connection” technology provided by Microsoft Corporation. The authentication and authorization was crosschecked at all the relevant stages. The user level accessibility has been restricted into two zones namely.

***Block Diagram:***



**Frontend and Backend:**

**Software Requirements:**

* Frontend : PHP, Android
* Backend : MySql

|  |  |
| --- | --- |
| Platform | Windows XP |
| Language | PHP |
| Mobile Client | Android |
| IDE/Tool | Eclipse IDE |

**Hardware Requirements:**

|  |  |
| --- | --- |
| Processor | Pentium IV |
| RAM | 64 MB |
| Storage | 20 GB |
| Mobile Phone | Android Phone |
| Monitor | 15” |
| Keyboard | Standard 102 Keys |
| Mouse | 1. Buttons |

**Features:**

Donor Registration and Blood Collection

• Red Cell Serology

• Infectious Marker System

• Component Separation and Accounting

• Component Received from IRCS/Other Hospitals

• Blood Requisition/Issue

• Stock Transfer

• Transfusion Reaction Detail

• Stock Maintenance (Whole Blood/Component)

• Transfer of Stock of Whole Blood (Unscreened Location to Screened Location)

• Plasma for Fractionation (NPFC)

• Stock Return

• Reserve/Unreserved of Stock

• Rejection Accounting

• Discard Accounting

• Record of the Staff

• Blood Donation Camps Detail Inventory Record

• User Access Control

***Advantages:***

* This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
* The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.
* Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. More over there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.
* User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
* From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can sat that the project is user friendly which is one of the primary concerns of any good project.
* Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
* Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.
* Allocating of sample results becomes much faster because at a time the user can see the records of last years.
* Easier and faster data transfer through latest technology associated with the computer and communication.
* Through these features it will increase the efficiency, accuracy and transparency,

**Disadvantages:**

* The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
* Training for simple computer operations is necessary for the users working on the system.

***Applications:***

1. Blood Donation Camp & Camp Organizer Management.
2. Donor Management - Donor Registration, managing donor database, recording their physical and medical statistics.
3. Inventory management in blood bank for storage and issuance of blood.
4. Blood requisition and issuance of blood.
5. Online transfer of blood from one blood bank to another.
6. Discarding of expired and unsuitable blood (Less Qty., Reactive, Clotting, Hemolysis)
7. Being a web based system, can be implemented throughout the state. - - Separate user accounts can be created for each blood bank.
8. Patient Register/Blood Sample Receiving Register, Donor Register, Blood Issue Register and Discarded Blood report.
9. Fridge Wise Stock Position and Printing of Fridge Stickers.
10. List of Donors who are eligible for donation on a particular date with contact Number.
11. Camp Wise Donor List and Printing of Donor Cards

***Conclusion***

It has been a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of not only programming in PHP web based application and no some extent Windows Application and SQL Server, but also about all handling procedure related with **“Blood Bequeath Federal”.** It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

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**Signature of Guide: Prof. G. B. Katkade**

**Name of Guide: HOD-Computer Tech.**