



Daffodil
International
University

A
PROJECT REPORT
ON

“[[Simple Blood donors Management System]]”

Submitted in partial fulfillment for
the Course of
Database Management System Laboratory

Submitted by:

S/L	Name	ID
1	Md. Shahid Monowar	191-15-2737
2	Muhammad Mahmudul Hasan	191-15-2711
3	Tasrin Jahan Mishu	191-15-2706

Submitted to

Rubel Sheikh
Lecturer
Department of Computer Science and Engineering
Daffodil International University

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CHAPTER 1

INTRODUCTION

Abstract:

The purpose of Blood Donor Management System is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. Blood Donor Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information. The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

1.1 PROJECT AIMS AND OBJECTIVES

The aims and objectives of the Simple Blood donors Management System are as follows:

1. To provide a means for the blood donor to publicize and advertise blood donation programs.
2. To allow the probable recipients to make search and match the volunteer donors, and make request for the blood.
3. To provide an efficient donor and blood stock management functions to the blood bank by recording the donor and blood details.
4. 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.
5. To provide synchronized and centralized donor and blood stock database.
6. To provide immediate storage and retrieval of data and information.

1.2 BACKGROUND OF THE PROJECT

The project Blood Donor Management System is developed using PHP myadmin as the programming language and MySQL as database.

PHP: A scripting language that is integral. Originally designed for web development to produce dynamic web pages, “PHP allows you to collect processes and utilize data to create a desired output” (Bradley, 2013).

MySQL: A database system, queries, and• features easily paired with PHP because it works side by side with ease. Uses MSQL to store many kinds of data, information and graphics. Also it is easily accessible from anywhere in the world (Bradley, 2013).

JavaScript: A programming language• developed for the design of interactive sites and creating web applications. JavaScript can interact effectively with source code, enabling web authors access to their

1.3 SCOPE OF THE PROJECT

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works

relative to Blood Bank Management System. It will be also reduced the cost of collecting

the management & collection procedure will go on smoothly.

Our project aims at Business process automation, i.e. we have tried to computerize various processes of Blood Bank Management System.

- In computer system the person has to fill the various forms & number of copies of

the forms can be easily generated at a time.

- In computer system, it is not necessary to create the manifest but we can directly

print it, which saves our time.

- To assist the staff in capturing the effort spent on their respective working areas.

- To utilize resources in an efficient mamer by increasing their productivity through automation.

- ☐ The system generates types of information that can be used for various purposes.
- ☐ It satisfy the user requirement
- ☐ Be easy to understand by the user and operator
- ☐ Be easy to operate
- ☐ Have a good user interface
- ☐ Be expandable
- ☐ Delivered on schedule within the budget.

CHAPTER 2

SYSTEM ANALYSIS

SOFTWARE REQUIRMENT SPECIFICATION:

1. Introduction:

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete ecommerce software system by defining the problem statement in detail. Nevertheless, it also concentrates on the capabilities required by customers and their needs while defining high-level features. The detailed requirements of the **SIMPLE BLOOD DONOR MANAGEMENT SYSTEM** are provided in this document.

2.PURPOSE:

Blood Bank Management Software is designed and suitable for several Blood Bank eitheroperating as indiviuals organizations or part of organizations covers all blood banking processfrom donors recruitment, donor management, mobile session component preparation,screening covering all test, blood stock inventory maintenance, patient registration, crossmatching, patient issues etc.

3.SOFTWARE TOOL USED:

PHP: PHP is a server side scripting language. that is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages. PHP scripts can only be interpreted on a server that has PHP installed.

Source Control

Github:

Github allows developers to review code, manage projects, and build software. It offers right tool for different development jobs.

Features of github:

- Coordinate easily, stay aligned, and get done with GitHub's project management tools

- Easy documentation alongside quality coding

- Allows all code in a single place

- Developers can host their documentation directly from repositories

ER-Model:

An Entity–relationship model (ER model) describes the structure of a database with the help of a diagram, which is known as Entity Relationship Diagram (ER Diagram). An ER model is a design or blueprint of a database that can later be implemented as a database. The main components of E-R model are: entity set and relationship set.

Features of ER model:

- Allows to build robust and maintainable systems

- It loads extremely large models in seconds

- Collaborate effectively globally

- Offers complete traceability

- Improve business outcomes

- Model and manage complex Data effectively

- Code execution to visual diagrams.

CHAPTER 3

SYSTEM DESIGN

TABLE DESIGN:

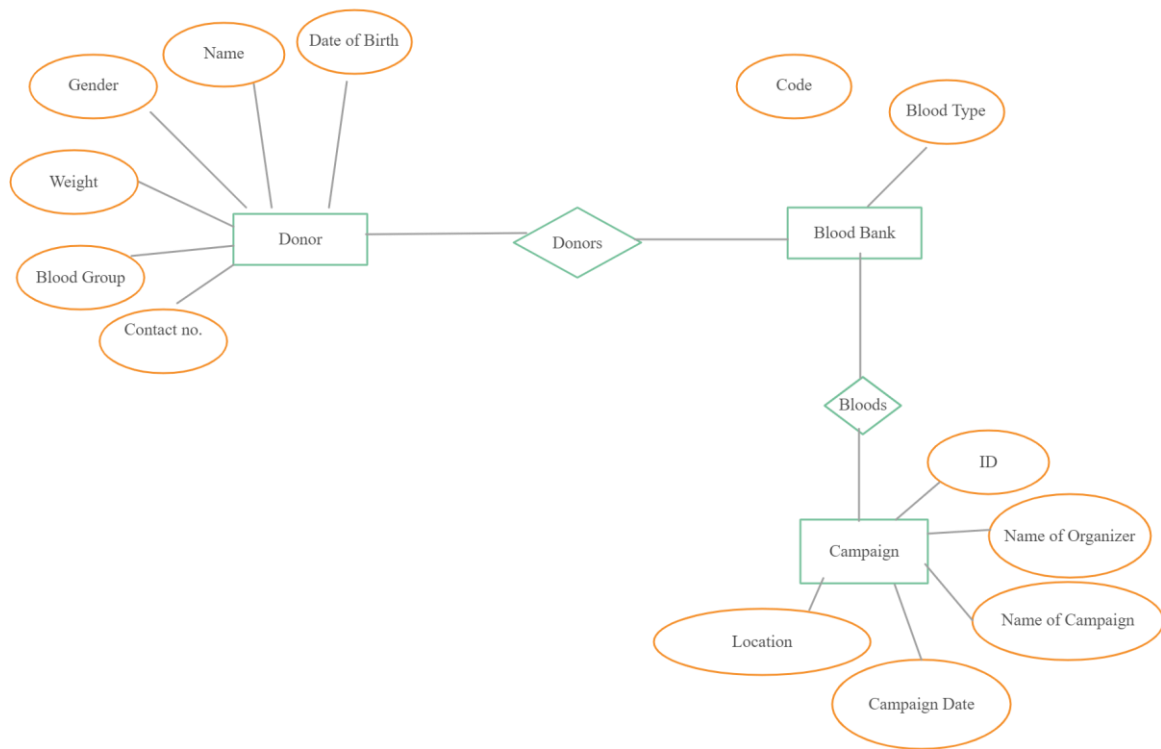
Blood donor details:

Full Name	Gender	D.O.B	Weight	Contact	Blood Group
Mahmudul	male	1999-05-02	98	2147483647	O+
Mishu	female	2222-02-02	22	2147483647	b+
Shahid Monowar	male	2000-02-07	51	1413144	A+
shakil	male	2021-04-06	20	1342345	O+

Campaign details:

ID	Name of Campaign	Name of Organizer	Campaign Date	Locations	Short Description
1	DIU Blood check	Positive vive	2222-08-02	Savar	khagan, savar, dhaka, bangladesh
2	Donate Camp	Org sky	2019-02-02	Rajshahi	this is a demo text.
8	Save life	Blood bank bd	5550-05-05	Khulna	hey give me blood

E-R DIAGRAM OF THE SYSTEM:



CHAPTER 4

SYSTEM IMPLEMENTATION

Modules of Blood Bank Management System:

- ☐ Blood donor Management Module: Used for managing the Blood donor details.
- ☐ Blood Group Module : Used for managing the details of Blood Group
- ☐ Donor Management Module: Used for managing the information and details of the Donor.

- ☐ Doner Module : Used for managing the Doner details
- ☐ Blood Module : Used for managing the Blood information
- ☐ Campaign Module: Used for managing the campaign details
- ☐ Users Module : Used for managing the users of the system

SCREENSHOTS:

```
XAMPP for Windows - mysql -u root -p
MariaDB [sangamdb]> show tables;
+-----+
| Tables_in_sangamdb |
+-----+
| blooddonor          |
| campaign            |
+-----+
2 rows in set (0.002 sec)

MariaDB [sangamdb]> desc blooddonor;
+-----+
| Field      | Type          | Null | Key | Default | Extra           |
+-----+
| id         | int(11)       | NO   | PRI | NULL    | auto_increment |
| name      | varchar(50)   | NO   |     | NULL    |                 |
| gender     | varchar(20)   | NO   |     | NULL    |                 |
| dob       | date          | NO   |     | NULL    |                 |
| weight    | int(5)        | NO   |     | NULL    |                 |
| contact   | int(10)       | NO   |     | NULL    |                 |
| bloodtype | varchar(3)    | NO   |     | NULL    |                 |
+-----+
7 rows in set (0.022 sec)

MariaDB [sangamdb]> select * from blooddonor;
+-----+
| id | name           | gender | dob       | weight | contact | bloodtype |
+-----+
| 1  | Mahmudul      | male   | 1999-05-02 | 98     | 2147483647 | O+        |
| 4  | Mishu         | female | 2222-02-02 | 22     | 2147483647 | b+        |
| 5  | Shahid Monowar | male   | 2000-02-07 | 51     | 1413144    | A+        |
| 6  | shakil        | male   | 2021-04-06 | 20     | 1342345    | O+        |
+-----+
4 rows in set (0.001 sec)

MariaDB [sangamdb]> show tables;
+-----+
| Tables_in_sangamdb |
+-----+
| blooddonor          |
| campaign            |
+-----+
2 rows in set (0.002 sec)

XAMPP for Windows - mysql -u root -p
MariaDB [sangamdb]> desc campaign;
+-----+
| Field          | Type          | Null | Key | Default | Extra           |
+-----+
| id             | int(11)       | NO   | PRI | NULL    | auto_increment |
| campaignname   | varchar(50)   | NO   |     | NULL    |                 |
| organizer      | varchar(50)   | NO   |     | NULL    |                 |
| date           | date          | NO   |     | NULL    |                 |
| location       | varchar(50)   | NO   |     | NULL    |                 |
| description    | varchar(100)  | NO   |     | NULL    |                 |
+-----+
6 rows in set (0.014 sec)


MariaDB [sangamdb]> select * from campaign;
+-----+
| id | campaignname | organizer | date       | location | description |
+-----+
| 1  | DIU Blood check | Positive vive | 2222-08-02 | Savar   | khagan, savar, dhaka, bangladesh |
| 2  | Donate Camp    | Org sky    | 2019-02-02 | Rajshahi | this is a demo text. |
| 8  | Save life      | Blood bank bd | 5550-05-05 | Khulna  | hey give me blood |
+-----+
3 rows in set (0.001 sec)

MariaDB [sangamdb]> show tables;
```

CHAPTER 5

SYSTEM TESTING

SIMPLE BLOOD DONORS MANAGEMENT SYSTEM



John Doe

john.doe@example.com

MAIN NAVIGATION

Home

Donors

Add Donors

View Donors

Edit Donors

Remove Donors

Campaigns

Full Name

Enter Name

Gender

Gender

Date of birth

mm/dd/yyyy

Weight

Weight

Contact


Contact

Blood Type

BloodType

Submit

SIMPLE BLOOD DONORS MANAGEMENT SYSTEM



John Doe

john.doe@example.com

MAIN NAVIGATION

Home

Donors

Add Donors

View Donors

Edit Donors

Remove Donors

Bloods

Full Name	Gender	D.O.B	Weight	Contact	Blood Group
Mahmudul	male	1999-05-02	98	2147483647	O+
Mishu	female	2222-02-02	22	2147483647	b+
Shahid Monowar	male	2000-02-07	51	1413144	A+
shakil	male	2021-04-06	20	1342345	O+

SIMPLE BLOOD DONORS MANAGEMENT SYSTEM

John Doe

john.doe@example.com

MAIN NAVIGATION

Home

Donors

Campaign

Create Campaign

Edit Campaign Details

View Campaign

Remove Campaign

Campaign Name

Enter Campaign Name

Organizer Name

Enter Organizer's Name

Date

mm/dd/yyyy

Location

Enter Campaign Location Details

Short Description

Enter Description

Submit

SIMPLE BLOOD DONORS MANAGEMENT SYSTEM

John Doe

john.doe@example.com

MAIN NAVIGATION

Home

Donors

Campaign

Create Campaign

Edit Campaign Details

View Campaign

Remove Campaign

ID	Name of Campaign	Name of Organizer	Campaign Date	Locations	Short Description
1	DIU Blood check	Positive vive	2222-08-02	Savar	khagan, savar, dhaka, bangladesh
2	Donate Camp	Org sky	2019-02-02	Rajshahi	this is a demo text.
8	Save life	Blood bank bd	5550-05-05	Khulna	hey give me blood

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

Conclusion:

Universally, blood is recognized as the most important element that saves life. It saves countless number of lives across the world in various circumstances. In today's world, where we can do many things from home, just by pressing one click, we can take advantage of that concept by making online solutions for the shortage of blood donors. The management information system helps to reduce the use of paper, so the probability of errors should be minimal. Researchers believe that improving the management information system for the blood bank will make revolutionary improvements in the system. This web-based blood bank is a small contribution to serve mankind. It can save lives by educating the public about the benefits of blood donation, encourage them to donate, and manage the records of donors and people who need blood, to help the people who need blood to find the appropriate donors as soon as possible in quick, perfect, and a safe way – with less effort.

Future Scope of the Project:

In a nutshell, it can be summarized that the future scope of the project circles around maintaining information regarding:

- ☐ We can add printer in future.
- ☐ We can give more advance software for Blood Bank Management System including more facilities
- ☐ We will host the platform on online servers to make it accessible worldwide
- ☐ Integrate multiple load balancers to distribute the loads of the system
- ☐ Create the master and slave database structure to reduce the overload of the database queries
- ☐ Implement the backup mechanism for taking backup of codebase and database

on regular basis on different servers

The above mentioned points are the enhancements which can be done to increase

the applicability and usage of this project. Here we can maintain the records of Blood

Bank and Donor. Also, as it can be seen that now-a-days the players are versatile, i.e.

so there is a scope for introducing a method to maintain the Blood Bank Management

System. Enhancements can be done to maintain all the Blood Bank, Donor, Doner,

Blood, Blood Group.

We have left all the options open so that if there is any other future requirement in the system by the user for the enhancement of the system then it is possible to implement them. In the last we would like to thank all the persons involved in the

development of the system directly or indirectly. We hope that the project will serve its

purpose for which it is developed there by underlining success of process.

CHAPTER 7

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