1.1 Problem definition

Despite advance in technology nowadays most blood bank system is running in manual system. As such there is a present problem in the available of needed types for instance when a person needs a certain blood, and this type is not available in the hospital family member send message through social media to those who can donate to them life of this the addition it seems that there is lack of proper documentation about blood doner and its medical history.

This may lead to blood bag contamination and may affected the blood transfusion safety generally this study aims to determine how to use of online bank management system enhance blood transfusion safety.

1.2 Study of Existing system.

Existing system is computerized the given system is developed to manage and insert the record of doner for collection blood sample application are given for registration and form filling process. The given system is handling by manually.

1.3 Drawback of Existing system

1) time taking process

2)possibilities of error in record keeping

3)the efficient blood inventory

4) less security.

1.4 Scope and proposed system.

The proposed system of the blood bank management system is the web-based system is the web-based system intends to simplify and atomate the process of searching blood in case of emergency and maintain the record of blood doner, receiver blood, blood donation programs and blood stocks in the bank. This online system replaces all paper works providing the benefit of its excellent administration and control.

2. Analysis

2.1 Feasibility study

The given website required frontend (HTML, CSS, JS) and software and database to efficient manage blood inventory, doner information and blood transfusion record.

2.2 Economical feasibility

The proposed system requires initial investment in the software development hardware etc.

Facility has the necessary and reliability power source.

If the system needs to integrate with existing healthcare system, there management but additional integrity cost.

In case of BBMS may doner, leading to increased revenue through blood donation.

2.3 Operation Feasibility

User friendly interface the website must be user friendly easy to operate for its uses implement mechanism for uses to provide feedback and report issues with the system regularly address concerns to improve operation efficiency.

5 Coding

5.1 Hardware specification

1) RAM 16GB DRR3

2) HDD LTB(SATA)

3) Processor 2.40GHz Intel(R)

5.2 Platform

1) Linux operation system and windows 11

5.3 Programming Language Used

PHP, CSS, HTML, JAVASCRIPT Language used.

5.4 Coding Style Required

1) CSS, HTML

6 Testing

6.1 Testcases and Test Results

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Test Cases** | **Test Step** | **Excepted Output** | **Status** |
| **Registration** | **It will check if all the required fields are correct filled & all constraints are followed:**  **1) valid phone number.**  **2) valid entry.**  **3) enter correct password.** | **If all the filed are correctly fill will submit the data** | **Successful** |
| **Log in Page** | **The username and password will be check and should be match the data** | **if data is match it will allow login** | **Successful** |
| **Forget Password** | **In case user forget password, security question and username should match** | **Password should be display with the username.** | **Successful** |
| **Doner Registration** | **Correctly filled all the constrain:**  **1) valid age.**  **2)valid phone.**  **3)valid pin code.**  **4) valid weight.**  **5) doner not have any disease and allergies and diabetes.** | **The form will be displaying user has filled appropriate details** | **Successful** |
| **Receiver Registration** | **Correctly filled all the constrain:**  **1) valid age.**  **2)valid phone.**  **3)valid pin code.**  **4) valid weight.** | **The form will be displaying user has filled appropriate details** | **Successful** |
| **Logout** | **Go to logout click the button.** | **Log out the website and display login page** | **Successful** |