BLOOD BANK & DONATION MANAGEMENT SYSTEM

Project Blood

Participants

Name	Roll Number
Jayadithya	23011103019
Akshay	23011103004
Ansh Mishra	23011103005
Rikhil	23011103022

Introduction :-

Project Overview :-

The Blood Bank Management System is designed to streamline the process of blood donation and blood requests. It manages the data of donors and acceptors, including their personal information, blood types, donation histories, and blood requests.

Scope:

The project covers the following functionalities:

- User Registration
- Login/Logout
- Profile Management
- Blood Donation Scheduling
- Blood Requesting
- Search & Display Features
- Admin Dashboard (user interface) for Managing the System
- Messaging between Donors and Acceptors
- Report Generation

Data Model Requirements:-

Entities:-

User: UserID (PK), Name, Email, Password, Phone No., Address, UserType (Donor/Acceptor).

Donor: DonorID (PK, FK), BloodType, LastDonationDate, TotalDonations.

Acceptor: AcceptorID (PK, FK), BloodType, RequestDate, Status.

BloodDonation: DonationID (PK), DonorID (FK), DonationDate, BloodType, Quantity, Health Criteria.

BloodRequest: RequestID (PK), AcceptorID (FK), RequestDate, BloodType, Quantity, Status.

Location: LocationID (PK), Address, City, State, ZipCode.

Relationships:

- A Donor can have multiple BloodDonations.

- An Acceptor can make multiple BloodRequests.

- Both Donor and Acceptor are types of User.

- BloodDonations and BloodRequests are linked to Location.

Functional Requirements:-

User Roles:-

Donor: Register, update profile, schedule donation, view donation history.

Acceptor: Register, request blood, update profile, view request history.

Admin: Manage users, manage blood inventory, view reports.

Features:-

- User Registration: Donor and acceptor registration with verification.

- Login/Logout: Secure authentication for users.

- Profile Management: Update personal information for both donors and acceptors.

- Blood Donation: Donors can schedule donations and view their donation history.

- Blood Request: Acceptors can request blood and view request status.

- Search: Search for blood donors or acceptors by various criteria.

- Admin Dashboard: Overview of system statistics, user management, and inventory management.

- Messaging: Communication between donors and acceptors.

- Reports: Generate various reports related to blood donations and requests.

Rough Implementations

1. **Donor Table**

Attribute	Description
Donor ID	Primary key, unique identifier for each donor
Name	Name of the donor
Contact Information	Contact details of the donor
Blood Type	Blood type of the donor
Donor Status	Status of the donor (active/inactive)
Health Criteria	Health-related eligibility criteria for donation

2. Recipient Table

Attribute	Description
Recipient ID	Primary key, unique identifier for each recipient
Name	Name of the recipient
Contact Information	Contact details of the recipient
Blood Type Needed	Blood type needed by the recipient
Request Status	Status of the blood request (pending/fulfilled)
Medical Information	Relevant medical information related to the request

3. Blood Donation Table

Attribute	Description
Donation ID	Primary key, unique identifier for each donation
Donor ID	Foreign key referencing Donor ID in Donor table
Donation Date	Date when the donation was made
Blood Type	Blood type donated
Additional Details	Additional details related to the donation
Expiry Date	Date When Blood unit Expires
Availability Status	Status Indicating if the units is in stock or out of stock.

Database Sample output (expected):-

    👤 Hello varun ▾

Dashboard

Add Donor

Donor List

Check Contactus Query

Manage Pages

Update Contact Info

Donor List

S.no	Name	Mobile Number	Email Id	Age	Gender	Blood Group	Address	Action
1	Varun	9234902345	varun@gmail.com	19	Male	B+	hisar	DELETE
2	simi	9416547112		55	Female	B+	Hisar	DELETE
3	Rashmi	9255761903	rashmi@gmail.com	39	Female	B-	Hisar	DELETE
4	Mahender Kumar	9896423503	mahender@gmail.com	43	Male	AB+	Hisar	DELETE
5	Jatin	9992522205		21	Male	O+	Hisar	DELETE
6	yogita	3456789022		25	Female	A+	Hisar	DELETE
7	Garima	1234567890		16	Female	B+	hisar	DELETE
8	tina	234567891	tina@gmail.com	25	Female	A-	Hisar	DELETE
9	Harshit	9729100124		19	Male	AB-	Bhiwani	DELETE
10	Sandeep	9711987349	sandeep.arora@nokia.com	40	Male	B+	258,sector-16,hisar	DELETE

1   2   Next