

Blood Bank Management System

BY: Bharath Kumar D P(2019103512)

Harish J(2019103524)

A portal to manage Blood donation and transfusion processes in a Blood bank. A common interface between Hospitals, Blood banks, Registered donors to speed up the process of blood transfusion and to create social awareness. Blood donation cycle will be transparent and turnaround time will be reduced.

If there is a lack of blood samples in Blood bank, the registered donors nearby the location will be contacted. Messages will be sent to them automatically in case of emergency and the location of hospitals will be shared.

FEATURES:

- To store the data of available Blood samples collected, their type, collected date and state.
- The data of registered donors, collected through Donation camps, NGO's.
- Information about Donation camps and interface to register for it.
- General awareness on the need for blood donation.
- Thalesmia patients can request for blood samples with an easy to fill form and their request will be informed to nearby blood banks. If there is an availability the request will be served by the blood bank with a confirmation message.
- If there is lack of blood samples in the Blood bank, the nearby Blood banks or the registered Donors will be contacted.
- To encourage donors, points and badges will be provided which can be redeemed for Free medical checkups in the respective hospitals.
- Users(potential Entities of the Database) of the site- Blood Bank organization, Donors of blood, Hospitals in need of Blood, Red cross, and other NGOs to advertise about Blood donation camps.

TECH STACK:

Front end: HTML,CSS,Java script

Back end: Node js 14.4.0, Express framework

Database: PostgreSQL

RELATIONS UNDER THE DATABASE:

1. User:

Attributes:

- a) UserID (Primary key)
- b) Name
- c) Age
- d) Address

2. Blood bank

Attributes:

- a) BloodBankID (Primary key)
- b) Name
- c) Category
- d) Address
- e) Contact no
- f) Website
- g) License no

3. Blood

Attributes:

- a) BloodID (Primary key)
- b) Number of units of blood
- c) Blood group
- d) Date

4. Camps

Attributes:

- a) CampID (Primary key)
- b) BloodBankID (Foreign key)
- c) Status

d)Date

5.Donation

Attributes:

- a)Login ID(Foreign key)
- b)BloodBank ID(Foreign key)
- c)Date
- d)Status

6.Request

Attributes:

- a)RequestID(primary key)
- b)BloodBankID(Foreign key)
- c)Login ID(Foreign key)
- d)Status
- e)Date

7.Health history(weak entity of User)

Attributes:

- a)Blood type
- b)Sugar level
- c)BP
- d)Height
- e)Weight
- f)Disease

8.Collected status(weak entity of Camps)

Attributes:

- a)UserID
- b)Blood type
- c)No of units of blood

9.Transactions

Attributes:

- a)TransactionID(Primary key)
- b)Blood type
- c)No of units of blood

- d)Date
- e)RequestID(Foreign key)

10.Hospital

Attributes:

- a)HospitalID(Primary key)
- b)Address
- c)Name

ER diagram:

