CSE 4/560 Data Models and Query Language

Semester Project

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BLOOD BANK MANAGEMENT SYSTEM

Milestone - 1

By

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1. PROBLEM STATEMENT

Blood donation centers gather, store and give collected blood to the patients who are needing blood. Individuals who give blood are called ‘donors’. The banks then cluster the blood that they receive per the blood groups. They additionally ensure that the blood isn't contaminated. The principle mission of the blood donation center is to give the blood to the emergency clinics and medical services which saves the patient's life. No hospital can maintain the health care system without pure and adequate blood.

The significant concern each blood donation center has is to screen the nature of the blood and screen individuals who give the blood. However, this a difficult undertaking. The current system won't fulfill the need of keeping up quality blood and monitor donors. To beat every one of these limits we presented a system called 'Blood Bank Management System'.

The 'Blood Bank Management System' permits us to monitor nature of blood and furthermore monitors accessible blood when mentioned by the acceptor. The current frameworks are Manual frameworks which are tedious and not all that viable. 'Blood Bank Management System' computerizes the circulation of blood. This data set comprises of thousands of records of each blood donation center.

By utilizing this framework looking through the accessible blood turns out to be simple and saves part of time than the manual framework. It will hoard, operate, recover and analyze information concerned with the administrative and inventory management within a blood bank.

This framework is created in a way that it is reasonable, time successful, financially savvy, adaptable and much labor isn't needed.

1. TARGET USER

* Manager of the Blood Bank
* Public who want to donate blood
* Staff from the participating hospitals

1. ER DIAGRAM

Diagram

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1. INFORMATION OF THE DATASET

In total we have eight entities and information of each entity is mentioned below:-

1. **Donor: (Attributes – did, dName, dsex, dage, dBgroup, ddate, dPhNo)**

The donor is the person who donates blood, on donation a donor id (did) is generated and used as primary key to identify the donor information. Other than that name, age , sex , blood group, phone number and registration dates will be stored in database under Donor entity.

1. **Recipient: (Attributes – rid, rName, rage, rBgrp, rBqnty, rsex, rdate, rPhNo)**

The Recipient is the person who receives blood from blood bank, when blood is given to a recipient a recipient ID (rid) is generated and used as primary key for the recipient entity to identify blood recipients information. Along with it name ,age, sex, blood group (needed), blood quantity(needed) , phone number, and registration dates are also stored in the data base under recipient entity.

1. **BB\_Manager: (Attributes – mid, mName, mPhNo)**

The blood bank manager is the person who takes care of the available blood samples in the blood bank, he is also responsible for handling blood requests from recipients and hospitals. Blood manager has a unique identification number (mid) used as primary key along with name and phone number of blood bank manager will be stored in data base under BB\_Manager entity.

1. **Staff : (Attributes – sid, sName, sPhNo)**

The Staff is a person who registers the blood donor and recipients and the Staff entity has sid which is primary key along with staff’s name and staff’s phone number will also be stored in the data base under Staff entity.

1. **BloodSpecimen : (Attributes – sNo, bGrp, status)**

In data base, under BloodSpecimen entity we will store the information of blood samples which are available in the blood bank. In this entity sNo and bGrp together will be primary key along with status attribute which will show if the blood is contaminated on not.

1. **DiseaseFinder : (Attributes - dfid, dfName, dfPhNo)**

In data base , under DiseaseFinder entity we will store the information of the doctor who checks the blood for any kind of contaminations. To store that information we have unique identification number (dfid) as primary key. Along with name and phone number of the doctor will also be stored under same entity.

1. **Hospital\_Info : (Attributes – hid, hName, hBgrp, hBqnty)**

In the data base, under Hospital\_Info entity we will store the information of hospitals. In this hid and hBgrp together makes the primary key. We will store hospital name and the blood quantity required at the hospital.

**8. city: (Attributes- cid, cName)**

This entity will store the information of cities where donors, recipients and hospitals are present. A unique identification number (cid) will be used as primary key to identify the information about the city. Along with ID city names will also be stored under this entity.

RELATIONSHIP BETWEEN ENTITIES

1. **City and Hospital\_Info:**

Relationship = “in”  
Type of relation = 1 to many  
Explanation = A city can have many hospital in it. One hospital will belong in one city.

1. **City and Donor:**

Relationship = “lives in”  
Type of relation = 1 to many  
Explanation = In a city, many donor can live. One donor will belong to one city.

1. **City and Recipient:**

Relationship = “lives in”  
Type of relation = 1 to many  
Explanation = In a city, many recipient can live. One recipient will belong to one city.

1. **Staff and Donor:**

Relationship = “registers”  
Type of relation = 1 to many  
Explanation = One recording staff can register many donors. One donor will register with one recording officer.

1. **Staff and Recipient:**

Relationship = “records”  
Type of relation = 1 to many  
Explanation = One recording staff can record many recipients. One recipient will be recorded by one recording officer.

1. **Hospital\_Info and BB\_Manager:**

Relationship = “gives order to” Type of relation = 1 to many

Explanation = One Blood bank manager can handle and process requests from many hospitals. One hospital will place request to on blood bank manager.

1. **BB\_Manager and BloodSpecimen:**

Relationship = “deals with”  
Type of relation = 1 to many  
Explanation = One Blood bank manager can manage many blood specimen and one specimen will be managed by one manager.

1. **Recipient and BB\_Manager:**

Relationship = “requests to”  
Type of relation = 1 to many  
Explanation = One recipient can request blood to one manager and one manager can handle requests from many recipients.

**9. DiseaseFinder and BloodSpecimen:**

Relationship = “checks”,  
Type of relation = 1 to many  
Explanation = A disease finder can check many blood samples. One blood sample is checked by one disease finder.

Text

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