

## Project Proposal

**Divansh Arora 2015027**

### Project details:

Blood bank management system. People will be able to enlist themselves for blood donation. Admin will be able to modify, add, delete people and their information. Different cities will be connected using the database and we can keep track of all the blood banks and all the types of blood available at a particular location.

Transport of blood between various locations is supported.

Queries:

1. Find details of a donor
2. Find details of banks at a given location
3. Find requirement of particular blood group type
4. Find camps organised.
5. Find requirement by person
6. Rank people by amount of blood donated
7. Rank people based on amount of blood needed
8. Rank blood group by requirement.
9. Cancel or add or delete blood donation appointments
10. Find information of current transport capability.
11. Addition/Deletion of urgent cases
12. Find doctor info and associated patients

Sample schema:

**Bank** - Bank id, Associated donors/patients, Location, available transport facility details

**Receiver data** - Name, id, Blood Group and quantity, Location, rank(urgency), Quantity, Contact Number, Address, Associated doctor id, Medical report id,

**Donor Data** - Personal Detail, Medical report id, Location, Last donation Date, Last donation location, Blood Group, appointment date

**Appointments** - List of available appointments for donation

**Doctor Data** - Doctor id, Doctor patients , age

**Locations** - Address , Location id, Bank info  
Etc...

**Complex queries:**

1. (Division query) Find names of donors who have appointment at all locations.
2. (Except and intersect use) Find all donors who have an appointment except those with a given blood group.
3. (Nested query) Find all the doctors who are in charge of patients with a given blood group and in a given bank.
4. (Set comparison using ANY etc.) Find names of all doctors with rating better than some other doctor with a given name.
5. Find all doctors who are older than the oldest doctor with a given rating
6. (group by and having) Find the age of the youngest doctor who is eligible to perform a surgery(user will give the amount of experience necessary) for each rating level with at least two n doctors(n will be given by user).