Database Schema

```
create database BLOODBANK;
use BLOODBANK;

/~ BLOOD BANK INFORMATION ~/
create table bloodbank(
bloodbank_id int not null primary key,
name varchar(100),
contact_number varchar(15),
email varchar(100) not null,
street_address varchar(100) not null,
city varchar(50) not null,
state varchar(50) not null,
zip_code varchar(15) not null
);

/~ BLOOD BANK'S EMPLOYEE INFORMATION ~/
create table employee (
employee_id int not null,
name varchar(50),
contact_number varchar(15),
email varchar(100) not null,
nid int not null,
bloodbank_id int not null,
```

```
primary key(employee_id, bloodbank_id),

foreign key (bloodbank_id) references bloodbank(bloodbank_id) on delete cascade on update cascade

);
```

/~ BLOOD INFORMATION ~/

```
create table blood (

blood_id int not null unique,

blood_type varchar(3) not null primary key

);
```

/~ HOSPITAL INFORMATION ~/

```
create table hospital(

hospital_id int not null primary key,

name varchar(100),

contact_number varchar(15),

email varchar(100) not null,

street_address varchar(100) not null,

city varchar(50) not null,

state varchar(50) not null,

zip_code varchar(15) not null

);
```

/~ DONOR INFORMATION ~/

```
create table donor(
```

```
donor_id int not null primary key,
full_name varchar(50),
gender enum('male', 'female', 'other'),
age int,
blood_type varchar(3) not null,
contact_number varchar(15),
email varchar(100) not null,
nid int not null,
street_address varchar(100) not null,
city varchar(50) not null,
state varchar(50) not null,
zip_code varchar(15) not null,
foreign key(blood_type) references blood(blood_type) on delete cascade on update cascade
);
```

/~ BLOOD DONATION INFORMATION ~/

```
create table blooddonation(
donation_id int not null,
donor_id int not null,
donation_date date,
donation_quantity_ml int,
bloodbank_id int not null,
primary key(donation_id),
foreign key(donor_id) references donor(donor_id) on delete cascade on update cascade,
foreign key(bloodbank_id) references bloodbank(bloodbank_id) on delete cascade on update
cascade
```

```
);

/~ PATIENT INFORMATION ~/
create table patient(
patient_id int not null primary key,
name varchar(50),
gender enum('male', 'female', 'other'),
age int,
blood_type varchar(3) not null,
contact_number varchar(15),
hospital_id int not null,
street_address varchar(100) not null,
city varchar(50) not null,
state varchar(50) not null,
zip_code varchar(15) not null,
foreign key(hospital_id) references hospital(hospital_id) on delete cascade on update cascade,
foreign key(blood_type) references blood(blood_type) on delete cascade on update cascade
);

/~ BLOOD REQUEST INFORMATION ~/
create table bloodrequest(
request_id int not null primary key,
patient_id int not null,
blood_type varchar(3) not null,
request_date date,
required_quantity_ml int,
```

status enum('pending', 'fulfilled', 'cancelled') default 'pending',

bloodbank_id int not null,

employee_id int not null,

foreign key(patient_id) references patient(patient_id) on delete cascade on update cascade,

foreign key(blood_type) references blood(blood_type) on delete cascade on update cascade,

foreign key(bloodbank_id) references bloodbank(bloodbank_id) on delete cascade on update cascade,

foreign key(employee_id, bloodbank_id) references employee(employee_id, bloodbank_id) on delete cascade on update cascade

);

/~ BLOOD INVENTORY INFORMATION ~/

create table bloodinventory(

inventory_id int not null primary key,

bloodbank_id int not null,

blood_type varchar(3) not null unique,

available_quantity_ml int,

employee_id int not null,

foreign key(bloodbank_id) references bloodbank(bloodbank_id) on delete cascade on update cascade,

foreign key(blood_type) references blood(blood_type) on delete cascade on update cascade,

foreign key(employee_id, bloodbank_id) references employee(employee_id, bloodbank_id) on delete cascade on update cascade

);