

GROUP 12: Blood Bank

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### Relational schema : BLOOD BANK

Blood Bank Branch (Branch-ID, Branch Name, City, State,  
Date of Inauguration, Total Units Stored)

Blood Type (Blood Type ID, Blood Group, Total Units, Quality Status,  
Storage Duration)

Donor (Donor ID, Name, Age, Gender, Contact Number, Address, Blood Type,  
Last Donation Date)

Receiver (Receiver ID, Name, Age, Gender, Contact-Number, Address,  
Blood Type ID, Date)

Donation (Donation ID, Donor ID, Branch ID, Donation Date,  
Quantity Donated, Quality Status, Urgency Level)

Blood Request (Request-ID, Receiver-ID, Branch ID, Request Date,  
Quantity Requested, Status, Urgency Level)

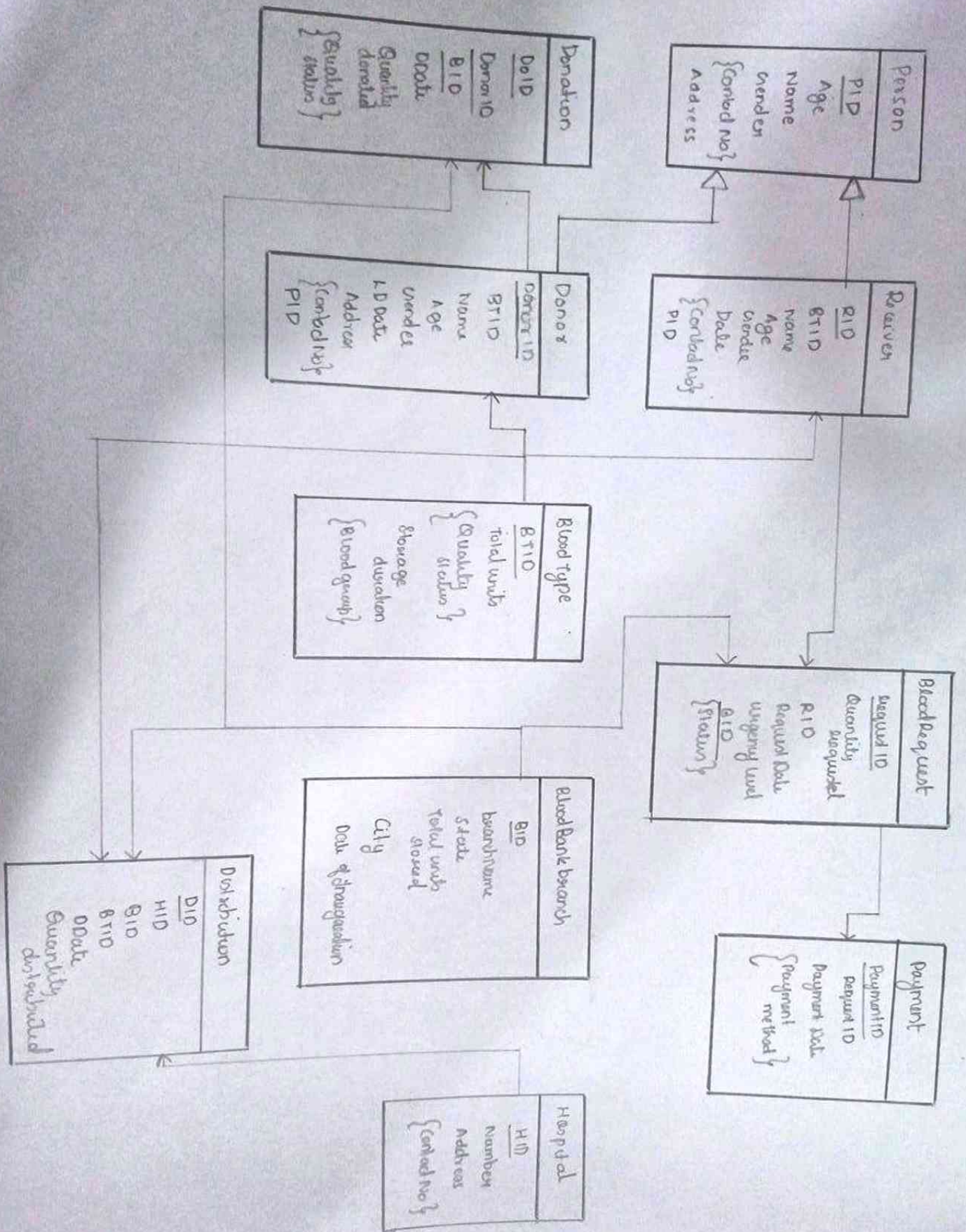
Person (Person-ID, Name, Age, Gender, Contact-Number, Address)

Payment (Payment-ID, Request-ID, Amount Paid, Payment Date,  
Payment-Method)

Hospital (Hospital-ID, Hospital Name, Address, City, Contact-Number);

Distribution (Distribution-ID, Hospital ID, Branch ID, Blood Type ID,  
Distribution Date, Quantity)











### Assumptions :

- \* A blood bank has branches in all the important cities of the state whose date of inauguration is maintained.
- \* It can accept blood of different types
- \* There are different donors whose information is to be maintained. Each donor can donate blood to different people.
- \* Each receiver can take blood from different donors. The receiver's information is also maintained which include the amount of blood taken and payment details.
- \* ~~A good~~ In donation entity, DonationID, DonorID, and BranchID together forms a composite primary key
- \* In BloodRequest entity, RequestID and BranchID together forms composite primary key because RequestID is not universally unique
- \* From Person entity, both Receiver and Donor entities are overlapping,  $\therefore$  the attributes Age, Name, Gender, ContactNo and Address are connected by foreign key.
- \* BloodType, BloodBankBranch and Hospital entities are aggregated and has a relation of distributes with Distribution entity
- \* All other foreign keys are represented in schema diagram