

Blood Donation Management System

Group Number: 37

Phase 1

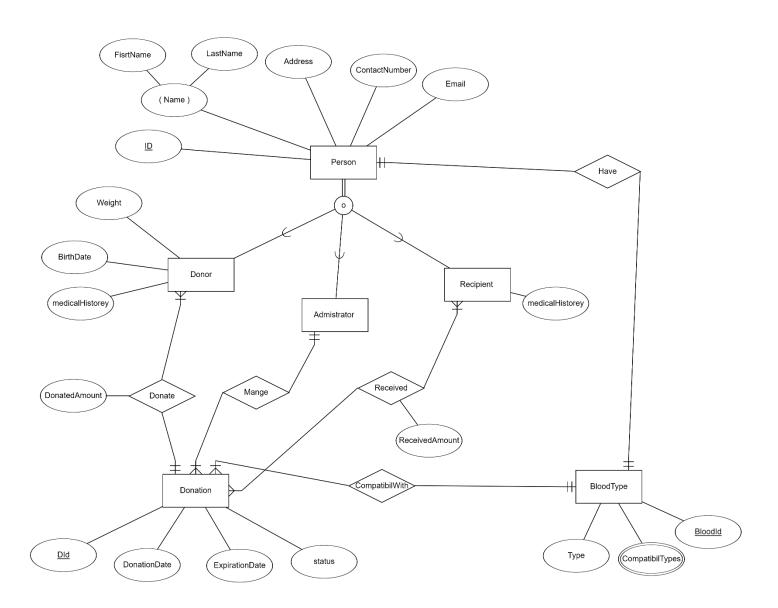
Members

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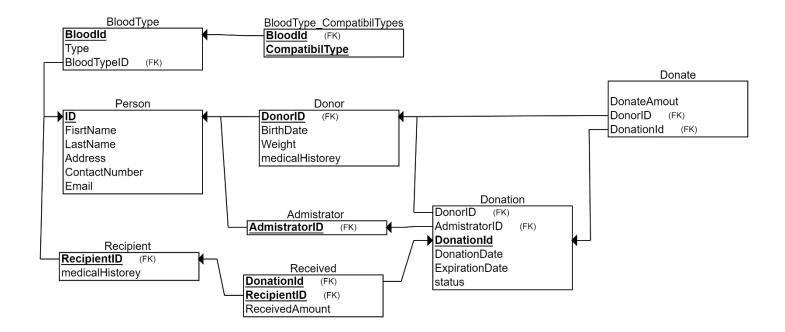
NOVEMBER 5, 2023



EER Model



Relational Schema



Assumptions

- 1- Each person has a unique ID.
- 2- Each person has a first name and a last name.
- 3- Each person has a blood type
- 4- A person can be a donor, a recipient, or an administrator at the same time.
- 5- A Donor has a weight.
- 6- Each donation has a donated amount
- 7- The compatibility between the recipient and the donor's blood types can be determined by referring to a blood type table, which identifies the compatible types for transfusion validation.
- 8- Each donation has a donation date and Expiration Date.
- 9- Each donation has a status of either passed or failed.
- 10- The administrator can manage many donations, collecting, storing, distributing, etc.
- 11- The recipient has a medical history.
- 12- Each donation has a received amount.
- 13- Each blood type has a unique ID.
- 14- Each blood type has a compatible blood type or more.

Semantic requirements that cannot be captured in the EER model.

1- Each donor must be:

At least 17 years old

Weigh at least 114 lbs.

Be free of major diseases.

- 2- Blood collection drives scheduling every 3 months.
- 3- Monitoring expiration dates of stored blood.
- 4-Incident tracking (capturing details of process failures).
- 5- Usage trend reports.

Contribution

Name	Contribution
Hassain Alsayhah	33.34
Mohammed Almubarak	33.33
Feras Alhasmi	33.33