Feature	Description	Details/Notes	Priority	Key Type
User Registration	Allow users to register as Donor or Acceptor.	Fields: Name, Email, Password, Phone No., Address.	High	N
Login/Logout	Provide secure authentication for users.	Use email and password; manage sessions.	High	N
Profile Management	Users can update personal information.	Both donors and acceptors; fields to be updated.	Medium	N
Blood Donation Scheduling	Donors can schedule their donation appointments.	Fields: Date, Time, Blood Type, Location.	High	N
Blood Requesting	Acceptors can request blood with required details.	Fields: Blood Type, Quantity, Request Date.	High	N
Search & Display	Search for donors or acceptors by criteria.	Criteria: Blood Type, Location, Availability.	Medium	N
Admin Dashboard	Interface for admin to manage users and view statistics.	Features: User Management, Inventory Control, Reports.	High	N
Messaging	Communication feature between donors and acceptors.	Inbox system, notifications.	Medium	N
Report Generation	Generate reports related to donations and requests.	Types: Donation Statistics, Request Summaries.	Medium	N

Non-Functional Requirements Table :-

Category	Requirement	Details/Notes	Priority	Status	Key Type
Performance	System response time	Define acceptable response times for various actions.	High	Not Started	N
Scalability	Handle increasing load	System should scale with increased users and data.	High	Not Started	N
Security	Data protection	Ensure data encryption and secure access controls.	High	Not Started	N
Usability	User interface design	Ensure easy-to-use and accessible interface.	Medium	Not Started	N
Reliability	System uptime and availability	Define required uptime percentage and backup plans.	High	Not Started	N

Use Cases Table (Rough Implemementation) :-

Use Case	Description	Actors	Preconditions	Postconditions	Steps	Key Type
User Registration	Users register as Donor or Acceptor.	New User	User is not registered.	User is registered.	1. Enter details 2. Verify email 3. Confirm registration	N
Login/Logout	Users login and logout of the system.	Registered User	User credentials valid.	User is logged in/out.	1. Enter credentials 2. Authenticate 3. Access system	N
Schedule Donation	Donors schedule a blood donation.	Donor	Donor is registered.	Donation is scheduled.	1. Select date 2. Confirm details 3. Save schedule	N
Request Blood	Acceptors request blood.	Acceptor	Acceptor is registered.	Blood request is created.	1. Select blood type 2. Enter quantity 3. Submit request	N
Search Donors/Acceptors	Search for donors or acceptors based on criteria.	User	User is logged in.	Search results are displayed.	1. Enter search criteria 2. View results	N
Admin Management	Admin manages users and views statistics.	Admin	Admin is logged in.	Users and stats are managed.	1. View user list 2. Manage inventory 3. Generate reports	N

Data Model Requirements Table

Entity	Attribute	Type	Description	Key Type
User	UserID	Integer	Unique identifier for users.	PK
	Name	String	User's name.	N
	Email	String	User's email address.	N
	Password	String	User's password.	N
	Phone No.	String	User's phone number.	N
	Address	String	User's address.	N
	UserType	String	Type of user (Donor/Acceptor).	N
Donor	DonorID	Integer	Unique identifier for donors.	PK, FK
	BloodType	String	Blood type of the donor.	N
	LastDonationDate	Date	Date of the last donation.	N
	TotalDonations	Integer	Total number of donations made.	N
Acceptor	AcceptorID	Integer	Unique identifier for acceptors.	PK, FK
	BloodType	String	Blood type needed by the acceptor.	N
	RequestDate	Date	Date of the blood request.	N
	Status	String	Status of the blood request.	N
BloodDonation	DonationID	Integer	Unique identifier for donations.	PK
	DonorID	Integer	Link to the donor making the donation.	FK
	DonationDate	Date	Date of the donation.	N
	BloodType	String	Blood type of the donation.	N
	Quantity	Integer	Quantity of blood donated.	N
	Health Criteria	String	Health criteria met for donation.	N
BloodRequest	RequestID	Integer	Unique identifier for requests.	PK
	AcceptorID	Integer	Link to the acceptor requesting blood.	FK
	RequestDate	Date	Date of the request.	N
	BloodType	String	Blood type requested.	N
	Quantity	Integer	Quantity of blood requested.	N
	Status	String	Status of the request.	N
Location	LocationID	Integer	Unique identifier for locations.	PK
	Address	String	Address of the location.	N
	City	String	City of the location.	N
	State	String	State of the location.	N
	ZipCode	String	Zip code of the location.	N