

User story board:

As a/an	I want to	So that
Donor	Register/Login	I can access and manage my donation profile
	Complete/Update personal and health information	I stay eligible for blood donation
	Search for donation camps or nearby hospitals	I can donate blood at a convenient location
	Schedule donation appointments	I can plan my donations at a suitable time
	View donation history and eligibility status	I can track my past donations and know when I'm next eligible
	Get reminders (SMS/Email) for next donation date	I don't miss my upcoming donation schedule
	Cancel or reschedule appointments	I can manage my availability and commitments
Recipient	Register/Login	I can access the system to request blood
	Submit blood request (blood type, location, urgency etc.)	I can get the required blood in emergency or planned situations
	Track status of request	I can monitor whether my request is being processed
	Contact donor or hospital (if allowed)	I can get timely help or clarification for urgent cases
	View donor matching status	I can know if a donor is available for my need
	Get notification when matched	I can act quickly to receive the donation

As a/an	I want to	So that
Hospital (organization)	Register/Login as organization	I can post and manage blood requirements
	Post blood requirements	I can request for specific blood types when stock is low
	Approve or decline donation requests	I can manage safe and eligible donations
	Update blood inventory	I can keep stock data accurate and up-to-date
	Verify donor eligibility	I can ensure only healthy and suitable donors participate
	Schedule and manage donation drives	I can organize effective blood collection campaigns
	Generate reports on blood stock, usage, and donor data	I can analyze and plan future blood collection and distribution
Admin	Approve/Manage user registrations	I can maintain a secure and valid user base
	Monitor system activity	I can ensure the system runs smoothly and detect unusual behavior
	Add/Remove blood banks or hospital accounts	I can control which organizations are part of the system
	Generate analytics reports	I can provide insights on trends and urgent needs
	Handle complaints, feedback, and fraud detection	I can maintain trust and resolve system issues quickly
	Send broadcast announcements	I can inform users about emergency blood needs or system updates

Project Scope

This project aims to build a web platform that connects blood donors, recipients, hospitals, NGOs, and administrators in a centralized system to facilitate safe, efficient, and real-time blood donation and request management. The system will ensure verified users, secure communication, and up-to-date availability, and will provide tools for emergency coordination and awareness campaigns.

Feature

1. Donor Users

Target Users: Individuals willing to donate blood voluntarily.

- **OTP-based Registration & Login**
- **Complete Profile Setup:** Name, Age, Blood Group, Phone, District/Upazila.
- **Availability Toggle:** Switch status between "Available" / "Unavailable".
- **Blood Request Handling:** Receive real-time requests, Accept or Reject donation requests.
- **Donation History:** Log of past donations with status (date, recipient, result).
- **Notification System:** SMS/Email alerts for nearby matching requests.

2. Recipient Users

Target Users: Patients or their family members in need of blood.

Key Features:

- **Secure OTP Registration**
- **Donor Search Tool:** Filter by Blood Group and Location.
- **Request Initiation:** Send request to one or multiple donors.
- **Request Tracking Dashboard:** View request statuses (Pending / Accepted / Rejected).
- **Communication Option:** View contact info after donor accepts requests.

3. Hospital / NGO Users

Target Users: Registered healthcare institutions or nonprofit organizations.

Key Features:

- **Verified Organizational Registration.**
- **Bulk Request Posting:** Submit multiple requests during emergencies.
- **Donor Response Monitoring:** Track which donors accept/respond.
- **Blood Drive Management:** Schedule and manage donation camps, View donor sign-ups per campaign.
- **Data Export Tools:** Download donor and request logs (with consent) for official use.

4. Admin Users

Target Users: System administrators overseeing platform integrity.

Key Features:

- **User Verification:** Approve donor registrations, Flag or block suspicious users.
- **Central Database Access:** View and manage all donor and recipient records.
- **Analytics Dashboard:** Monitor usage statistics, View donor-recipient interaction logs.
- **Report Generation:** Blood donation states by region, time, and group.
- **Alert & Content Management:** Send global or regional alerts, reminders, or messages.