BloodConnect System - Fully Expanded Use Cases

M.Usman 49649
Ahmad Arsalan 54381

December 12, 2025

Use Case Documentation

Use Case 01: View Donation History

Use Case Section	Comment
Use case no	01
Use case name	View Donation History
Actor	Donor
Type	Primary
Description	Donor views their past donation records and details.
Preconditions	Donor is logged in.
Postconditions	Donor sees complete donation history displayed.

Normal flows / Main success flows

	Actor Action	System Response
1	Donor goes to "Donation History".	System loads donation records.
2	Donor selects a specific donation.	System displays details like date, location, blood type.

Alternative flows / Extension

	Description
A1.1	If no history exists → System shows "No donations yet" message.

Use Case 02: Schedule Appointment

Use Case Section	Comment
Use case no	02
Use case name	Schedule Appointment
Actor	Donor
Type	Primary
Description	Donor schedules a donation appointment at a blood bank.
Preconditions	Donor is logged in and available.
Postconditions	Appointment scheduled and confirmed.

Normal flows / Main success flows

	Actor Action	System Response
1	Donor goes to "Schedule Appointment".	System shows available slots and locations.
2	Donor selects slot and location.	System validates availability.
3	Donor confirms.	System books appointment and sends confirmation.

Alternative flows / Extension

	Description
A1.1	Slot unavailable → System suggests alternatives.

Use Case 03: Accept / Decline Requests

Use Case Section	Comment
Use case no	03
Use case name	Accept / Decline Requests
Actor	Donor
Type	Primary
Description	Donor accepts or declines blood donation requests.
Preconditions	Donor has received a request notification.
Postconditions	Request status updated.

Normal flows / Main success flows

	Actor Action	System Response
1	Donor opens request.	System displays request details.
2	Donor selects "Accept" or "Decline".	System updates status and notifies recipient.

Alternative flows / Extension

	Description
A1.1	If decline → System prompts for reason (optional).

Use Case 04: Receive Notifications

Use Case Section	Comment
Use case no	04
Use case name	Receive Notifications
Actor	Donor
Type	Primary
Description	Donor receives notifications about matching blood requests.
Preconditions	Donor is registered and available.
Postconditions	Notification delivered and viewed.

Normal flows / Main success flows

	Actor Action	System Response
1	Matching request posted.	System sends notification.
2	Donor opens notification.	System displays request details.

Alternative flows / Extension

	Description
A1.1	Notifications disabled → Stored in app inbox.

Use Case 05: Update Availability

Use Case Section	Comment
Use case no	05
Use case name	Update Availability
Actor	Donor
Type	Primary
Description	Donor updates their availability status for donation.
Preconditions	Donor is logged in.
Postconditions	Availability status updated immediately.

Normal flows / Main success flows

	Actor Action	System Response
1	Donor goes to "My Profile".	System loads current status.
2	Donor toggles "Available for Donation" switch.	System updates availability instantly.
3	Donor taps "Save".	System saves changes and shows "Availability updated".

Alternative flows / Extension

	Description
A1.1	Donor in cooling-off period → Switch disabled and next eligible date shown.

Use Case 06: Register / Manage Profile

Use Case Section	Comment
Use case no	06
Use case name	Register / Manage Profile
Actor	Donor
Type	Primary
Description	Donor registers or manages their profile information.
Preconditions	For registration: Not logged in; For manage: Logged in.
Postconditions	Profile created or updated.

Normal flows / Main success flows

	Actor Action	System Response
1	Donor selects "Register" or "Manage Profile".	System displays form.
2	Donor enters/updates details (name, blood group, etc.).	System validates in real-time.
3	Donor submits.	System saves and confirms.

Alternative flows / Extension

	Description
A1.1	Invalid details → System highlights errors.

Use Case 07: Provide Feedback

Use Case Section	Comment
Use case no	07
Use case name	Provide Feedback
Actor	Recipient
Type	Primary
Description	Recipient provides feedback after receiving blood.
Preconditions	Request fulfilled.
Postconditions	Feedback recorded.

Normal flows / Main success flows

	Actor Action	System Response
1	Recipient opens fulfilled request.	System shows feedback form.
2	Recipient enters rating and comments.	System saves feedback.

Alternative flows / Extension

	Description
A1.1	No feedback provided → System reminds later.

Use Case 08: Update / Cancel Request

Use Case Section	Comment
Use case no	08
Use case name	Update / Cancel Request
Actor	Recipient
Type	Primary
Description	Recipient updates or cancels a blood request.
Preconditions	Active request exists.
Postconditions	Request modified or cancelled.

Normal flows / Main success flows

	Actor Action	System Response
1	Recipient selects request.	System displays edit/cancel options.
2	Recipient updates details or cancels.	System applies changes and notifies.

Alternative flows / Extension

	Description
A1.1	Request already responded to → Update limited.

Use Case 09: Track Responses

Use Case Section	Comment
Use case no	09
Use case name	Track Responses
Actor	Recipient
Type	Primary
Description	Recipient tracks responses to their blood request.
Preconditions	Request posted.
Postconditions	Responses displayed in real-time.

Normal flows / Main success flows

	Actor Action	System Response
1	Recipient opens "My Requests".	System shows response list.
2	Recipient views details.	System updates status live.

Alternative flows / Extension

	Description
A1.1	No responses → System suggests alternatives.

Use Case 10: Post Blood Request

Use Case Section	Comment
Use case no	10
Use case name	Post Blood Request
Actor	Recipient
Type	Primary
Description	Recipient posts a new blood request.
Preconditions	Recipient logged in.
Postconditions	Request posted and notified.

Normal flows / Main success flows

	Actor Action	System Response
1	Recipient selects "Post Request".	System shows form.
2	Recipient fills details (blood group, urgency).	System validates.
3	Recipient submits.	System posts and notifies donors.

Alternative flows / Extension

	Description
A1.1	Invalid details → Error messages shown.

Use Case 11: Donation Tracking & Reporting

Use Case Section	Comment
Use case no	11
Use case name	Donation Tracking & Reporting
Actor	Blood Bank Manager
Type	Primary
Description	Manager tracks and reports on donations.
Preconditions	Manager logged in.
Postconditions	Report generated.

Normal flows / Main success flows

	Actor Action	System Response
1	Manager selects "Tracking & Reporting".	System shows options.
2	Manager chooses parameters.	System generates report.

Alternative flows / Extension

	Description
A1.1	No data → Empty report message.

Use Case 12: Trigger Emergency Alerts

Use Case Section	Comment
Use case no	12
Use case name	Trigger Emergency Alerts
Actor	Blood Bank Manager
Type	Primary
Description	Manager triggers alerts for emergency blood needs.
Preconditions	Emergency situation identified.
Postconditions	Alerts sent.

Normal flows / Main success flows

	Actor Action	System Response
1	Manager selects "Trigger Alert".	System shows alert form.
2	Manager enters details.	System sends alerts to donors.

Alternative flows / Extension

	Description
A1.1	No matching donors → Broader search.

Use Case 13: Monitor Staff & Technicians

Use Case Section	Comment
Use case no	13
Use case name	Monitor Staff & Technicians
Actor	Blood Bank Manager
Type	Primary
Description	Manager monitors staff and technician activities.
Preconditions	Manager logged in.
Postconditions	Activity logs displayed.

Normal flows / Main success flows

	Actor Action	System Response
1	Manager opens "Monitor Staff".	System shows activity dashboard.

Alternative flows / Extension

	Description
A1.1	No activity → "No recent activity" shown.

Use Case 14: Generate Reports

Use Case Section	Comment
Use case no	14
Use case name	Generate Reports
Actor	Blood Bank Manager
Type	Primary
Description	Manager generates operational reports.
Preconditions	Manager logged in.
Postconditions	Report created and available.

Normal flows / Main success flows

	Actor Action	System Response
1	Manager selects report type.	System prompts for filters.
2	Manager applies filters.	System generates and displays report.
3	Manager exports.	System downloads report.

Alternative flows / Extension

	Description
A1.1	Invalid filters → Error prompt.

Use Case 15: Monitor Operations

Use Case Section	Comment
Use case no	15
Use case name	Monitor Operations
Actor	Blood Bank Manager
Type	Primary
Description	Manager monitors overall blood bank operations.
Preconditions	Manager logged in.
Postconditions	Operations dashboard viewed.

Normal flows / Main success flows

	Actor Action	System Response
1	Manager opens dashboard.	System displays real-time metrics.

Alternative flows / Extension

	Description
A1.1	System offline → Cached data shown.

Use Case 16: Update Blood Stock

Use Case Section	Comment
Use case no	16
Use case name	Update Blood Stock
Actor	Blood Bank Technician
Type	Primary
Description	Technician updates blood stock inventory.
Preconditions	Technician logged in, donation completed.
Postconditions	Stock levels updated.

Normal flows / Main success flows

	Actor Action	System Response
1	Technician selects "Update Stock".	System shows current inventory.
2	Technician enters new units.	System validates and updates.

Alternative flows / Extension

	Description
A1.1	Invalid entry → Error message.

Use Case 17: Validate Donor Eligibility

Use Case Section	Comment
Use case no	17
Use case name	Validate Donor Eligibility
Actor	Blood Bank Technician
Type	Primary
Description	Technician validates if donor is eligible.
Preconditions	Donor at appointment.
Postconditions	Eligibility status set.

Normal flows / Main success flows

	Actor Action	System Response
1	Technician scans donor.	System loads profile.
2	Technician performs checks.	System records results.
3	Technician approves/rejects.	System updates status.

Alternative flows / Extension

	Description
A1.1	Not eligible → Reason logged.

Use Case 18: Confirm Donation Completion

Use Case Section	Comment
Use case no	18
Use case name	Confirm Donation Completion
Actor	Blood Bank Technician
Type	Primary
Description	Technician confirms donation is complete.
Preconditions	Donation process finished.
Postconditions	Donation recorded.

Normal flows / Main success flows

	Actor Action	System Response
1	Technician selects session.	System shows summary.
2	Technician confirms.	System updates records and stock.

Alternative flows / Extension

	Description
A1.1	Issues during donation → Cancel and log.

Use Case 19: Communicate with Donors & Recipients

Use Case Section	Comment
Use case no	19
Use case name	Communicate with Donors & Recipients
Actor	Blood Bank Staff
Type	Primary
Description	Staff communicates with donors and recipients.
Preconditions	Staff logged in.
Postconditions	Message sent.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff opens chat.	System loads conversation.
2	Staff sends message.	System delivers message.

Alternative flows / Extension

	Description
A1.1	User offline → Message queued.

Use Case 20: Schedule Donor Appointments

Use Case Section	Comment
Use case no	20
Use case name	Schedule Donor Appointments
Actor	Blood Bank Staff
Type	Primary
Description	Staff schedules appointments for donors.
Preconditions	Donor request accepted.
Postconditions	Appointment booked.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff views requests.	System shows calendar.
2	Staff assigns slot.	System confirms and notifies.

Alternative flows / Extension

	Description
A1.1	Conflict → Suggest alternatives.

Use Case 21: Assign Requests to Technicians

Use Case Section	Comment
Use case no	21
Use case name	Assign Requests to Technicians
Actor	Blood Bank Staff
Type	Primary
Description	Staff assigns blood requests to technicians.
Preconditions	Request received.
Postconditions	Request assigned.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff views pending requests.	System lists technicians.
2	Staff assigns.	System notifies technician.

Alternative flows / Extension

	Description
A1.1	No available technicians → Hold request.

Use Case 22: Approve / Reject Registrations

Use Case Section	Comment
Use case no	22
Use case name	Approve / Reject Registrations
Actor	Blood Bank Staff
Type	Primary
Description	Staff approves or rejects new registrations.
Preconditions	Registration pending.
Postconditions	Registration status updated.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff opens pendings.	System shows details.
2	Staff approves/rejects.	System notifies user.

Alternative flows / Extension

	Description
A1.1	Incomplete info → Request more details.

Use Case 23: Manage Security & Authentication

Use Case Section	Comment
Use case no	23
Use case name	Manage Security & Authentication
Actor	Administrator
Type	Primary
Description	Admin manages security and authentication settings.
Preconditions	Admin logged in.
Postconditions	Security updated.

Normal flows / Main success flows

	Actor Action	System Response
1	Admin opens security settings.	System shows current configs.
2	Admin updates protocols.	System applies changes.

Alternative flows / Extension

	Description
A1.1	Invalid config → Validation error.

Use Case 24: Platform-wide Reports

Use Case Section	Comment
Use case no	24
Use case name	Platform-wide Reports
Actor	Administrator
Type	Primary
Description	Admin generates platform-wide reports.
Preconditions	Admin logged in.
Postconditions	Report generated.

Normal flows / Main success flows

	Actor Action	System Response
1	Admin selects report.	System prompts parameters.
2	Admin submits.	System creates report.

Alternative flows / Extension

	Description
A1.1	Large data → Progress bar shown.

Use Case 25: Monitor System Activity

Use Case Section	Comment
Use case no	25
Use case name	Monitor System Activity
Actor	Administrator
Type	Primary
Description	Admin monitors overall system activity.
Preconditions	Admin logged in.
Postconditions	Activity logs viewed.

Normal flows / Main success flows

	Actor Action	System Response
1	Admin opens monitoring.	System displays logs and metrics.

Alternative flows / Extension

	Description
A1.1	Suspicious activity → Alert triggered.

Use Case 26: Moderate Requests & Feedback

Use Case Section	Comment
Use case no	26
Use case name	Moderate Requests & Feedback
Actor	Administrator
Type	Primary
Description	Admin moderates requests and feedback.
Preconditions	Content flagged.
Postconditions	Content moderated.

Normal flows / Main success flows

	Actor Action	System Response
1	Admin views flagged items.	System shows details.
2	Admin removes/restores.	System updates and notifies.

Alternative flows / Extension

	Description
A1.1	Dispute → Review process.

Use Case 27: Verify Blood Compatibility

Use Case Section	Comment
Use case no	27
Use case name	Verify Blood Compatibility
Actor	Medical Staff
Type	Primary
Description	Medical staff verifies blood compatibility.
Preconditions	Blood assigned to patient.
Postconditions	Compatibility confirmed.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff scans blood unit.	System shows details.
2	Staff performs test.	System records result.

Alternative flows / Extension

	Description
A1.1	Incompatible → Alert sent.

Use Case 28: Post Urgent Requests

Use Case Section	Comment
Use case no	28
Use case name	Post Urgent Requests
Actor	Medical Staff
Type	Primary
Description	Medical staff posts urgent blood requests.
Preconditions	Staff logged in.
Postconditions	Urgent request posted.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff selects "Urgent Request".	System shows form.
2	Staff fills details.	System posts and alerts.

Alternative flows / Extension

	Description
A1.1	High urgency → Priority notification.

Use Case 29: Safety Feedback on Donors

Use Case Section	Comment
Use case no	29
Use case name	Safety Feedback on Donors
Actor	Medical Staff
Type	Primary
Description	Medical staff provides safety feedback on donors.
Preconditions	Donation used.
Postconditions	Feedback recorded.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff opens donor record.	System shows feedback form.
2	Staff submits feedback.	System updates donor profile.

Alternative flows / Extension

	Description
A1.1	Adverse feedback → Donor flagged.

Use Case 30: Track Urgent Requests

Use Case Section	Comment
Use case no	30
Use case name	Track Urgent Requests
Actor	Medical Staff
Type	Primary
Description	Medical staff tracks urgent requests.
Preconditions	Urgent request posted.
Postconditions	Status updated in real-time.

Normal flows / Main success flows

	Actor Action	System Response
1	Staff opens "Urgent Requests".	System shows tracking dashboard.

Alternative flows / Extension

	Description
A1.1	Delay in response → Escalation alert.