BloodConnect – Expanded Use Cases

Use Case 1: View Donation History

Actor: Donor

Type: Primary

Description: Donor views past donation records.

Preconditions: Donor is logged in.

Postconditions: History displayed.

Normal Flow:

- Opens 'Donation History'

- Selects entry to view details.

Alternative Flow:

- If no history: Show 'No donations yet'

Use Case 2: Schedule Appointment

Actor: Donor

Type: Primary

Description: Schedules donation appointment.

Preconditions: Logged in and available.

Postconditions: Appointment confirmed.

Normal Flow:

- Opens 'Schedule Appointment'

- Selects slot

- Confirms booking

Alternative Flow:

- If slot unavailable: Suggest alternatives

Use Case 3: Accept / Decline Requests

Actor: Donor

Type: Primary

Description: Handles donation requests.

Preconditions: Request received.

Postconditions: Status updated.

Normal Flow:

- Opens request

- Accepts or declines

Alternative Flow:

- If declined: Ask optional reason

Use Case 4: Receive Notifications

Actor: Donor

Type: Primary

Description: Receives matching request alerts.

Preconditions: Registered & available.

Postconditions: Notification viewed.

Normal Flow:

- System sends notification

- Donor opens it

Alternative Flow:

- If notifications off: Stored in inbox

Use Case 5: Update Availability

Actor: Donor

Type: Primary

Description: Updates availability status.

Preconditions: Logged in.

Postconditions: Status updated.

Normal Flow:

- Opens profile

- Toggles availability

- Saves

Alternative Flow:

- Cooling-off period: Disable switch

Use Case 6: Register / Manage Profile

Actor: Donor

Type: Primary

Description: Manage donor profile.

Preconditions: Not logged in OR logged in.

Postconditions: Profile saved.

Normal Flow:

- Opens form

- Enters details

- Submits

Alternative Flow:

- Invalid details: Highlight errors

Use Case 7: Provide Feedback

Actor: Recipient

Type: Primary

Description: Gives feedback after receiving blood.

Preconditions: Request fulfilled.

Postconditions: Feedback stored.

Normal Flow:

- Opens fulfilled request

- Submits rating

Alternative Flow:

- If skipped: System reminds later

Use Case 8: Update / Cancel Request

Actor: Recipient

Type: Primary

Description: Modifies posted request.

Preconditions: Active request exists.

Postconditions: Updated or cancelled.

Normal Flow:

- Opens request

- Edits or cancels

Alternative Flow:

- If responded already: Limited edit

Use Case 9: Track Responses

Actor: Recipient

Type: Primary

Description: Tracks donor responses.

Preconditions: Request posted.

Postconditions: Responses displayed.

Normal Flow:

- Opens 'My Requests'

- Views response details

Alternative Flow:

- If no responses: Suggest alternatives

Use Case 10: Post Blood Request

Actor: Recipient

Type: Primary

Description: Posts new blood request.

Preconditions: Logged in.

Postconditions: Request posted.

Normal Flow:

- Opens form

- Fills details

- Submits

Alternative Flow:

- Invalid details → Errors

Use Case 11: Donation Tracking & Reporting

Actor: Manager

Type: Primary

Description: Tracks/report donations.

Preconditions: Logged in.

Postconditions: Report generated.

Normal Flow:

- Selects 'Tracking & Reporting'

- Chooses parameters

Alternative Flow:

- If no data: Empty report

Use Case 12: Trigger Emergency Alerts

Actor: Manager

Type: Primary

Description: Sends emergency alerts.

Preconditions: Emergency identified.

Postconditions: Alerts sent.

Normal Flow:

- Opens 'Trigger Alert'

- Enters details

Alternative Flow:

- No matches: Broader reach

Use Case 13: Monitor Staff & Technicians

Actor: Manager

Type: Primary

Description: Monitors operations.

Preconditions: Logged in.

Postconditions: Logs displayed.

Normal Flow:

- Opens 'Monitor Staff'

Alternative Flow:

- If no activity: Show none

Use Case 14: Generate Reports

Actor: Manager

Type: Primary

Description: Generates operational reports.

Preconditions: Logged in.

Postconditions: Report ready.

Normal Flow:

- Selects type

- Applies filters

- Exports

Alternative Flow:

- Invalid filters → Error

Use Case 15: Monitor Operations

Actor: Manager

Type: Primary

Description: Monitors full operations.

Preconditions: Logged in.

Postconditions: Dashboard viewed.

Normal Flow:

- Opens dashboard

Alternative Flow:

- If offline: Show cached

Use Case 16: Update Blood Stock

Actor: Technician

Type: Primary

Description: Updates stock units.

Preconditions: Logged in, donation done.

Postconditions: Stock updated.

Normal Flow:

- Opens stock

- Adds units

Alternative Flow:

- Invalid entry → Error

Use Case 17: Validate Donor Eligibility

Actor: Technician

Type: Primary

Description: Checks eligibility.

Preconditions: Donor at appointment.

Postconditions: Eligibility recorded.

Normal Flow:

- Scans donor

- Performs checks

- Approves/rejects

Alternative Flow:

- Not eligible: Reason stored

Use Case 18: Confirm Donation Completion

Actor: Technician

Type: Primary

Description: Confirms completion.

Preconditions: Donation done.

Postconditions: Recorded.

Normal Flow:

- Opens session

- Confirms

Alternative Flow:

- Issue → Cancel/log

Use Case 19: Communicate with Donors & Recipients

Actor: Staff

Type: Primary

Description: Handles messaging.

Preconditions: Logged in.

Postconditions: Message sent.

Normal Flow:

- Opens chat

- Sends message

Alternative Flow:

- If offline: Queued

Use Case 20: Schedule Donor Appointments

Actor: Staff

Type: Primary

Description: Schedules for donors.

Preconditions: Request accepted.

Postconditions: Appointment booked.

Normal Flow:

- Views requests

- Assigns slot

Alternative Flow:

- Conflict → Suggest alternative

Use Case 21: Assign Requests to Technicians

Actor: Staff

Type: Primary

Description: Assigns technician.

Preconditions: Request received.

Postconditions: Assigned.

Normal Flow:

- Views pending

- Assigns

Alternative Flow:

- No technicians → Hold

Use Case 22: Approve / Reject Registrations

Actor: Staff

Type: Primary

Description: Manages new users.

Preconditions: Pending registration.

Postconditions: Updated.

Normal Flow:

- Opens pending list

- Approves/rejects

Alternative Flow:

- Incomplete info → Ask more

Use Case 23: Manage Security & Authentication

Actor: Admin

Type: Primary

Description: Manages platform security.

Preconditions: Logged in.

Postconditions: Security updated.

Normal Flow:

- Opens settings

- Updates protocols

Alternative Flow:

- Invalid config → Error

Use Case 24: Platform-wide Reports

Actor: Admin

Type: Primary

Description: Generates full reports.

Preconditions: Logged in.

Postconditions: Report generated.

Normal Flow:

- Selects report

- Submits parameters

Alternative Flow:

- Large data → Progress bar

Use Case 25: Monitor System Activity

Actor: Admin

Type: Primary

Description: Monitors logs.

Preconditions: Logged in.

Postconditions: Logs viewed.

Normal Flow:

- Opens monitoring panel

Alternative Flow:

- Suspicious → Alert

Use Case 26: Moderate Requests & Feedback

Actor: Admin

Type: Primary

Description: Moderates flagged content.

Preconditions: Content flagged.

Postconditions: Moderated.

Normal Flow:

- Views flagged

- Removes/restores

Alternative Flow:

- Dispute → Review

Use Case 27: Verify Blood Compatibility

Actor: Medical Staff

Type: Primary

Description: Checks compatibility.

Preconditions: Blood assigned.

Postconditions: Compatibility confirmed.

Normal Flow:

- Scans unit

- Performs test

Alternative Flow:

- Incompatible → Alert

Use Case 28: Post Urgent Requests

Actor: Medical Staff

Type: Primary

Description: Posts urgent request.

Preconditions: Logged in.

Postconditions: Urgent request posted.

Normal Flow:

- Opens urgent form

- Submits

Alternative Flow:

- High urgency → Priority

Use Case 29: Safety Feedback on Donors

Actor: Medical Staff

Type: Primary

Description: Submits donor safety feedback.

Preconditions: Donation used.

Postconditions: Feedback stored.

Normal Flow:

- Opens donor record

- Submits

Alternative Flow:

- Adverse → Donor flagged

Use Case 30: Track Urgent Requests

Actor: Medical Staff

Type: Primary

Description: Tracks urgent needs.

Preconditions: Urgent request posted.

Postconditions: Status updated.

Normal Flow:

- Opens urgent dashboard

Alternative Flow:

- Delay → Escalation