



Badhan Automated System Management



Use Case

SUBSYSTEMS

Subsystems	Scope
1. Database Management	Managing donor , member and user database
2. Search Management	Searching nearest Badhan zone, donor availability search, member search
3. Meeting Management	Managing events, discussions , presenting new proposals , analyzing monthly/yearly reports etc
4. Notification Management	Managing notification subsystems
5. Automated Requisition Form Verification	Providing an interface for automated requisition form verification

ACTORS

- User
- Donor
- Unit Member
- Zonal Member
- Central Member
- Moderator (All Zonal Presidents & Club Moderators)
- Admin (Central Badhan President)
- Advisor
- Hospital Representative
- Time (System)

ACTORS GLOSSARY

Actors	Short-Key	Activity Scope
User	USR	Check Availability & Makes Blood Call
Donor	DNR	Donate Blood & Update Info
Unit Member	UM	Authenticate ,Search , Confirm Blood Calls
Zonal Member	ZM	Monitor Unit Activities
Central Member	CM	Monitor Zonal Activities
Moderator	MOD	Verify Accounts
Admin	ADM	Control Whole System
Advisor	ADV	Gives Direction & Occasional Financial Support
Hospital Representative	HR	Verify Scanned Requisition Form

1. DATABASE MANAGEMENT

Use-Case ID > Name	Description	Participant Actors
1.1 > Volunteer for Donation	Donor volunteers for blood donation and informs a unit member	Donor fills up form and unit member receives request
1.2 > Add Donor	Unit member adds donor if found eligible for blood donation	Unit member updates donor database
1.3 > Remove Donor	Unit member removes donor from database if donor no longer available for further blood donation	Unit member
1.4 > Donor Update Regarding Donation	Donor informs unit member after a blood donation	Unit member and donor
1.5 > Donor Database Update	Unit member updates donor database	Unit member
1.6 > User Database Management	Zonal members conducts modifications to user database	Zonal committee member
1.7 > Member Database Management	Club moderator maintains member database	Moderator

1. DATABASE MANAGEMENT

- Subsystem Actors
 - Donor (DNR)
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Moderator (MOD)

Database Management System

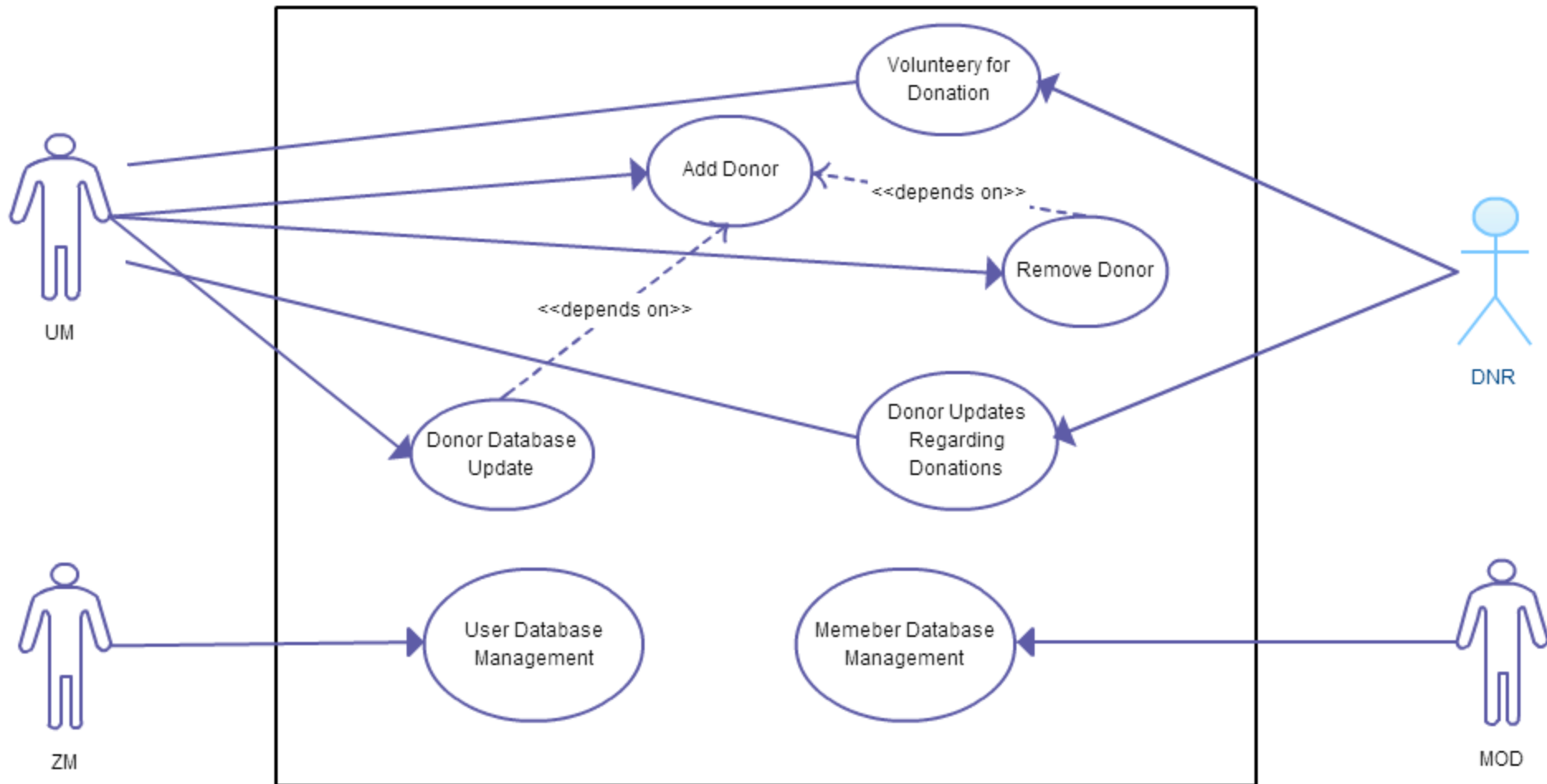


Fig : Use-Case Diagram for Database Management System

1.1 VOLUNTEERY FOR DONATION

Use-Case Name	Volunteery for Donation
Use-Case ID	1.1
Priority	High
Primary Business Actor	Donor(DNR)
External Receiver Actor	Unit Member(UM)
Description	Donor volunteers for blood donation and informs a unit member
Trigger	By DNR

Table : Use Case Narrative 1.1

1.1 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. Donor volunteers for donation	2. Request to be forwarded to a unit member
3. Unit member receives a donor request	

1.1 DOCUMENTATION OF USE-CASE VOLUNTEERY FOR DONATION

- Conclusion : Concludes when a unit member receives the request for blood donation volunteer
- Post Condition : Unit member checks donor's eligibility for blood donation
- Implementation Issue : Interested donors can fill up forms online and submit request for becoming a donor. This process can also be done manually, in person

1.2 ADD DONOR

Use-Case Name	Add Donor
Use-Case ID	1.2
Priority	High
Primary System Actor	Unit Member(UM)
Description	Unit member adds new donor information in database
Trigger	By UM
Typical Course of Event	Unit member adds new donor to database

Table : Use Case Narrative 1.2

1.2 DOCUMENTATION OF USE-CASE ADD DONOR

- Conclusion : Concludes when a unit member makes entry in database regarding information of new donor
- Post Condition : Donor information is added to database
- Implementation Issue : System contains the donor database. Unit member makes entry to this database from their account

1.3 REMOVE DONOR

Use-Case Name	Remove Donor
Use-Case ID	1.3
Priority	High
Primary System Actor	Unit Member(UM)
Description	Unit member removes donor information if donor no longer can donate blood(Example scenario: donor left the education institute)
Trigger	By UM
Typical Course of Event	Unit member removes donor from database

Table : Use Case Narrative 1.3

1.3 DOCUMENTATION OF USE-CASE REMOVE DONOR

- Conclusion : Concludes after the unit member makes a deletion of a donor entry from donor database
- Pre Condition : Target donor has been added to database before
- Post Condition : A donor record is erased from donor database
- Implementation Issue : System contains donor database. Unit members can erase a donor from their account

1.4 DONOR UPDATES REGARDING DONATION

Use-Case Name	Donor Updates Regarding Donation
Use-Case ID	1.4
Priority	Medium
Primary Business Actor	Donor(DNR)
External Receiver Actor	Unit Member(UM)
Description	Donor informs unit member after a blood donation or other info (Example – contact/room no change etc)
Trigger	By DNR
Typical Course of Event	Donor informs a unit member of recent blood donation or concerning updates possibly by filling up a form online or informing unit member in person

Table : Use Case Narrative 1.4

1.4 DOCUMENTATION OF USE-CASE DONOR UPDATES REGARDING DONATION

- Conclusion : Concludes when a unit member receives update of recent blood donation from a donor
- Post Condition : Unit member updates donor database

1.5 DONOR DATABASE UPDATE

Use-Case Name	Donor Database Update
Use-Case ID	1.5
Priority	High
Primary Business Actor	Unit Member(UM)
Description	Unit member updates donor records regarding latest donation or other donor details
Trigger	By UM
Typical Course of Event	Unit member updates donor records regarding latest donation or other donor details

Table : Use Case Narrative 1.5

1.5 DOCUMENTATION OF USE-CASE DONOR DATABASE UPDATE

- Conclusion : Concludes after unit member updates donor information in database
- Pre Condition : Target donor has been added to database before
- Post Condition : Donor database up-to-date
- Implementation Issue : Donor database can be accessed by unit members and they can update existing records

1.6 USER DATABASE MANAGEMENT

Use-Case Name	User Database Management
Use-Case ID	1.6
Priority	Medium
Primary Business Actor	Zonal Committee Member(ZM)
Description	<ul style="list-style-type: none">▪ During blood calls, zonal members check user database for user's previous records.▪ New user added.▪ Update information on existing user.
Trigger	By ZM

Table : Use Case Narrative 1.6

1.6 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. User makes a blood call	
2. Zonal member receives blood call	
3. Zonal member authenticates user and searches user database	4. No user entry in the system
5. Zonal member adds new user to database	6. New user added

1.6 ALTERNATE COURSE OF EVENTS

Actor Action	System Response
1. User makes a blood call	
2. Zonal member receives blood call	
3. Zonal member authenticates user and searches user database	4. System returns user information
5. User information from database helps zonal member for authentication	
6. Zonal member updates user information on database regarding current blood call	7. User database up-to-date

1.6 DOCUMENTATION OF USE-CASE USER DATABASE MANAGEMENT

- Conclusion : Concludes when a zonal committee member makes an entry or modifies an entry in user database
- Post Condition : User database is up-to-date containing blood call records for users
- Implementation Issue : User database is contained in the system. Zonal committee members can log-in to their account to update user database

1.7 MEMBER DATABASE MANAGEMENT

Use-Case Name	User Database Management
Use-Case ID	1.7
Priority	High
Primary Business Actor	Moderator(MOD)
Description	Moderator adds or removes members and updates member information(Example : member promotion)
Trigger	By MOD
Typical Course of Events	<ul style="list-style-type: none">▪ Adds new member▪ Removes existing member▪ Updates record of existing member

Table : Use Case Narrative 1.7

1.7 DOCUMENTATION OF USE-CASE MEMBER DATABASE MANAGEMENT

- Conclusion : Concludes when a club moderator makes an entry or modification or removal of a member record
- Post Condition : Member database is up-to-date
- Implementation Issue : Club moderator has access to members database. He can alter records in the database

Q&A

- Any Questions ?



Thank You

2. SEARCH MANAGEMENT SYSTEM

- Subsystem Actors
 - User (USR)
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)

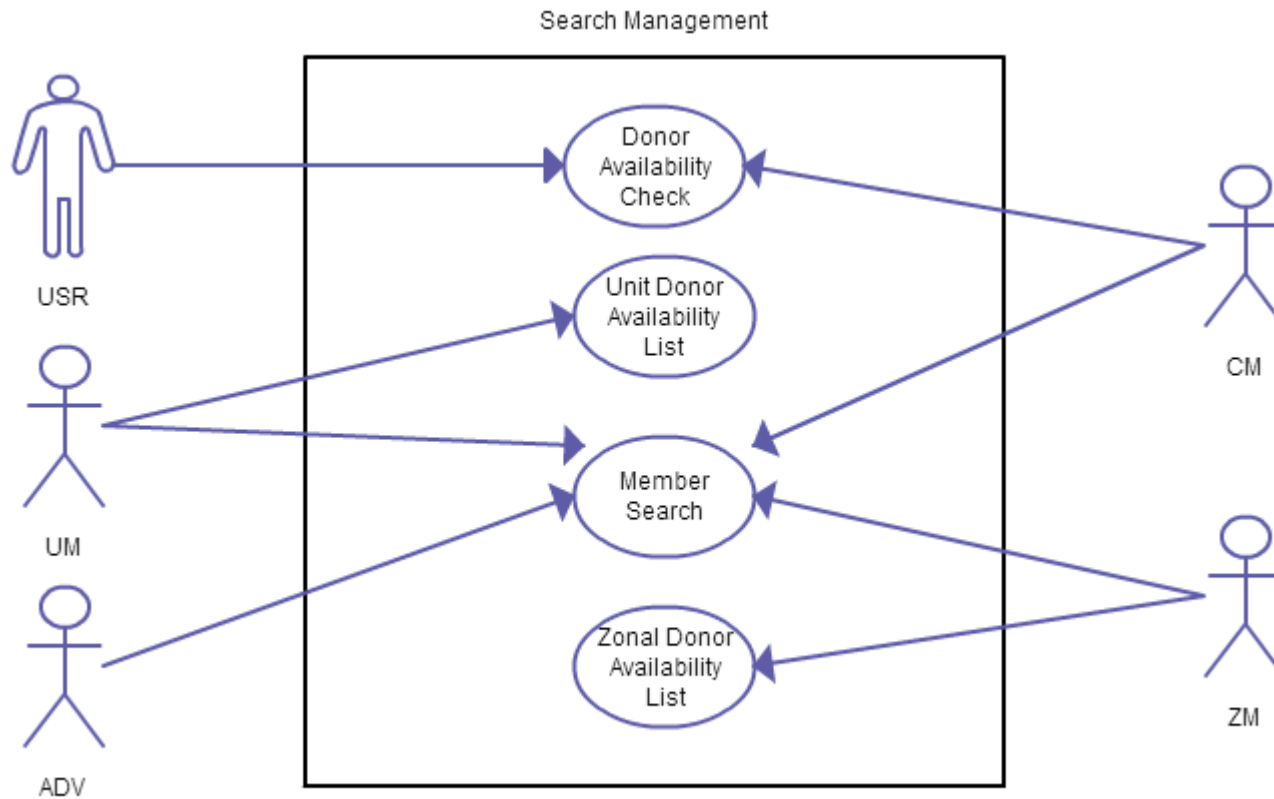


Fig : Use-Case Diagram for Search Management System

3. MEETING MANAGEMENT

- Subsystem Actors
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)
 - Moderator (MOD)
 - Admin (ADM)

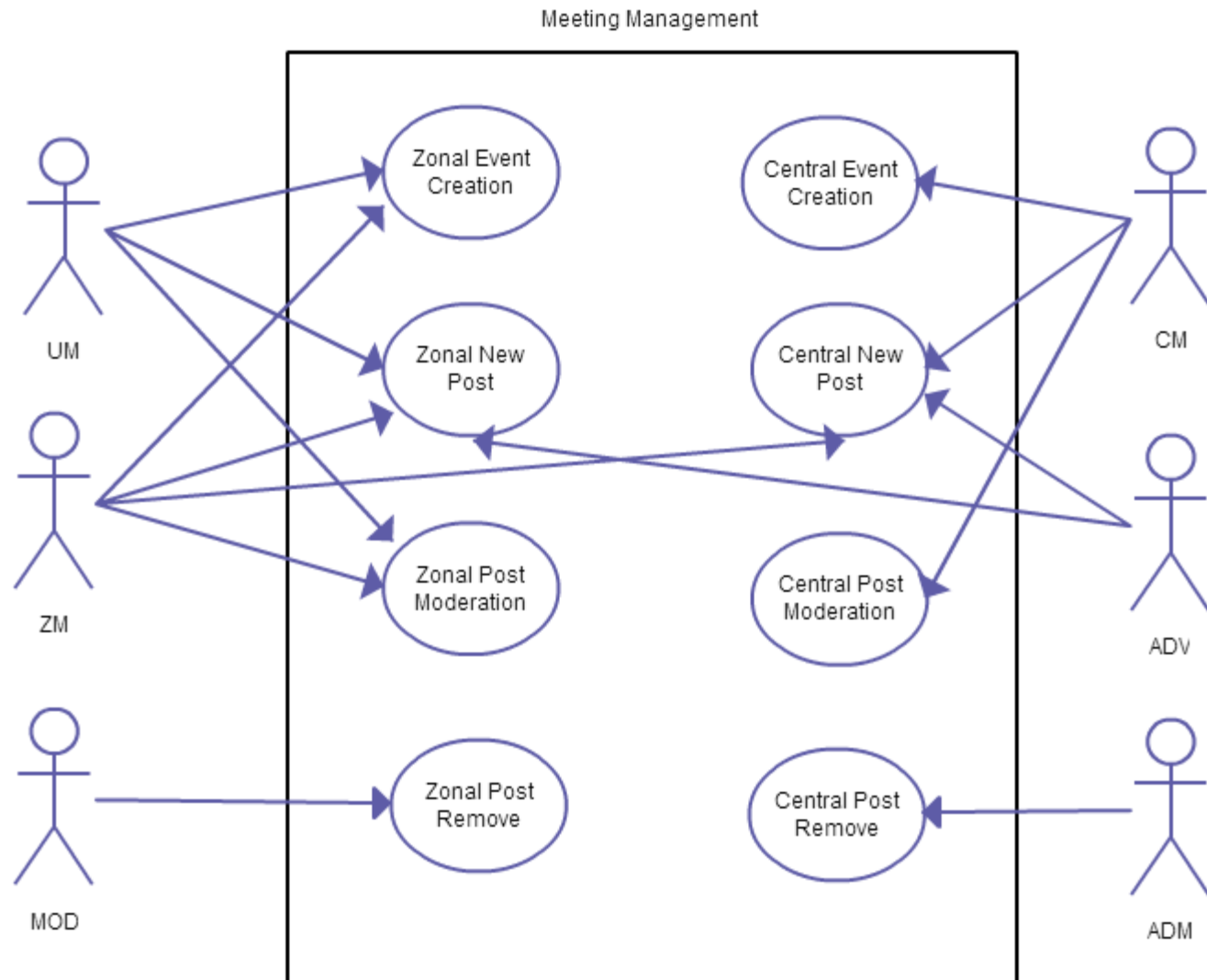


Fig : Use-Case Diagram for Meeting Management System

4. NOTIFICATION MANAGEMENT

- Subsystem Actors
 - Donor (DNR)
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)
 - System (Time)

Notification Management

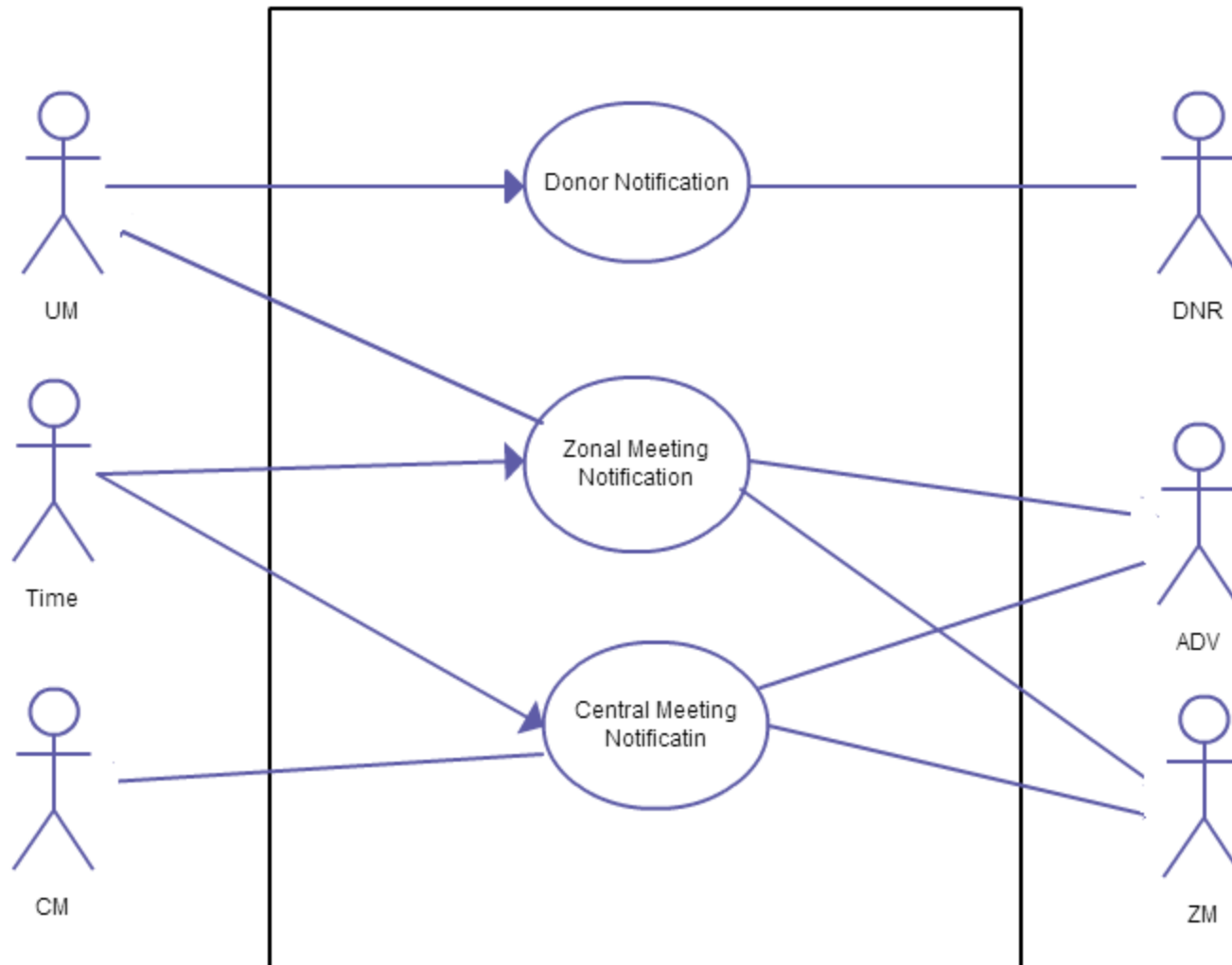


Fig : Use-Case Diagram for Notification Management System

5. AUTOMATED REQUISITION FORM VERIFICATION

- Subsystem Actors
 - User (USR)
 - Unit Member (UM)
 - Hospital Representative (HR)

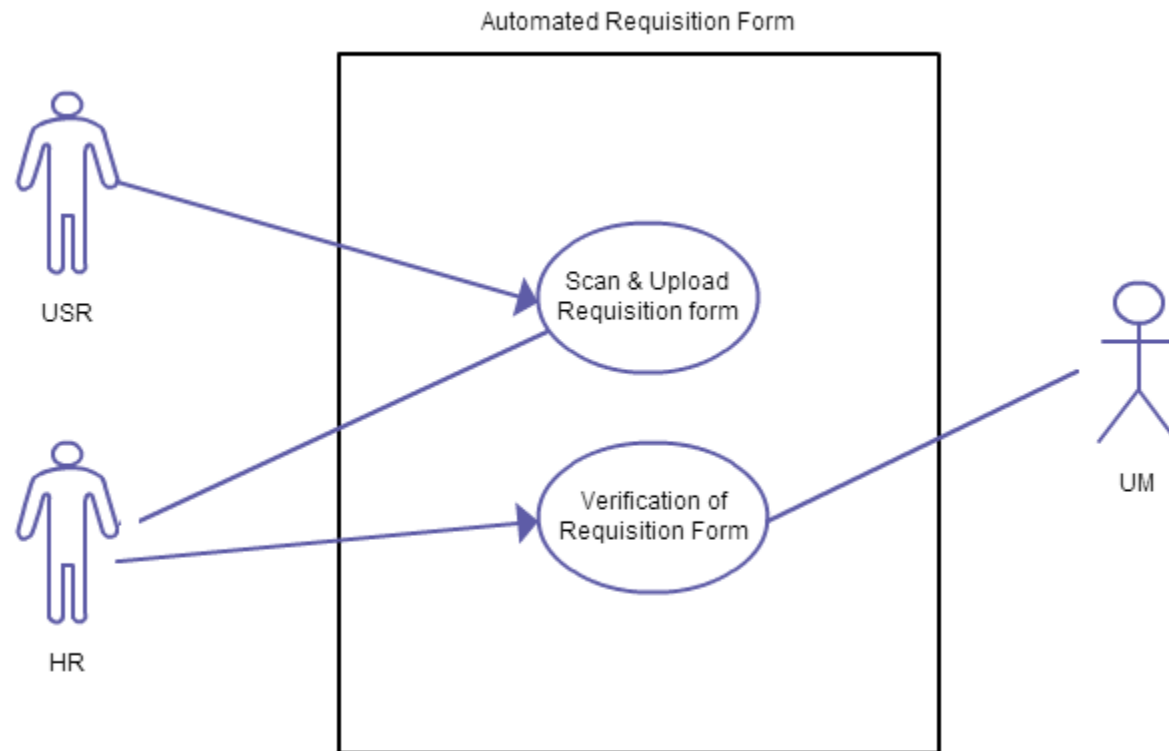


Fig : Use-Case Diagram for Automated Requisition Form Verification

2. SEARCH MANAGEMENT SYSTEM

Use-Case ID > Name	Description	Participant Actors
2.1 > Donor Availability Check	Returns Specific Donor Availability in the Nearest Badhan Zone	USR, CM
2.2 > Unit Donor Availability List	Returns Available Donor List of the Respective Unit	UM
2.3 > Zonal Donor Availability List	Returns Available Donor List of the Respective Zone	ZM
2.4 > Member Search	Search & Returns All Current or Previous Badhan Members Information & Unit / zonal / Central Committee List	UM,ZM,CM,ADV

2. SEARCH MANAGEMENT SYSTEM

- Subsystem Actors
 - User (USR)
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)

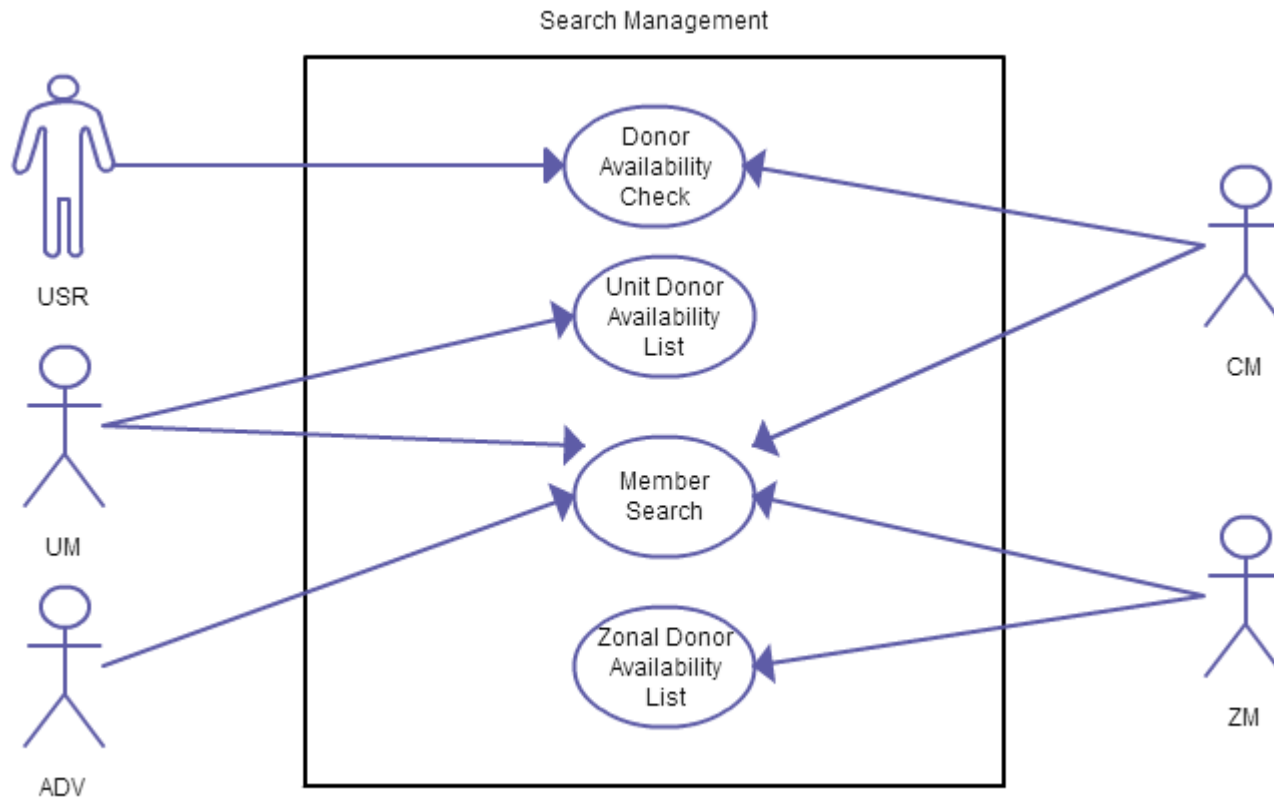


Fig : Use-Case Diagram for Search Management System

2.1 DONOR AVAILABILITY CHECK

Use-Case Name	Donor Availability Check
Use-Case ID	2.1
Priority	High
Primary Business Actor	User (USR)
External Receiver Actor	User (USR)
Description	Returns Specific Donor Availability in the Nearest Badhan Zone
Trigger	By USR

Table : Use Case Narrative 2.1

2.1 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. User Selects the Nearest Zone of Badhan	
2. User then search if required blood donor is available in that zone	3. System responded with yes /no
4. If no then user checks the other Badhan zone and if any donor available there	5. System retrieve these information from database and inform the USR
6. User checks the contact information of the required zone	7. System respond with contact informations & other process to make blood call

2.1 DOCUMENTATION OF USE-CASE DONOR AVAILABILITY CHECK

- **Conclusion:** User will get to know where and how to find blood donor promptly
- **Post-Condition:** User come the Badhan office to verify and inform them about his required blood

2.2 UNIT DONOR AVAILABILITY LIST

Use-Case Name	Unit Donor Availability List
Use-Case ID	2.2
Priority	High
Primary Business Actor	Unit Member(UM)
Description	System informs about the available donor, their current blood donation statistics and contact information of the required blood group in the respective units
Trigger	By UM

Table : Use Case Narrative 2.2

2.2 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. Unit member queries about the required blood group	2. System extracts information about the donor of the respective blood group from database and provide with their necessary information
3. Unit member checks donor's current blood donation statistics and queries if blood donation possible	
4. Unit member contact with donor & confirms	

2.2 DOCUMENTATION OF USECASE UNIT DONOR AVAILABILITY LIST

- **Conclusion:** Unit member will find the available donor as well as their contact information and blood donation statistics
- **Post-Condition:** Unit member then tries to contact with the available donor and finds out who are willing to donate blood that time
- **Implementation Issues:** The extraction of available donor is maintained by system database

2.3 ZONAL DONOR AVAILABILITY LIST

Use-Case Name	Zonal Donor Availability List
Use-Case ID	2.3
Priority	High
Primary Business Actor	Zonal Member(ZM)
Description	System informs about the available donor, their current blood donation statistics and contact information of the required blood group donors of all units of the respective zone
Trigger	By ZM

Table : Use Case Narrative 2.3

2.3 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. ZM queries about the required blood group	2. System extracts information about the donor of the respective blood group from database and provide with their necessary information
3. ZM checks donor's current blood donation statistics and queries if blood donation possible	
4. ZM contact with donor & confirms	

2.3 DOCUMENTATION OF USECASE ZONAL DONOR AVAILABILITY LIST

- **Conclusion:** ZM will find the available donor as well as their contact information and blood donation statistics
- **Post-Condition:** ZM then tries to contact with the available donor and finds out who are willing to donate blood that time
- **Implementation Issues:** the entire extraction of available donor out of the huge list and preparing list is maintained by system database

2.4 MEMBER SEARCH

Use-Case Name	Member Search
Use-Case ID	2.4
Priority	Normal
Primary Business Actor	UM,ZM,CM,ADV
Description	Search & Returns All Current or Previous Badhan Members Information & Unit / zonal / Central Committee List
Trigger	By UM,ZM,CM,ADV

Table : Use Case Narrative 2.4

2.4 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. UM,CM,ZM,ADV search/query about any Badhan member or Unit/Zonal/Central Committee List	2. System provides the member information or Committee list

2.4 DOCUMENTATION OF USE CASE MEMBER SEARCH

- **Conclusion:** All the Badhan members can be up to date with other members current status, contact informations
- **Post-Condition:** CM,ZM,UM,ADV can find out any query relating to current , past Badhan members
- **Implementation Issues:** the list of member information is managed by system database

3. MEETING MANAGEMENT

Use-Case ID > Name	Description	Participant Actors
3.1 > Zonal Event Creation	UM, ZM create new event	UM,ZM
3.2 > Zonal New Post	UM, ZM ,ADV create new discussion	UM,ZM,ADV
3.3 > Zonal Post Moderation	UM, ZM modify a post if necessary	UM,ZM
3.4 > Zonal Post Remove	Only MOD remove a post if necessary	MOD
3.5 > Central Event Creation	CM create new central event	CM
3.6 > Central New Post	CM,ZM,ADV create new discussion	CM,ZM,ADV
3.7 > Central Post Moderation	CM modify a post if necessary	CM
3.8 > Central Post Remove	Only ADM remove a post if necessary	ADM

3. MEETING MANAGEMENT

- Subsystem Actors
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)
 - Moderator (MOD)
 - Admin (ADM)

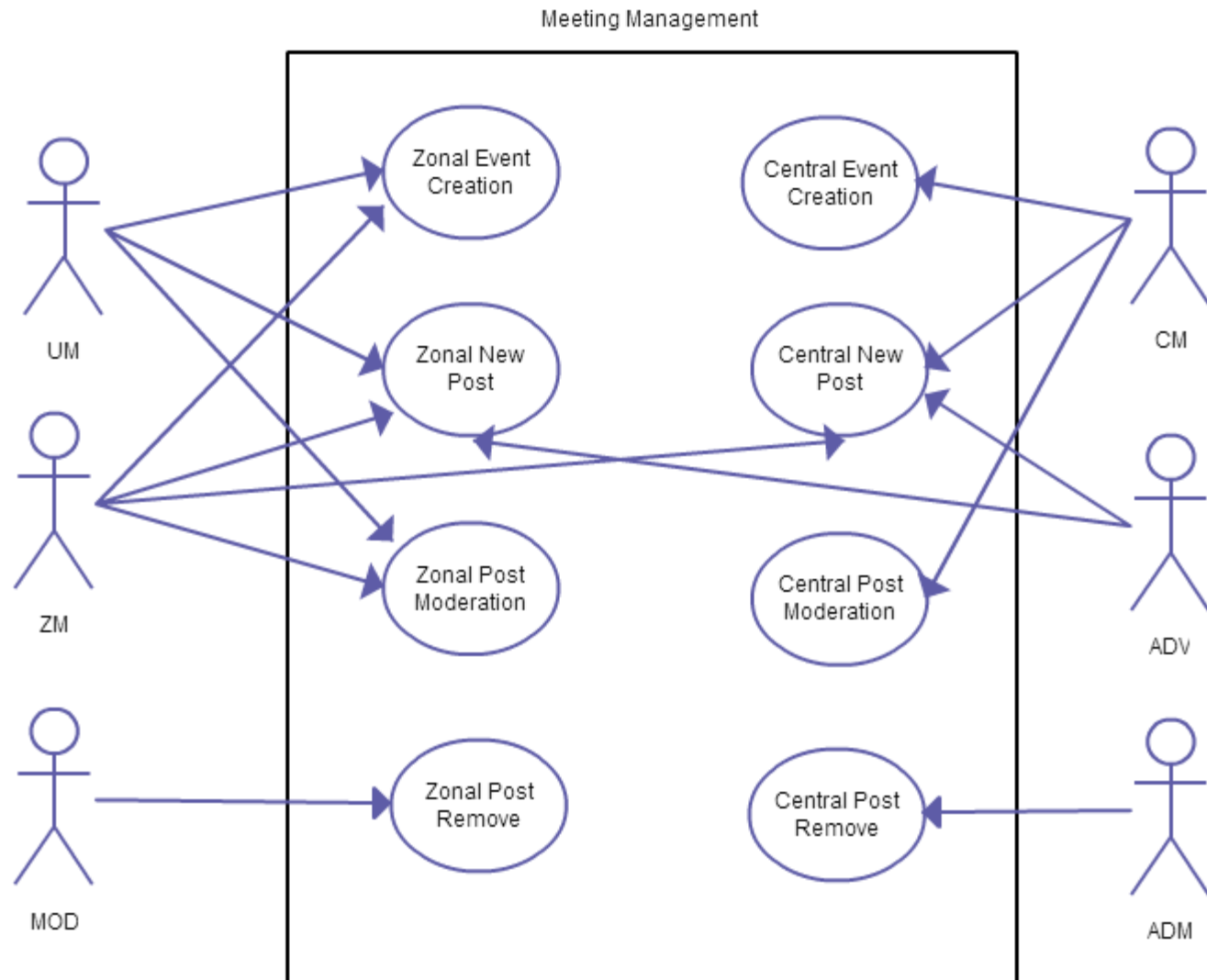


Fig : Use-Case Diagram for Meeting Management System

3.1 ZONAL EVENT CREATION

Use-Case Name	Zonal Event Creation
Use-Case ID	3.1
Priority	High
Primary Business Actor	UM,ZM
Description	UM,ZM create new event
Trigger	UM,ZM

Table : Use Case Narrative 3.1

3.1 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. UM,ZM create event	2. Notification Sent to respective UM,ZM,ADV
3. UM,ZM,ADV response accordingly	

3.1 DOCUMENTATION OF USE-CASE ZONAL EVENT CREATION

- Conclusion : Concludes when the event date is expired
- Post Condition : According to External Receiver Actor's feedback

3.2 ZONAL NEW POST

Use-Case Name	Zonal New Post
Use-Case ID	3.2
Priority	High
Primary Business Actor	UM, ZM, ADV
Description	UM,ZM,ADV create new discussion
Trigger	By UM, ZM, ADV

Table : Use Case Narrative 3.2

3.2 Typical Course of Events

Actor Action	System Response
1. UM, ZM, ADV create new discussion	2. Notification Sent to respective UM, ZM, ADV
3. UM, ZM, ADV response accordingly	

3.2 DOCUMENTATION OF USE-CASE ZONAL NEW POST

- Conclusion : When MODs remove the post
- Post Condition : According to External Receiver Actor's feedback

3.3 ZONAL POST MODERATION

Use-Case Name	Zonal Post Moderation
Use-Case ID	3.3
Priority	High
Primary Business Actor	UM,ZM
Description	UM,ZM modify a post if necessary
Trigger	By UM,ZM
Typical Course of Event	UM,ZM modify a post if necessary

Table : Use Case Narrative 3.3

3.3 DOCUMENTATION OF USE-CASE ZONAL POST MODERATION

- Conclusion : Concludes when a MOD remove the post
- Post Condition : According to MOD's action

3.4 ZONAL POST REMOVE

Use-Case Name	Zonal Post Remove
Use-Case ID	3.4
Priority	Normal
Primary Business Actor	MOD
Description	Only MOD remove a post if necessary
Trigger	By MOD
Typical Course of Event	MOD remove a post if necessary

Table : Use Case Narrative 3.4

3.4 DOCUMENTATION OF USE-CASE ZONAL POST REMOVE

- Conclusion : Concludes immediately

3.5 CENTRAL EVENT CREATION

Use-Case Name	Central Event Creation
Use-Case ID	3.5
Priority	Normal
Primary Business Actor	CM
External Receiver Actor	CM,ZM,ADV
Description	CM create new central event
Trigger	By CM

Table : Use Case Narrative 3.5

3.5 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. CM create event	2. Notification Sent to CM,ZM & ADV
3. CM, ZM & ADV response accordingly	

3.5 DOCUMENTATION OF USE-CASE CENTRAL EVENT CREATION

- Conclusion : Concludes when the event date is expired
- Post Condition : According to External Receiver Actor's feedback

3.6 CENTRAL NEW POST

Use-Case Name	Zonal New Post
Use-Case ID	3.6
Priority	Normal
Primary Business Actor	CM, ZM, ADV
Description	CM, ZM, ADV create new discussion
Trigger	By CM, ZM, ADV

Table : Use Case Narrative 3.6

3.6 Typical Course of Events

Actor Action	System Response
1. CM, ZM, ADV create new discussion	2. Notification Sent to respective CM, ZM, ADV
3. CM, ZM, ADV response accordingly	

3.6 DOCUMENTATION OF USE-CASE CENTRAL NEW POST

- Conclusion : When ADM remove the post
- Post Condition : According to External Receiver Actor's feedback

3.7 CENTRAL POST MODERATION

Use-Case Name	Zonal Post Moderation
Use-Case ID	3.3
Priority	Normal
Primary Business Actor	CM
Description	CM modify a post if necessary
Trigger	By CM
Typical Course of Event	CM modify a post if necessary

Table : Use Case Narrative 3.7

3.7 DOCUMENTATION OF USE-CASE CENTRAL POST MODERATION

- Conclusion : Concludes when ADM remove the post
- Post Condition : According to ADM action

3.8 CENTRAL POST REMOVE

Use-Case Name	Central Post Remove
Use-Case ID	3.8
Priority	Normal
Primary Business Actor	ADM
Description	Only ADM remove a post if necessary
Trigger	By ADM
Typical Course of Event	ADM remove a post if necessary

Table : Use Case Narrative 3.8

3.8 DOCUMENTATION OF USE-CASE CENTRAL POST REMOVE

- Conclusion : Concludes immediately

4. NOTIFICATION MANAGEMENT

Use-Case ID > Name	Description	Participant Actors
4.1 > Donor Notification	Emergency blood call's notification sent to available donor	DNR,UM
4.2 > Zonal Meeting Notification	Zonal Meeting Notification sent to UM,ZM,ADV	Time,UM,ZM,ADV
4.3 > Central Meeting Notificatin	Central Meeting Notification sent to CM,ZM,ADV	Time,CM,ZM,ADV

4. NOTIFICATION MANAGEMENT

- Subsystem Actors
 - Donor (DNR)
 - Unit Member (UM)
 - Zonal Member (ZM)
 - Central Member (CM)
 - Advisor (ADV)
 - System (Time)

Notification Management

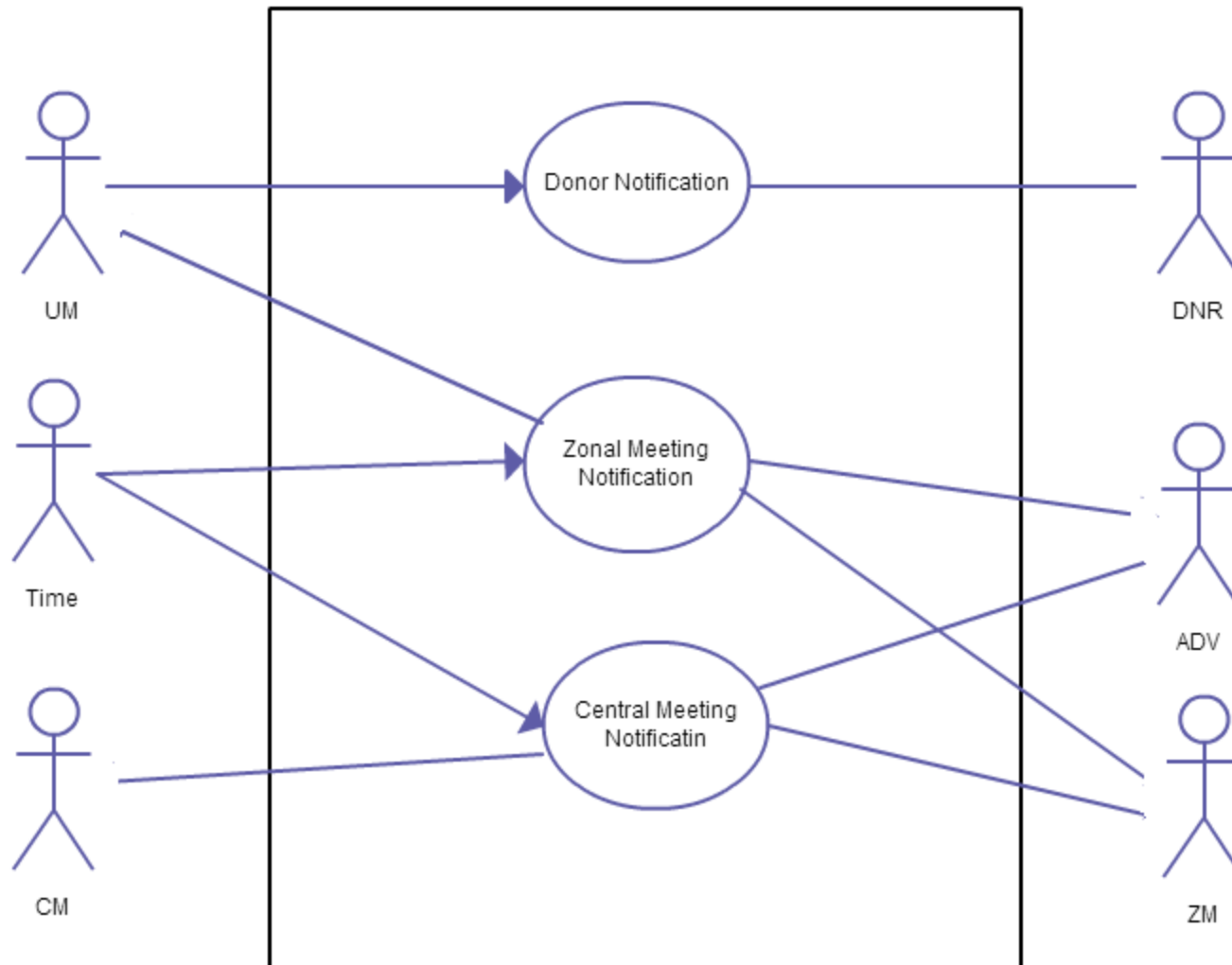


Fig : Use-Case Diagram for Notification Management System

4.1 DONOR NOTIFICATION

Use-Case Name	Zonal Event Creation
Use-Case ID	4.1
Priority	High
Primary Business Actor	UM
External Receiver Actor	DNR
Description	Emergency blood call's notification sent to available DNR
Trigger	By UM

Table : Use Case Narrative 4.1

4.1 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. Notification sent to donor	
2.UM receives DNR reply	

4.1 DOCUMENTATION OF USE-CASE DONOR NOTIFICATION

- Conclusion : Concludes when DONR replies
- Post Condition : According to DONR's feedback

4.2 ZONAL MEETING NOTIFICATION

Use-Case Name	Zonal Meeting Notification
Use-Case ID	4.2
Priority	High
Primary Business Actor	Time
External Receiver Actor	UM,ZM,ADV
Description	Zonal Meeting Notification sent to UM,ZM,ADV
Trigger	By Time
Typical Course of Event	System sends notification to UM,ZM,ADV

4.2 DOCUMENTATION OF USE-CASE ZONAL EVENT NOTIFICATION

- Conclusion : Concludes when notification is sent.

4.3 CENTRAL EVENT NOTIFICATION

Use-Case Name	Zonal New Post
Use-Case ID	4.3
Priority	Normal
Primary Business Actor	Time
External Receiver Actor	CM, ZM, ADV
Description	Central Meeting Notification sent to CM,ZM,ADV
Trigger	By System
Typical Course of Event	System sends notification to CM,ZM,ADV

Table : Use Case Narrative 4.3

4.3 DOCUMENTATION OF USE-CASE CENTRAL EVENT NOTIFICATION

- Conclusion : Concludes when notification is sent.

5. AUTOMATED REQUISITION FORM

Use-Case ID > Name	Description	Participant Actors
5.1 > Scan & Upload Requisition form	The requisition form is scanned and uploaded by user to send to UM.	USER (USR)
5.2 > Verification of Requisition Form	The uploaded requisition form is verified by both HR and UM.	HOSPITAL REPRESENTATIVE (HR), UNIT MEMBER(UM)

5. AUTOMATED REQUISITION FORM

- Subsystem Actors
 - User (USR)
 - Unit Member (UM)
 - Hospital Representative (HR)

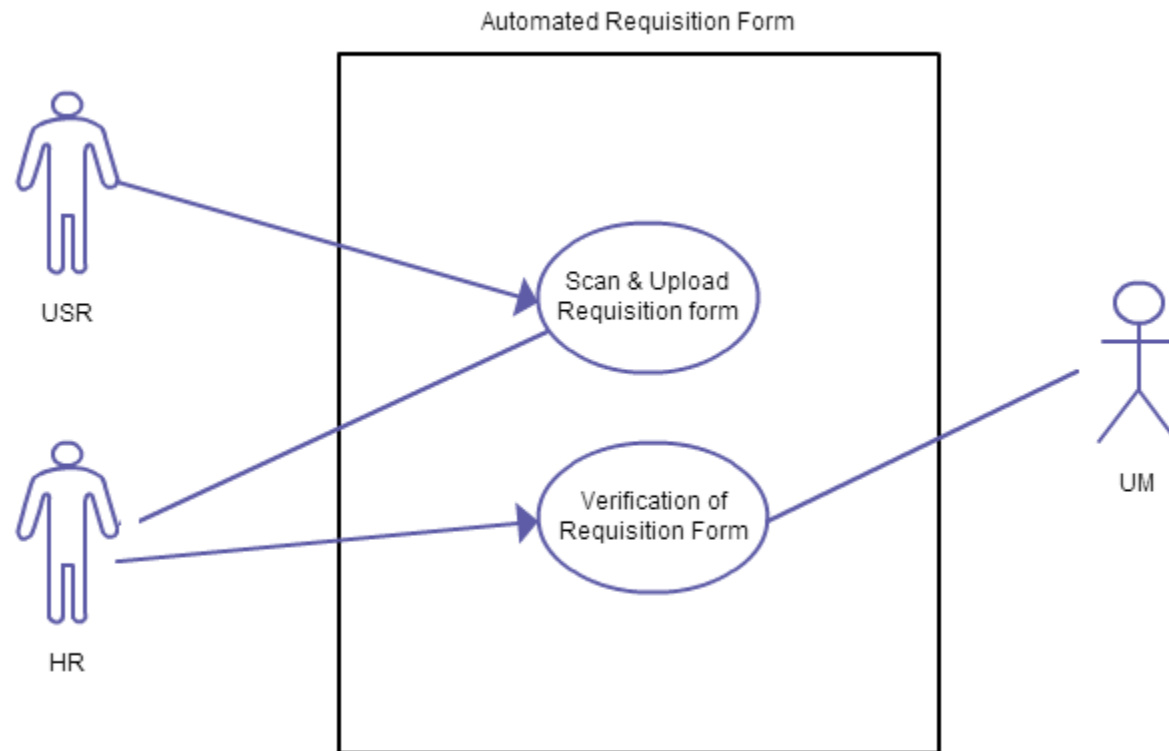


Fig : Use-Case Diagram for Automated Requisition Form

5.1 SCAN & UPLOAD REQUISITION FORM

Use-Case Name	Scan & Upload Requisition Form
Use-Case ID	5.1
Priority	High
Primary Business Actor	USER(USR)
External Receiver Actor	HR, UM
Description	The requisition form is scanned and uploaded by user to send to UM & HR.
Trigger	By USR

Table : Use Case Narrative 5.1

5.1 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. USER uploads the requisition form after scanning it.	
2. UM & HR gets the scanned form to check over it.	

5.1 DOCUMENTATION OF USE-CASE: SCAN & UPLOAD REQUISITION FORM

- Conclusion : Concludes when the scanned requisition form is uploaded.

5.2 VERIFICATION OF REQUISITION FORM

Use-Case Name	Verification of Requisition Form
Use-Case ID	6.2
Priority	High
Primary Business Actor	HR, UM
External Receiver Actor	HR
Description	The uploaded requisition form is verified by both HR and UM.
Trigger	By HR & UM.

Table : Use Case Narrative 5.2

5.2 TYPICAL COURSE OF EVENTS

Actor Action	System Response
1. HR verifies the requisition form.	2. Sends Verification form to UM.
3.UM receives the scanned requisition form	

5.2 DOCUMENTATION OF USE-CASE VERIFICATION OF REQUISITION FORM

- Conclusion : Concludes when search for donor by the UM is completed.



End