Student Portal Use Cases Documentation

Table of Contents

1. User Management

1.1 Authentication

UC-101: Sign Up

Field	Details
Actor	New User
Trigger	User clicks on the "Sign Up" button
Input	Institutional email, password, optional profile details (e.g., name, profile picture)
Validation Steps	1. Verify email domain matches institutional pattern 2. Ensure password meets security criteria (e.g., minimum length, special characters)
Error Handling	1. Display error if email is invalid or not institutional 2. Show password validation errors in real-time 3. Alert if email is already registered
Output	User receives a confirmation email. After verifying, they can log in
Post-condition	Account is created and active
Priority	High

UC-102: Log In

Field	Details
Actor	Registered User
Trigger	User clicks "Log In" and enters credentials
Input	Email, password
Validation Steps	1. Match email and password to stored credentials
Error Handling	1. Show "Invalid credentials" for incorrect input 2. Account lock after multiple failed attempts
Output	User gains access to the dashboard or main portal
Post-condition	User is logged into their profile

Priority	High

UC-103: Password Recovery

Field	Details
Actor	User who forgot their password
Trigger	User clicks "Forgot Password" link
Input	Registered email address
Validation Steps	1. Verify email exists in the database 2. Ensure reset link is unique and time-limited
Error Handling	1. Display "Email not found" for unregistered addresses 2. Expire old reset links
Output	User receives an email with a reset link, sets a new password, and logs in
Post-condition	Password is updated successfully
Priority	Medium

1.2 Profile Management

UC-111: Create Profile

Field	Details
Actor	New User
Trigger	User logs in for the first time and navigates to the "Profile" section
Input	Profile picture, bio, academic interests, optional details like name and contact information
Validation Steps	1. Ensure required fields (e.g., bio, academic interests) are filled 2. Validate file type for profile picture upload
Error Handling	1. Display error messages for invalid file types or empty required fields 2. Allow user to retry with correct inputs
Output	Profile is saved and viewable by others
Post-condition	Profile setup is complete
Priority	Medium

UC-112: Update Profile

Field	Details
Actor	Registered User
Trigger	User navigates to the "Profile" section and clicks "Edit Profile"

Input	Updated profile picture, bio, academic interests, or other optional details
Validation Steps	1. Ensure uploaded files (if any) meet size and format criteria 2. Validate changes to mandatory fields
Error Handling	1. Show real-time validation errors for invalid inputs 2. Allow user to cancel or retry updates
Output	Profile updates are saved and reflected on the user's profile page
Post-condition	Profile reflects the latest changes
Priority	Medium

2. Communication

2.1 Messaging

UC-201: Direct Messaging

Field	Details
Actor	User
Trigger	User searches for a peer or faculty member and opens a chat window
Input	Text message or attachment (optional)
Validation Steps	1. Ensure recipient exists in the system 2. Validate message length and attachment size
Error Handling	1. Show error if the recipient is not found 2. Notify if attachment size exceeds limits
Output	Message is sent and visible to the recipient
Post-condition	Communication thread is updated for both sender and recipient
Priority	High

UC-202: Group Chats

Field	Details
Actor	User
Trigger	User selects or creates a group chat
Input	Group name, description (for new group), and messages from members
Validation Steps	1. Validate uniqueness of group name 2. Ensure members exist in the system
Error Handling	1. Notify if group creation fails due to name conflict 2. Alert if a message delivery fails

Output	Messages are exchanged and visible to group members
Post-condition	Group chat is active and accessible to members
Priority	Medium

2.2 Groups and Communities

UC-211: Create Groups

Field	Details
Actor	User, Faculty, or Admin
Trigger	Actor clicks on "Create Group"
Input	- Group name - Description - Group type (Official/Community) - Optional group image
Validation Steps	1. Ensure group name is unique 2. Validate description length and file type for images 3. **For Official Groups:** - Verify creator has Admin/Faculty permissions - Validate academic purpose **For Community Groups:** - Standard validation only
Error Handling	1. Show error if group name already exists 2. Notify if file upload fails 3. Display permission error for unauthorized official group creation
Output	Group is created and added to appropriate directory: - Official Groups directory for faculty/admin created groups - Community Groups directory for user-created groups
Post-condition	- Official groups: Only modifiable by faculty/admin - Community groups: Modifiable by creator
Priority	High

UC-212: Join Groups

Field	Details
Actor	User
Trigger	User browses group directories (Official or Community) and clicks "Join"
Input	Selected group
Validation Steps	1. Verify group access settings: - Official Groups: Open or Invite-only - Community Groups: Public or private

Field	Details
Error Handling	1. Display "Access Denied" for invite-only/private groups 2. Notify if the group is at member capacity
Output	User is added as a member of the group
Post-condition	User receives updates and access to group discussions
Priority	Medium

UC-213: Manage Groups

Field	Details
Actor	Group Owner (Faculty/Admin for Official Groups, Creator for Community Groups)
Trigger	Actor navigates to group and selects "Manage Group"
Input	- Updated group details (name, description, image) - Member management actions (add/remove) - Group settings changes (privacy, permissions)
Validation Steps	1. Validate actor's permissions: - For Official Groups: Must be Faculty/Admin - For Community Groups: Must be group creator 2. Verify member operations are valid 3. Ensure updates meet platform guidelines
Error Handling	1. Show error if actor lacks required permissions 2. Display error for invalid member operations 3. Notify if updates fail to save 4. Alert if settings changes violate platform rules
Output	Group settings, membership, and details are updated according to actor's permissions
Post-condition	- Official Groups: Changes reflected with institutional guidelines maintained - Community Groups: Changes reflected within platform guidelines
Priority	High

UC-214: Start a Discussion in a Group

Field	Details
Actor	Group Member
Trigger	User clicks "Start a Discussion" within a group
Input	Title, body content, optional attachments or media
Validation Steps	1. Ensure title is not empty 2. Validate content length 3. Check file type and size of attachments

Error Handling	1. Show error if title or content is invalid 2. Notify if attachment upload fails
Output	Discussion is created and visible to all group members
Post-condition	Other group members can view, reply to, or interact with the discussion
Priority	High

UC-215: Reply to a Discussion

Field	Details
Actor	Group Member
Trigger	User clicks "Reply" on an existing discussion
Input	Reply content, optional attachments
Validation Steps	1. Ensure reply is not empty 2. Validate file types and sizes for attachments
Error Handling	1. Show error for invalid inputs 2. Notify if attachment upload fails
Output	Reply is added to the discussion thread
Post-condition	Other members see the reply in real-time or when they refresh
Priority	Medium

UC-216: Pin/Highlight a Discussion

Field	Details
Actor	Admin, Faculty, or Group Moderator
Trigger	Moderator selects "Pin" or "Highlight" on a discussion
Input	Selected discussion
Validation Steps	1. Ensure the actor has appropriate permissions
Error Handling	Display error if permissions are invalid
Output	Discussion is marked as pinned or highlighted, appearing at the top of the discussion list
Post-condition	Group members easily find the pinned/highlighted discussion
Priority	Medium

3. Resource Management

3.1 Academic Resources

UC-301: Upload Academic Materials

Field	Details
Actor	User
Trigger	User clicks "Upload Resource"
Input	File (e.g., PDF, DOCX), title, description, and tags
Validation Steps	1. Check file type and size 2. Ensure title and description are not empty
Error Handling	1. Show error for unsupported file types or size limit exceeded 2. Notify if upload fails
Output	Resource is uploaded and visible in the shared resources directory
Post-condition	Other users can view, download, or interact with the resource
Priority	High

UC-302: Interact with Resources

Field	Details
Actor	User
Trigger	User selects a resource to comment on, rate, or download
Input	Comment, rating (stars), or download action
Validation Steps	1. Validate rating scale (e.g., 1-5 stars) 2. Ensure comments are not empty
Error Handling	Notify if the interaction fails to save
Output	Interaction (comment or rating) is recorded and visible to others
Post-condition	Resource interaction enhances engagement and feedback
Priority	Medium

4. Event Management

4.1 Event Operations

UC-401: Create Events

Field	Details
Actor	Faculty, Admin
Trigger	Faculty/Admin clicks "Create Event"
Input	Event name, date, time, location, description, and optional image

Validation Steps	1. Check date and time validity (e.g., no past dates) 2. Ensure required fields are filled
Error Handling	1. Show error if date or time is invalid 2. Notify if image upload fails
Output	Event is created and visible in the event directory
Post-condition	Users can view and RSVP to the event
Priority	High

UC-402: RSVP to Events

Field	Details
Actor	User
Trigger	User clicks "RSVP" on an event
Input	Event selection
Validation Steps	Ensure event is not full (if capacity is set)
Error Handling	Notify if RSVP fails or if event is full
Output	User's RSVP is recorded and confirmed
Post-condition	User receives event updates and reminders (if applicable)
Priority	Medium

UC-403: Sync Events to Calendar

Field	Details
Actor	User
Trigger	User clicks "Sync to Calendar" for an event
Input	Calendar application integration (Google Calendar, Outlook, etc.)
Validation Steps	Ensure user grants necessary permissions for calendar sync
Error Handling	Notify if sync fails due to connectivity or permission issues
Output	Event is added to the user's calendar
Post-condition	User sees the event in their personal calendar
Priority	Low