

Semester: Summer-2025

Course Title: Information System Analysis and Design

Course Code: CSE347

**Sec:** 05

**Group No: 2** 

# **Group members**

| Student Name                | Student Id    |
|-----------------------------|---------------|
| Malek Hossain Jim           | 2023-1-60-117 |
| Sheikh Hossain Bin Bakhtiar | 2023-1-60-060 |
| Farzana Shahanaz            | 2023-1-60-201 |
| Humaira Habib Usha          | 2023-1-60-022 |

# **StudySync Project - Use Case Scenarios**

# 1. Account Management Use Cases

**UC-001: Student Registration** 

**Actor**: Student

Precondition: User has internet access, valid email, and required documents

**Required Input Data:** 

- Full name
- Age (minimum 16 years)
- Email address
- Phone number
- Password (minimum 8 characters with special characters)
- University/College/School ID card image (clear, readable photo)
- Gender
- Current institution name
- Academic level (High School/Undergraduate/Graduate)
- Confirm password

### **UC-002: Mentor Registration**

**Actor**: Mentor

**Precondition**: User has professional experience, valid documents, and internet access

- Full name
- Age (minimum 22 years)
- Email address
- Phone number
- Password (minimum 8 characters with special characters)
- National ID (NID) number
- Company ID card image or Professional certificate

- Current company name
- Job title/position
- Years of experience
- Area of expertise
- LinkedIn profile URL
- Hourly mentorship rate (optional)
- Confirm password

# UC-003: User Login

Actor: Student, Mentor, Admin

Precondition: User has active, verified account

**Required Input Data:** 

- Email address or phone number
- Password
- Optional: Remember me selection

### **UC-004: Edit User Profile**

Actor: Student, Mentor

Precondition: User is logged in with active account

**Required Input Data (Student):** 

- Phone number
- Current institution
- Academic level
- Profile picture
- Bio/description
- Study interests
- Privacy settings

# **Required Input Data (Mentor):**

- Phone number
- Current company
- Job title

- Years of experience
- Areas of expertise
- Hourly rate
- Professional bio
- LinkedIn profile

**UC-005: Delete Account** 

Actor: Student, Mentor

Precondition: User is logged in

**Required Input Data:** 

- Current password confirmation
- Reason for deletion (dropdown selection)
- Final confirmation checkbox

# 2. Group Study Management Use Cases

**UC-006: Create Group Study Post** 

Actor: Student

**Precondition**: Student has completed profile and is in good standing

**Required Input Data:** 

- Study topic/subject (dropdown selection + custom option)
- Date and time (future date, max 30 days ahead)
- Duration (1-8 hours selection)
- Location (Online/Physical address with city)
- Gender preference (Male only/Female only/Mixed/No preference)
- Maximum group size (2-10 members including creator)
- Study level (Beginner/Intermediate/Advanced)
- Description (50-500 characters)
- Contact method preference (In-app messaging/Phone/Email)
- Study materials required (optional)
- Special requirements (optional)

# **UC-007: Browse Study Groups**

Actor: Student

**Precondition**: Student is logged in **Required Input Data (Filters)**:

- Subject/topic filter
- Date range selection
- Location radius (for physical meetings)
- Gender preference match
- Study level
- Group size preference
- Online/offline preference

# **UC-008: Request to Join Study Group**

**Actor**: Student

**Precondition**: Student is viewing available study group posts

**Required Input Data:** 

- Group post selection
- Personal message to group owner (optional, max 200 characters)
- Confirmation of availability for scheduled time
- Agreement to group rules/requirements

# **UC-009: Manage Join Requests**

**Actor**: Student (Post Owner)

**Precondition**: Student has active group study post with pending requests

**Required Input Data:** 

- Request selection (approve/reject)
- Reason for rejection (optional)
- Welcome message for approved members (optional)

# **UC-010: Send Message to Post Owner**

**Actor**: Student

Precondition: Student is viewing a group study post

**Required Input Data:** 

• Message content (10-300 characters)

- Subject line (optional)
- Contact preference (reply in-app/email/phone)

# **UC-011: Edit Study Group Post**

**Actor**: Student (Post Owner)

**Precondition**: Student owns an active study group post

**Required Input Data (Modifiable):** 

- Date and time
- Location
- Description
- Special requirements
- Contact method
- Study materials

# Required Input Data (Non-modifiable):

- Topic/subject (locked after first join request)
- Gender preference (locked after first join request)
- Maximum group size (can only decrease)

### **UC-012: Delete Study Group Post**

**Actor**: Student (Post Owner)

**Precondition**: Student owns a study group post

**Required Input Data:** 

- Confirmation checkbox
- Reason for cancellation (dropdown selection)
- Message to joined members (optional)

# 3. Mentorship Management Use Cases

### **UC-013: Create Mentorship Request**

**Actor**: Student

**Precondition**: Student is logged in with complete profile

- Target company name (dropdown + custom option)
- Specific job role/position

- Career level seeking (Entry/Mid/Senior)
- Mentorship type (Career guidance/Interview prep/Skill development)
- Preferred mentor experience (years)
- Budget range for mentorship
- Specific questions/areas of focus
- Preferred communication method
- Availability schedule
- Timeline for mentorship (weeks/months)

# **UC-014: Browse Mentorship Requests**

**Actor**: Mentor

Precondition: Mentor is logged in with approved account

**Required Input Data (Filters)**:

- Company filter (matching mentor's expertise)
- Job role filter
- Career level filter
- Mentorship type
- Budget range
- Timeline requirements
- Student's academic level

# **UC-015: Respond to Mentorship Request**

**Actor**: Mentor

**Precondition**: Mentor is viewing mentorship requests

- Availability confirmation
- Proposed mentorship plan outline
- Fee structure (hourly/package/monthly)
- Expected timeline
- Communication frequency
- Success metrics/goals

- Initial consultation offer (free/paid)
- Contact information for further discussion

# 4. Premium Subscription Management

#### **UC-016: Subscribe to Premium**

Actor: Student, Mentor

Precondition: User has active account and valid payment method

**Required Input Data:** 

- Payment method selection (Credit card/Mobile banking)
- Billing information (Name, address)
- Card details (Number, expiry, CVV) or mobile number
- Subscription plan selection (Monthly/Annual)
- Auto-renewal preference
- Billing email confirmation

# **UC-017: Manage Subscription**

**Actor**: Premium User

**Precondition**: User has active premium subscription

**Required Input Data:** 

- Action selection (Upgrade/Downgrade/Cancel)
- Reason for change (optional)
- New plan selection (if upgrading/downgrading)
- Cancellation confirmation (if canceling)

#### **5.** Administrative Use Cases

# **UC-018: View Monthly Revenue Dashboard**

**Actor**: Admin

**Precondition**: Admin is logged in with financial access permissions

- Month/year selection
- Revenue type filter (Premium subscriptions/Ad revenue)
- Payment method breakdown
- Regional filter (if applicable)

- Currency selection
- Export format (PDF/Excel/CSV)
- Date range comparison (month-over-month/year-over-year)

# **UC-019: Monitor User Activity**

**Actor**: Admin

**Precondition**: Admin is logged in with appropriate permissions

# Required Input Data (Search Criteria):

- User type filter (Student/Mentor)
- Activity date range
- Activity type (Posts/Messages/Reports)
- Account status filter
- Search by user name/email
- Violation type filter
- Content type filter (Text/Image/File)
- Reported content only toggle

# **UC-020:** Review Account Authenticity

**Actor**: Admin

**Precondition**: Admin is reviewing new registrations or flagged accounts

# **Required Input Data:**

- Account selection for review
- Document verification status (ID card/Company ID/NID)
- Image quality assessment (Clear/Blurry/Fake)
- Information cross-verification
- Background check results (for mentors)
- Approval decision (Approve/Request additional docs/Reject)
- Feedback message to user
- Verification badge assignment

### **UC-021: Delete Inappropriate Posts**

Actor: Admin

Precondition: Inappropriate content has been reported or detected

**Required Input Data:** 

- Post selection for deletion
- Content violation type (NSFW/Spam/Misleading/Harassment/Copyright)
- Severity level (Minor/Major/Severe)
- Evidence collection (Screenshots/URLs/User reports)
- User notification requirement
- Warning/strike assignment to user
- Content backup for legal purposes (if required)
- Report to law enforcement (if severe violation)

# **UC-022: Suspend User Account**

Actor: Admin

Precondition: Policy violation has been identified and reviewed

**Required Input Data:** 

- User account selection
- Violation type (Inappropriate content/Harassment/Fraud/Spam/Document forgery)
- Violation severity (Minor/Major/Critical)
- Suspension duration (1 day/1 week/1 month/Indefinite)
- Strike count consideration (1st/2nd/3rd offense)
- Detailed reason for suspension
- Evidence/screenshots collection
- Warning message to user
- Appeal process information
- Related content cleanup (posts/messages)

# **UC-023: Delete User Account**

Actor: Admin

**Precondition**: Serious policy violation occurred, repeated offenses, or user requested deletion

- User account selection
- Deletion reason (Critical policy violation/User request/Document fraud/Multiple offenses/Legal requirement)
- Strike history review (previous warnings/suspensions)
- Final confirmation with admin credentials
- Data retention requirements (Legal compliance/GDPR)
- Content removal scope (All posts/Messages/Files)
- User notification method (Email/SMS/None for security cases)
- Blacklist email/phone (prevent re-registration)
- Legal documentation backup
- Refund processing (if premium user)

# **UC-024: Review User Reports**

**Actor**: Admin

**Precondition**: Users have submitted violation reports

**Required Input Data:** 

- Report ID selection
- Report type (Content/User behavior/Technical issue/Fraud)
- Reporter credibility assessment
- Evidence evaluation (Screenshots/Links/Messages)
- Investigation priority (Low/Medium/High/Critical)
- Review decision (Valid/Invalid/Needs investigation/Escalate)
- Action taken (Warning/Suspension/Deletion/Content removal/No action)
- Response to reporter
- Case closure documentation
- Follow-up requirements

#### **UC-025: Content Moderation Dashboard**

**Actor**: Admin

Precondition: Admin has content moderation permissions

- Content type filter (Posts/Messages/Images/Files)
- Flagging source (Auto-detection/User reports/Manual review)
- Content status (Pending review/Approved/Rejected)
- Date range selection
- Risk level filter (Low/Medium/High)
- Content category (Study group/Mentorship/General)
- Batch action selection (Approve all/Delete all/Flag for review)
- Moderator assignment (if multiple admins)

# **6. Administrative Analytics Use Cases**

# **UC-026: Platform Analytics Dashboard**

**Actor**: Admin

Precondition: Admin is logged in with analytics access

**Required Input Data:** 

- Time period selection (Daily/Weekly/Monthly/Yearly)
- Metric type (User growth/Activity/Revenue/Engagement)
- User segment filter (Students/Mentors/Premium/Free)
- Geographic filter (City/Country)
- Platform usage statistics
- Popular study topics analysis
- Peak usage hours identification
- Conversion rate tracking (Free to Premium)

### **UC-027: Financial Audit Trail**

**Actor**: Admin

**Precondition**: Admin has financial access permissions

- Transaction date range
- Payment method filter
- Transaction type (Subscription/Refund/Chargeback)
- Amount range filter

- User type filter
- Transaction status (Successful/Failed/Pending)
- Currency selection
- Export format for accounting software
- Tax reporting requirements
- Dispute tracking

Postcondition: Detailed financial audit report generated

# 7. Communication System Use Cases

**UC-028: Send Direct Message** 

Actor: Student, Mentor

Precondition: Users are connected through groups or mentorship

**Required Input Data:** 

- Recipient selection
- Message content (max 1000 characters)
- Message priority (Normal/Urgent)
- Attachment (optional, max 5MB)
- Read receipt request (optional)

Postcondition: Message delivered with notification to recipient

**UC-029: Manage Notifications** 

**Actor**: Student, Mentor

Precondition: User is logged in

- Notification type preferences (Email/SMS/In-app)
- Frequency settings (Immediate/Daily digest/Weekly)
- Category preferences (Messages/Group updates/System alerts)
- Do not disturb schedule
- Sound/vibration preferences