



East West University

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Course Title: Information System Analysis and Design

Course Code: CSE347

Sec: 05

Group No: 2

Group members

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StudySync Project - Use Case Scenarios

StudySync is an online platform where students can post study-related problems and connect with mentors for job interview guidance.

Students can post about group study with topic, date, time, gender preference, and group size. Others can request to join or message the post owner. Once the required members are reached, the post is removed.

Mentors have a separate page where students can request mentorship for specific jobs or companies, and payment can be discussed.

Ads run on the site, but premium users won't see them. The admin controls all accounts and can suspend or delete any account for serious policy violations.

1. Account Management Use Cases

UC-001: Student Registration

Actor: Student

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

Required Input Data:

- Using OCR we will extract name, institution name, student id from student id card
- Age
- Email Address
- Gender
- Academic Level
- Password (Minimum 8 characters with special characters)

UC-002: Mentor Registration

Actor: Mentor

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

Required Input Data:

- Using OCR we will extract name, institution name, age, phone number from Company Id card
- 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):

- Job title
- Years of experience

- Areas of expertise
- 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

Required Input Data:

- 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

Required Input Data:

- 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 – using STRIPE)
- Billing information (Name, address)
- 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

Required Input Data:

- 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:

- Will use verification code to verify
- Document verification status (ID card/Company ID/NID)
- 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 – using NSFWJS

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

Required Input Data:

- 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

Required Input Data:

- 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

Required Input Data:

- 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

Required Input Data:

- 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