

FAST-NUCES

EDU-TRACK

PHASE-01

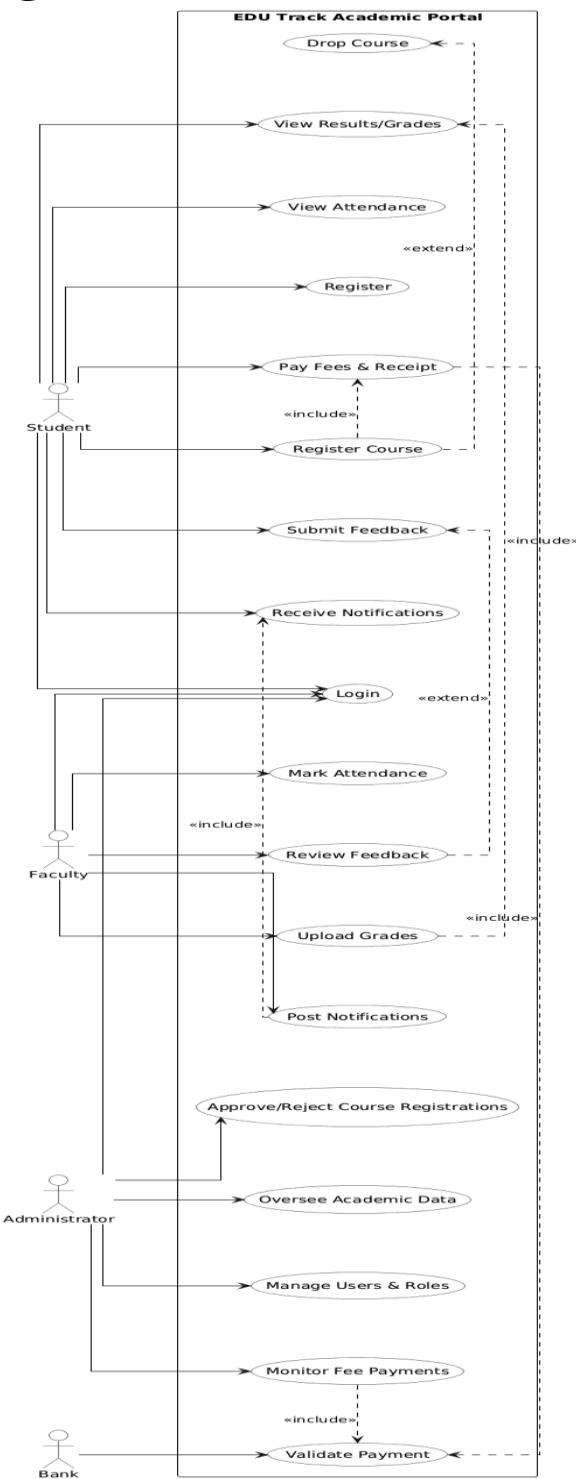
TEAM -02

| Member Name | Roll-No | Primary Responsibility |
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1) Use Case Diagram



2) Use Case Description (Use Case -01)

| | |
|------------------------|--|
| Identifier | UC-01 |
| Name | Register Course |
| Summary | Allows a student to register for courses offered in the semester. |
| Priority | High |
| Actors | Student ,Administrator |
| Pre-Conditions | Student must be logged into the system. Course registration period must be open. |
| Post-Conditions | Course registration request is submitted and awaits approval. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--|--|
| 1 | Student selects “Register Course” option | System displays available courses |
| 2 | Student chooses desired course(s) | System validates prerequisites and course availability |
| 3 | Student confirms registration | System submits registration request for admin approval |
| 4 | Administrator reviews request | System updates registration status |

Alternate Course of Action

| | | |
|---|---|------------------------------------|
| 1 | Student selects a course with missing prerequisites | System displays error message |
| 2 | Student attempts to register after deadline | System denies registration request |

2) Use Case Description (Use Case -02)

| | |
|------------------------|--|
| Identifier | UC-02 |
| Name | Drop Courses |
| Summary | Enables a student to drop a registered course within the allowed period. |
| Priority | Medium |
| Actors | Student ,Administrator |
| Pre-Conditions | Student must be logged in for course registration. |
| Post-Conditions | Course is removed from student's registration list. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--------------------------------------|--|
| 1 | Student selects “Drop Course” option | System displays list of registered courses |
| 2 | Student selects a course to drop | System validates deadline for dropping |

Alternate Course of Action

| | | |
|---|--|-------------------------------------|
| 1 | Student attempts to drop after deadline | System rejects request |
| 2 | Student tries to drop last compulsory course | System displays restriction warning |

2) Use Case Description (Use Case -3)

| | |
|------------------------|---|
| Identifier | UC-03 |
| Name | View Results/Grades |
| Summary | Allow students to view their academic performance in each course. |
| Priority | High |
| Actors | Student ,Faculty |
| Pre-Conditions | Student must be logged in. Grades must be uploaded by faculty. |
| Post-Conditions | Student view final or interim grades. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|---------------------------------------|---|
| 1 | Student selects “View Results” option | System displays grade report for registered courses |
| 2 | Faculty uploads grades | System updates student records |

Alternate Course of Action

| | | |
|---|--|--|
| 1 | Student views results before grades are uploaded | System displays “Grades not available” message |
|---|--|--|

2) Use Case Description (Use Case-04)

| | |
|------------------------|--|
| Identifier | UC-04 |
| Name | View Attendance |
| Summary | Student can check their attendance record for each course. |
| Priority | Medium |
| Actors | Student ,Faculty |
| Pre-Conditions | Faculty must have marked attendance. Students must be logged in. |
| Post-Conditions | Attendance details displayed. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--|-----------------------------------|
| 1 | Student selects “View Attendance” option | System retrieves attendance data |
| 2 | Faculty marks attendance | System updates attendance records |

Alternate Course of Action

| | | |
|---|---------------------------|--|
| 1 | Attendance not yet marked | System shows “Attendance data unavailable” message |
|---|---------------------------|--|

2) Use Case Description (Use Case-05)

| | | |
|-----------------------------------|--|-----------------------------------|
| Identifier | UC-05 | |
| Name | Pay Fees and Receipt | |
| Summary | Students can pay tuition fees and receive payment receipts. | |
| Priority | High | |
| Actors | Students, Bank, Administrator | |
| Pre-Conditions | Students must have pending fee. Bank gateway must be online. | |
| Post-Conditions | Fee payment completed and receipt issued. | |
| Typical Course of Action | | |
| 1 | Student selects “Pay Fees” option | System generates payment request |
| 2 | Student provides payment details | System sends request to bank |
| 3 | Bank validates payment | System confirms transaction |
| 4 | System issues receipt | Student downloads/prints receipt |
| Alternate Course of Action | | |
| S# | Actor Action | System Response |
| 1 | Bank rejects payment | System notifies student |
| 2 | Network failure occurs | System saves payment as “Pending” |

2) Use Case Description (Use Case-06)

| | |
|------------------------|---|
| Identifier | UC-06 |
| Name | Submit Feedback |
| Summary | Students provide feedback for courses and instructors. |
| Priority | Medium |
| Actors | Students, Faculty |
| Pre-Conditions | Students must be enrolled in the course. Feedback session must be open. |
| Post-Conditions | Feedback stored and available for faculty review. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--|-----------------------------------|
| 1 | Student selects “Submit Feedback” option | System displays feedback form |
| 2 | Student fills and submits feedback | System saves feedback |
| 3 | Faculty reviews feedback | System generates feedback reports |

Alternate Course of Action

| | | |
|---|-------------------------|--------------------------|
| 1 | Feedback session closed | System denies submission |
|---|-------------------------|--------------------------|

2) Use Case Description (Use Case-07)

| Identifier | UC-07 | |
|-----------------------------------|---|---|
| Name | Receive Notifications | |
| Summary | Students receive notifications about academic events, deadlines, and updates. | |
| Priority | Medium | |
| Actors | Students, Faculty, Administrator | |
| Pre-Conditions | User must be logged in. | |
| Post-Conditions | Notifications delivered to user. | |
| Typical Course of Action | | |
| S# | Actor Action | System Response |
| 1 | Faculty/Admin posts notification | System sends notification to concerned students |
| 2 | Student views notification | System displays notification details |
| Alternate Course of Action | | |
| 1 | Student offline | System queues notification for later delivery |

2) Use Case Description (Use Case-08)

| | |
|------------------------|--|
| Identifier | UC-08 |
| Name | Login |
| Summary | Authenticates users before accessing the portal. |
| Priority | High |
| Actors | Students, Faculty, Administrator |
| Pre-Conditions | User must have valid credentials. |
| Post-Conditions | User gains access to system based on role. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|-------------------------|------------------------------|
| 1 | User enters credentials | System validates credentials |
| 2 | Credentials valid | System grants access |

Alternate Course of Action

| | | |
|---|---------------------------------------|----------------------|
| 1 | User enters invalid credentials | System denies access |
| 2 | Account locked due to failed attempts | System notifies user |

2) Use Case Description (Use Case-09)

| | |
|------------------------|--|
| Identifier | UC-09 |
| Name | Mark Attendance |
| Summary | Faculty marks attendance for their classes. |
| Priority | High |
| Actors | Faculty |
| Pre-Conditions | Faculty must be logged in. Class session must exist. |
| Post-Conditions | Attendance records updated. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--|-----------------------------------|
| 1 | Faculty selects “Mark Attendance” option | System displays enrolled students |
| 2 | Faculty marks attendance | System updates records |

Alternate Course of Action

| | | |
|---|-------------------------|---------------------------------------|
| 1 | Faculty forgets to save | System prompts to confirm before exit |
|---|-------------------------|---------------------------------------|

2) Use Case Description (Use Case-10)

| | |
|------------------------|---|
| Identifier | UC-10 |
| Name | Review Feedback |
| Summary | Faculty reviews student feedback to improve teaching. |
| Priority | Medium |
| Actors | faculty |
| Pre-Conditions | Feedback must be submitted by student |
| Post-Conditions | Feedback displayed. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|-----------------------------------|-------------------------------------|
| 1 | Faculty selects “Review Feedback” | System retrieves feedback records |
| 2 | Faculty views reports | System displays summarized feedback |

Alternate Course of Action

| | | |
|---|-----------------------|---|
| 1 | No feedback submitted | System displays “No feedback available” |
|---|-----------------------|---|

2) Use Case Description (Use Case-11)

| | |
|------------------------|---|
| Identifier | UC-11 |
| Name | Upload Grades |
| Summary | faculty uploads student grades in system. |
| Priority | High |
| Actors | faculty |
| Pre-Conditions | Faculty must be logged in. Students must be enrolled. |
| Post-Conditions | Grades stored and visible to students. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|---------------------------------|-----------------------------------|
| 1 | Faculty selects “Upload Grades” | System displays enrolled students |
| 2 | Faculty enters grades | System validates and stores data |
| 3 | System updates results | Students can view grades |

Alternate Course of Action

| | | |
|---|-----------------------------------|-------------------------------|
| 1 | Faculty uploads incomplete grades | System prompts for completion |
|---|-----------------------------------|-------------------------------|

2) Use Case Description (Use Case-12)

| | |
|------------------------|---|
| Identifier | UC-12 |
| Name | Post Notifications |
| Summary | Faculty or admin posts announcements for users. |
| Priority | Medium |
| Actors | Faculty, Administrator |
| Pre-Conditions | User must be logged in with posting rights. |
| Post-Conditions | Notification sent to concerned users. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|---|-----------------------------------|
| 1 | Faculty/Admin selects “Post Notification” | System provides notification form |
| 2 | User submits notification | System distributes notification |

Alternate Course of Action

| | | |
|---|------------------------------|---------------------------|
| 1 | Notification form incomplete | System prompts correction |
|---|------------------------------|---------------------------|

2) Use Case Description (Use Case-13)

| | |
|------------------------|---|
| Identifier | UC-13 |
| Name | Approve/Reject Course Registrations |
| Summary | Administrator approves or rejects student course registration requests. |
| Priority | High |
| Actors | Administrator approves or rejects student course registration requests. |
| Pre-Conditions | Students must submit course registration requests. |
| Post-Conditions | Registration status updated. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|---------------------------------|--|
| 1 | Admin selects “Course Requests” | System lists pending requests |
| 2 | Admin reviews each request | System displays student details |
| 3 | Admin approves/rejects request | System updates status and notifies student |

Alternate Course of Action

| | | |
|---|---------------------|-----------------------------------|
| 1 | Admin delays action | System marks request as “Pending” |
|---|---------------------|-----------------------------------|

2) Use Case Description (Use Case-14)

| | |
|------------------------|---|
| Identifier | UC-14 |
| Name | Oversee Academic Data |
| Summary | Administrator monitors and manages institutional academic data. |
| Priority | Medium |
| Actors | Administrator monitors and manages institutional academic data. |
| Pre-Conditions | Admin must be logged in |
| Post-Conditions | Academic data updated. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|---------------------------------------|----------------------------------|
| 1 | Admin selects “Oversee Academic Data” | System displays academic records |
| 2 | Admin reviews data | System updates changes if made |

Alternate Course of Action

| | | |
|---|------------------|----------------------------|
| 1 | Data unavailable | System shows error message |
|---|------------------|----------------------------|

2) Use Case Description (Use Case-15)

| Identifier | UC-15 | |
|-----------------------------------|---|-------------------------------|
| Name | Manages Users and Roles | |
| Summary | Administrator manages accounts and assign roles. | |
| Priority | High | |
| Actors | Administrator manages accounts and assign roles. | |
| Pre-Conditions | Admin must be logged in | |
| Post-Conditions | Users added/modified/removed with assigned roles. | |
| Typical Course of Action | | |
| S# | Actor Action | System Response |
| 1 | Admin selects “Manage Users” | System displays user list |
| 2 | Admin adds/updates/deletes user | System updates database |
| 3 | Admin assigns roles | System saves permissions |
| Alternate Course of Action | | |
| 1 | Invalid user details | System prompts for correction |

2) Use Case Description (Use Case-16)

| | |
|------------------------|--|
| Identifier | UC-16 |
| Name | Monitor Fee Payments |
| Summary | Administrator monitors fee payment statuses. |
| Priority | Medium |
| Actors | Administrator ,Bank |
| Pre-Conditions | Bank transactions recorded. |
| Post-Conditions | Updated payment status report. |

Typical Course of Action

| S# | Actor Action | System Response |
|----|--------------------------------------|---|
| 1 | Admin selects “Monitor Fee Payments” | System displays student payment records |
| 2 | System verifies payments with bank | Updated status shown |

Alternate Course of Action

| | | |
|---|-----------------------|-------------------------------------|
| 1 | Bank validation fails | System flags transaction for review |
|---|-----------------------|-------------------------------------|

2) Use Case Description (Use Case-17)

| Identifier | UC-17 | |
|-----------------------------------|--|--------------------------------|
| Name | Validates Payments | |
| Summary | Bank validates student payment transactions. | |
| Priority | High | |
| Actors | Bank, System | |
| Pre-Conditions | Student submits payment details. | |
| Post-Conditions | Payment approved or rejected. | |
| Typical Course of Action | | |
| S# | Actor Action | System Response |
| 1 | System sends payment request | Bank validates payment |
| 2 | Bank approves transaction | System records payment success |
| Alternate Course of Action | | |
| 1 | Bank rejects payment | System notifies student |
| 2 | Payment timed out | System marks as pending |

3) Analysis Class Diagram

