System Requirements Student Management System

Work division:

Era:

Current Students should be able to: (UC06 -UC09)

- 1. make document requests.
- 2. select courses for each semester.
- view their tuition debt.
- 4. fill the survey for lecturer evaluation.

The Head of Department should be able to: (UC-23)

5. Assign lecturers to courses.

Aurora:

Administrative staff: (UC21-UC22, UC24 -UC26)

Head of Department:

- 1. review, monitor and evaluate syllabus material.
- 2. create new courses.

Coordinator

3. upload and make changes to the timetable records.

Finance Office

- 4. manage and update tuition fees accordingly.
- 5. manage document request payments.

Dea:

The Academic staff should be able to: (UC15 - UC18, UC33)

- 1. load grades into the system.
- 2. record the attendance of students.
- 3. view course syllabus.
- 4. access the survey responses.

The IT office should be able to:

5. Create Academic Staff Account

Ema:

Administrative Staff (UC28- UC32)

The Dean of Students Office should be able to:

- 1. create new student clubs.
- 2. post student club activities.

The Registrar's Office should:

- 3. create a new student account.
- 4. edit/update student account information.
- 5. process document requests.

Franko:

Student should be able do :(UC03 - UC05)

- 1. View their Transcript.
- 2. View their course grades
- 3. View their attendance for each course

Current student should be able to (UC12, UC14)

- 4. View their disciplinary records
- 5. Apply for resit exams

Herion:

All levels of users should be able to (UC01, UC02)

- 1. log in into the system.
- view/filter timetable records.

Current Students should be able to (UC10, UC11)

- 3. apply in student clubs
- 4. view student club activities.

Ersido:

Current Students should be able to:(UC13)

1. View course syllabus.

The main lecturer should be able to: (UC19)

2. Publish the course syllabus.

Advisor should be able to:(UC20)

3. Approve students' course selection.

The Dean of Students Office should be able to:(UC27)

4. Record any disciplinary/misconduct measures.

Log in

UC Name	UC01 - Log in
Summary	This use case describes the process by which a registered user logs into the system.
Dependency	UC30 or UC33 (Registering account)
Actors	Primary Actor: Registered User
Preconditions	The user must have a registered account on the platform.
Description of the Main Sequence	 The user navigates to the login page. The user enters their email and password. The user submits the login form. The system verifies the provided credentials. If the credentials are valid, the system grants access to the user's account. The user is redirected to their dashboard or the designated landing page.
Description of the Alternative Sequence	 If the user enters invalid credentials in step 2: a. The system prompts the user with an error message indicating invalid credentials. b. The user retries entering their credentials.
Non functional requirements	Performance: The login process should be completed within 10 seconds under normal server load conditions. Security: User passwords must be securely hashed and compared against the stored hash to prevent unauthorized access. Error Handling: The system should provide clear error messages for incorrect login attempts to assist users in troubleshooting.
Postconditions	The user is logged into their account. Access to the user's account features and functionalities is granted.

View timetable

UC Name	UC02 - View timetable
Summary	This use case describes the process in which the user views and filters the public timetable
Dependency	UC01(Log into the system)
Actors	Primary Actors: All registered users
Preconditions	The user must have a registered account on the platform
Description of the Main Sequence	 The user logs into the system. The user navigates to the timetable tab. There the user can see the public timetable and filters for specifying the sort of timetable(Graduate or Undergraduate), Class(Degree and field of study for example BA SWE2), Lecturer and Classroom. The user can choose to view the timetable of his choice applying each filter individually. An interface displaying a timetable is shown after the filters have been applied.
Description of the Alternative Sequence	The user should have all timetable information already published in the system however in the case that there is missing timetable information or the timetable is not approved the user must wait for the administrative staff and coordinators who are responsible for publishing the correct information.
Non functional requirements	Performance: The timetable filters should be fast and efficient, showing a result in less than 4 seconds under normal server load. Security: The timetable should be accessible to all users, however it must be confirmed that they are logged in, in the case that their session has expired they need to log in again before they can access their timetable. Error Handling: The system should provide the user with clear information in the case that incorrect filters are applied. Reliability: The system should ensure that the information regarding the timetable is publicly accessible and accurate.
Postconditions	The user is able to view a user interface displayed with the details of the specified timetable and is informed about the requested timetable.

View Transcript

UC Name	UC03- View Transcript
Summary	This use case describes the process of how the student can see their final grades and gpa (transcript).
Dependency	UC01(Log in into the system)
Actors	Primary Actor : Student
Preconditions	The user must be logged into their account. The user must be identified as a current student or alumni into the system.
Description of the Main Sequence	 The student opens the application and logs in. Press the transcript button. The student can now see the gpa and final grades.
Description of the Alternative Sequence	If the current student does not have any grades in the system yet. • The student opens the application and logs in. • Press the transcript button. • They cannot see their grades since none appear.
Non functional requirements	Security: Access to transcript should be restricted to registered users only. (students in this case) Error Handling: The system should provide clear error messages for any issues encountered Reliability: The system should ensure that the transcript page is accurately recorded.
Postconditions	The students are able to see their final grade of each course separately in each semester, and their gpa/cgpa.

View grades

UC Name	UC04- View grades
Summary	This use case describes the process of how the student can see their grades for each course.
Dependency	UC01(Log in into the system)
Actors	Primary Actor : Student
Preconditions	The user must be logged into their account. The user must be identified as a current student into the system.
Description of the Main Sequence	 The student opens the application and logs in. Press the Courses button. Choose the Course you want to see your grades in. The student can see their grades in this course.
Description of the Alternative Sequence	If the current student does not have any grades in the system yet. • The current student opens the application and logs in. • Press the Courses button. • Choose the Course. • They cannot see their grades since none appear.
Non functional requirements	Security: Access to grades should be restricted to registered users only. (students in this case) Error Handling: The system should provide clear error messages for any issues encountered Reliability: The system should ensure that grades page is accurately recorded.
Postconditions	Now the students can see their grades like : midterm exam,final exam,project etc for every course that they are taking or they took before in the university

View Attendance

UC Name	UC05- View Attendance
Summary	This use case describes the process of how the student can see their attendance for each course.
Dependency	UC01(Log in into the system)
Actors	Primary Actor : Student
Preconditions	The student must be logged into their account.
Description of the Main Sequence	 The student opens the application and logs in. Press the Courses button Select the course you want to see the attendance You press the Attendance Button The student can now see the attendance of this course for each lesson
Description of the Alternative Sequence	If the student does not start the university yet he can not have access to the course.
Non functional requirements	Security: Access on attendance should be restricted to registered users only. (current students and alumni in this case) Reliability: The system should ensure that all attendance for each course is accurately recorded.
Postconditions	The students can now view their attendance percentage and see the specific instances where they were absent during the lesson.

Make Document Request

UC Name	UC06- Make Document Request
Summary	This use case describes the process by which a current student can make document requests in the system.
Dependency	UC-01(Logging into the system) UC-32 (Processing document requests) UC-26 (Managing document request payments).
Actors	Primary Actor: Current Student Secondary Actor: Registrar's Office
Preconditions	The user must be logged into their account. The user must be identified as a current student into the system.
Description of the Main Sequence	 The current student navigates to the document request section within the dashboard of their account. The system presents the list of available types of documents that can be requested by the user as well as with their specifications(language, price). The current student selects the type of document they want to request. The system prompts the student to provide any necessary details or information required for the document request. The student submits the document request form. The system acknowledges the request for the student.
Description of the Alternative Sequence	 If the current student has any penalty debt to pay(usually from 50 €) they can not proceed to make a document request into the system. In order to do so, current students should: visit the Finance Office and pay the debt. proceed with the steps normally(mentioned in the main sequence)
Non functional requirements	Reliability: The system should ensure that all document requests are accurately recorded and processed. Performance: The document request process should be completed within 15 seconds under normal server load conditions. Usability: The document request interface should be easy to

	navigate for current students. Scalability: The system should be able to handle an increasing number of document requests without experiencing significant degradation in performance.
Postconditions	-The document request is successfully submitted and recorded into the systemThe student receives confirmation of their document request by acknowledging the request and being provided details regarding the document(date of application ,number of copies, total price, payment, status and actions) - The Registrar's Office is notified of the new document request they have to process, from the system.

Course selection

UC Name	UC07 - Course selection
Summary	This use case describes the process by which a current student selects courses for each semester in the system.
Dependency	UC-01 (Logging into the system) UC-20 (Course selection approval)
Actors	Primary Actor: Current Student Secondary Actors: -Advisor(to validate and confirm the selection)
Preconditions	-The user must be logged into the systemThe user must be identified as a current studentCurrent students must have paid the tuition fee of the respective semester, as well as any other penalty fee, if existentStudents are eligible to select courses only during the period of time the applications are open.

Description of The current student navigates to the course selection the Main section in the system dashboard. Sequence The system presents to the student the available courses for the upcoming semester. The student selects desired courses from the list. The advisor validates the selected courses for any prerequisites and if any issue is existent. • If no issues are found, the advisor confirms the course selection. The student receives confirmation of successful course selection (usually by email). If the student attempts to select a course for which they do not Description of meet prerequisites or if any issue is occured: the Alternative The advisor has the right to not accept a student's course Sequence selection. Advisor informs the student for steps she/ he should take in order to achieve a successful course selection. • Current student performs the steps suggested by the advisor (or the system itself). • Current student does course selection again. (Main sequence) Non functional Security: Access to course selection should be restricted to registered users only. (current students in this case) requirements Error Handling: The system should provide clear error messages for any issues encountered during course selection. Reliability: The system should ensure that all courses selected are accurately recorded. -The selected courses by the students are associated with the **Postconditions** student's account for the upcoming semester. -The student should access the course syllabus and other information and functionalities related to the selected courses. (attendance, grades)

View student's debt

UC Name	UC08 - View Debt
Summary	This use case describes the process by which a current student views their student debt within the system.
Dependency	UC-01(Log into the system) UC-25 (Managing and updating tuition fees)
Actors	Primary Actor: Current Student Secondary Actors: Finance Office(to validate and confirm the selection)
Preconditions	-The user must be successfully logged into the systemThe user must be identified as a current student.
Description of the Main Sequence	 The current student navigates to the "Finance" section within the dashboard of the system. The system retrieves the student's debt information from the database. (Finance Office) The system displays the student's debt. The student views the displayed debt information.
Description of the Alternative Sequence	No alternative sequence. This is just a "view" process.
Non functional requirements	Security: Access to student's debt information should be restricted to authenticated users only. Reliability: The system should ensure that all student debts are accurately recorded and processed from the Finance Office. Usability: The student debt interface should be easy to navigate for current students who want to access this feature.
Postconditions	-The current student proceeds to the payment process of the debt (in case of having one),in order to gain access to several actions taken on the system.

Fill out Survey

UC Name	UC09 - Fill out Survey
Summary	This use case describes the process by which a current student fills out a survey for lecturer evaluation within the system.
Dependency	UC01 (Logging into the system) UC07 (Course selection)
Actors	Primary Actor: Current student
Preconditions	-The student must be successfully logged into the systemThe current student must be enrolled in a course with a lecturer to evaluateThe survey application period must be initiated (usually before the final exams).
Description of the Main Sequence	 The student navigates to the system, and clicks the button that contains the survey information (usually the survey can be found at the "Interim grades" dashboard, as the grades cannot be accessed without filling the survey). The student selects each survey for each subject. The system presents the survey form containing questions and ratings related to the lecturer's performance, teaching style, and course material. The student fills out the survey by providing ratings and an optional written feedback for each lecturer/assistant lecturer. After completing the survey, the student submits the survey form. The system stores the survey responses anonymously for further analysis.
Description of the Alternative Sequence	No alternative sequence

Non functional requirements	Security: Access to the survey for lecturer evaluation should be restricted to authenticated students only. Reliability: The system should ensure that all student survey answers are accurately recorded. Usability: The survey should be easy to navigate and complete, as well as it should contain comprehensive content for the course and lecturers.
Postconditions	-The student has successfully filled out and submitted the survey for lecturer and course evaluation anonymouslyThe survey responses are stored securely in the system database anonymouslyThe student can access other functionalities of the system like; interim grades, finance or attendance, after completing the survey.

Apply to Student Clubs

UC Name	UC10 - Apply to Student Clubs
Summary	This use case involves the process of users applying to student clubs.
Dependency	UC01 (Log in into the system) UC28 (Creating student clubs/student clubs already exist)
Actors	Primary Actor: Current Students Secondary Actor: Dean of Students
Preconditions	Student is currently studying at the university, has a registered account and is logged in into the system. Clubs should have been created ahead of time by Administrative staff(Dean of Students). Club application period should be open.
Description of the Main Sequence	 When club applications open, the student navigates to the Clubs tab and can view all the active clubs that have been created & registered. Students can select a club they're interested in joining.

	 Then they must fill in the form with their personal information such as: Name, Surname, Phone Number and additional information that may be needed and is within the scope of the club. Afterwards students need to press the Submit button to confirm and submit the application. The information of the application is received by the system
Description of the Alternative Sequence	 and sent to the Dean of Students If the user has provided incomplete information the application is not submitted Rather the user is prompted to enter the information again, correctly.
Non functional requirements	Security: The system needs to ensure that only current students who are logged in can access the club application form Reliability: The system needs to ensure that data is passed correctly and reliably from the students applying to the Dean of Students and people who are responsible for the club. Usability: The application form should be accessible and use friendly design language to make sure that information is filled correctly by users.
Postconditions	The reviewed application information is saved by the Dean of Students staff in the system and the student is accepted into the club.

View Club Activities

UC Name	UC11 - View Club Activities
Summary	This use case involves the process of users viewing activities organized by their respective clubs
Dependency	UC01(Login) UC10(Applying/Joining a student club) UC28(Student clubs already exist) UC29(Creating and posting activities in Student clubs)
Actors	Primary Actor: Current Students Secondary Actor: Dean of Students
Preconditions	Student is currently studying at the university, has a registered account and is logged in into the system.

	Clubs should have been created ahead of time by the Dean of Students and the Student must be a registered member of that club. Club activity should have been posted ahead of time.
Description of the Main Sequence	 The Student navigates to the Clubs tab. Under the clubs section the Student selects the specific club whose activities the student is interested in. The Student can then view in a list all the activities that have been posted in that club by the organizers sorted by the time posted. The most recent activities will be at the top of the list of activities so the user can see which activities he can attend.
Alternative Sequence	No alternate sequence as the student can only view the activities.
Non functional requirements	Performance: A fast response rate of less than 3 seconds will make sure that there is a negligible bounce rate and that users stay interested in the club's activities. <u>Usability</u> : The user interface of club activities should use friendly design language to make sure that activities get their point through, meaning that information such as date, time, location, description are well communicated.
Postconditions	The user is well informed regarding the activities(and their details) of the clubs that he participates in and can choose to attend if interested.

View Disciplinary/Misconduct records

UC Name	UC12 - View Disciplinary/Misconduct records
Summary	This use case describes the process of how the student can see their disciplinary records if they have one.
Dependency	UC01(Log in into the system.)
Actors	Primary Actor : Students

Preconditions	-The student must be successfully logged into the systemThis student must be a current student or Alumni - This students must have a disciplinary records
Description of the Main Sequence	 The student open the application and logs in. Press the profile button Press the disciplinary button The student can see the disciplinary records with the date and some details
Description of the Alternative Sequence	If the student does not have a disciplinary record the button does not appear
Non functional requirements	Performance: The system should provide quick and clear-cut access to view the disciplinary record . Security: Access to the discipline page should be restricted to the head of department, ensuring data confidentiality and integrity.
Postconditions	The students are able to see the disciplinary record if they have at least one in the system. They can see the date when this problem happened and some details about description or If you're fined by this problem

View Course Syllabus

UC Name	UC13 - View Course Syllabus
Summary	Current students should be able to view the course syllabus for the courses they are enrolled in.
Dependency	The course syllabus must be prepared and available in a suitable format within the system. The system needs to efficiently retrieve and present the syllabus to the students. UC01 (Log in)
Actors	Current students who are enrolled in specific courses.
Preconditions	Authentication and authorization of the student. The student must

	be enrolled in the course for which they want to view the syllabus.
Description of the Main Sequence	 The student logs into the system using their credentials. They navigate to the section or module within the system related to course information or syllabi. The system displays a list of courses in which the student is currently enrolled. The student selects the specific course for which they want to view the syllabus. The system retrieves and displays the course syllabus to the student.
Description of the Alternative Sequence	If the course syllabus is not available or cannot be found for the selected course, the system displays a message indicating that the syllabus is not available at the moment.
Non functional requirements	Performance: The system should efficiently retrieve and present the course syllabus, even with a large number of enrolled courses and students. Response times should be minimal to provide a seamless user experience. Security: Access to the course syllabus should be restricted to authorized users only, ensuring that students can only view syllabus for courses in which they are enrolled
Postconditions	The student successfully views the course syllabus. The system may provide an option for the student to download or print the syllabus for reference.

Apply for Resit Exam

UC Name	UC14 - Apply for Resit Exam
Summary	This use case describes the process of applying for the resit exam/s.
Dependency	UC01(Log in into the system) UC15(Load grades into the system)
Actors	Primary actor : Current student Secondary Actors : Academic Staff
Preconditions	-The student must be successfully logged into the systemThe student must be a current studentThe student must have a final grade of DC or less to apply for the resit exam.
Description of the Main Sequence	 The student opens the application and logs in. Press the Resit Application button to have access on it You see the courses that you have taken as final grades Dc or less. The student select the course he want to apply for resit You can see a confirmation by the system that you are approved for this request exam.
Description of the Alternative Sequence	If the student has not yet completed the final exams and the professors have not finalized the grades, you do not have access to this page. • The system prompts the user with an error message "Resit application has not started yet". • The system returns you in the menu page
Non functional requirements	Usability: The system interface should be user-friendly and intuitive, allowing students to easily navigate through the application and submit resit exam requests without confusion. Reliability: The system should be available and functional at all times to accommodate resit exam requests from students

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	whenever they need to access it.
	Security: The system should ensure the security and privacy of student data, requiring authentication for logins and encrypting sensitive information such as grades and personal details.
	Performance: The system should have fast response times, minimizing loading times and delays when students log in, access their grades, and submit resit exam requests.
	Scalability: The system should be able to handle a potentially large volume of concurrent users during peak times, ensuring that all students can access it without experiencing performance degradation.
Postconditions	Upon successful submission of a resit exam request, the system confirms approval to the student and updates their record accordingly.

Load grades into the system

UC Name	UC15 - Load grades into the system
Summary	Academic staff members should be able to upload grades into the system
Dependency	The grading information must be prepared and available in a suitable format. The upload procedure needs to be handled by the system effectively (verifying the data being uploaded, storing it securely, updating the database correctly). UC01 (Log in)
Actors	The primary actor is the academic staff member (can be either main or assistant lecturer), which is responsible for the particular course.
Preconditions	-Authentication and authorization of the staff member
Description of the Main	 The staff member logs into the system and goes to the "Courses" section(the courses she/he teaches appears) He/she selects the specific course for which they want to

Sequence	 within the "Course" section, the teacher selects the activity they want to perform("Upload Grades", in this case) The system then shows all non-finalized grades the teacher has uploaded (for modification)or the teacher can add a new grade(for example, a new quiz or a new assignment) The system prompts the teacher to specify the type of grade(e.g. Midterm exam, final exam, assignment etc.) and its weight(e.g. 20%, 30%). The system then displays a list of students enrolled in the selected course. The teacher uploads the respective points for each student. After entering all the points the teacher needs to confirm the upload. The system validates for accuracy and consistency. The system updates the grades in the database.
Description of the Alternative Sequence	 After uploading the grades, the teacher identifies an error or discrepancy in one of the grades. He/she navigates back to the "Grade Uploading" section and now he/she selects the particular non-finalized grades that have been uploaded(not a new one). The teacher edits the grade for that student and the system validates the changes. The changes are reflected on the database.
Non functional requirements	PERFORMANCE: Efficiency of grade upload, even when a large number of students enrolled in a particular course, to ensure minimal waiting times for teachers. The system should allow for quick and seamless modification of grades. SECURITY: Access to the grades uploaded should be restricted to authorized users only, and data transmission should be encrypted to protect sensitive information.
Postconditions	 The user interface reflects the updated grades. The system sends a confirmation message to the teacher indicating the upload was successful.

Record Attendance

UC Name	UC16 - Record Attendance of Students
Summary	Academic Academic staff members should be able to record the attendance of students in the system.
Dependency	UC01 (Log in into the system)
Actors	The primary actor is the academic staff member (main or assistant lecturer) responsible for the course.
Preconditions	Authentication and authorization of the staff member.
Description of the Main Sequence	 Staff member logs into the system and navigates to the "Course" section. Selects the specific course for which they want to record the attendance. Within the "Course" section, selects the activity they want to perform, in this case, "Record Attendance" The system displays all the attendance records previously uploaded for the selected course, showing the date, the type of teaching and description (e.g, Feb 23 2024 - Lecture, Introduction) Staff members should choose to modify an existing attendance record or add a new one. If adding a new record, the system prompts the staff member to specify the date, type (lesson, practice, lab), and hours of the session. The system then displays a list of enrolled students in the course Staff member uploads the attendance record for each student. After entering all the attendance records the teacher needs to confirm the upload. The system validates for accuracy and consistency. The system updates the attendance records in the database
Description of the Alternative	After recording attendance, staff member identifies an error or discrepancy.

Sequence	 Navigates back to the "Record Attendance" section and selects the specific attendance record to modify. Edits the attendance record for the session. System validates changes. Changes are reflected in the database.
Non functional requirements	 PERFORMANCE: Efficient attendance recording, even with a large number of students enrolled in the course, to ensure minimal waiting times for staff. SECURITY: Access to attendance records restricted to authorized users, with encrypted data transmission for protection.
Postconditions	User interface reflects the updated attendance records. System sends confirmation messages indicating successful recording of attendance.

View Syllabus (Academic)

UC Name	UC17 - View Course Syllabus
Summary	Academic staff members should be able to access and view the course syllabus that have previously been published in the system.
Dependency	The course syllabus must have been previously published by the academic staff member in the system. UC01 (Log in)
Actors	Primary actor:Academic staff member (main or assistant lecturer) responsible for the course.
Preconditions	Authentication and authorization of the staff member. The course syllabus must be previously published by the staff member.
Description of the Main Sequence	 Staff member logs into the system. Navigates to the "Course" section. Selects the specific course for which they want to view the syllabus.

	 Within the course section, select the option to view the syllabus. The system displays the course syllabus previously published by the staff member.
Description of the Alternative Sequence	• N/A
Non functional requirements	PERFORMANCE: The system should provide quick access to the syllabus information. SECURITY: Access to the syllabus should be restricted to the authorized users only.
Postconditions	The system maintains security and privacy of the syllabus content.

Access Survey Responses

UC Name	UC18 - Access Survey Responses
Summary	Academic staff members should be able to access the survey responses submitted by students for their respective courses.
Dependency	Survey responses must be submitted by students for their teachers. Access to survey responses should be enabled after the midterms exams week. UC01 (Log in)
Actors	Primary Actor: Academic staff member (main or assistant lecturer) responsible for the course.
Preconditions	Authentication and authorization of the staff member. Survey responses must have been submitted by students for the respective courses. Midterm exams week must have passed.
Description of the Main Sequence	 After the midterm exams week, staff members log into the system. Navigates to the "Course" section. Selects the specific course they teach.

	 Within the course section, select the option to access survey responses. The system displays the survey responses submitted by students for that course. The survey show an overall assessment, without revealing any student name or identification.
Description of the Alternative Sequence	• N/A
Non functional requirements	PERFORMANCE: The system should efficiently retrieve and display survey responses, even for courses with a large number of enrolled students. SECURITY: Access to survey responses should be restricted to authorized users only.
Postconditions	The academic staff member successfully accesses the survey responses for each course. Survey ensures anonymity. The system maintains security and privacy of the survey responses.

Publish Syllabus

UC Name	UC19 - Publish Syllabus
Summary	The main lecturer should be able to publish the course syllabus.
Dependency	The course syllabus must be prepared and available in a suitable format within the system. The system needs to handle the upload procedure effectively, verifying the data being uploaded, storing it securely, and updating the database correctly. UC01 (Log in)
Actors	Main lecturer
Preconditions	Authentication and authorization of the main lecturer. The course for which the syllabus will be published is selected.

Description of The main lecturer logs into the system. the Main They navigate to the course management module. Sequence • The main lecturer selects the specific course for which they want to publish the syllabus. • The system displays the current draft or template of the course syllabus. The lecturer updates or modifies the syllabus content as necessary. The main lecturer publishes the updated syllabus. Description of • If the main lecturer encounters an error or discrepancy the Alternative while publishing the course syllabus, such as an invalid file Sequence format or incomplete content, the system displays an error message. • The main lecturer is prompted to correct the error or provide missing information. • The lecturer makes the necessary adjustments to the syllabus. • After making the corrections, the lecturer attempts to publish the syllabus again. • The system validates the updated syllabus content. • If the validation is successful, the system publishes the syllabus. If the validation fails again, the system displays another error message, prompting the lecturer to review and correct the issues. • This loop continues until the syllabus is successfully published or the lecturer cancels the operation. Non functional Performance: The system should efficiently handle the upload requirements and publication of course syllabi, ensuring minimal waiting times for lecturers. Security: Access to the syllabus publication feature should be restricted to authorized main lecturers only. Data transmission should be encrypted to protect sensitive information.

Postconditions	 The course syllabus is published and made available to students enrolled in the course. The system sends a confirmation message to the main lecturer indicating the publication was successful.
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Approve Course Selection

UC Name	UC20 - Approve Course Selection
Summary	Advisors should be able to approve students' course selection.
Dependency	The course selection data must be available in the system. The system needs to handle the approval process effectively, verifying the selected courses and updating the student's record accordingly. UC01 (Log in into the system)
Actors	Advisor
Preconditions	Authentication and authorization of the advisor. The student has submitted their course selection for approval.
Description of the Main Sequence	 The advisor logs into the system. They navigate to the advisor dashboard or student management module. The advisor selects the student whose course selection they want to approve. The system displays the student's submitted course selection. The advisor reviews the selected courses and verifies their suitability. The advisor approves the student's course selection.
Description of the Alternative Sequence	 If the advisor identifies any issues or discrepancies with the student's course selection, such as missing prerequisites or course conflicts, the advisor contacts the student to discuss potential modifications. The advisor works with the student to resolve the issues and adjust the course selection as necessary.

	After resolving the issues, the advisor repeats the approval process by reviewing and approving the modified course selection.
Non functional requirements	Performance: The system should efficiently handle the approval process, ensuring minimal waiting times for advisors. Security: Access to the course selection approval feature should be restricted to authorized advisors only.
Postconditions	 The student's course selection is approved, and their record is updated accordingly. The system sends a notification to the student informing them that their course selection has been approved.

Review Syllabus

UC Name	UC21 - Reviews syllabus material
Summary	This use case describes the process in which the head of department reviews syllabus material of a specific lecturer.
Dependency	UC01(Login) UC19(Main Lecturer publishes syllabus)
Actors	Primary Actor: Head of Department Secondary Actors: Main lecturer(who published the syllabus)
Preconditions	The head of department is authenticated and authorized in the system. Syllabus material is available for review, therefore a main lecturer must have published it beforehand.

Description of the Main Sequence	 The head of department logs into the student management system. The head of department navigates to the syllabus dashboard. The head of department can view any published course syllabus up for review. The system displays the syllabus material for a selected course(s). The head of department reviews the syllabus content, making any necessary changes. The head of department approves the revised syllabus material.
Description of the Alternative Sequence	If the head of department encounters any errors or inconsistencies in the syllabus material: -The head of department flags the issues, and denies submission of the syllabusThe system notifies the syllabus' main lecturer of his rejectionThe head of department proceeds with the review process after/if the issues are addressed.
Non functional requirements	Security: Access to the syllabus section should be restricted to the head of department only.
Postconditions	The reviewed syllabus material is saved in the system, reflecting any changes made by the head of department.

Create new Course

UC Name	UC22 - Create new Course
Summary	This use case involves the process of creating new courses.
Dependency	UC01(Login)
Actors	Primary Actor: Head of Department Secondary Actors: Academic Staff (Main Lecturer and Assistant Lecturers)
Preconditions	The head of department is authenticated and authorized in the system.
Description of the Main Sequence	 The head of department logs into the student management system. The head of department navigates to the "New Course" tab. The head of department fills out the necessary details for the new course, including course title, description, prerequisites, and credit hours. The head of department submits the course creation form. The system notifies any relevant academic/administrative personnel of the newly created course.
Description of the Alternative Sequence	If the entered information for the new course is incomplete or invalid: -The system prompts the head of department to provide the missing or corrected information.
Non functional requirements	Error handling: The system should provide clear error messages for any issues or invalid information during course creation.

	Security: Access to the course creation functionality should be restricted to authorized personnel, ensuring data integrity and preventing unauthorized modifications.
Postconditions	A new course is successfully created and added to the course catalog within the system, further utilized through course selection.

Assigning lecturer to teach Course

UC Name	UC23 - Assigning lecturers to courses
Summary	This use case describes the process of assigning lecturers to a course.
Dependency	UC01 (Logging into the system) UC22 (Creating new course)
Actors	Primary Actors: Head of Department Secondary Actors: Academic Staff
Preconditions	The Head of Department must be authenticated and authorized to access the system. The lecturer/s are required to meet the requirements and qualifications for teaching the course.
Description of the Main Sequence	 The Head of Department logs into the system. The Head of Department navigates to the course management. The system displays a list of available lecturers who are qualified to teach a selected course. The Head of Department reviews the list of available lecturers and their qualifications and selects one or more lecturers to assign to the course. The Head of Department updates the course information with the assigned lecturers. The system notifies the assigned lecturers of their new course assignments.

Description of the Alternative Sequence	If there are no available lecturers qualified to teach the selected course: -The system notifies the Head of Department of the unavailability. -The Head of Department may choose to proceed with other arrangements.
Non functional requirements	Performance: The system should provide a responsive interface for selecting lecturers, ensuring a smooth and efficient process for the Head of Department. Security: Access to lecturer assignment features should be restricted to authorized personnel, maintaining confidentiality of lecturer information. Reliability: The system should accurately reflect the current availability and qualifications of lecturers for assignment, minimizing errors in lecturer selection.
Postconditions	The selected course is successfully updated with the assigned lecturers within the system. Lecturers are notified of their new course assignments, and the lecturer/s-course pairings will be available for student course selection.

Upload Timetable

UC Name	UC24 - Upload Timetable
Summary	This use case involves the Coordinator uploading and making changes to the timetable records within the student management system.
Dependency	UC01(Login)
Actors	Primary Actor: Coordinator Secondary Actors: None
Preconditions	The Coordinator is authenticated and authorized within the system.

Description of the Main Sequence	 The Coordinator logs into the student management system. The Coordinator navigates to timetable management. The Coordinator selects the timetable records to upload or modify. For uploading new timetable records: a. The Coordinator prepares the timetable data in the required format. b. The Coordinator uploads the timetable data into the system. c. The system validates the uploaded data. d. If the validation is successful, the system adds the new timetable records to the database. For making changes to existing timetable records: a. The Coordinator selects the timetable record to be modified. b. The Coordinator makes the necessary changes to the timetable details. c. The system validates the modified data. d. If the validation is successful, the system updates the timetable record in the database. The system notifies Students, Academic Staff and
Description of the Alternative Sequence	Administrative Staff of any changes to the timetable. If the uploaded timetable data contains errors or inconsistencies(for example multiple courses overlapping for the same class): -The system notifies the Coordinator of the errorsThe Coordinator corrects the errors in the timetable data.
Non functional requirements	Performance: The system should handle timetable uploads and modifications efficiently, minimizing processing time to ensure timely updates. Security: Access to timetable management features should be restricted to the Coordinators only.
Postconditions	Timetable records are successfully uploaded or modified within

the system, reflecting any changes made by the Coordinator. Notifications are sent to relevant stakeholders regarding the updates.(Students, Academic Staff and Administrative Staff)

Manage Tuition fees

UC Name	UC25 - Manage Tuition fees
Summary	This use case involves the Finance Office managing tuition fees for each student, keeping track of the payments according to scholarship and debt.
Dependency	UC01(Login) UC30(create student account)
Actors	Primary Actor: Finance Office Secondary Actors: Students
Preconditions	The Finance Office is logged into the system. It retrieves information from external sources like the bank account of the university, and all occurring transactions.
Description of the Main Sequence	 The Finance Office logs into the student management system. The Finance Office navigates to tuition fee management. Based on their transcripts, The Finance Office/system updates tuition fees for each scholarship student accordingly. The Finance Office submits the fees as debt to be viewed on the students' side. The Finance Office, through external sources, checks which payments have been processed within the deadline, and updates corresponding student debt.

Description of the Alternative Sequence	-If a student does not pay their tuition fees on time, The Finance Office will be obligated to charge a late payment fee until a second deadline, consequently updating the debt on the systemIf they still haven't paid by the second deadline, they will not be able to attend any courses for the term.
Non functional requirements	Security: Access to tuition fee management features should be restricted to authorized personnel, ensuring data confidentiality and integrity.
Postconditions	Tuition fees for the selected academic term are successfully managed and updated within the system, reflecting any changes made by the Finance Office. Invoices or fee statements are generated for enrolled students based on the updated fee structure. (In case of debt higher than 50 Euro, other UC-s, e.g. the document request sent from the students, are affected.)

Document Request Payment

UC Name	UC26 - Document Request Payment
Summary	This use case involves the Finance Office managing document request payments within the student management system.
Dependency	UC01(Login) UC06(Student makes a document request) UC32(Registrar processes a requested document)
Actors	Primary Actor: Finance Office Secondary Actors: Students, Registrar's Office
Preconditions	The Finance Office is logged in the system. The student must have requested a document.
Description of the Main	The Finance Office logs into the student management

Sequence	 system. The Finance Office navigates to the document request payment management section. The Finance Office views the list of pending document requests that require payment. The Finance Office selects a document request for payment processing. The Finance Office verifies the details of the document request and the associated fee. The Finance Office initiates the payment process, by manually entering payment details. (The student must have paid their fee at the school premises.) The system updates the status of the document request to indicate that payment has been received. The Finance Office generates a receipt or confirmation for the payment transaction, notifying the Registrar's Office of the payment confirmation.
Description of the Alternative Sequence	If the student does not pay their fee, their document request simply remains pending for a short period of time, until it expires.
Non functional requirements	Performance: The system should handle document request payment processing efficiently, ensuring timely confirmation of payments. Security: Access to document request payment management features should be restricted to authorized personnel, ensuring secure handling of payment information.
Postconditions	Payment for the selected document request is successfully processed within the system, and the status of the document request is updated. A receipt is generated for the transaction, and the Registrar's office is notified accordingly. The latter will proceed to provide the requested document for the student.

Record disciplinary/misconduct cases

UC Name	UC27- Record disciplinary cases
Summary	This use case describes the process by which The Dean of Students Office records any disciplinary/misconduct measures.
Dependency	UC01 (Log in)
Actors	Primary Actor: Dean of Students personnel
Preconditions	- Dean of Students Office personnel are logged in the system Student information is already stored in the system.
Description of the Main Sequence	 Dean of Students logs into the system. Dean selects the student involved in the disciplinary/misconduct issue. Dean records details of the incident, including date, nature of the misconduct, and any actions taken. System saves the recorded information.
Description of the Alternative Sequence	None
Non functional requirements	Security: Access to disciplinary records should be restricted to authorized personnel only. Performance: The system should handle a large volume of records efficiently. Reliability: Data recording should be reliable and accurate.
Postconditions	The disciplinary/misconduct measures are successfully recorded in the system for future reference.

Create new Student Clubs

UC Name	UC28 - Create Student Clubs
Summary	This use case describes the process of creating new student clubs .
Dependency	UC01 (Log in)
Actors	Primary Actor: Dean of Students personnel
Preconditions	Dean of Students personnel is logged into the system with appropriate permissions. There are no existing clubs with conflicting names in the system.
Description of the Main Sequence	 The Dean of Students logs into the system. They navigate to the section for creating new student clubs. They input the necessary information for the new club (e.g., club name, purpose, advisor). The system validates the information provided. If validation is successful, the system creates the new club.
Description of the Alternative Sequence	If any required information is missing or invalid, the system prompts the Dean of Students to correct the errors before proceeding with club creation.
Non functional requirements	Security: Access to club activity posting should be restricted to the Dean of Students or authorized personnel only. Reliability: Club creation should be reliable, ensuring accurate data entry and validation.
Postconditions	A new student club is successfully created in the system.

Post Student Club Activities

UC Name	UC29 - Post Student Club Activities
Summary	This use case describes the process of posting activities for a student club .
Dependency	UC01 (Log in) UC28 (a student club already exists)
Actors	Primary Actor: Dean of Students personnel
Preconditions	Dean of Students personnel is logged into the system with appropriate permissions. Student clubs are already registered in the system.
Description of the Main Sequence	 Dean of Students logs into the system. Dean navigates to the section for managing student club activities. Dean selects the club for which they want to post activities. Dean inputs details of the activity, including date, time, location, and description. System saves the posted activity.
Description of the Alternative Sequence	If you want to post an activity for a club that is not registered, you would have to go to the registering clubs section of the system first.
Non functional requirements	Security: Access to club activity posting should be restricted to the Dean of Students or authorized personnel only. Reliability: The system should reliably save posted activities and ensure they are displayed accurately.
Postconditions	The activity is successfully posted for the selected student club, and the information is saved in the system for students to view.

Create new Student Account

UC Name	UC30 - Create new Student Account
Summary	This use case describes the process of creating new student accounts.
Dependency	UC01 (Log in)
Actors	Primary Actor: Registrar's Office Staff
Preconditions	Staff members of the Registrar's Office have logged into the system with appropriate permissions.
Description of the Main Sequence	 Staff members of the Registrar's Office log into the system. They navigate to the section for creating new student accounts. They input the required student information The system validates the information and generates a unique student ID. Staff members review and confirm the creation of the new account. The system saves the student information and assigns the new student ID.
Description of the Alternative Sequence	If any required information is missing or invalid, the system prompts staff members to correct the errors before proceeding with account creation.
Non functional requirements	Reliability: The account creation process should be reliable, ensuring accurate data entry and ID generation. Security: The system must adhere to security protocols to protect student data from unauthorized access or breaches. Privacy: The system should handle student information in compliance with relevant privacy regulations, ensuring confidentiality and data protection.
Postconditions	A new student account is successfully created with a unique student ID assigned, and the student information is saved in the system.

Update/Edit student information

UC Name	UC31 - Update/Edit student information
Summary	This use case describes the process of updating/editing student information.
Dependency	UC01 (Log in) UC30(The student account to be edited should already exist)
Actors	Registrar's Office personnel
Preconditions	 Registrar's Office personnel have logged into the system with appropriate permissions. Student accounts are already created and accessible in the system.
Description of the Main Sequence	 Registrar's Office personnel log into the system. They search for the student account whose information needs to be edited/updated. They select the specific student account. The system displays the current student information. Registrar's Office personnel make the necessary edits/updates to the information. User clicks to save the changes. If the edited information is not valid, the system prompts the user to correct the errors. The system updates the student account with the validated edited/updated information.
Description of the Alternative Sequence	If the student account cannot be found, Registrar's Office personnel may search using different criteria or initiate the creation of a new student account. If the edited information is not valid, the user is prompted by the system.
Non functional requirements	Security: Access to editing/updating student account information should be restricted to authorized personnel only.
	Privacy: The system should handle student information in compliance with relevant privacy regulations, ensuring confidentiality and data protection.
	Reliability: Changes made to student account information should

	be accurately reflected in the system without errors.
Postconditions	The student account information is successfully edited/updated in the system, and the changes are saved and reflected in the updated student records.

Process Document Requests

UC Name	UC32 - Process Document Requests
Summary	This use case describes the process of processing document requests.
Dependency	UC01 (Log in) UC26 (finance office manages document request payments) UC06 (student makes document requests)
Actors	Primary Actors: Registrar's Office personnel Secondary Actors: Students, Finance Office
Preconditions	Registrar's Office personnel are authenticated and authorized to access the system. Student records and document templates are stored in the system. Finance Office has approved payment for student request.
Description of the Main Sequence	 Registrar's Office personnel log into the system. They navigate to the document request section. The system generates the requested document based on the student's information and the selected template. Registrar's Office personnel review the document for accuracy. If everything is correct, the system sends the document request approval to the specified recipient. (Ready status)
Description of the Alternative Sequence	-If the document is generated incorrectly, the Registrar's Office personnel can initiate a review processRegistrar's Office personnel review the document again, identifying errors and making necessary correctionsOnce corrected, the system sends the document request approval to the specified recipient. (Ready status)

Non functional requirements	Performance: The system should efficiently process document requests, minimizing wait times for students. Reliability: Document generation should be accurate and dependable. Security: Access to student records and document templates should be restricted to authorized personnel only.
Postconditions	The requested document is successfully generated and the specified recipient is notified of the "Ready" status.

Create staff account

UC Name	UC33 - Create Academic Staff Account
Summary	The IT office should be able to create new academic staff accounts in the system.
Dependency	UC01 (Log in)
Actors	Primary actor:IT administrator.
Preconditions	Authentication and authorization of the IT professional to perform administrative tasks. Access to administrative privileges or permission to create, modify, or delete user accounts.
Description of the Main Sequence	 The IT admin logs into the system with administrative credentials. They navigate to the user management. Within the user management section, they select the option to create a new user account. They enter the required information for the new academic staff member, including username, password, contact information, and role designation. After entering the necessary details, they submit the form to create the new account. The system validates the information provided and securely saves the username and password in the database, and confirms the successful creation of the new academic staff

	account.
Description of the Alternative Sequence	• N/A
Non functional requirements	PERFORMANCE: The system handles account creation requests efficiently to ensure minimal waiting times for the IT office or system administrator. SECURITY: The system enforces strong password policies and encrypts sensitive data to ensure the security of newly created accounts. USER MANAGEMENT: The system provides a user-friendly interface with clear prompts and error messages for input validation. SCALABILITY: The system accommodates an increasing number of academic staff members over time without compromising performance or usability.
Postconditions	A new academic staff account is successfully created in the system, and the username and password details are securely saved in the database. The newly created account is available for the academic staff member to use for authentication and access to system features.