**Use Cases Document**

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| **Module Name** | Courses center |
| **Date** | November 3 , 2023 |
| **Version** | 1.0 |

## Use Case(s)

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| --- | --- | --- | --- | --- |
| **Use Case ID:** | UC001 | | | |
| **Use Case Name:** | Users Registration | | | |
| **Created By:** | Rehab Shaban | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | October 16, 2023 | | **Last Revision Date:** |  |
| **Actors:** | | Student, instructor | | |
| **Description:** | | This use case outlines the process of registering students for courses, with both instructors and students as primary actors. | | |
| **Trigger:** | | The instructor or student initiates the registration process. | | |
| **Preconditions:** | | 1. **The system is operational and accessible**. 2. **Course information, including available courses and their prerequisites, is up to date in the system.** | | |
| **Post conditions:** | | .1For successful registrations, the students are registered for the selected course, and the system provides a registration confirmation.  .2For unsuccessful registrations (due to ineligibility or other issues), the system informs the instructor or student, and no registrations are made. | | |
| **Normal Flow:** | | 1. The system displays a list of available courses. 2. The instructor selects a course to register students. 3. The system verifies the eligibility of the selected students for the chosen course. 4. If eligibility is met for all students, the students are successfully registered for the course, and the system confirms the registration. 5. If eligibility is not met for any student, the system informs the instructor of the ineligible students, and the registration process for those students is aborted. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | If no courses are available, the system displays a message to the student, indicating that no courses are open for registration.  In case the student selects a course for which registration is closed, the system displays a message indicating that registration for that course is not allowed at the moment. | | |
| **Exceptions:** | | 1. If the system encounters an error during the registration process, it displays an error message and prompts the instructor to try again.  2. If the instructor or student cancels the registration process, the use case ends without any registrations. | | |
| **Includes:** | | **This use case may include the "View Available Courses”** | | |
| **Frequency of Use:** | | This use case is expected to be used frequently, especially during course enrollment periods, such as before the start of a new round. | | |
| **Special Requirements:** | | * 1.Instructors should have the appropriate permissions and access rights to initiate the registration process. * **2**. The system should provide clear and user-friendly error messages to handle exceptions effectively. | | |
| **Assumptions:** | | * Instructors and students have valid accounts and are logged into the system. * Course information is accurate and up-to-date. * The system is functional and accessible. | | |
| **Notes and Issues:** | | A potential issue to consider is how to handle concurrent registration attempts for the same course by different instructors. This could result in conflicts or over-enrollment. | | |

## 1.2

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| **Use Case ID:** | UC002 | | | |
| **Use Case Name:** | User login | | | |
| **Created By:** | Rehab Shaban | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | October 16, 2023 | | **Last Revision Date:** |  |
| **Actors:** | | Student, instructor | | |
| **Description:** | | The "User Login" use case outlines the process by which both instructors and students access the system by providing their respective credentials (username and password). | | |
| **Trigger:** | | The "User Login" use case is triggered when a user, whether an instructor or student, initiates the login process by accessing the system and providing their login credentials. | | |
| **Preconditions:** | | 1. **The system is operational and accessible.** 2. **Users (instructors and students) have previously** **registered accounts within the system.** 3. **Users have valid and up-to-date login credentials, including a username and password, to access their accounts.** | | |
| **Post conditions:** | | * For a successful login, users are granted access to their respective profiles and functionalities within the system. * For failed login attempts, users receive appropriate error messages, and access to the system is denied. | | |
| **Normal Flow:** | | 1. The user selects the login option on the system interface. 2. The user enters their username and password in the designated fields. 3. The system validates the provided credentials against the stored user account information. 4. If the credentials are valid, the system grants access to the user's profile and associated features. 5. If the credentials are invalid or incomplete, the system displays an error message, indicating that the login attempt failed, and prompts the user to re-enter their login information. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | If a user forgets their password, they can initiate the password recovery process through a "Forgot Password" link. The system sends instructions to the user's registered email address for resetting their password. | | |
| **Exceptions:** | | If the system encounters technical issues during the login process, it displays a general error message and advises the user to try logging in again later. | | |
| **Includes:** | | **This use case may include security measures such as account lockout after a certain number of failed login attempts to enhance system security.** | | |
| **Frequency of Use:** | | The "User Login" use case is frequently used, as users need to log in to access the system regularly. | | |
| **Special Requirements:** | | * The system must implement strong security measures to protect user accounts and data, including encryption of stored passwords and secure communication during login. * Passwords should be stored securely, such as through salted and hashed storage techniques, to prevent unauthorized access to user data. | | |
| **Assumptions:** | | * Users have already registered accounts and provided valid credentials. * Users have provided accurate and up-to-date contact information for account recovery, including email addresses for password reset. | | |
| **Notes and Issues:** | | * One potential issue to consider is the need for a secure and efficient password recovery mechanism in case users forget their login credentials. * monitoring and responding to brute force login attempts should be considered to prevent unauthorized access and protect user accounts from potential breaches.   Top of Form | | |

## 1.3

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| **Use Case ID:** | UC003 | | | |
| **Use Case Name:** | Update Profile | | | |
| **Created By:** | Hasnaa Tarek | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | October 16, 2023 | | **Last Revision Date:** | October 16, 2023 |
| **Actors:** | | Students  Instructors | | |
| **Description:** | | allows primary actors (students and instructors) to modify and enhance their user profiles within the system. Users can manage their personal and contact information, ensuring their profiles remain up to date. | | |
| **Trigger:** | | when the user initiates the profile and want to update process through the user interface. | | |
| **Preconditions:** | | * The user is authenticated and logged into the system. * The user has an existing user profile. | | |
| **Post conditions:** | | * The user's profile is successfully updated with the changes made. | | |
| **Normal Flow:** | | 1. The user logs into the system. 2. The user navigates to the profile section and selects the "Edit Profile" option. 3. The system presents an editable form with existing user details. 4. The user modifies the desired fields and saves the changes by clicking the "Update" or "Save" button. 5. The system validates the input and updates the user's profile. 6. The system displays a confirmation message of the successful update. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | 1. **User Cancels Update:**  * If the user decides to cancel the update, they can choose a "Cancel" or "Discard Changes" option.   + The system discards any unsaved changes and returns to the user's profile without modification.  1. **Validation Error:**    * If the system detects validation errors in the user's input (e.g., invalid email format), it displays error messages next to the relevant fields.    * The user is prompted to correct the errors before resubmitting. | | |
| **Exceptions:** | | **Update Failure:**   * If the system encounters an error while saving the updated information (e.g., database connection issues), it notifies the user about the failure and advises them to try again later. | | |
| **Includes:** | | None | | |
| **Frequency of Use:** | | This use case is expected to be frequently used, as both students and instructors may need to update their profiles whenever their personal or contact details change. | | |
| **Special Requirements:** | | * The system should perform data validation to ensure the accuracy of the updated information. * Users should be able to cancel the update process at any point during the interaction. | | |
| **Assumptions:** | | * Users have the necessary permission to update their own profiles. * Users are familiar with the system's interface and navigation. | | |
| **Notes and Issues:** | | Keeping user profiles up to date is essential for maintaining accurate and current contact information. | | |

## 1.4

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| **Use Case ID:** | UC004 | | | |
| **Use Case Name:** | Organize Exams | | | |
| **Created By:** | Hasnaa Tarek | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | October 16, 2023 | | **Last Revision Date:** | October 16, 2023 |
| **Actors:** | | Students  instructors | | |
| **Description:** | | The "Organize Exams" use case involves the process of scheduling and conducting exams within an educational system. This use case primarily revolves around two main actors: students and instructors. Instructors initiate and manage the exam creation process, while students participate in the exams. The primary goal is to ensure a well-organized exam process from start to finish. | | |
| **Trigger:** | | when an instructor decides to schedule and conduct an exam within the educational system. The trigger can also be initiated by predefined exam schedules. | | |
| **Preconditions:** | | 1. Instructors and students must have authenticated access to the system. 2. Course content, including topics to be covered in the exam, must be available. 3. The system should have a list of enrolled students for the course. 4. Instructors must have the necessary permissions to create and schedule exams. | | |
| **Post conditions:** | | 1. Exams are scheduled and made available for students to access. 2. Students can participate in the exams as per the schedule. 3. Exam results may be generated and made available after the exam is completed. | | |
| **Normal Flow:** | | 1. An instructor logs into the system. 2. The instructor selects the course for which they want to organize an exam. 3. The instructor creates a new exam and defines its details, such as title, date, time, duration, and instructions. 4. The instructor schedules the exam. 5. Students log into the system and access the exam within the scheduled timeframe. 6. Students complete the exam by providing their answers. 7. The system collects and stores the student responses. 8. Instructors review and evaluate student submissions. 9. After the exam is graded, students can access their exam results. | | |
| **Alternative Flows:** | | 1. If the scheduled exam needs to be modified, the instructor can update the exam details or reschedule it. 2. If students encounter technical issues during the exam, they can request assistance from the instructor or system support. | | |
| **Exceptions:** | | 1. If the system experiences technical difficulties during the exam period, it should provide a mechanism for rescheduling or handling such situations. 2. If an instructor schedule overlapping exams for a student, the system should prevent conflicts and notify the instructor to resolve the issue. 3. Instructors may need to handle academic misconduct during the exam, and the system should have procedures in place for addressing cheating or plagiarism. | | |
| **Includes:** | | 1. Exam creation and management. 2. Student authentication and access control. | | |
| **Frequency of Use:** | | The frequency of this use case may vary based on the course curriculum and the number of courses offered. It can range from several times a week for courses with frequent exams to a few times per semester for courses | | |
| **Special Requirements:** | | 1. The system should provide a user-friendly interface for exam creation and management. 2. Secure storage and handling of student data and exam content. 3. Support for a variety of question types (e.g., multiple-choice, essay) and grading options. 4. Mechanisms for exam proctoring or monitoring to prevent academic misconduct. | | |
| **Assumptions:** | | 1. Instructors have the necessary qualifications and expertise to create and manage exams. 2. Students have access to the required technology and a stable internet connection for exam participation. | | |
| **Notes and Issues:** | | **Notes:**   * Exams may include various question formats, time limits, and grading criteria, depending on the course and instructor's preferences.   **Issues:**   * Ensuring the integrity of online exams and preventing cheating is an ongoing challenge for educational systems. Appropriate measures must be put in place to address this concern. | | |

## 1.5

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| **Use Case ID:** | UC005 | | | |
| **Use Case Name:** | Billing system and payment | | | |
| **Created By:** | Abdullah Khaled | | **Last Updated By:** | Abdullah Khaled |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | Students  Administration employees.  Instructors | | |
| **Description:** | | The billing system and payment use case involves the process of generating invoices for student tuition fees and processing payments for those fees. It allows students to view and pay their bills, and administration employees to manage billing records. Instructors may also use the system for certain billing-related tasks. | | |
| **Trigger:** | | When it is time to bill students for their tuition fees or when a student initiates a payment. | | |
| **Preconditions:** | | - Student information is up-to-date in the system.  - Tuition fee rates and payment policies are defined.  - Students are registered for courses. | | |
| **Post conditions:** | | - Invoices are generated and stored in the system.  - Payments are recorded and updated in the student's account.  - Students receive a confirmation of their payment. | | |
| **Normal Flow:** | | 1. The system generates invoices for students based on their enrolled courses and tuition fees.  2. Students receive notifications or access the system to view their invoices.  3. Students select a payment method and submit the payment.  4. The system processes the payment and updates the student's account.  5. Confirmation of the payment is sent to the student. | | |
| **Alternative Flows:** | | 1. If a payment fails, the system notifies the student and provides instructions for resolving the issue.  2. If a student disputes a charge, the administration employee can initiate a review and correction process.  3. Instructors may have the option to request specific billing adjustments for their courses. | | |
| **Exceptions:** | | 1. System downtime or technical issues prevent students from accessing their invoices or making payments.  2. Invalid payment information provided by the student.  3. Invoices cannot be generated due to missing or incorrect student information. | | |
| **Includes:** | | The use case may include interactions with the course registration system, payment gateway, and student information database. | | |
| **Frequency of Use:** | | The use case is frequently used, typically at the start of each academic term when tuition fees are due. | | |
| **Special Requirements:** | | The system must ensure the security and privacy of student payment information, comply with relevant financial regulations, and provide a user-friendly interface for students and administration employees. | | |
| **Assumptions:** | | - Students have valid and up-to-date payment methods on file.  - The system is capable of generating invoices and processing payments.  - Instructors may request billing adjustments, but they require approval from administration. | | |
| **Notes and Issues:** | | - It is essential to maintain data accuracy, especially regarding student information and payment records.  - Regular system maintenance and updates are necessary to ensure smooth operation.  - Compliance with applicable financial regulations is a critical requirement.  - In case of any issues or errors, there should be a clear process for error resolution and customer support. | | |

## 1.6

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| **Use Case ID:** | UC006 | | | |
| **Use Case Name:** | Enroll in Course | | | |
| **Created By:** | Abdullah Khaled | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | Students  Administration employees.  Instructors | | |
| **Description:** | | The "Enroll in Course" use case involves the process of students enrolling in courses offered by the educational institution. It allows students to search for courses, select the ones they wish to enroll in, and complete the enrollment process. Administration employees may also assist with enrollment, and instructors may have related tasks. | | |
| **Trigger:** | | When students need to enroll in courses for an academic term or when they initiate the enrollment process. | | |
| **Preconditions:** | | - Student information is up-to-date in the system.  - Course offerings and availability are defined. | | |
| **Post conditions:** | | - Students are successfully enrolled in their selected courses. | | |
| **Normal Flow:** | | 1. Students determine the language. 2. Students choose from the recommended courses based on the test of determining the level.   2. Students select the courses they want to enroll in.  3. Students confirm their course selections and provide any necessary information.  4. The system processes the enrollment and updates the student's course schedule.  5. Confirmation of the enrollment is sent to the student. | | |
| **Alternative Flows:** | | 1. If a course is full or unavailable, students may be placed on a waitlist or advised on alternative courses.  2. Instructors may provide prerequisites or require approval for enrollment in specific courses. | | |
| **Exceptions:** | | 1. System downtime or technical issues prevent students from searching for or enrolling in courses.  2. Invalid information or course selections provided by the student. | | |
| **Includes:** | | The use case may include interactions with the course catalog, student information database, and enrollment management system. | | |
| **Frequency of Use:** | | The use case is frequently used during academic term registration periods. | | |
| **Special Requirements:** | | The system must ensure accurate course availability and enrollment, provide a user-friendly interface for students, and allow for instructor approvals where required. | | |
| **Assumptions:** | | - Students have access to the course catalog and prerequisites.  - The system can manage course enrollment and schedule updates.  - Instructors have the ability to approve or deny enrollment in their courses. | | |
| **Notes and Issues:** | | - Maintaining up-to-date course availability is essential for a smooth enrollment process.  - Clear communication with students regarding enrollment status is crucial.  - Error handling procedures and support for students encountering issues should be in place. | | |

## 1.7

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| **Use Case ID:** | UC007 | | | |
| **Use Case Name:** | Manage payment cancellation | | | |
| **Created By:** | Abanob Rafik | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | * Student * Developer * Administrators | | |
| **Description:** | | The system should provide a mechanism for students to cancel their payments, as well as for developers and administrators to manage these cancellations. The system should also track the reasons for payment cancellations to improve service or product quality | | |
| **Trigger:** | | A student initiates the cancellation process by requesting a refund or credit for their payment. | | |
| **Preconditions:** | | * The student must have a valid payment account. * The payment must be eligible for cancellation. | | |
| **Post conditions:** | | * The student's payment will be canceled and their balance will be updated. * A record of the cancellation will be maintained. | | |
| **Normal Flow:** | | 1. The student initiates the cancellation process by clicking on a "cancel payment" button or link. 2. The system verifies that the payment is eligible for cancellation. 3. The system cancels the payment and updates the student's balance. 4. The system generates a record of the cancellation and stores it in a database. | | |
| **Alternative Flows:** | | * If the payment is not eligible for cancellation, the system will display an error message and the student will not be able to cancel their payment. * If the student does not provide a reason for cancellation, the system will record the cancellation without any additional information. | | |
| **Exceptions:** | | * If there is an error in processing the cancellation request, the system will display an error message and the student will not be able to cancel their payment. * If the student's account is suspended or canceled, they will not be able to cancel their payment. | | |
| **Includes:** | | The system should also include a mechanism for developers and administrators to view and manage payment cancellations. | | |
| **Frequency of Use:** | | This feature is expected to be used by students on a regular basis. | | |
| **Special Requirements:** | | * The system should be secure and protect sensitive payment information. * The system should be easy to use and understand. * The system should be efficient and responsive. | | |
| **Assumptions:** | | * The system will be integrated with a payment gateway for processing refunds and credits. * The system will maintain a comprehensive audit trail of all payment cancellations. | | |
| **Notes and Issues:** | | * The system should be able to handle multiple payment cancellations simultaneously. * The system should be able to handle cancellations for both active and past payments. * The system should be able to handle cancellations for both full and partial payments. | | |

## 1.8

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| **Use Case ID:** | UC008 | | | |
| **Use Case Name:** | Facilitate communication | | | |
| **Created By:** | Abanob Rafik | | **Last Updated By:** | Sylvia Yousif |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | Center administrator, students, instructor. | | |
| **Description:** | | The system should facilitate communication with instructors and collaboration among participants. | | |
| **Trigger:** | | The need for communication and collaboration arises. | | |
| **Preconditions:** | | * The system is installed and running. * The user has access to the system. | | |
| **Post conditions:** | | * Participants can communicate with each other in real-time. * Participants can collaborate with each other. * Participants can upload and share files. | | |
| **Normal Flow:** | | 1. Participants log in to the system. 2. Participants can communicate with the instructors and with each other in real-time through chatting user interface provided in the course. 3. Participants can upload and share files. | | |
| **Alternative Flows:** | | * If the user is not able to log in, the user can contact the system administrator for assistance. | | |
| **Exceptions:** | | None. | | |
| **Includes:** | | * Provide features for real-time communication between instructors and students, as well as among students themselves. * A private messaging system for one-on-one or group communication between students and instructors. * The ability to upload and share files, such as assignments, research papers, or reference materials. | | |
| **Frequency of Use:** | | This system is used on a daily basis by center administrators, students, and instructors. | | |
| **Special Requirements:** | | * The system should be easy to use. * The system should be secure. | | |
| **Assumptions:** | | * Participants have access to the system. * Participants have the necessary hardware and software to use the system. | | |
| **Notes and Issues:** | | None. | | |

## 1.9

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| **Use Case ID:** | UC009 | | | |
| **Use Case Name:** | Manage reports | | | |
| **Created By:** | Fadel Abdeltwab | | **Last Updated By:** | Fadel Abdeltwab |
| **Date Created:** | 11 Nov, 2023 | | **Last Revision Date:** | 11 Nov, 2023 |
| **Actors:** | | Administration | | |
| **Description:** | | Manage Reports is a task that involves organizing, maintaining, and distributing reports. This may include creating new reports, editing existing reports, deleting reports, and granting access to reports | | |
| **Trigger:** | | * A request to create a new report * A request to edit an existing report * A request to delete a report * A request to grant access to a report | | |
| **Preconditions:** | | * The Administrator has the necessary permissions to manage reports. * The necessary data is available. * The reporting tool is available | | |
| **Post conditions:** | | The report has been created, edited, deleted, or access has been granted. | | |
| **Normal Flow:** | | 1. The system verifies that the user has the necessary permissions. 2. The system retrieves the necessary data. 3. The system performs the requested action. 4. The system sends a notification to the user that the request has been completed. 5. Store the report and associated data in a secure and organized manner for future reference. 6. system allows admins to edit on reports and send them to instructors and students | | |
| **Alternative Flows:** | | * If the user does not have the necessary permissions, the system will deny the request. * If the necessary data is not available, the system will notify the user and request the missing data. * If the reporting tool is not available, the system will notify the user and request that they try again later. | | |
| **Exceptions:** | | The system may encounter an unexpected error. | | |
| **Includes:** | | * Creating new reports * Editing existing reports * Deleting reports * Granting access to reports | | |
| **Frequency of Use:** | | Manage Reports is a task that is performed on an as-needed basis. | | |
| **Special Requirements:** | | None | | |
| **Assumptions:** | | * The admin has the necessary training to manage reports. * The reporting tool is properly configured. | | |
| **Notes and Issues:** | | None | | |

## 1.10

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| **Use Case ID:** | UC010 | | | |
| **Use Case Name:** | Make reports | | | |
| **Created By:** | Fadel Abdeltwab | | **Last Updated By:** | Fadel Abdeltwab |
| **Date Created:** | 11 Nov, 2023 | | **Last Revision Date:** | 11 Nov, 2023 |
| **Actors:** | | -Students  -Instructors | | |
| **Description:** | | The Make Reports use case involves the generation of reports specifically related to the activities and performance of a courses center. These reports may focus on various aspects, such as enrollment trends, student performance, instructor effectiveness, course offerings, and financial performance. | | |
| **Trigger:** | | * A periodic review of courses center activities. * An assessment of student performance or course effectiveness. * A request for financial data related to courses center operations. * An evaluation of enrollment trends and course offerings. | | |
| **Preconditions:** | | * Access to relevant data sources, such as student records, course enrollment data, and financial records. * Availability of reporting tools and software capable of handling the desired data analysis and visualization. * Clear understanding of the specific report requirements and the intended audience. | | |
| **Post conditions:** | | * The requested reports are generated and delivered to the appropriate personnel. * The reports accurately reflect the analyzed data and provide meaningful insights into courses center activities. * The reports are formatted in a clear, concise, and visually appealing manner. * The reports are distributed securely and adhere to data privacy regulations. | | |
| **Normal Flow:** | | 1. The necessary data is gathered from relevant sources, such as student records, course enrollment data, and financial records. 2. The collected data is analyzed using appropriate methods and tools to identify trends, patterns, and insights. 3. The report is prepared using reporting tools and software, incorporating the analyzed data, visualizations, and relevant commentary. 4. The draft report is reviewed by the courses center manager or other authorized personnel for accuracy, clarity, and adherence to requirements. 5. The report is finalized, incorporating feedback and ensuring it meets all specified requirements. 6. The finalized report is distributed to the intended recipients, such as courses center staff, instructors, or decision-makers. | | |
| **Alternative Flows:** | | * If the necessary data is unavailable or incomplete, the report generator may request additional information or delay report generation. * If the data analysis reveals unexpected patterns or outliers, further investigation or consultation may be needed. * If the report generator encounters formatting challenges, they may seek assistance from colleagues or IT personnel. * Based on feedback or new information, the report may require revisions or updates. | | |
| **Exceptions:** | | * . Errors or inconsistencies in data sources may impact the accuracy of the report. * Technical glitches or limitations in reporting tools may hinder data visualization or report generation. * The absence of key personnel involved in report generation, such as data analysts or report writers, may impact report timelines. | | |
| **Includes:** | | 1. Defining report requirements and objectives 2. Gathering and preparing relevant data 3. Analyzing data and identifying trends or insights 4. Selecting appropriate data visualizations and formatting 5. Writing clear and concise report narratives 6. Reviewing and refining draft reports 7. Distributing finalized reports to the intended audience | | |
| **Frequency of Use:** | | The frequency of report generation for the courses center may vary depending on the specific needs and goals of the center. Some reports may be generated regularly, such as monthly enrollment reports or quarterly performance reviews, while others may be generated on an as-needed basis, such as reports for special initiatives or external evaluations. | | |
| **Special Requirements:** | | * Access to relevant data sources and reporting tools * Data analysis and interpretation skills * Report writing and formatting skills * Knowledge of courses center operations and data * Familiarity with data privacy regulations and report distribution protocols | | |
| **Assumptions:** | | The defined report. | | |
| **Notes and Issues:** | | None . | | |

## 1.11

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| **Use Case ID:** | UC011 | | | |
| **Use Case Name:** | Provide Feedback | | | |
| **Created By:** | Bilal Ibrahim | | **Last Updated By:** | Hasnaa Tarek |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | * Student * Instructor * Administrators | | |
| **Description:** | | The "provide Feedback" use case involves learners providing feedback about course content and the system. The system generates reports based on the feedback and sends them to instructors and developers. Instructors and developers use the reports to update courses content or the system. | | |
| **Trigger:** | | The trigger occurs when a learner completes a learning round or course. This could be when they finish all the lessons, quizzes, assignments, or any other required components of the round. | | |
| **Preconditions:** | | * Learners have completed a course or interacted with the system. * The system has a feedback mechanism in place. | | |
| **Post conditions:** | | * Feedback is submitted by learners. * Reports are generated by the system. * Instructors and developers receive the reports. * Courses content or the system is updated based on the reports. | | |
| **Normal Flow:** | | 1. Learners access the feedback section of the system. 2. Learners provide feedback on courses content or the system. 3. The system collects and compiles feedback data. 4. The system generates reports based on feedback. 5. Reports are sent to instructors and developers. 6. Instructors review feedback and make decisions regarding course content. 7. Developers review feedback and make decisions regarding system improvements. 8. Courses content or the system is updated accordingly. | | |
| **Alternative Flows:** | | * If learners encounter issues submitting feedback, they may contact system support for assistance. * Instructors may engage in a discussion with learners to gather more detailed feedback. | | |
| **Exceptions:** | | Technical issues may temporarily disrupt the feedback submission or report generation process. | | |
| **Includes:** | | * Submitting feedback. * Generating reports. * Reviewing feedback. | | |
| **Frequency of Use:** | | regularly, as it is a part of the continuous improvement process | | |
| **Special Requirements:** | | * Feedback mechanisms within the system. * Communication channels for sending reports. | | |
| **Assumptions:** | | * Learners provide honest and constructive feedback. * Instructors and developers are proactive in using feedback for improvements. | | |
| **Notes and Issues:** | | * Ensuring that the feedback process is user-friendly and encourages participation from learners. * Balancing the need for improvements with the feasibility of implementing suggested changes. | | |

## 1.12

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| **Use Case ID:** | UC012 | | | |
| **Use Case Name:** | Notify Users | | | |
| **Created By:** | Bilal Ibrahim | | **Last Updated By:** | Hasnaa Tarek |
| **Date Created:** | Nov 8, 2023 | | **Last Revision Date:** | Nov 8, 2023 |
| **Actors:** | | * Administrator * Students | | |
| **Description:** | | Implement a notification system that allows users to receive alerts and updates. | | |
| **Trigger:** | | Users may be notified when new course materials, assignments, or resources become available for access or when payments are recorded and cancelled. | | |
| **Preconditions:** | | * Users, including administrators and students, should have registered accounts within the system and be logged in to receive notifications tailored to their roles and preferences. * Set notification preferences, specifying the type of alerts to receive (e.g., email notifications, in-app notifications, SMS alerts). * For notifications related to payments, the system should accurately record financial transactions and identify situations where payments are either recorded or canceled. | | |
| **Post conditions:** | | * Users, both administrators and students, have received the relevant notifications as specified by their notification preferences. This may include email notifications, in-app notifications, SMS alerts, or other designated communication channels. * The system has recorded the notifications that were sent, including the content of the notifications, the time they were sent, and the users to whom they were delivered. This information is retained for tracking and audit purposes. * Users have received notifications in a timely manner, ensuring that they are informed of new course materials, assignments, resources, or payment activities as soon as they become available or change status. | | |
| **Normal Flow:** | | 1. The system detects an event requiring notification (e.g., course update, upcoming assignment, forum discussion). 2. Users who have opted for notifications are identified. 3. The system checks users' notification preferences. 4. Notifications are sent to users through selected channels (email, in-app, SMS). 5. Users receive and view the notifications. 6. Users can take action based on the received information (e.g., accessing updated course content). | | |
| **Alternative Flows: [Alternative Flow 1 – Not in Network]** | | * Users can update their notification preferences at any time. * In cases where multiple events occur, users may receive consolidated notifications. | | |
| **Exceptions:** | | * Technical issues may temporarily disrupt the notification delivery process. * Users may choose to disable notifications temporarily. | | |
| **Includes:** | | * Detecting events requiring notification. * Checking users' notification preferences. * Sending notifications through selected channels. * Allowing users to update notification preferences. | | |
| **Frequency of Use:** | | Frequently, as notifications are essential for keeping users informed. | | |
| **Special Requirements:** | | * A notification system capable of handling different channels (email, in-app, SMS). * User-friendly interfaces for updating notification preferences. | | |
| **Assumptions:** | | * Users have provided accurate contact information for notification channels. * Users are proactive in updating their notification preferences. | | |
| **Notes and issues:** | | **Notes:**   * The content of notifications should be clear and concise. * The system should provide an option for users to acknowledge or dismiss notifications.   **Issues:**   * Balancing the frequency of notifications to avoid overwhelming users. * Ensuring the security and privacy of user contact information used for notifications. | | |

## 1.13

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| **Use Case ID:** | | UC013 | | | | |
| **Use Case Name:** | | Manage Online Course Material | | | | |
| **Created By:** | | Mohamed Khaled | | | **Last Updated By:** |  |
| **Date Created:** | | 11/7/2023 | | | **Last Revision Date:** |  |
| **Actors:** | | | | Instructor , Student | | |
| **Description:** | | | | This use case outlines the process of managing online course materials, such as lecture notes, assignments, and additional resources, within an online learning platform. The primary actors involved in this use case are instructors and students. | | |
| **Trigger:** | | | | The trigger for this use case is the need to upload, organize, or access course materials within an online learning environment. | | |
| **Preconditions:** | | * Instructors and students must be registered and logged into the online learning platform. * Instructors must have courses assigned to them to upload materials. * Course materials should exist or need to be created/uploaded. * Internet access for both instructors and students. | | | |
| **Post conditions:** | | | | * Course materials are successfully uploaded, organized, and made accessible for students. * Students can access and download the course materials for their enrolled courses. | | | |
| **Normal Flow:** | | | | 1. Instructors log into the online learning platform. 2. Instructors select the course for which they want to manage mate Instructors log into the online learning platform. 3. Instructors select the course for which they want to manage materials. 4. Instructors choose the "Manage Course Materials" option. 5. Instructors upload, organize, and categorize course materials, such as lecture notes, presentations, assignments, reading materials, and additional resources. 6. Instructors set access permissions (e.g., public, private, or restricted access) for the uploaded materials. 7. Instructors may provide descriptions or context for the uploaded materials. 8. Students log into the online learning platform. 9. Students navigate to the course they are enrolled in. 10. Students access and view the course materials provided by their instructors. 11. Students download or interact with the materials as required for their coursework. 12. rials. 13. Instructors choose the "Manage Course Materials" option. 14. Instructors upload, organize, and categorize course materials, such as lecture notes, presentations, assignments, reading materials, and additional resources. 15. Instructors set access permissions (e.g., public, private, or restricted access) for the uploaded materials. 16. Instructors may provide descriptions or context for the uploaded materials. 17. Students log into the online learning platform. 18. Students navigate to the course they are enrolled in. 19. Students access and view the course materials provided by their instructors. 20. Students download or interact with the materials as required for their coursework. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | | | * The user will be unable to upload or access course materials. * They will receive a network connectivity error message. * The user should reconnect to the internet and retry the action. | | |
| **Exceptions:** | | | | * If instructors encounter errors or issues while uploading materials (e.g., file format issues, size restrictions, or server errors): * Instructors will receive an error message. * Instructors may need to resolve the issue by correcting the materials or seeking technical support. * If students face difficulties in accessing course materials (e.g., broken links or file corruption): * Students will receive an error message. * Students can report the issue to the platform administrator or their instructor for resolution. | | |
| **Includes:** | | | | This use case may include features such as file management, user authentication, and access control features within the online learning platform. | | |
| **Frequency of Use:** | | | | This use case is expected to be frequently used throughout the duration of a course, with instructors frequently uploading materials and students accessing them. | | |
| **Special Requirements:** | | | | * The online learning platform should provide sufficient storage capacity for course materials. * It should support various file formats for course materials. * User accounts should be secured with authentication and authorization mechanisms. | | |
| **Assumptions:** | | | | * Instructors have the necessary permissions to upload and manage course materials. * Students are enrolled in courses and have legitimate access to the materials. * Users have internet connectivity to access the online learning platform. | | |
| **Notes and Issues:** | | | | * Platform administrators should monitor and maintain the platform to ensure smooth functionality. * Adequate user support and training resources should be available to assist instructors and students in managing and accessing course materials. * Periodic backups and data recovery measures should be in place to prevent data loss. | | |

## 1.14

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| **Use Case ID:** | UC014 | | | |
| **Use Case Name:** | Verify Instructors Qualifications | | | |
| **Created By:** | Mohamed Khaled | | **Last Updated By:** |  |
| **Date Created:** | 7/11/2023 | | **Last Revision Date:** |  |
| **Actors:** | | Instructor , Administrator. | | |
| **Description:** | | This use case outlines the process of verifying the qualifications of instructors within an educational institution or online learning platform. The primary actors involved in this use case are Instructors and Administrators. | | |
| **Trigger:** | | The trigger for this use case is the need to verify the qualifications of an instructor who wants to join or continue teaching within the educational institution or online learning platform. | | |
| **Preconditions:** | | * The instructor has submitted an application or request to teach. * The instructor's qualifications and supporting documents are available. * The administrator is responsible for verifying qualifications. * The institution or platform has defined criteria and requirements for instructor qualifications. | | |
| **Post conditions:** | | The instructor's qualifications are either verified and approved, or they are not approved, and the instructor is notified of the decision. | | |
| **Normal Flow:** | | 1. The instructor submits an application or request to teach. 2. The administrator receives the instructor's application. 3. The administrator reviews the qualifications and supporting documents submitted by the instructor. 4. The administrator compares the qualifications against the predefined criteria and requirements for instructor qualifications. 5. If the qualifications meet the criteria:    * The administrator approves the instructor's qualifications.    * The instructor is granted permission to teach within the institution or platform.    * The administrator notifies the instructor of the approval. 6. If the qualifications do not meet the criteria:    * The administrator does not approve the instructor's qualifications.    * The administrator provides the instructor with a notification detailing the reasons for the rejection.    * The instructor is informed about any steps needed to meet the qualification criteria. | | |
| **Alternative Flows:** | | [Alternative Flow 1 – Missing Documents]   * If the instructor's application is missing essential supporting documents:   + The administrator notifies the instructor about the missing documents.   + The instructor is required to provide the missing documents to continue the verification process.   [Alternative Flow 2 – Exceptional Qualifications]   * If the instructor's qualifications exceed the predefined criteria:   + The administrator may grant permission for the instructor to teach, even if their qualifications exceed the requirements.   + The instructor is notified of the approval. | | |
| **Exceptions:** | | If there are technical issues or system failures during the verification process:   * The administrator may experience difficulties in reviewing the instructor's qualifications. * The administrator should seek technical support to resolve the issue and ensure the process continues smoothly. | | |
| **Includes:** | | * This use case may include features such as document submission, qualification criteria definition, and communication mechanisms to notify instructors of verification outcomes. | | |
| **Frequency of Use:** | | * This use case is expected to be used whenever an instructor applies to teach within the institution or platform. | | |
| **Special Requirements:** | | * The system should have a secure document submission mechanism. * Well-defined qualification criteria and requirements should be established. | | |
| **Assumptions:** | | * The qualifications to be verified are within the scope of the institution or platform's defined requirements. * The instructor is aware of the verification process. | | |
| **Notes and Issues:** | | * The verification process is critical to ensure that the educational institution or platform maintains high-quality instruction and adheres to predefined standards. * Communication with instructors should be clear and timely to provide feedback on the verification outcome and any necessary actions. | | |

## 1.15

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| **Use Case ID:** | UC015 | | | |
| **Use Case Name:** | Manage Course Schedule | | | |
| **Created By:** | Aya Ahmed | | **Last Updated By:** | 11/8/2023 |
| **Date Created:** | 11/8/2023 | | **Last Revision Date:** |  |
| **Actors:** | | Student, instructor | | |
| **Description:** | | The Manage Course Schedule use case involves the interaction between instructors and students in handling the scheduling of courses within an educational institution. | | |
| **Trigger:** | | * **Instructor Logging In:**   when an instructor logs into the system   * **Student Logging In:**   when a student logs into the system   * **Instructor Modifying Schedule**:   when an instructor decides to add, remove, or modify class sessions in the course schedule.   * **Student Accessing Schedule**:   when a student accesses the course schedule to view classes | | |
| **Preconditions:** | | **The system must have a valid course schedule for the selected course** | | |
| **Post conditions:** | | Any modifications to the course schedule are updated in the system. | | |
| **Normal Flow:** | | **Instructor Views Schedule:**   * The instructor logs into the system. * The instructor navigates to the "Course Schedule" section. * The system displays the schedule for the selected course.   **Instructor Modifies Schedule:**   * The instructor has the option to add, remove, or modify class sessions. * The system updates the schedule based on the instructor's modifications.   **Student Views Schedule:**   * A student logs into the system. * The student navigates to the "Course Schedule" section. * The system displays the schedule for the selected course. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | **Instructor Cancels Class:**  If an instructor needs to cancel a class session, they can select the session and choose to cancel it. The system adjusts the schedule accordingly.  **Student Registration:**  If students are not automatically registered for classes, they can follow a registration process, and the system updates the schedule with registered students. | | |
| **Exceptions:** | | **Schedule Conflict:**  If a modification to the schedule creates a conflict (e.g., overlapping classes), the system notifies the user and prevents the conflicting modification. | | |
| **Includes:** | |  | | |
| **Frequency of Use:** | | * Regular Updates by Instructors * Student Access for Schedule Checking | | |
| **Special Requirements:** | | * The system should provide a user-friendly interface for both instructors and students. * Schedule modifications should be logged for auditing purposes. | | |
| **Assumptions:** | |  | | |
| **Notes and Issues:** | | Consider incorporating a notification system for any schedule changes to keep all relevant parties informed. | | |

## 1.16

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| **Use Case ID:** | UC016 | | | |
| **Use Case Name:** | Show about page | | | |
| **Created By:** | Aya Ahmed | | **Last Updated By:** | 11/8/2023 |
| **Date Created:** | 11/8/2023 | | **Last Revision Date:** |  |
| **Actors:** | | Administrator | | |
| **Description:** | | This use case describes the scenario in which an administrator accesses and displays the "About Page" of the system. | | |
| **Trigger:** | | The administrator chooses to view the "About Page" from the system interface. | | |
| **Preconditions:** | | * The administrator is logged into the system. * The "About Page" feature is available and accessible. | | |
| **Post conditions:** | | The "About Page" is displayed, providing information about the system, its purpose, and relevant details. | | |
| **Normal Flow:** | | The administrator selects the "About" option. | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | **Page Not Available:**  An error message informs the administrator about the unavailability. | | |
| **Exceptions:** | | None | | |
| **Includes:** | | None | | |
| **Frequency of Use:** | | administrators may refer to the "About Page" for system details and information. | | |
| **Special Requirements:** | | The "About Page" should be regularly updated to ensure that the information provided is accurate and relevant. | | |
| **Assumptions:** | | The system's "About Page" is designed to convey essential information about the system, its creators, and its purpose. | | |
| **Notes and Issues:** | | None | | |