



**DALHOUSIE
UNIVERSITY**

CSCI 5709 – ADVANCED WEB SERVICES

Assignment 1

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Group - 07

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‘ClassMate’: School at your fingertips!

A1.1 (Project’s Purpose, Goals, and Intended Features)

1. Purpose:

The classmate application provides a digital platform for students, professors, and campus administrators to efficiently manage and interact within an educational setting. It aims to streamline administrative tasks, facilitate effective communication between students and professors, and enhance the overall learning experience.

2. Goals:

Our goal revolves around simplifying administrative processes, fostering effective communication between students and professors, and promoting a collaborative learning environment. We aim to provide Efficient Administration Management that enables professors, course, and student provisions to create an associative environment. Professor Dashboard provides assignment and quiz module administration. Using Student Dashboard, students can get notifications of upcoming deadlines for all enrolled courses in one place, for specific courses students can access assignments and quizzes and get grade updates. The Course Discussions tab provides a comprehensive discussion portal for students and professors for doubt resolution or other queries. A comprehensive newsletter that provides current news from admin university wide.

3. Intended Features:

1. User Management:

Unified page for Professor Student registration (Accessible only to admins), login or deleting a specific account (Accessible only to admins). It also provides an option to reset a password through forgot password option.

Tasks:

- **Student and Professor registration:** Setting up the process for new student or professor to create an account and provide basic information such as first name, last name, email, and password.
- **User authentication:** Verifying the identity of users through login credentials using email and password and forgot password functionality.
- **User profile management:** Allowing users to view and update their information.
- **User account Deletion:** Once user becomes inactive only admins have authority to delete the account.

2. Student & Professor Dashboard

It provides students with a user-friendly interface to access their enrolled courses. Students will be able to submit assignments, take quizzes, and receive notifications for valuable information such as due dates and announcements. They should also be able to read course-specific announcements. Student will be able to update their profile.

Tasks:

Analytics dashboard:

- **View Student Performance:** The analytics dashboard allows professors to access detailed information about student performance, such as individual grades, assignment scores, and test results. They can gain insights into how students are progressing and identify areas where additional support may be needed.
- **Identify Passing and Failing Students:** Professors can use the analytics dashboard to identify students who are meeting or exceeding expectations (passing) as well as those who may be struggling (failing). This information helps professors intervene and provide appropriate guidance or resources to help students succeed.
- **Track Enrollment Data:** The analytics dashboard provides data on enrolled students, allowing professors to monitor class size, enrollment trends, and student demographics. This information helps in understanding the composition of the class and making informed decisions about instructional strategies.
- **Analyze Assessment Results:** Professors can analyze assessment results through the analytics dashboard to gain insights into how students are performing on specific assignments, tests, or quizzes. They can identify areas of strength and weakness in student understanding and adjust their teaching accordingly.

List courses:

- **For Student:** The "List Courses" feature allows students to conveniently access and view their enrolled courses in a well-organized manner. It provides a snapshot of essential course information, such as course names, instructors, and schedules, enabling students to easily navigate and engage with their academic content.
- **For Professor:** The "List Courses" feature provides professors with a clear and organized view of their courses, including key details like course names, enrollments, and schedules, streamlining course management and navigation.

Manage content:

- **Share content:** The "Share Content" feature simplifies the process of distributing educational materials, allowing professors to manage and share course resources effortlessly. It promotes collaboration and enables students to access relevant materials for an enhanced learning experience.

View content:

- **Access materials:** The "View Content" feature enables students to conveniently access and explore course materials shared by their professors. It provides a user-friendly interface for browsing and engaging with educational resources, fostering a seamless learning experience.

Announcement:

- **For professor:** The "Announcement" feature enables professors to easily communicate important news and updates to their students, ensuring efficient information dissemination and keeping students informed.
- **For students:** The "Announcement" feature allows students to stay updated with important course information, such as deadlines, schedule changes, and general announcements, fostering effective communication between professors and students.

Profile updates:

- **For professor:** The "Profile Update" feature enables professors to keep their professional information up to date, including personal details, qualifications, and contact information, ensuring accurate and current representation.
- **For students:** The "Profile Update" feature allows students to maintain their personal information, update contact details, and provide relevant details such as interests or areas of study, ensuring accurate and comprehensive profiles within the educational platform.

3. Admin Dashboard:

The admin dashboard is designed to provide administrative control over the course management system. It allows the administrator to perform manage (Create, Read, Update, Delete) operations for courses, approve professors, and map professors to their respective courses.

Tasks:

Course Management:

- **Create Course:** The admin can create new courses by providing details such as course name, description, start date, and end date.
- **Read Course:** The admin can view the list of existing courses, including their details and associated professors.
- **Update Course:** If there are any changes to a course's information, the admin can update the course details, such as its name, description, or dates.

- **Delete Course:** In case a course is no longer needed or has been discontinued, the admin can delete it from the system.

Professor Approval:

- **Approve Professors:** When professors register in the system, their applications are sent for approval. The admin can review and approve professors based on their qualifications and credentials.
- **Read Professor Details:** The admin can view a list of professors awaiting approval, along with their personal information and qualifications.

Professor-Course Mapping:

- **Map Professors to Courses:** Once the professors are approved, the admin can assign them to specific courses. This mapping ensures that each course has the appropriate professor responsible for it.
- **Read Mapping Details:** The admin can access the list of courses and their assigned professors to keep track of the allocation.

4. Assignment Management:

As our Brightspace or any online education platform suggests, professors can upload assignments, and students can view those assignments and upload them before the due deadline. The details of assignments feature are as follows:

Tasks:

Professor Side Assignment View:

- **Create & Upload Assignment:** Professor can create the assignment and upload it through file upload systems using either .pdf or .doc file. We will have a separate page for uploading files for an assignment.
- **Update Assignment:** Professor can also update the assignment as they feel it needs to be changed in future and set the deadline accordingly.
- **Assignment Constraints:** Professor is required to set some constraints regarding an assignment like Due date, visible date, description of assignment, assignment weightage and an attachment to that.
- **Visible Date:** Professor can set a visible date for an assignment to the students stating that this assignment should be visible to the students on a particular date or time otherwise not visible to them.

Student Side Assignment View:

- **View Assignments:** On student dashboard, at the assignment tab, students can see their courses assignments listed with the basic details.
- **Assignment constraints:** Students can see their assignments listed with detailed information like description, deadline, status of assignment (Either completed or in complete) and assignment names and its attachment.
- **Submission:** Students can upload the submission file using file upload window systems, where they can upload either .pdf or .doc file along with some important description (let say some important links to the attachment). Once they submit the assignment, they can look into the grades section for feedback on scores.

5. Quiz Management:

To check the knowledge Professor set quiz which can be managed and updated. Students can view the quiz and submit their answers, to secure a good score. Below is the detail of this feature, distributed among professor and student:

Tasks:

Professor Side Quiz View:

- **Create Quiz:** By specifying the questions, response options, and any additional instructions or constraints, professors can construct quizzes.
- **Question Bank:** Professors can manage a question bank, by adding question through forms or uploading a csv file for multiple questions. This allows them to store and organize a pool of questions for reuse in multiple quizzes or assessments.
- **Random Questions:** Professors can choose to randomize the order of questions for each student. This prevents cheating during quizzes, as students will receive different question sequences.
- **Quiz Time:** Professors set the time for specific quizzes. This ensures that students have a specific duration within which they need to answer the questions. It allows professors to control the pace of the quiz and ensures fairness among students.
- **Visible Date:** Professor can set a visible date for a quiz to the students stating that this quiz should be visible to the students on a particular date or time otherwise not visible to them.
- **Modify Quiz:** The quiz that has been created can be modified by the professor, i.e., the questions, options, correct answers, quiz time, date, and visibility date.
- **Delete Quiz:** Professor can delete the unwanted quiz.

Student Side Quiz View:

- **View Quiz:** On student dashboard, at the quiz tab, students can see their courses quizzes listed with the basic details.
- **Specific Quiz:** On a single quiz page, students can see the questions and options for each question.
- **Quiz Submit:** After successfully completing the quiz students can submit it and check their marks in the grade section.
- **Quiz review:** Students can learn from their mistakes by reviewing the correct answers. So, after completing the quiz, students can review their quiz results, i.e., correct, and incorrect answers provided by the professor.

6. Grades Management:

Grade's function is made to manage and keep track of students' performance on various assessments, such as quizzes, projects, assignments, and exams. Grades can be viewed and configured per course. The following are the tasks and intended features for the grades feature:

Tasks:

Professor Side Grades View:

- **Weightage:** Professor can configure the weightage of different assessments such as assignment, quiz, and exams. This allows for the calculation of weighted averages and helps determine final course grades accurately. This can be used to calculate the final grade of the course.
- **Grade Entry:** Professors enter grades for various assessments (quizzes, assignments, exams). They assign numerical scores, letter grades, or use a grading scale determined by the institution.
- **Grade Visibility:** Professor can set when to make the grades such as allowing students to see individual assignment grades, overall course grades, or both.
- **Grade comments/feedback:** Professor provides the feedback or comments for the assignments either via text or files. This will help students to understand their strengths and areas for improvement.

Student Side Grades View:

- **View Grades:** Student can view their individual grades summaries for all the assessments.

- **View Feedback:** Students can see the remarks and feedback provided by the professor for their tests or assignments. They can learn from this input about their strengths and weaknesses and adjust for upcoming assignments.

7. Notifications Management

The Notification Management feature ensures effective communication and timely updates between professors and students within the course management system. It includes various types of notifications that inform students about assignment and quiz visibility, approaching due dates, grades/feedback, and newly created course content. Additionally, students can view their notification history.

Tasks:

- **Assignment and Quiz Visibility:** Whenever a professor opens a quiz or makes an assignment visible, notifications are automatically sent to all students enrolled in the course.
- **Due Date Approaching:** Students receive a notification one day before an assignment's due date is approaching.
- **Grades/Feedback:** Whenever a quiz grade is updated or when a professor provides grades and feedback for an assignment, students receive a notification.
- **Content Created:** Whenever a professor uploads new content specific to a particular course, such as lecture notes, slides, or additional resources, students receive a notification.
- **View Notifications:** Students have access to a dedicated notification center where they can view all their notifications in one place.

8. University Newsletter Management:

The Newsletter Management feature provides administrators with the ability to create, manage, and distribute newsletters within the course management system. Administrators can perform MANAGE (Create, Read, Update, Delete) operations for newsletters, while professors and students have read-only access to view the newsletters.

Tasks:

1. **Create Newsletter:** Admins can easily create newsletters. They have the flexibility to customize the newsletter according to the specific needs and objectives.
2. **Read Newsletter:** Admins, professors and students can access the newsletters within their respective dashboards. They can view all the content shared by the administrators.

3. **Update Newsletter:** In case there are any changes required for a newsletter, admins can make necessary modifications to the content. This ensures that the information remains accurate and up to date.
4. **Delete Newsletter:** If a newsletter becomes obsolete or is no longer relevant, administrators can delete it from the system. This helps to maintain a streamlined collection of newsletters and avoids confusion or outdated information.

9. Discussion Management

Professors can have multiple discussions possible per course so that they can communicate with the students easily.

Tasks:

- **Create Discussion:** Professor will create a chat option once a professor will require to pass some important news / announcements with students:
- **Read Discussion:** Students on the other side will get the notification and they can open that chat once they go to Discussion tab at Student Dashboard. They can join the chat option.
- **Update Discussion:** Professors and students can update their responses whenever they feel like they need to change it. It will be reflected on both the chat side (Professor side as well as student side).
- **Delete Discussion:** Professors can only delete the chat option as they feel they do not require to be communicate further. Once deleted it will be removed from both the dashboard (professor and student).

10. Calendar Management

Shows deadline across all courses, both to the professor as well as student to get an overview of all the due dates at one place.

Tasks:

- **Course Integration:** Calendar view of upcoming deadlines across all the courses.
- **Easy traversal:** Student and professor can easily go to any course's deadline and perform actions.
- **Division:** Divided between past deadlines & upcoming deadlines for quick overview.

A1.2 User Personas and Intended Scenarios

4. User Personas

11. Admin



"Efficiency is the key to unlocking seamless collaboration and empowering educational success."

Admin Anya

AGE	42
GENDER	FEMALE
STATUS	Married
EDUCATION	B.Tech in CS
LOCATION	Halifax, NS

Influences

- User feedback
- Regulatory frameworks
- Latest trends
- Technology advancements

Frequently used apps



Google Classroom Microsoft Teams

Goals

- Streamline classroom management and administrative tasks.
- Foster a collaborative and interactive learning environment.
- Create and share diverse educational content easily.

Frustrations

- Limited visibility into platform analytics for informed decision-making.
- Challenges in keeping up with evolving educational technology landscape.
- Complex user account management processes hinder efficient administration.

Personality

Introverted

Helpful

Industrious

Technology

Data analysis

Learning management system

System Integration

Figure 1: User persona for Admin.

12. Student

STUDENT @ RECOGNIZED UNIVERSITY	TYPE
 <p>Jason Momoa</p>	Idealist
<p>Quote</p> <p><i>"Success is the result of determination, organization, collaboration, and staying informed."</i></p>	<p>Bio</p> <p>Jason is a 20-year-old undergraduate student pursuing a degree in Computer Science at a university. He is in his third year of studies and is known for his dedication to academic excellence. He is a tech-savvy individual who is comfortable using various digital tools and applications to enhance his learning experience.</p>
<p>Motivations</p> <ul style="list-style-type: none">• Academic Excellence• Personal Growth• Future Opportunities• Personal Fulfillment	<p>Goals</p> <ol style="list-style-type: none">1. Stay organized: Jason seeks an app to efficiently manage his courses, assignments, and deadlines for effective academic planning.2. Access course materials: Jason desires easy access to lecture notes, presentations, and reference materials to support his learning and understanding of subjects.3. Collaborate with peers: Jason values collaborative features that enable discussions, idea sharing, and seeking assistance from classmates.4. Stay informed: Jason wants timely notifications for important announcements, schedule changes, and upcoming university events to stay updated.5. Monitor academic progress: Jason aims to track grades, monitor his academic journey, and receive valuable feedback from professors for self-improvement.
<p>Brands and influencers</p>   <p>Google Classroom</p> 	<p>Frustrations</p> <ul style="list-style-type: none">• Time management: Jason requires a tool to prioritize tasks and effectively manage his time amidst multiple courses and assignments.• Communication gaps: Jason seeks a platform that enables seamless communication and collaboration with classmates beyond classroom hours.• Information overload: Jason needs a system that organizes and presents information in a clear and structured manner, preventing confusion and overload due to numerous courses and updates.

Figure 2: User Persona for student.

13. Professor

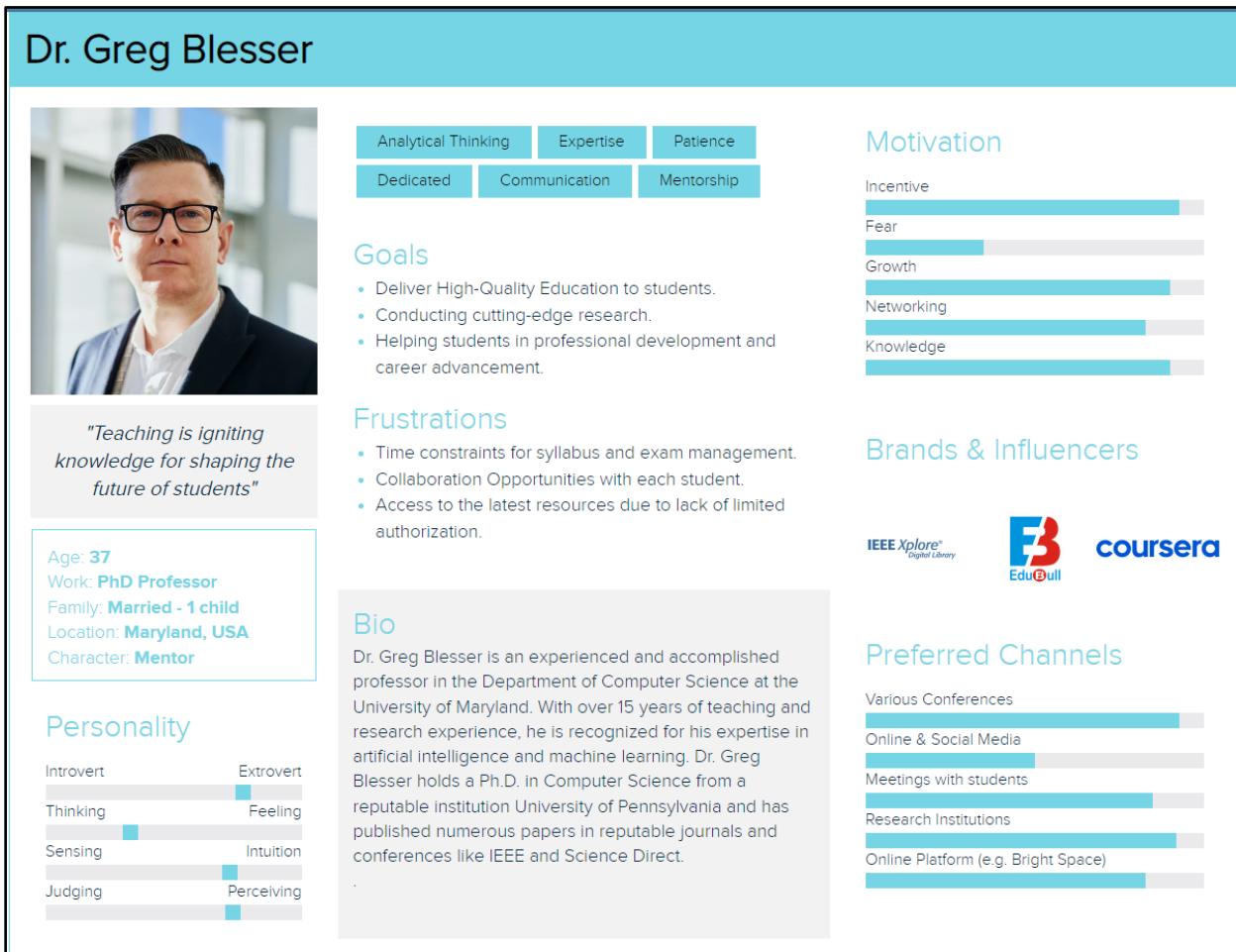


Figure 3: User persona for professor.

5. Intended Scenarios

14. Student and professor dashboard:

Create Content

Professor Dr. Greg Blesser effortlessly creates and shares lecture notes, slides, readings, and videos with his students using the "Share Content" feature. This promotes collaboration, engagement, and easy access to relevant course materials, enhancing the overall learning experience.

Table 1: Share content Intended scenario.

Persona	Professor (Dr. Greg Blesser)
Feature	Create content (professor)
Need	The "CreateContent" feature addresses the need for seamless distribution of educational materials, ensuring easy access to resources for students and facilitating effective teaching practices for professors.
Context	Professor wanted to share relevant content with their students

View Content

Professor Dr. Greg Blesser utilizes the "View Content" feature to access and review shared course materials. This allows him to conveniently view lecture notes, readings, and other resources uploaded by himself or other professors, enabling him to stay informed and prepared for class discussions and lectures. The "Read Content" feature facilitates efficient content consumption and supports effective teaching practices.

Table 2: View Content Intended Scenario

Persona	Professor (Dr. Greg Blesser)
Feature	Create content (professor)
Need	The "Read Content" feature addresses the need for convenient access to course materials, enabling professors to review shared resources for effective teaching and preparation.
Context	Professor wanted to view content shared with their students

Delete Content

Professor Dr. Greg Blesser utilizes the "Delete Content" feature to remove outdated or irrelevant course materials from the platform. This ensures that students have access to the most up-to-date and accurate resources, maintaining the integrity and relevance of the course content. The "Delete Content" feature allows for efficient content management, streamlining the learning process for students.

Table 3: Delete Content Intended Scenario

Persona	Professor (Dr. Greg Blesser)
Feature	Create content (professor)

Need	The "Delete Content" feature addresses the need for efficient content management, allowing professors to remove outdated or irrelevant materials and maintain the relevance of course content for students.
Context	Professor wanted to delete some outdated content shared with their students

Update Context

Professor Dr. Greg Blesser utilizes the "Update Content" feature to make necessary revisions or additions to course materials. This ensures that students have access to the most accurate and up-to-date resources, providing them with the latest information and enhancing their learning experience. The "Update Content" feature enables seamless content maintenance and promotes continuous improvement in course delivery.

Table 4: Update content Intended Scenario

Persona	Professor (Dr. Greg Blesser)
Feature	Update content (professor)
Need	The "Update Content" feature addresses the need for keeping course materials current and relevant, allowing professors to make revisions or additions to resources for an enhanced learning experience.
Context	The professor wanted to update some content shared with their students as they made some mistakes.

Analytics dashboard

Professor Dr. Greg Blesser utilizes the "Analytics Dashboard" sub-feature to view student performance metrics, including grades, attendance, and participation in various courses. This allows him to assess student progress, identify areas for additional support, and make informed decisions regarding teaching strategies and interventions.

Table 5: Update content Intended Scenario

Persona	Professor (Dr. Greg Blesser)
Feature	Update content (professor)
Need	The Analytics Dashboard sub-feature addresses the need for professors like Dr. Greg Blesser to access and monitor student performance metrics, facilitating data-driven insights and informed decision-making for effective teaching and support.
Context	The professor shall use analytics dashboard to get deeper insights into

List courses

Student Jason Momoa utilizes the "List Courses" sub-feature to browse and explore available courses. This allows him to view course descriptions, prerequisites, and other relevant details, helping him make informed decisions regarding course enrollment and academic planning.

Table 6: Update content Intended Scenario

Persona	Student (Jason Momoa)
Feature	Update content (professor)
Need	The List Courses sub-feature addresses the need for students like Jason Momoa to explore and access comprehensive course listings, facilitating informed decision-making and effective academic planning.
Context	Jason will use list courses features to access his current courses.

View content (Student)

Student Jason Momoa utilizes the "View Content" sub-feature to access and review course materials, such as lecture slides, readings, and multimedia resources. This allows him to engage with the content outside of the classroom, reinforce his understanding, and prepare for upcoming assignments and assessments.

Table 7: Update content Intended Scenario

Persona	Student (Jason Momoa)
Feature	Update content (professor)
Need	The View Content sub-feature addresses the need for students like Jason Momoa to easily access and review course materials, supporting self-paced learning and academic preparation.
Context	Jason will view content shared by the professor in the system.

Announcement

Student Jason Momoa receives notifications through the "Announcements" sub-feature regarding important updates, news, and announcements from professors and the institution. This ensures that he remains informed about any course-related changes, upcoming events, and academic opportunities.

Table 8: Update content Intended Scenario

Persona	Student (Jason Momoa)
Feature	Update content (professor)
Need	The Announcements sub-feature addresses the need for students like Jason Momoa to receive timely notifications about important updates and news, facilitating effective communication and engagement within the academic community.
Context	Jason will view announcements shared by the professor.

Profile updates

Student Jason Momoa utilizes the "Profile Updates" sub-feature to manage his personal information, such as contact details, preferences, and academic interests. This allows him to maintain an up-to-date profile and ensure accurate communication and engagement within the learning platform.

Table 9: Update content Intended Scenario

Persona	Student (Jason Momoa)
Feature	Update content (professor)
Need	The Profile Updates sub-feature addresses the need for students like Jason Momoa to manage and maintain their personal information, facilitating accurate communication and personalized academic experiences.
Context	Jason will use the profile update feature to make some changes to their profile.

15. University Newsletter:

Post News

The admin – Jacques wants to notify the whole university about a specific event happening in the main ground a few days before. Via this feature, he can make announcements like this to the whole university (all students and professors). Admin can also use this feature as day-to-day news about what is going on within campus and if there are any specific problems happening around any area.

Table 10: Post News Intended Scenario

Persona	Admin (Anya Thompson)
Feature	University Newsletter
Need	To inform the entire university community about important events, announcements, and updates, as well as address any campus-related issues.
Context	Student wanted to take an upcoming quiz before deadline passes

Edit News

While performing the above step, Jacques made a mistake, and he wants to modify some of the content.

Table 11: Edit News Intended Scenario

Persona	Admin (Anya Thompson)
Feature	University Newsletter
Need	To edit and modify news in the newsletter
Context	The admin made the mistake in date/year of a specific event. The location of the event got changed at the last moment.

Delete News

Admin posted a rumor which he thought was true but turned out to be wrong. So, now he wants to remove the news.

Table 12: Delete News Intended Scenario

Persona	Admin (Anya Thompson)
Feature	University Newsletter
Need	To delete an unwanted news
Context	Admin wants to delete the news as he does not want people to see that now

View Post

Professor and student want to check out all the news published by Admin's to see what is happening around the campus (e.g., to find interesting activities or which roads to avoid while on campus).

Table 13: Delete News Intended Scenario

Persona	Student (Jason Momoa), Professor (Greg Blesser)
Feature	University Newsletter
Need	To view all news published by the admin at one place in the dashboard
Context	Student and Professor's wants to check latest news around campus (e.g., mask policy, exam dates, etc.)

16. User Management:

User Registration

In a classroom environment, Anya, Jason, or Greg want to register onto ClassMate website. They want to register themselves by giving more information about them on the website such that they identify their roles and see the features.

Table 14: User Registration

Persona	Admin (Admin Anya), Student (Jason Momoa), Professor (Greg Blesser)
Feature	User Management
Need	To register a user with some information on the website.
Context	The user decided to sign up as a new user because they wanted to access more features.

User Login

Anya, Jason, or Greg have already registered themselves as their intended role and created their account into database. Now they want to access the features of the website.

Table 15: User Login

Persona	Admin (Admin Anya), Student (Jason Momoa), Professor (Greg Blesser)
Feature	User Management
Need	To login a user with some information on the website.
Context	User was logged out despite having an account already. They must check in to access all the features.

Forgot Password

Anya, Jason, or Greg already registered on the website and successfully created their intended account. Now, they want to login into their account, but it does not work as it is saying incorrectly. So, they want to reset their password.

Table 16: Forgot Password

Persona	Admin (Admin Anya), Student (Jason Momoa), Professor (Greg Blesser)
Feature	User Management
Need	To offer users the ability to reset their passwords if they forget theirs
Context	User wants to generate a new password after forgetting their current one.

View User Profile

Anya, Jason, or Greg already registered on the website and successfully logged onto their intended account. Now, they want to see their profile how it looks like.

Table 17 User Profile Persona

Persona	Admin (Admin Anya), Student (Jason Momoa), Professor (Greg Blesser)
Feature	User Management
Need	To see personal basic details accordingly
Context	Users can see their profile

Delete Accounts

Anya has found some bad professors or students who have been created somehow and she wants to delete them from the website, so she wants to revoke their accesses.

Table 18 Delete accounts Persona

Persona	Admin (Admin Anya)
Feature	User Management
Need	To delete the account for professors and students from the courses
Context	User felt like something bad happened or intentionally done something to students or other colleagues – then Admin will remove such bad users.

17. Assignment Management:

Assignment Creation:

Professor Greg wants to give some assignments to the students in a particular course. So, the professor will upload an either .pdf or .doc file into file upload window page and the registered students will get that assignment with basic details:

Table 19 Assignment Creation Table

Persona	Professor (Greg Blessner)
Feature	User Management
Need	To create the assignment and assign it to the students.
Context	The professor can give some tasks to their students so that they can grade them.

Assignment View:

A student Jason wants to view the given assignment with the details like an attachment, description, and the final submission deadline.

Table 20 View Particular Assignment

Persona	Student (Jason Momoa)
Feature	User Management
Need	Instructions to be followed as per description and progress purpose.
Context	A student can see the assignment created by professor and is intended to do that within the given timeline.

Visible Date

Professor Greg wants to set up a page where once assignments are created, students can only be able to see the attachment on a particular date otherwise till date students can see only viewable assignment list.

Table 21 Visible Assignment Date

Persona	Student (Jason Momoa)
Feature	User Management
Need	To manage proper submission deadline and progress window of students over a period.
Context	Jason will see that once the visible date is enabled – that assignment will be published on that date only.

Submission and Status

Student Jason Momoa wants to submit an assignment. He wants to submit a file using the submission window.

Table 22 Status and Submission of Assignments

Persona	Student (Jason Momoa)
Feature	User Management
Need	To submit an assignment within a proper deadline.
Context	To upload a file, Jason will simply put .pdf or .doc file and once you click on submit, the status of the submission will be reflected as Completed.

18. Quiz Management:

Create Quiz

Professor Greg wants to evaluate the knowledge of students. He wants to take a quiz using

Table 23: Create Quiz

Persona	Professor (Greg Blessner)
Feature	Quiz Management
Need	To create a quiz and assign it to students
Context	Professors use quizzes to evaluate student comprehension, provide feedback, and track progress.

Question Bank

Using the Question Bank feature, Professor Greg creates a repository of questions. When making a quiz, he may quickly access these questions, ensuring a well-rounded and organized evaluation.

Table 24: Quiz Question Bank

Persona	Professor (Greg Blessner)
Feature	Quiz Management
Need	Centralized repository for managing and reusing questions
Context	Professors utilize the question bank feature to efficiently create customized assessments and maintain consistency in evaluations.

Random Questions

Greg has lots of questions in the pool and wants to randomize those questions, so that students get different limited questions in the quiz.

Table 25: Random Questions in Quiz

Persona	Professor (Greg Blessner)
Feature	Quiz Management
Need	To randomize the questions from the question bank

Context	Greg wanted to give each student different questions to make sure there is no cheating.
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Quiz Time

Professor Greg wants to set the time limit for a quiz. He sets the time limit for the quiz while setting up the quiz.

Table 26: Quiz Time Limit

Persona	Professor (Greg Blessing)
Feature	Quiz Management
Need	To limit time for the quiz
Context	Professor wants to limit the time for which a student can take the quiz after starting the quiz.

Visible Date

The quiz should only be seen to students when it is enabled by professor. Being a professor, Greg wants to set the visibility date for the quiz so that students can take the quiz within that time.

Table 27: Quiz Visibility Date

Persona	Professor (Greg Blessing)
Feature	Quiz Management
Need	To set a date-time for quiz to visible to students
Context	Professors want to set the start and end date for the quiz to be visible to students.

Modify Quiz

Greg thought that he made a mistake while creating the quiz. To overcome the mistake, he can edit the quiz he has created.

Table 28: Modify Quiz

Persona	Professor (Greg Blessing)
Feature	Quiz Management
Need	Modification of quiz that has been created
Context	Professors need to update the quiz.

Delete Quiz

Greg no longer wants the quiz that he created. He can simply delete the quiz. This action is not reversible, so once he deletes the quiz, it is gone.

Table 29: Delete Quiz

Persona	Professor (Greg Blessner)
Feature	Quiz Management
Need	To delete the quiz
Context	Professors feels like he does not want the whole quiz.

Quiz Review

Student Jason wants to check the correctness of the quiz based on his knowledge. So, he can navigate to quiz review in which he will be able to see the correct answer of the quiz.

Table 30: Quiz Review

Persona	Student (Jason Momoa)
Feature	Quiz Management
Need	To check correct/incorrect answers
Context	Students wanted to review the quiz that they have given.

19. Calendar:

Course Integration

Jason wants to see what the coming deadline is and for which course. If there is something pressing, he wants to check which course's deadline is earliest, description of the goal to achieve.

On the other hand, Greg has something urgent come up. He wants to move all the deadlines to another day. He can check all the deadlines on that day and notify students by emailing, posting in discussion channel or announcing it on course channel.

Table 31: Intended Scenario - Student

Persona	Student (Jason Momoa)
Feature	Calendar
Need	Jason needs the calendar feature to prioritize his tasks by checking upcoming deadlines and associated courses
Context	Jason uses the calendar to efficiently manage his academic responsibilities.

Table 32: Intended Scenario - Calendar - Professor

Persona	Professor (Greg Blessner)
Feature	Calendar
Need	Greg wants to mark his unavailability to answer student questions on specific days.
Context	Greg utilizes it to communicate his availability and ensure students are informed about his unavailability.

Easy traversal

Jason wants to gather all the deadlines and traverse to a specific assignment quickly. It also shows a categorized compact view and divides the deadlines between upcoming or past deadlines.

Meanwhile Greg wants to check all deadlines he set for any course.

Table 33: Intended Scenario - traversal - Professor.

Persona	Professor (Greg Blesser)
Feature	Calendar
Need	The calendar feature to gather and navigate deadlines efficiently
Context	Greg forgot to check the holiday before adding the assignments. He wants to send an email notifying all students that have the assignment on that specific deadline.

Table 34: Intended Scenario - traversal - Student.

Persona	Student (Jason Momoa)
Feature	Calendar
Need	Jason wants to know the deadlines on a specific date.
Context	Jason, as a student, uses the Calendar feature to view and track the deadlines specifically on a particular date.

20. Discussion Management:

Create Discussion:

Professor Greg wants to create a topic under which he wants to communicate with the students. So, Greg will create a discussion channel for that topic.

Table 35 Create Discussion

Persona	Professor (Greg Blesser)
Feature	User Management
Need	For communicating important details or requirements regarding classroom.
Context	Greg will provide important updates and communicate with students in two ways so that Greg can clear the doubts of the students.

View Discussion:

Student Jason Momoa wants to discuss with the professor using the discussion channel which was created by Professor Greg. Now, Jason will send the message to the professor and Greg will respond to the message respectively.

Table 36 View Discussion from Student side

Persona	Student (Jason Momoa)
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Feature	User Management
Need	To share important details – like doubts and insights from assignments, quizzes or any topic related to the course.
Context	Jason will response to that created discussion topic and describe his views to the professor Greg.

21. Notification:

Assignment & quiz are visible:

Student Jason Momoa receives notifications when new assignments and quizzes become visible on the platform. This allows him to promptly access and review the assignment details, ensuring he stays informed about upcoming tasks and can effectively plan his study schedule. The Assignment Visibility sub-feature enables Jason to stay organized and prepared for his academic responsibilities.

Table 37: Assessment Notification

Persona	Student (Jason Momoa)
Feature	Notification
Need	The Assignment Visibility sub-feature addresses the need for students like Jason Momoa to receive notifications and access information about newly visible assignments and quizzes, promoting timely awareness and effective task management.
Context	Jason will view the notifications about assignments and quizzes.

Due dates:

Student Jason Momoa receives notifications about assignment due dates, allowing him to stay organized and submit his work on time. This ensures that he can effectively manage his workload and meet the academic requirements within the given timeframe.

Table 38: Due dates notification

Persona	Student (Jason Momoa)
Feature	Notification
Need	The Due Dates sub-feature addresses the need for students like Jason Momoa to receive timely notifications about assignment due dates, promoting effective time management and successful task completion.
Context	Jason will view notifications about upcoming due dates.

Grades and Feedback:

Student Jason Momoa receives notifications about his grades and feedback provided by his professors. This allows him to track his progress, identify areas for improvement, and leverage valuable feedback to enhance his learning and academic performance.

Table 39: Grades & Feedback notification

Persona	Student (Jason Momoa)
Feature	Notification
Need	The Grades & Feedback sub-feature addresses the need for students like Jason Momoa to receive notifications about their grades and feedback, facilitating continuous learning and improvement.
Context	Jason will view notifications about feedback and grades received for assignments and quizzes.

Content created:

Student Jason Momoa receives notifications when new course content is created by his professors. This ensures that he stays updated on relevant materials, can access additional resources, and engage in a comprehensive learning experience.

Table 40: Content created notification

Persona	Student (Jason Momoa)
Feature	Notification
Need	The Content Created sub-feature addresses the need for students like Jason Momoa to receive notifications about newly created course content, ensuring they have access to the latest materials for an enriched learning journey.
Context	Jason will view notifications about newly created content.

View notifications:

Student Jason Momoa can easily navigate to the notification page, where he can access all his notifications in one centralized location. This allows him to conveniently review updates, announcements, and important from his professors, ensuring he stays well-informed and engaged in his academic journey.

Table 41: View notifications

Persona	Student (Jason Momoa)
Feature	Notification
Need	The View Notification Page sub-feature addresses the need for students like Jason Momoa to have a centralized location to access and review all their notifications, promoting efficient information management and facilitating effective communication with professors.
Context	Jason will view notifications on the notifications page.

22. Admin Dashboard:

Course creation:

Admin Anya utilizes the "Course Creation" sub-feature to create new courses in the system. This allows her to add essential details, such as course name, description, and enrollment requirements, ensuring accurate course information for students and efficient course management.

Table 42: Course creation

Persona	Admin (Admin Anya)
Feature	Admin dashboard
Need	The Course Creation sub-feature addresses the need for Admin Anya to create new courses, enabling her to provide accurate information and efficiently manage course offerings.
Context	Anya will use the create course feature to add new courses to the system.

Course viewing:

Admin Anya utilizes the "Course Viewing" sub-feature to access and review existing courses in the system. This allows her to view course details, enrollment statistics, and other pertinent information, facilitating effective course administration and decision-making.

Table 43: Course Viewing

Persona	Admin (Admin Anya)
Feature	Admin dashboard
Need	The Course Viewing sub-feature addresses the need for Admin Anya to access and review course details, enabling her to make informed decisions and efficiently manage courses.
Context	Anya will use the view course feature to view course information in the system.

Course update:

Admin Anya utilizes the "Course Updating" sub-feature to make modifications and updates to existing courses in the system. This allows her to edit course details, adjust enrollment requirements, or update course materials, ensuring that courses remain current and relevant.

Table 44: Course update

Persona	Admin (Admin Anya)
Feature	Admin dashboard

Need	The Course Updating sub-feature addresses the need for Admin Anya to make modifications and updates to existing courses, enabling her to keep courses relevant and up to date.
Context	Anya will use the update course feature to update course information in the system.

Course deletion:

Admin Anya utilizes the "Course Deletion" sub-feature to remove courses from the system. This allows her to delete outdated or discontinued courses, ensuring a streamlined course catalog and preventing confusion among students.

Table 45: Course deletion

Persona	Admin (Admin Anya)
Feature	Admin dashboard
Need	The Course Deletion sub-feature addresses the need for Admin Anya to remove courses from the system, maintaining an up-to-date and well-organized course catalog.
Context	Anya will use the delete course feature to delete a course from the system.

Course mapping:

Admin Anya utilizes the "Professor to Course Mapping" sub-feature to assign professors to specific courses. This ensures that each course is allocated to the appropriate professor, facilitating efficient teaching assignments, and optimizing the academic experience for students.

Table 46: Course Mapping

Persona	Admin (Admin Anya)
Feature	Admin dashboard
Need	The Professor to Course Mapping sub-feature addresses the need for Admin Anya to allocate professors to courses, ensuring effective teaching assignments and a structured educational environment.
Context	Anya will map certain professor to a course(s).

Professor approval:

Admin Anya utilizes the "Prof Approval" sub-feature to add professors to the system. This allows her to manage the approval process, ensuring that only authorized and qualified professors are granted access to the platform, maintaining the integrity and professionalism of the educational institution.

Table 47: Professor approval

Persona	Admin (Admin Anya)
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Feature	Admin dashboard
Need	The Prof Approval sub-feature addresses the need for Admin Anya to add and approve professors in the system, maintaining control over the accessibility and authorization of individuals within the educational institution.
Context	Anya will approve professors to be added to the system.

A1.3 Site mapping

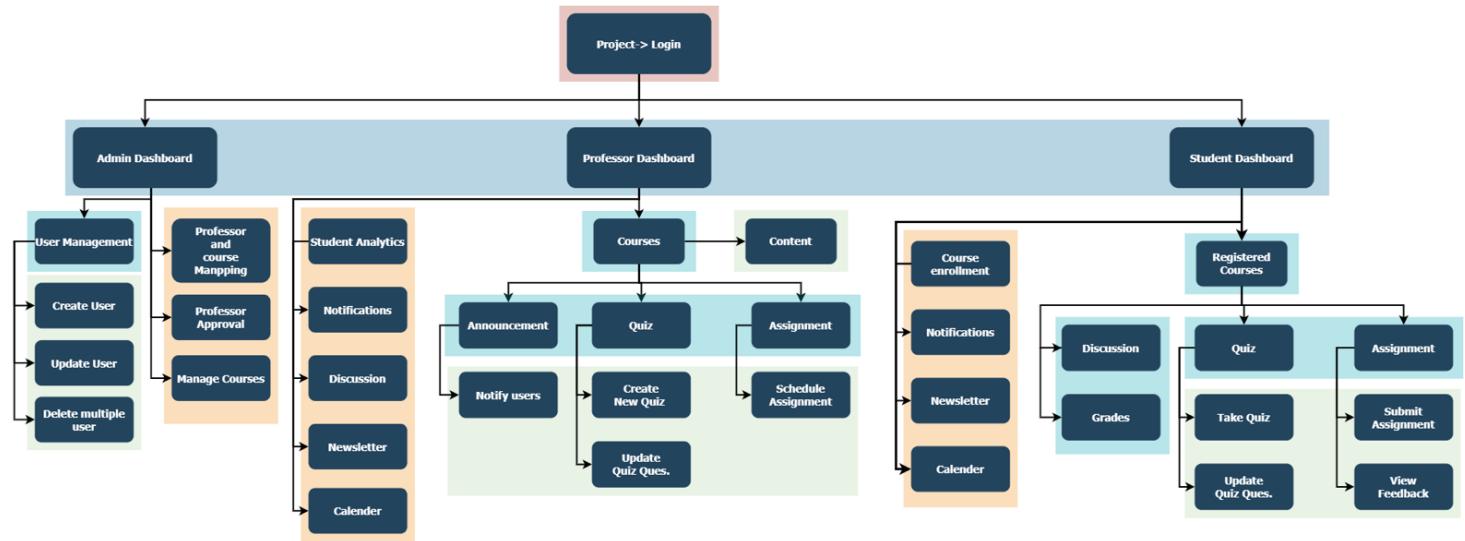


Figure 4: Site map of the web application.

For Site Map, please find the file **sitemap.png** attached in assignment submission since it is scaled horizontally, so not able to fit in here.

A1.4 Use cases

6. User Management

Unified page for Professor Student registration (Accessible only to admins), login or deleting a specific account (Accessible only to admins). It also provides an option to reset a password through forgot password option.

Use Case: Student and professor registration.

1. Admin wants to create a user for professor.
2. Admin clicks on register user.
3. Admin chooses professor.
4. Fills up all the details required for professor profile.
5. Submit the new professor creation request.
6. Admin then wants to create student profile.
7. Admin clicks on register student.
8. Fills up all the profile details for student and clicks on submit.

Use Case: User Authentication

1. User comes on login page.
2. User enters the id and password.
 - a. If the logged in user is a student, he is redirected to the student dashboard.
 - b. If the logged in user is professor, he is redirected to professor dashboard.
 - c. If the logged in user is an admin, he is redirected to the admin dashboard.

Use Case: User account deletion.

1. Admin wants to delete professor or students account as they are no longer affiliated with university.
2. Admin click on delete user button.
3. Enter the email address of the user.
4. User gets deleted.

7. Discussion

The logged in professor will create a topic for a discussion based on the course content and learning objectives. The discussion will be on the Discussion Web page, visible on the professor dashboard only. Here we will Permit people to participate in discussions by replying to already-existing messages.

Use Case: Discussion Creation

1. Professor can create a discussion channel for a particular topic by clicking on a button.
2. Professor will open a chat option for the students.
3. Students on the other side can see the incoming messages from the professor.
4. Student can select the message, respond to that message, and give it back to the professor.
5. Now two-way communication will be started between the professor and the students.
6. Multiple students can chat among themselves, by sending messages.
7. Students can have a text box where they can write a particular message.
8. System will have a Send button to deliver the message under that topic.
9. This is how our discussion channel will be supported to discuss doubts and important topics for the content or slides.

8. Assignments

The professor can create an assignment with basic details for the submission based on the content and slides delivered to the students on a periodic basis. The basic workflow of the assignment creation process is as per following steps:

Use Case: Professor Assignments creation:

1. Professor will click on the create assignment button to write some details.
2. After clicking on the button, the professor will write a description of the assignment.
3. After that, the professor will upload the assignment in the form of .pdf or .doc file.
4. Professor will have an option to visible the assignment on a particular date.
5. Professor should mention a submission deadline.
6. Once the professor releases the assignment, an automatic notification will be sent to the students inside that course.

Use Case: Visible Date Professor:

1. A professor can set the visible date option for a particular assignment by clicking on either a radio button or by just entering the date using date picker option.
2. System will reflect automatically to release that assignment to be visible to the students on that date.

Use Case: Submission and Status:

1. Once a student submits the assignment for a particular course, it will ask for the file upload and once it has been uploaded, they will be redirected to the submission history page.
2. Now A student can see the assignment status as “Completed”.

Use Case: Students Assignment View:

The student will be able to see the assignments listed on the assignment page in a list format. The basic workflow of the assignment submission process is as per following steps:

1. The student will be notified from the notification that the assignment has been created by the professor.
2. The student will go to the assignment page to see the assignment and they can see into a list format with basic details like status, submission deadline date and upload final submission into .pdf or .doc format.
3. For submission, students will click on the view assignment button, and they can see description and how to submit the assignment.
4. After that, students can click on the upload files button to upload final submission.
5. If there is no connection error or any issues that have not happened, then students will see the successful message saying that the files have been uploaded successfully.
6. Now students can see the status as "Completed" instead of "Incomplete".
7. Some assignments will be visible to the students after the visible date that professor has set already on their side.
8. Clicking on the history button, the window will open which will describe the submitted assignments with the description that the students have submitted for any kind of clarification to the professor.

9. Quiz

Use Case: Create Quiz

1. The system displays the Quiz Management interface, providing options for quiz creation.
2. Professor selects the "Create Quiz" option.
3. The system prompts you to enter a title and description for the quiz.
4. Professor enters the title and description, providing clear instructions and context for the quiz.
 - 4.1 Professor leaves the title or description field blank.
 - 4.2 The system displays an error message indicating that both the title and description fields are required.
5. Professor proceeds to add questions to the quiz.
6. Professor selects the desired question type and enters the question along with possible answer options or select question from the question bank.
7. The professor repeats step 6 for each additional question they want to include.

8. The professor specifies any additional settings for the quiz, such as time limits, randomizing question order, due date, and visibility date.
9. The professor reviews the quiz details and makes any necessary adjustments.
10. Professor clicks on the "Create Quiz" or "Save" button to finalize the quiz creation process.
11. The system saves the quiz and provides confirmation to the user.
12. The professor is redirected to the quiz management interface, where they can view and manage the created quiz.
13. The created quiz is now available for distribution to students and can be accessed for completion and grading.

Use case: Question Bank

1. The system displays the Question Bank interface.
2. The professor selects the "Question Bank" or "Manage Questions" option.
3. The professor performs actions such as adding, editing, or deleting questions.
4. The professor adds a new question or uploads a CSV file for the question bank.
5. The professor fills in the required fields and provides additional information for the question.
6. The professor saves or adds the question to the bank.
7. The system confirms the successful addition of the question.
8. The professor can repeat steps 4-7 to add more questions or edit/delete existing ones.
9. The professor can review, preview, and perform other management actions on the question bank.
10. The professor can exit the question bank interface, and all changes are retained.

Use Case: Random Questions

1. Professor selects the "Random Question" feature while creating a quiz.
2. The system will take random questions from the pool of questions.
3. The quiz is saved and published, and each student receives a unique combination of random questions.
4. Students attempt the quiz and answer the randomly selected questions within the given time limit.

Use Case: Quiz Time

1. Professor accesses the quiz setting.
2. Professor selects the option to set the time limit for the quiz.
3. Professor inputs the desired duration, such as 60 minutes, for the quiz.
4. The system saves the specified time limit for the quiz.
5. Students attempting the quiz are informed about the time limit set by the Professor.
6. Students must complete the quiz within the designated time limit.

Use Case: Modify Quiz

1. Professor accesses the list of quizzes.
2. Professor selects the specific quiz he wants to modify.
3. The system displays the quiz details and options for editing.
4. Professor makes the necessary modifications to the quiz, such as adding, removing, or editing questions.
5. After completing the modifications, the Professor saves the updated version of the quiz.
6. The modified quiz is now available for students to access and attempt with the updated changes.

Use Case: Delete Quiz

1. Professor selects the specific quiz he wants to delete from the list.
2. The system prompts the Professor to confirm the deletion action.
3. Professor confirms the deletion of the quiz.
4. The quiz is immediately deleted from the platform and all associated data is permanently removed.

Use Case: Specific Quiz

1. Students navigate to the specific quiz page.
2. The system loads the quiz interface, displaying the quiz title, instructions, and any additional relevant information.
3. Students read the question promptly and carefully review the available answer options.
4. If applicable, students may utilize navigation features (e.g., previous/next buttons) to move between questions.
5. Students analyze the answer options and select their chosen answer for each question.
6. Once all questions have been addressed, students may submit their quiz for grading.

Use Case: Quiz Review

1. After submitting the quiz, students access the quiz review.
2. The system displays the quiz results, including the student's answers and the correct answers for each question.
3. Students can review their attempted answers, compare them with the correct answers, and assess their performance.
4. Students can utilize the quiz review to learn from their mistakes and improve their understanding of the quiz topics.

10.Student & Professor Dashboard

Use case: Analytics Dashboard:

1. Professor Dr. Greg Blesser wants to assess student performance and track progress.
2. Dr. Blesser navigates to the Analytics Dashboard in his professor dashboard.
3. He examines student grades, attendance, and participation to gain insights into their academic performance.

Use case: List Courses:

1. Student Jason Momoa wants to view his current courses and access their details.
2. Jason logs into his student dashboard and navigates to the List Courses section.
3. He sees a list of his enrolled courses, including course names, instructors, and relevant information.

Use case: MANAGE Content by Professor:

1. Professor Dr. Greg Blesser wants to create, view, update, and delete course content.
2. Dr. Blesser accesses the MANAGE Content feature in his professor dashboard.
3. He creates lecture slides, uploads readings, and adds multimedia resources using the content creation interface.

Use case: View Content by Student:

1. Student Jason Momoa wants to access and review course materials shared by professors.
2. Jason logs into his student dashboard and selects the View Content option.
3. He opens lecture slides, reads assigned readings, and watches videos provided by the professor.

Use case: Announcement:

1. Professor Dr. Greg Blesser wants to make important announcements to his students.
2. Dr. Blesser accesses the Announcement feature in his professor dashboard.
3. He writes announcement messages, including details, deadlines, and attachments, and sends them to the target courses.

Use case: Profile Updates for Students:

1. Student Jason Momoa wants to update his personal information and preferences.
2. Jason goes to his student dashboard and selects the Profile Updates option.
3. He edits his contact details and preferences and saves the changes.

11.Admin Dashboard

Manage Course:

Use case: Admin wants to create a new course in the system.

1. Admin accesses the MANAGE Course feature in the admin dashboard.
2. Admin fills in the necessary course details (title, description, etc.).
3. Admin submits the course creation request, and the course is added to the system.

Use case: Admin wants to view the details of an existing course.

1. Admin selects the desired course from the course list in the admin dashboard.
2. Admin accesses the course details, including enrolled students and assigned professors.

Use case: Admin wants to update the information of an existing course.

1. Admin selects the desired course from the course list in the admin dashboard.
2. Admin edits the course details (title, description, etc.).
3. Admin saves the changes, and the course information is updated in the system.

Use case: Admin wants to delete a course from the system.

1. Admin selects the desired course from the course list in the admin dashboard.
2. Admin chooses the delete option and confirms the deletion.
3. The course is removed from the system, and all associated data (students, professors, content) is also deleted.

Professor to Course Mapping:

Use case: Admin wants to assign a professor to a specific course.

1. Admin accesses the Professor to Course Mapping feature in the admin dashboard.
2. Admin selects the desired professor and course from the available options.
3. Admin confirms the mapping, and the professor is assigned to the course.

Professor Approval:

Use case: Admin wants to add a new professor to the system.

1. Admin accesses the Professor Approval feature in the admin dashboard.
2. Admin fills in the necessary details of the new professor (name, contact information, etc.).
3. Admin submits the approval request, and the professor is added to the system.

12.News

Manage News:

Use case: Admin Anya wants to create a news article to share important updates with the users.

1. Anya accesses the MANAGE News feature in the admin dashboard.
2. Anya selects the "Create News" option and fills in the article details (title, content, etc.).
3. Anya submits the news article, and it is published for users to view.

Use case: Admin Anya wants to view the details of an existing news article.

1. Anya selects the desired news article from the list in the admin dashboard.
2. Anya accesses the news article details, including the title, content, and publishing date.

Use case: Admin Anya wants to update an existing news article.

4. Anya selects the desired news article from the list in the admin dashboard.
5. Anya edits the article details (title, content, etc.).
6. Anya saves the changes, and the updated news article is published for users.

Use case: Admin Anya wants to delete a news article from the system.

1. Anya selects the desired news article from the list in the admin dashboard.
2. Anya chooses the delete option and confirms the deletion.
3. The news article is removed from the system and is no longer visible to users.

Read News by Professor:

Use case: Professor wants to access and read the latest news articles shared by the admin.

1. The professor logs into their dashboard and navigates to the News section.
2. The professor views the list of available news articles and selects the desired article.
3. The professor reads the article's content, including any important updates or announcements.

13.Notifications

Use case: When Assignment and Quiz Gets Visible:

1. The system automatically notifies the students when a new assignment or quiz becomes visible for a specific course.
2. Students receive a notification indicating the availability of the assignment or quiz.

3. Students can access the assignment or quiz details and begin their preparation or submission accordingly.

Use case: Due Date Approaching:

2. The system sends reminders to the students as the due date for an assignment or quiz approaches.
3. Students receive notifications highlighting the remaining time until the submission deadline.

Use case: Grades and Feedback:

1. When professors grade assignments or quizzes and provide feedback, the system notifies the students.
2. Students receive notifications regarding their grades and can access detailed feedback from the professor.

This allows students to review their performance, understand their strengths and areas for improvement, and take necessary actions.

Use case: Content Created:

1. Professors receive notifications when new course content, such as lecture slides, readings, or videos, is created or uploaded.
2. Professors can quickly access the newly added content and ensure it aligns with the course curriculum and requirements.

This notification ensures that professors stay updated on the course materials available to the students.

Use case: View Notification:

1. Students and professors can view their notification history to review past notifications.
2. The notification history displays a list of previously received notifications, categorized by type and date.

This feature allows users to revisit important information and reminders, ensuring they do not miss any crucial updates.

A1.5 User Experience and Task Flow

1. User Management [Harshil Shah]

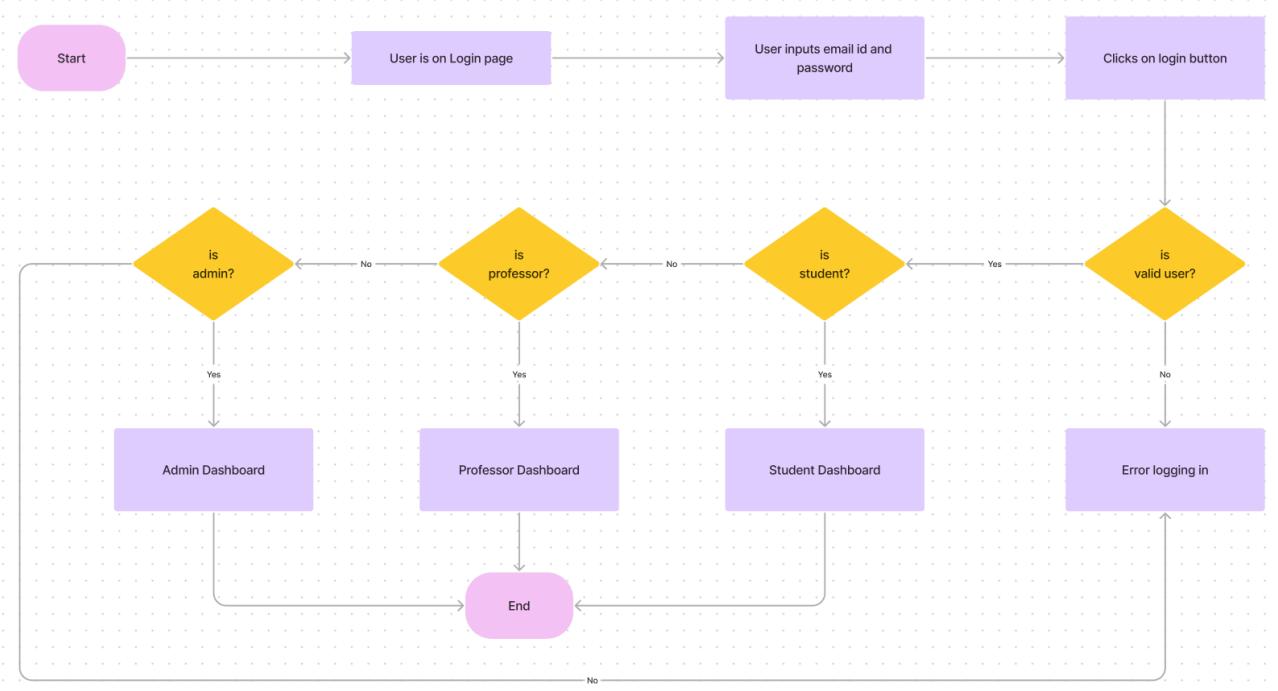


Figure 5: Task flow for login

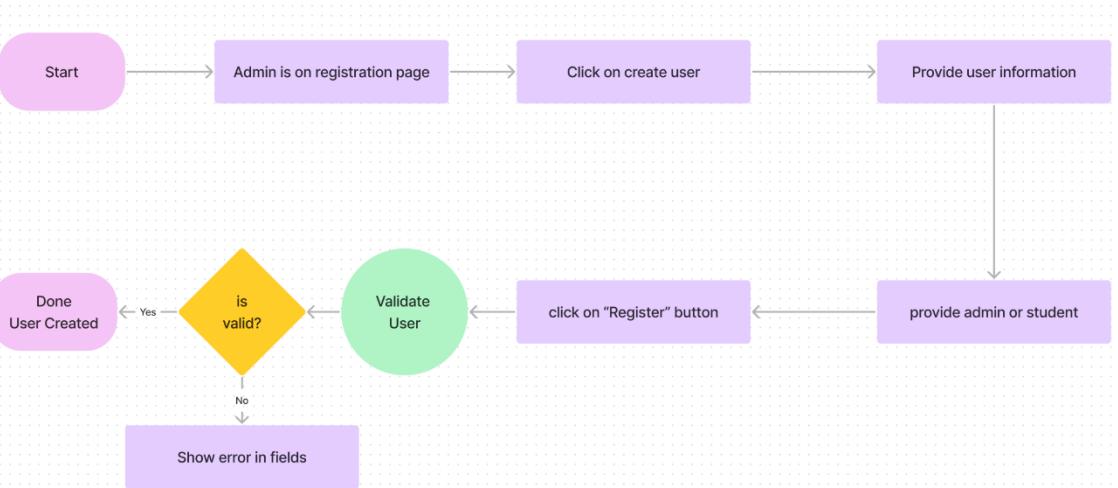


Figure 6: Task Flow for registration

2. Quiz [Raj Soni]

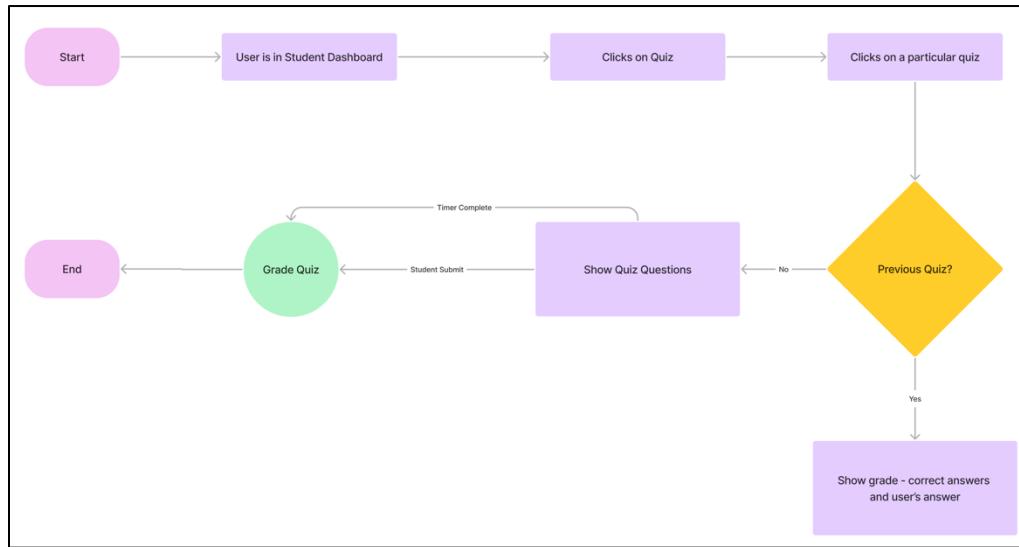


Figure 7: Task flow for Take Quiz

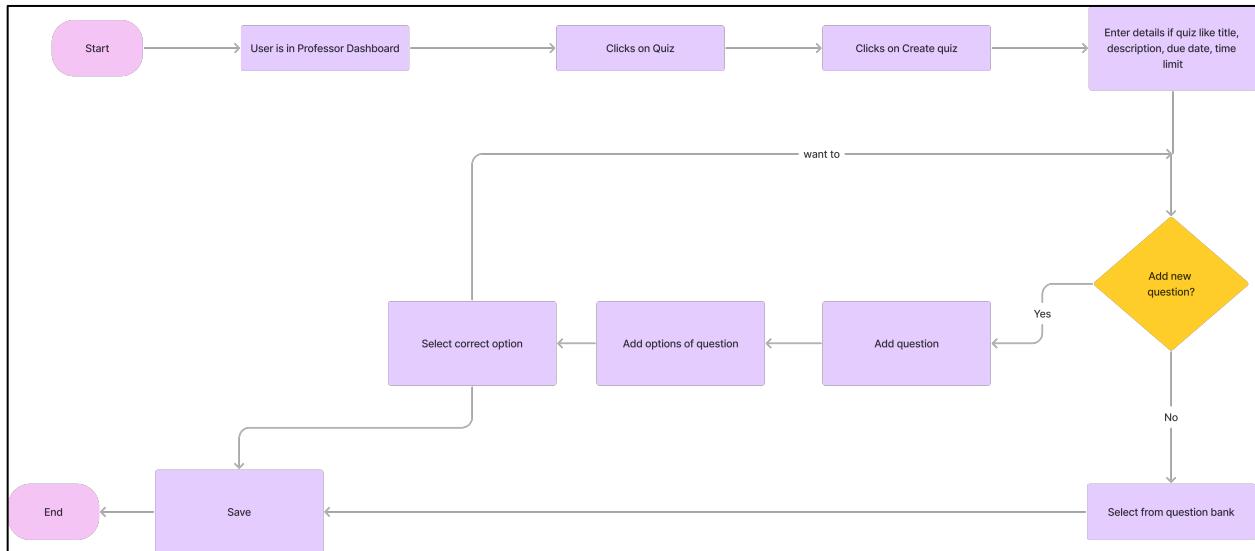


Figure 8: Task flow for create Quiz.

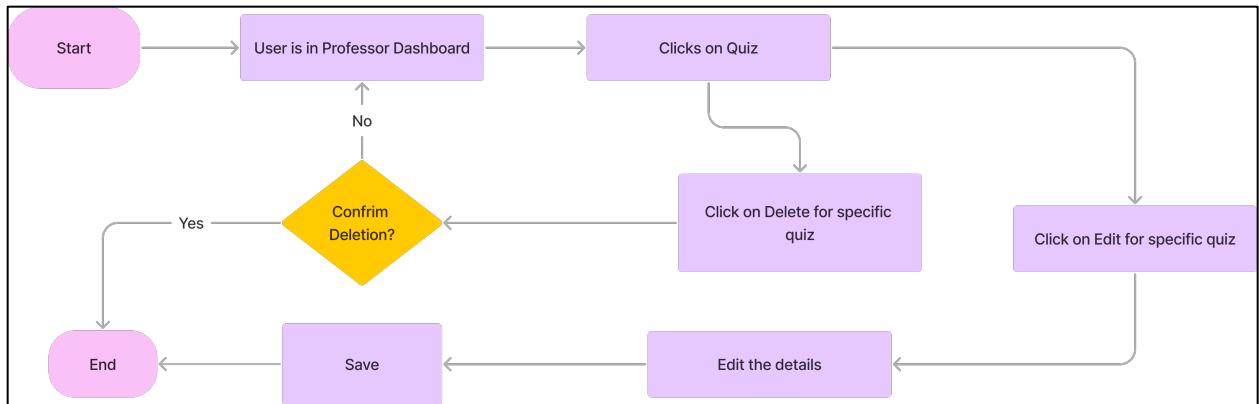


Figure 9: Task flow for Edit and Delete Quiz

3. Admin Dashboard [Aanandi Pankhania]

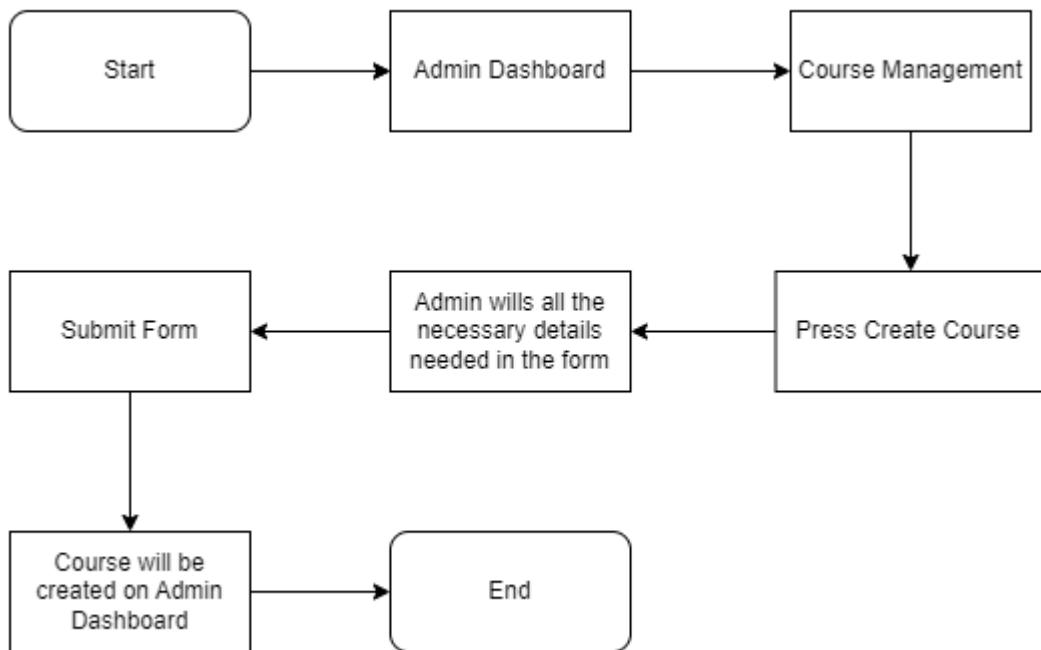


Figure 10: Task flow for Creating course in course management (created by Aanandi)

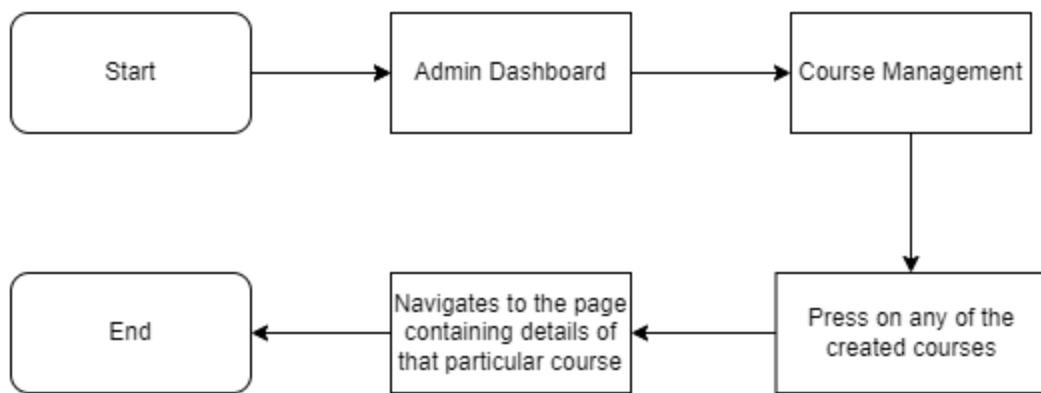


Figure 11: Task flow for Reading course in course management (created by Aanandi)

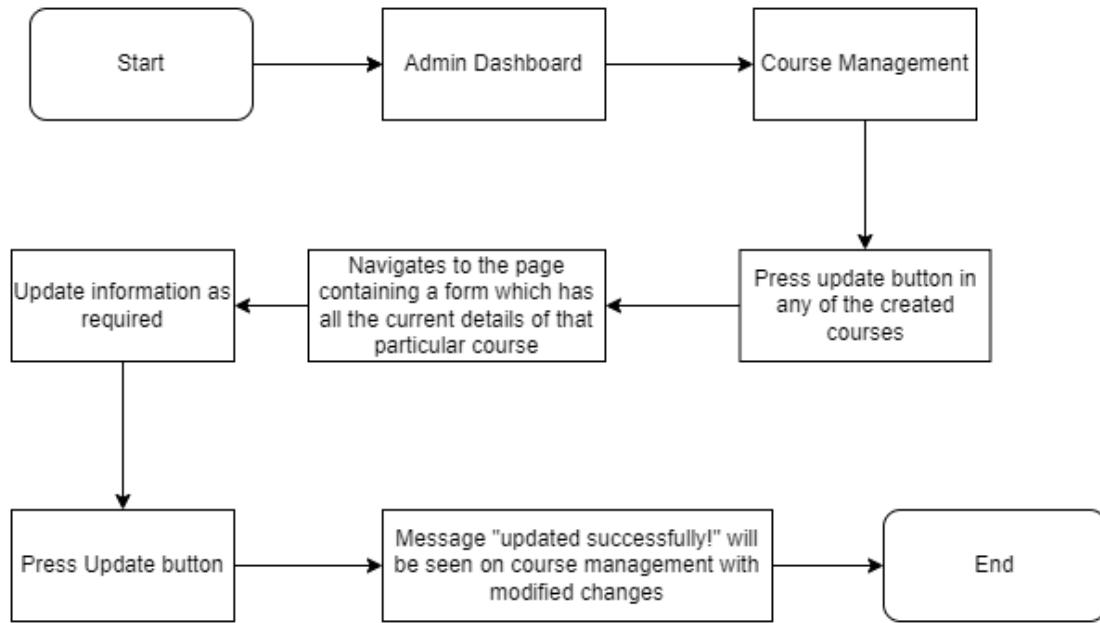


Figure 12: Task flow for Updating course in course management (created by Aanandi)

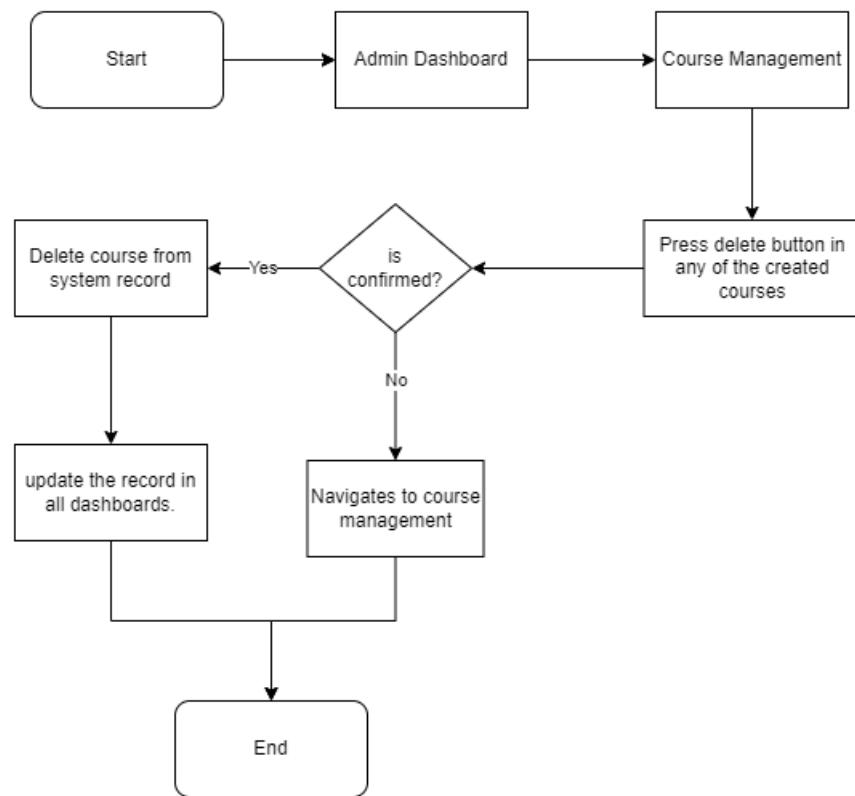


Figure 12: Task flow for Deleting course in course management (created by Aanandi)

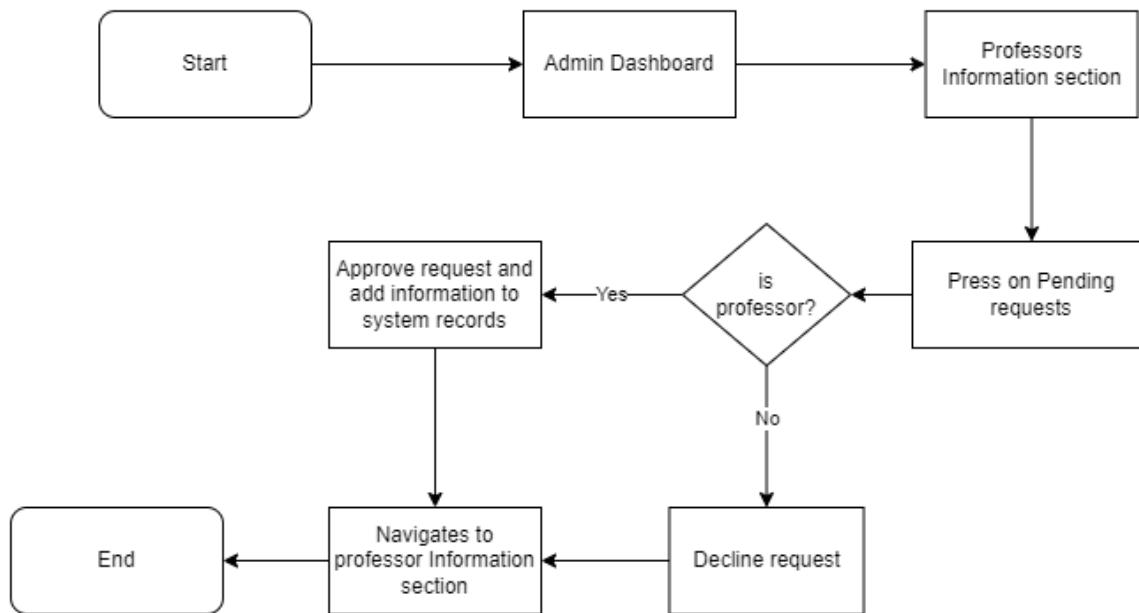


Figure 13: Task flow for Professor approval (created by Aanandi)

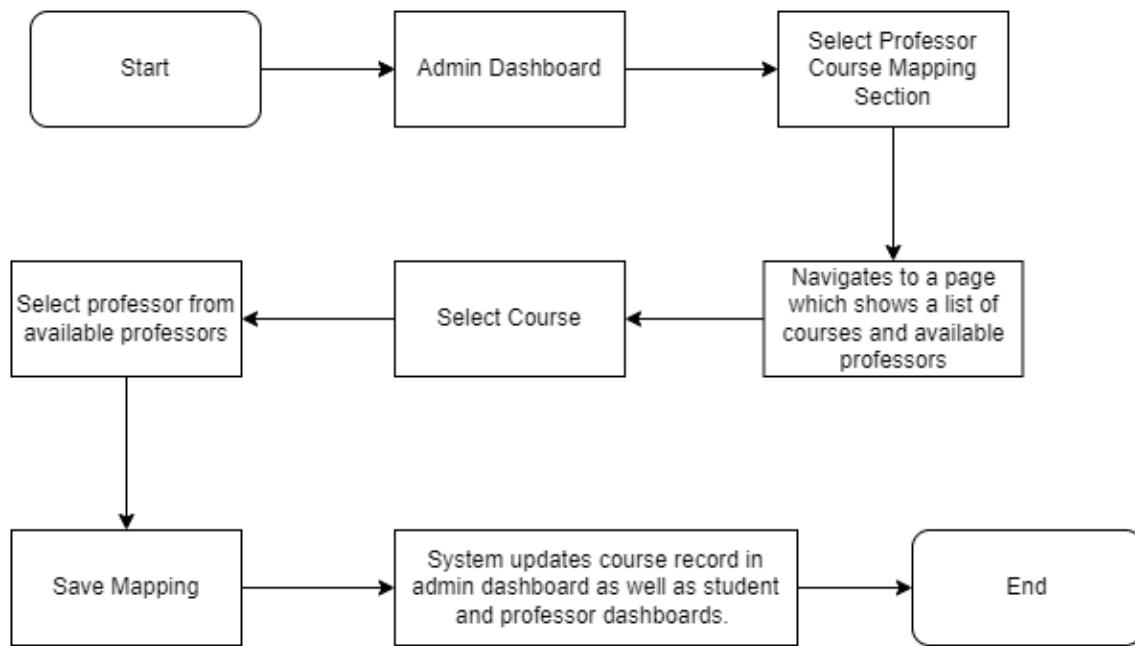


Figure 14: Task flow for Mapping of Professor and Courses (created by Aanandi)

4. Assignment [Viral Siddhapura]

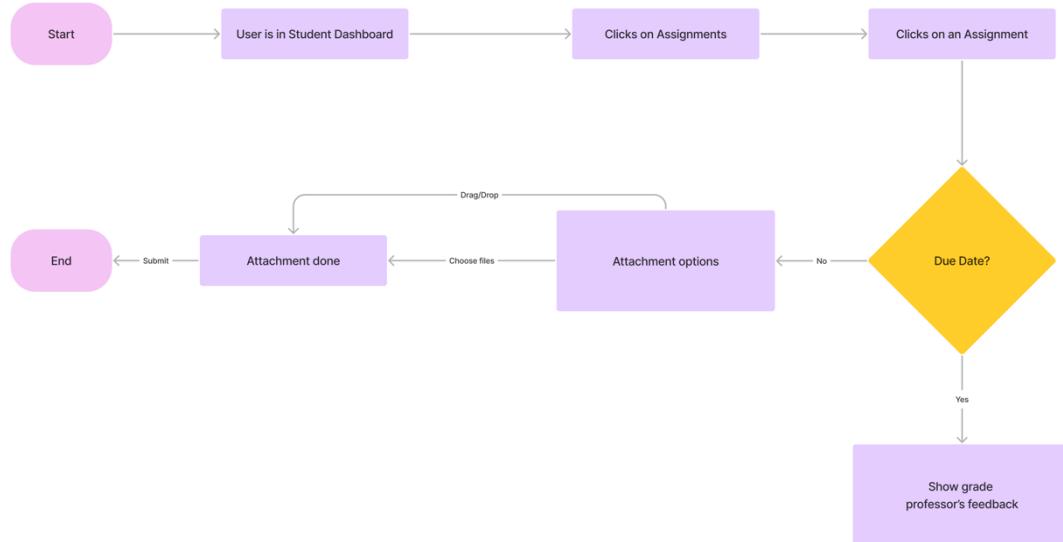


Figure 15: Task flow for Assignments in Students Screen (created by Viral)

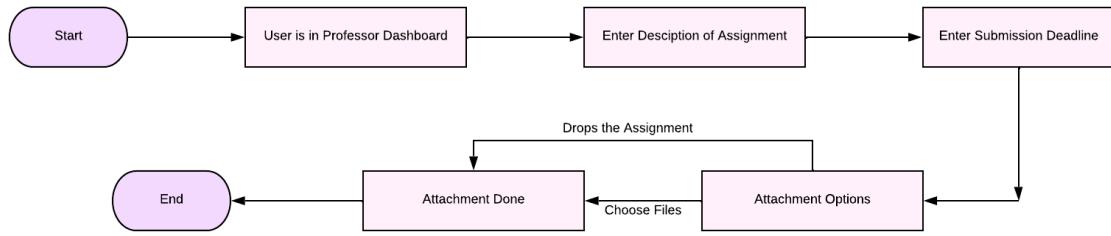


Figure 16: Task flow for uploading the Assignments in Professor Screen (created by Viral)

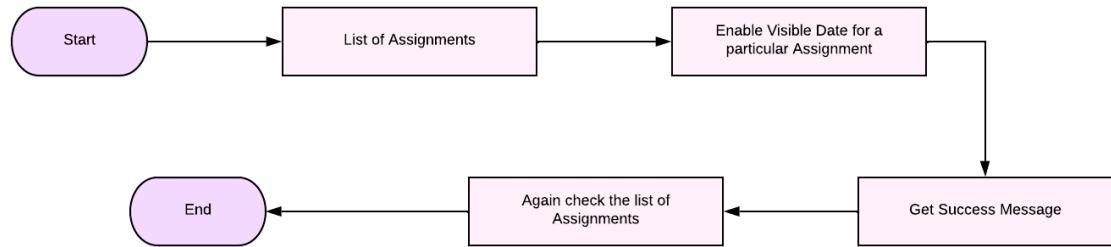


Figure 17: Showing how to enable visible date by a professor. (created by Viral)

5. Professor and Student Dashboard [Yatrik Amrutiya]

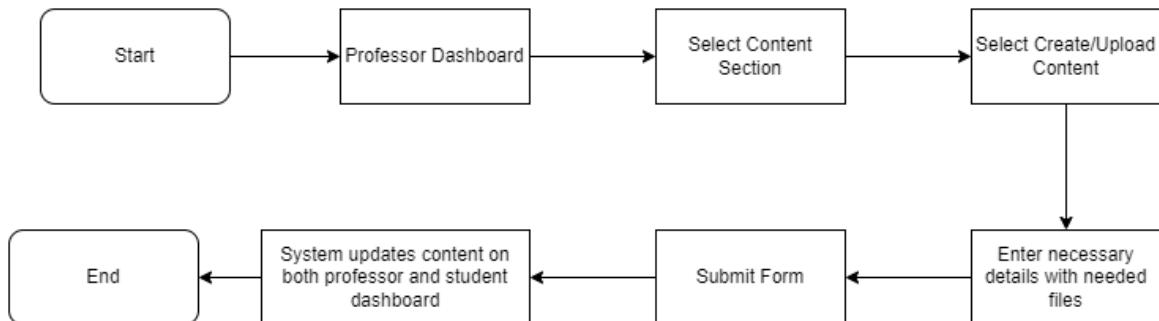


Figure 18: Task flow for Professor Dashboard- Creating content (created by Yatrik)

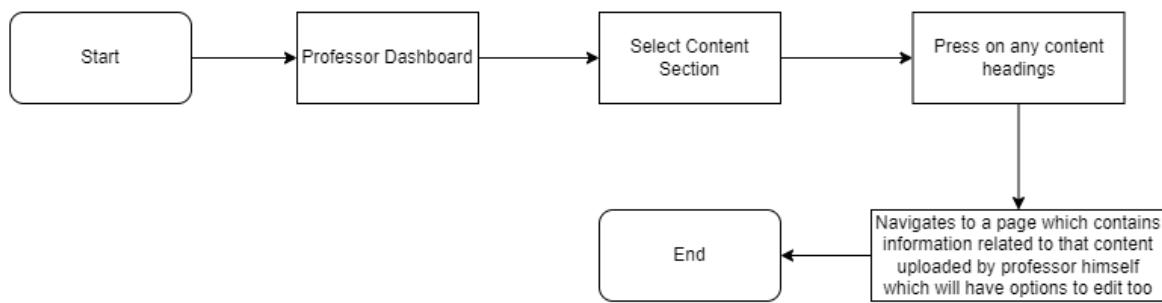


Figure 19: Task flow for Professor Dashboard- Reading content (created by Yatrik)

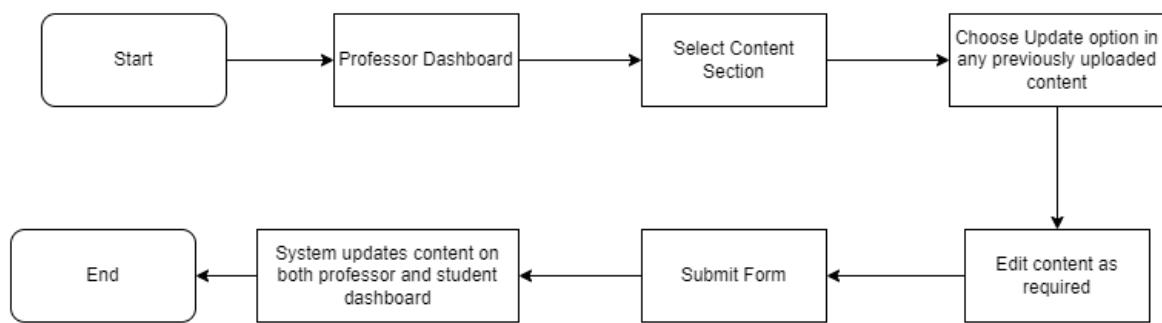


Figure 20: Task flow for Professor Dashboard- Updating content (created by Yatrik)

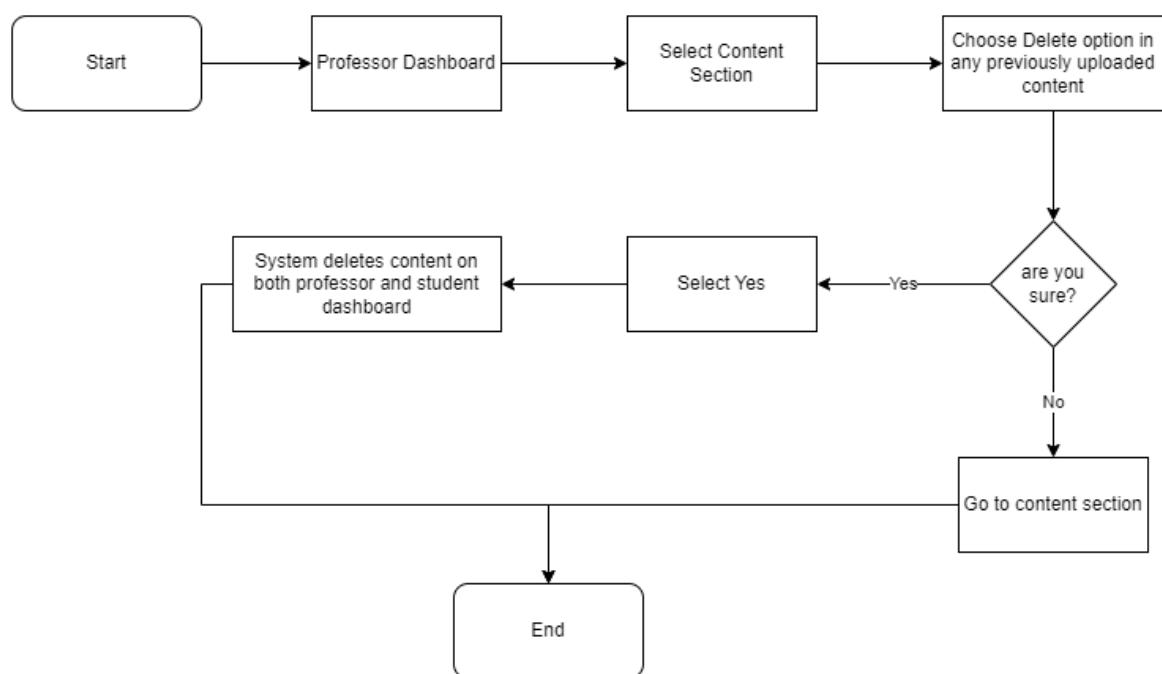


Figure 21: Task flow for Professor Dashboard- Deleting content (created by Yatrik)

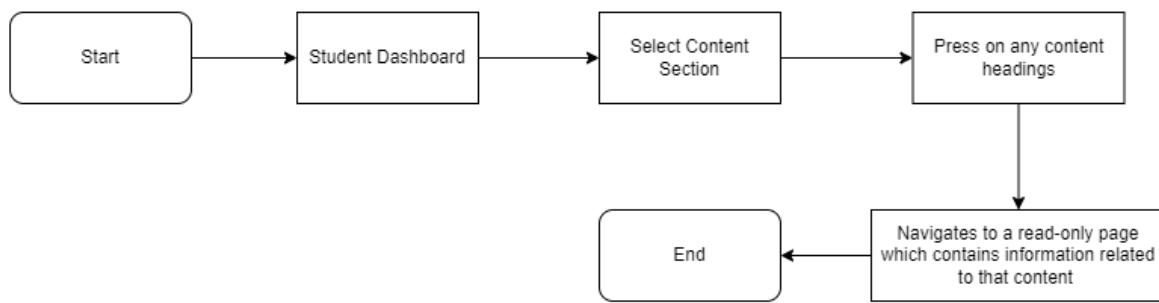


Figure 22: Task flow for Student Dashboard- Reading content (created by Yatrik)

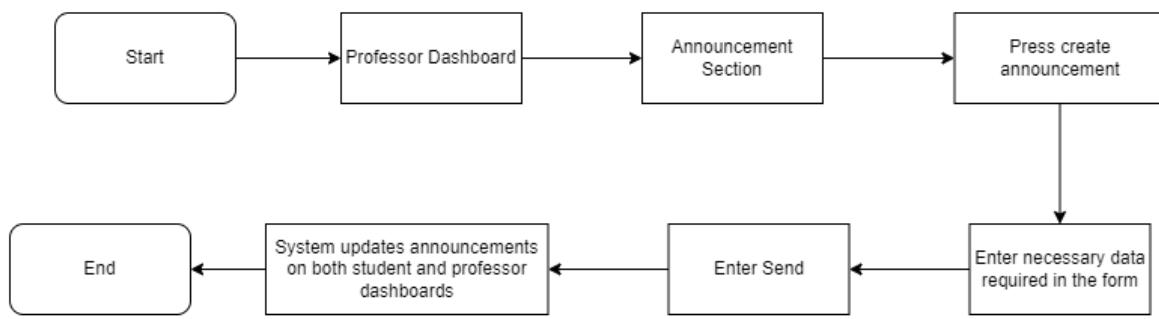


Figure 23: Task flow for Professor Dashboard- Create Announcements (created by Yatrik)

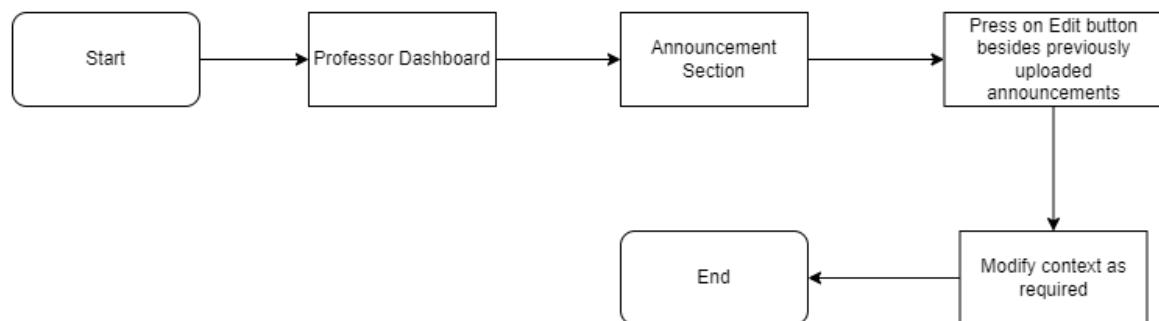


Figure 24: Task flow for Professor Dashboard- Edit Announcements (created by Yatrik)

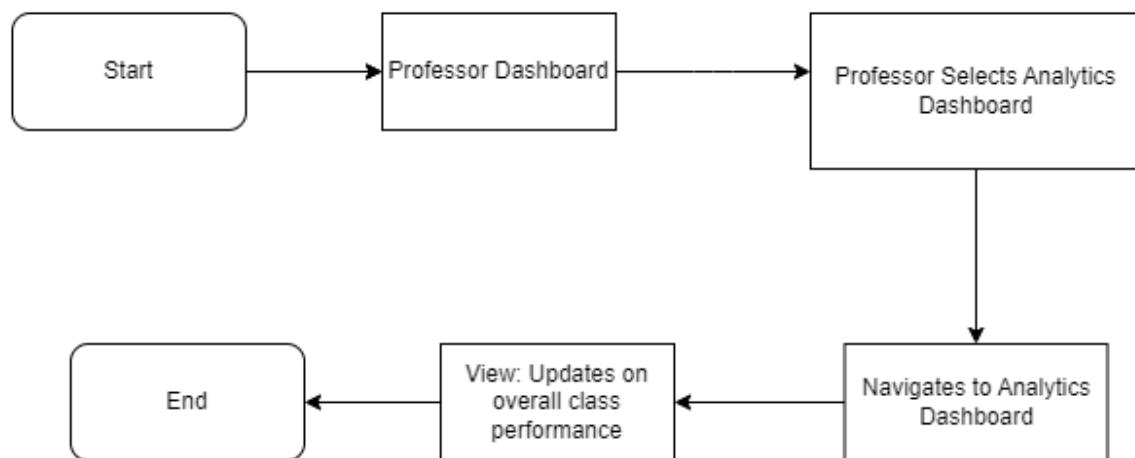


Figure 25: Task flow for Professor Dashboard- Analytics Dashboard (created by Yatrik)

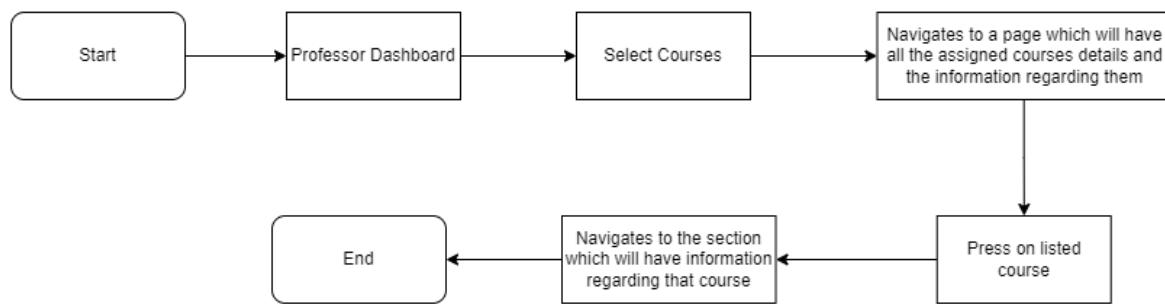


Figure 26: Task flow for Professor Dashboard- List courses (created by Yatrik)

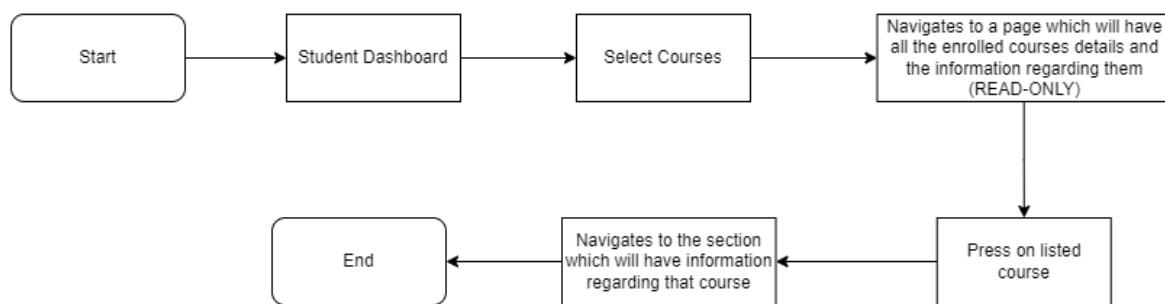


Figure 27: Task flow for Student Dashboard- List Courses (created by Yatrik)

A1.6 Lo-Fidelity Prototype

1. User Management [Harshil Shah]

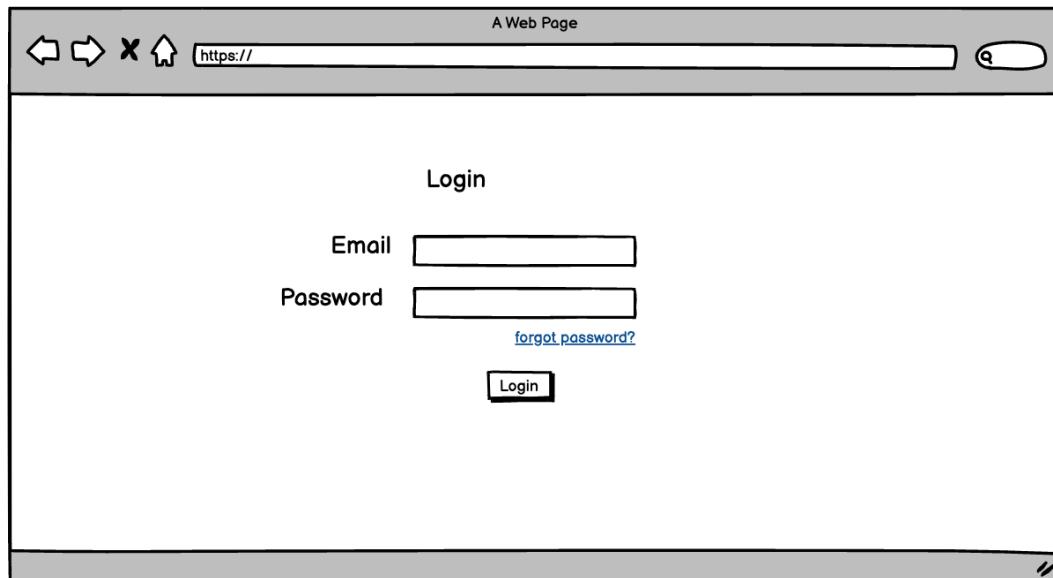


Figure 28: Unified Login Screen (created by Harshil)

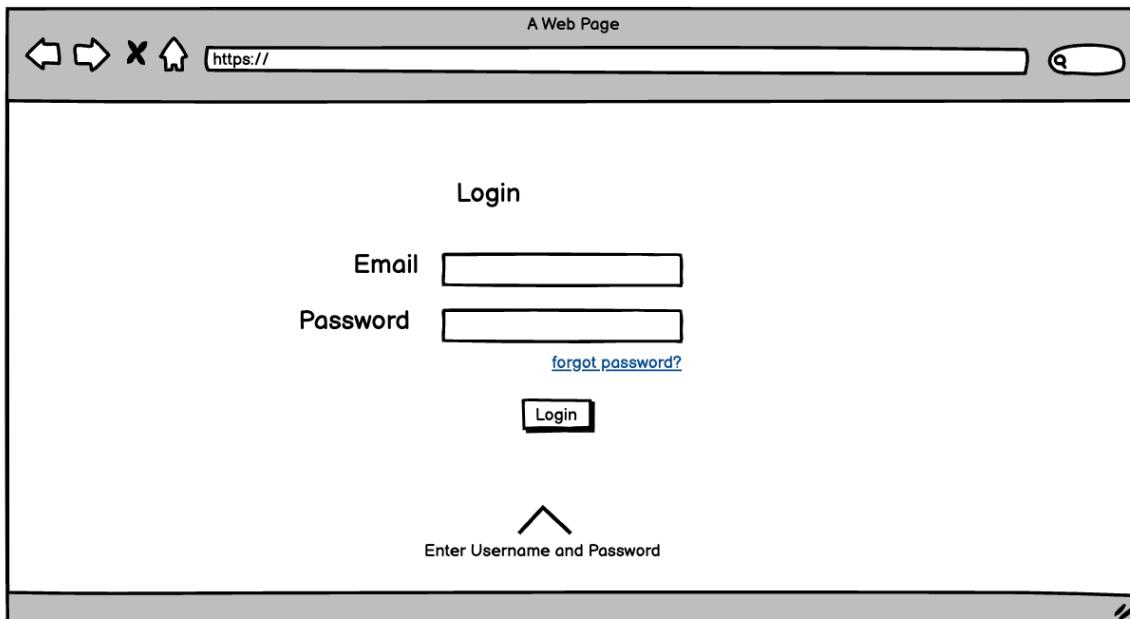


Figure 29: Empty Username password Alert (created by Harshil)

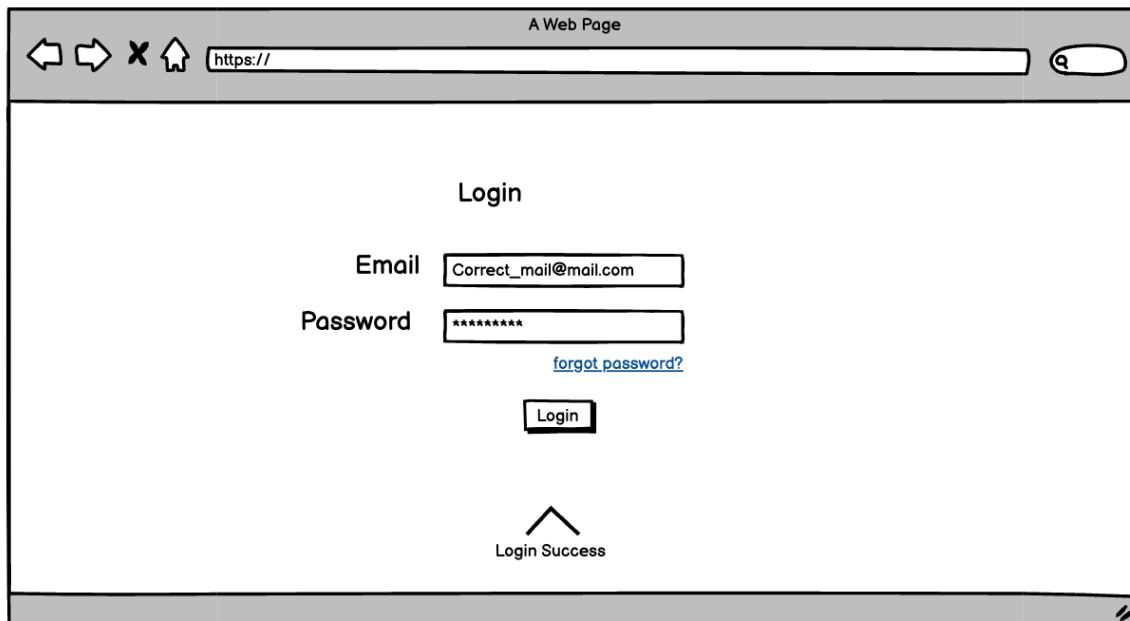


Figure 30: Successful Login (created by Harshil)

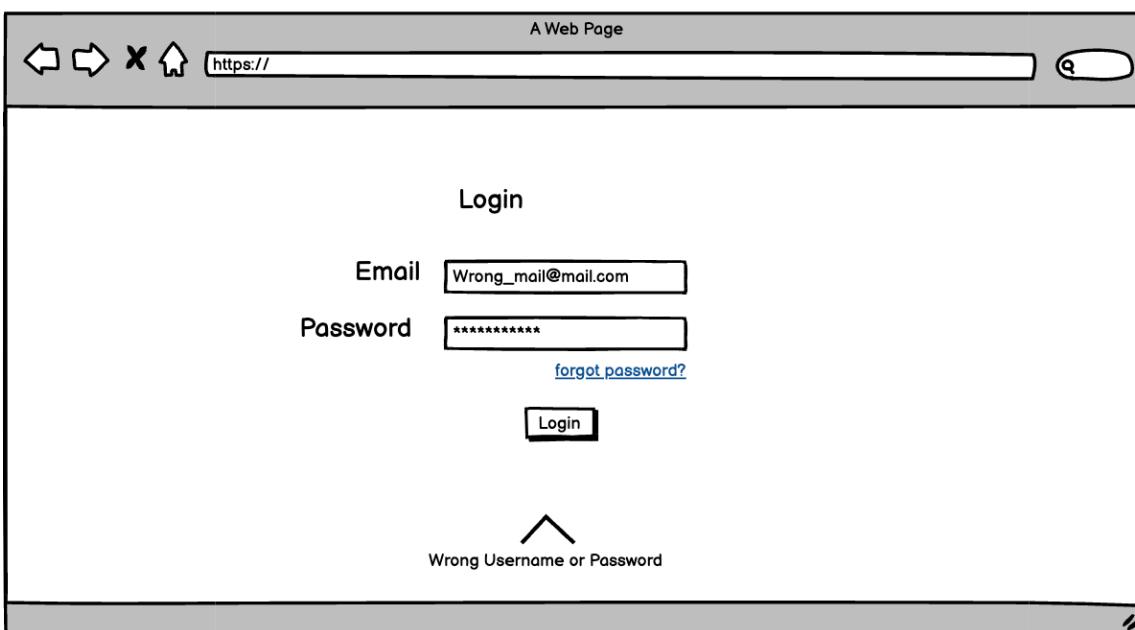


Figure 31: Wrong Username/Password Alert (created by Harshil)

A Web Page

The screenshot shows a web browser window titled 'A Web Page'. The address bar displays 'https://'. The main content area is titled 'ClassMate' and has a dark grey header bar with the word 'Admin' on the left and a 'Logout' button on the right. Below the header, the page title 'Create User' is centered. There are three input fields: 'Email', 'Password', and 'Retype Password', each with a corresponding text input box. Below these fields are two radio buttons: 'Student' and 'Professor'. At the bottom center is a large, prominent 'Create User' button.

Figure 32: Create Professor/Student from admin panel. (created by Harshil)

A Web Page

This screenshot is identical to Figure 32, showing the 'Create User' form on the ClassMate Admin panel. However, there are now red validation error messages displayed above each of the three input fields ('Email', 'Password', and 'Retype Password'). These messages indicate that the respective fields are required or contain invalid data.

Figure 33: Password Validation failed. (created by Harshil)

A Web Page

https://

ClassMate

Admin

Create User

Email

Password

Retype Password

Student Professor

Create User

User Created Successfully

Logout

Figure 34: User Creation success (created by Harshil)

A Web Page

https://

ClassMate

Admin

Email	First Name	Last name	User Type	Delete User
mail@mail.com	Fname1	Lname1	Prof	DELETE
mail1@mail.com	Fname2	Lname2	Stud	DELETE

Logout

Figure 35: User Listing, Search - Filter & Deletion Window (created by Harshil)

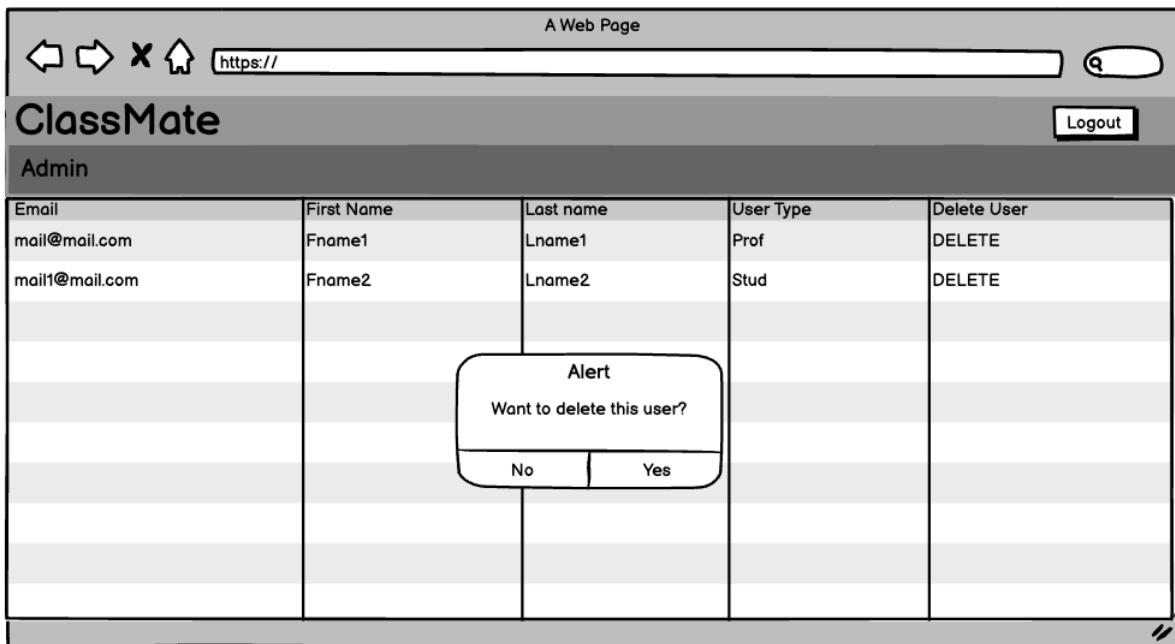


Figure 36: Alert While deleting. (created by Harshil)

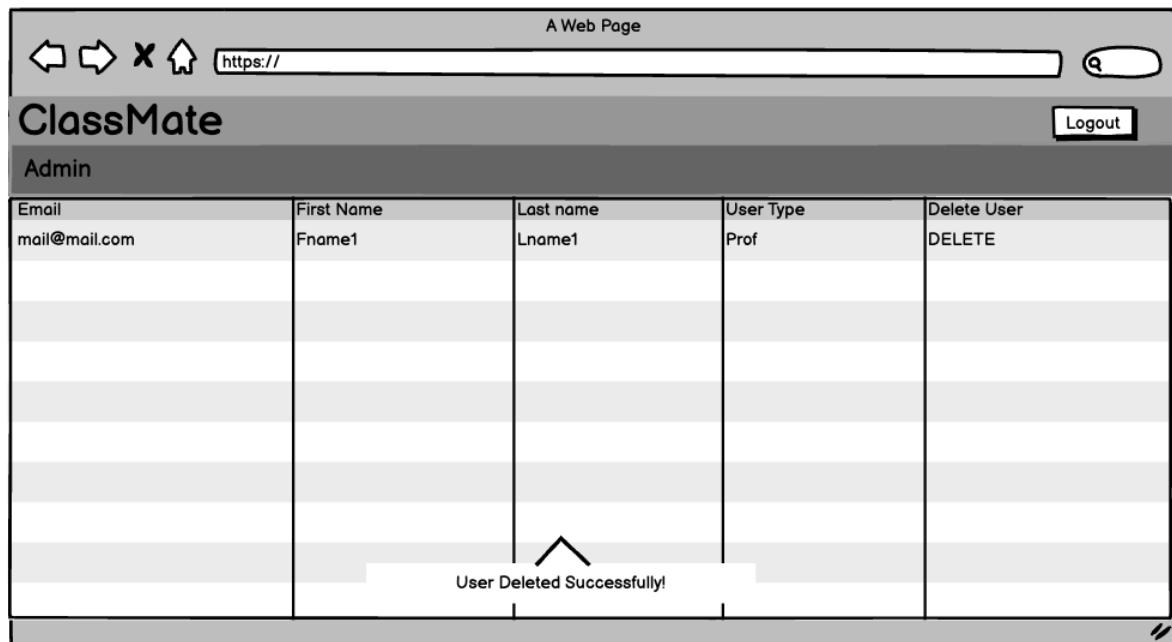


Figure 37: Deletion Success message (created by Harshil)

2. Admin Dashboard [Aanandi Pankhania]:

The screenshot shows the 'Courses' section of the Admin Dashboard. At the top, there is a navigation bar with tabs: ClassMate, Courses, Mapping, and Approve. Below the navigation bar, the word 'Courses' is displayed in a large, bold font. A 'Create +' button is located in the top-left corner of the main content area. Two course cards are visible: 'Course 1' and 'Course 2'. Each card has a placeholder image at the top, followed by the course name, a detailed description, and fields for Instructor, Term, and Start date. Each card also features an 'Advanced options' button at the bottom right.

Figure 38: Admin Dashboard: courses window (created by Aanandi)

The screenshot shows the 'Create course' dialog box overlaid on the 'Courses' section of the Admin Dashboard. The dialog has a title 'Create course' and contains fields for Course name, Instructor, Term, Start date, and Description. Each field has a corresponding input field. At the bottom of the dialog are 'Close' and 'Save' buttons. To the right of the dialog, a small preview of the course card is shown, mirroring the layout of 'Course 1' or 'Course 2' from Figure 38.

Figure 39: Output when create course button is pressed (created by Aanandi)

ClassMate Courses Mapping Approve

Courses

Create +

Course

dsafn ihfaui hua huh auf iufha iufh aiushf iuah fiuifh aiuh faul fua fiahu f fiau fui aiu aiu f au

Instructor: name
Term: name
Start date: dd/mm/yy

[Advanced opt](#)

Edit details

Course name

Instructor

Term

Start date

Description

[Close](#) [save](#) [remove course](#)

2

fuaiah fuah
uf a a uifah
aiaufh alu
aiuf

[Options](#)

Figure 40: Edit course window when we press Advanced options (created by Aanandi)

ClassMate Courses Mapping Approve

Mapping

ID : XXX
Course name: XXX

Select an instructor ▾

[Allocate](#)

ID : XXX
Course name: XXX

Select an instructor ▾

Dr. Dey
Dr. Sharma

[Allocate](#)

ID : XXX
Course name: XXX

Select an instructor ▾

[Allocate](#)

Figure 41: Mapping window to map instructors with courses (created by Aanandi)

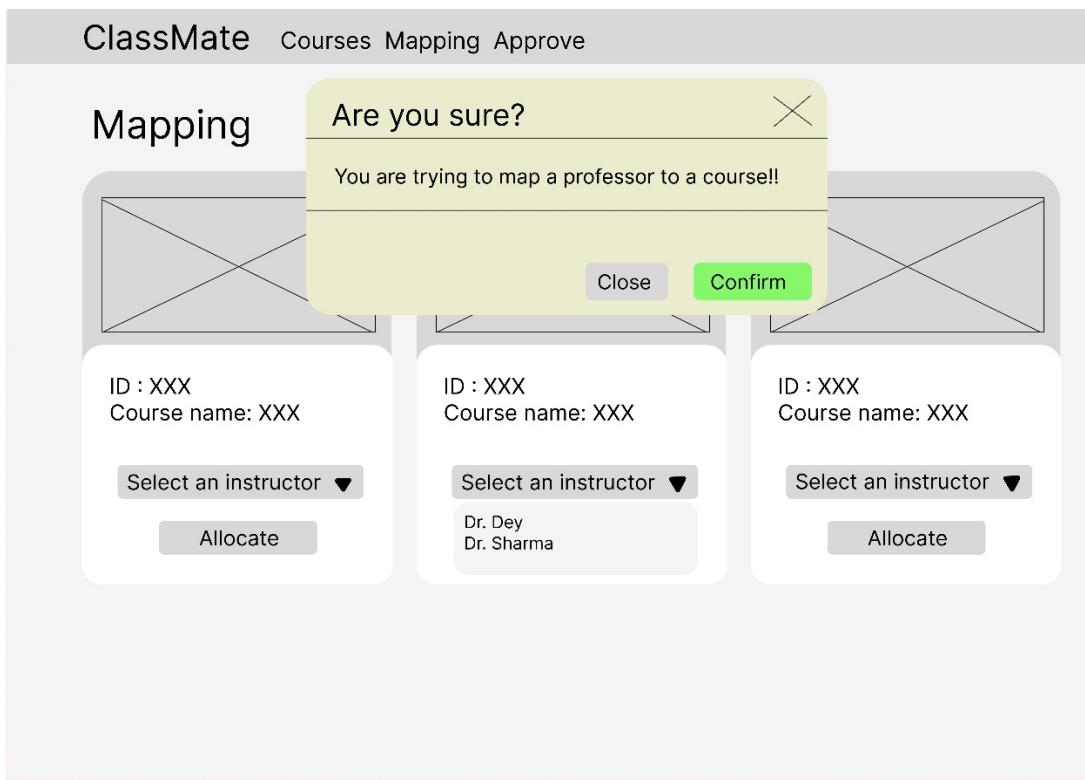


Figure 42: Reconfirmation for mapping (created by Aanandi)

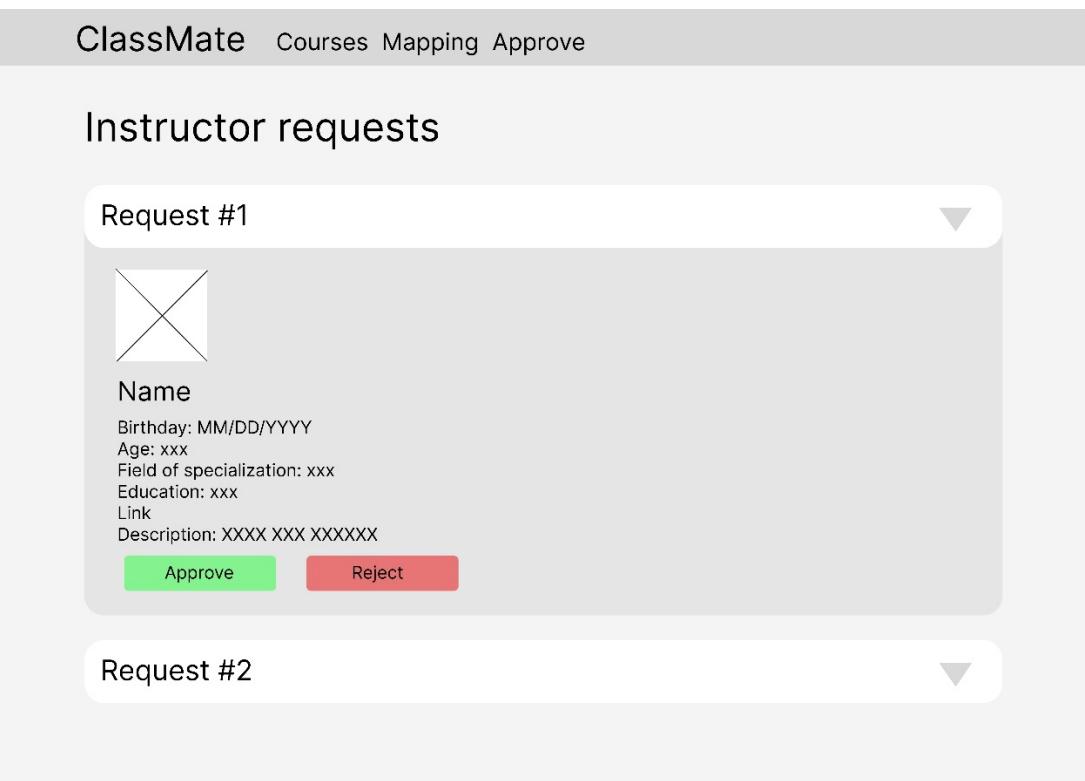


Figure 43: Professor Approval window (created by Aanandi)

3. Assignments [Viral Siddhapura]

The screenshot shows a web browser window titled "A Web Page" with the URL <https://ClassMate.com/assignments>. The browser interface includes standard navigation buttons (back, forward, stop, home) and a search bar.

The main content area is titled "Assignments". A "History" button is visible in the top right corner of this title bar. Below the title bar is a table header with three columns: "Tutorials", "Status", and "Submission Deadline".

The table data is as follows:

Tutorials	Status	Submission Deadline
Tutorial link 1	Completed	Date - May 27, 2035
Tutorial link 2	In Complete	Date - June 7, 2035
Project Proposal	Completed	Date - June 1, 2035
Project Report	In Complete	Date - June 10, 2035
Assignment 1	Completed	Date - June 14, 2035

Figure 44: Assignment's list - student view (created by Viral)

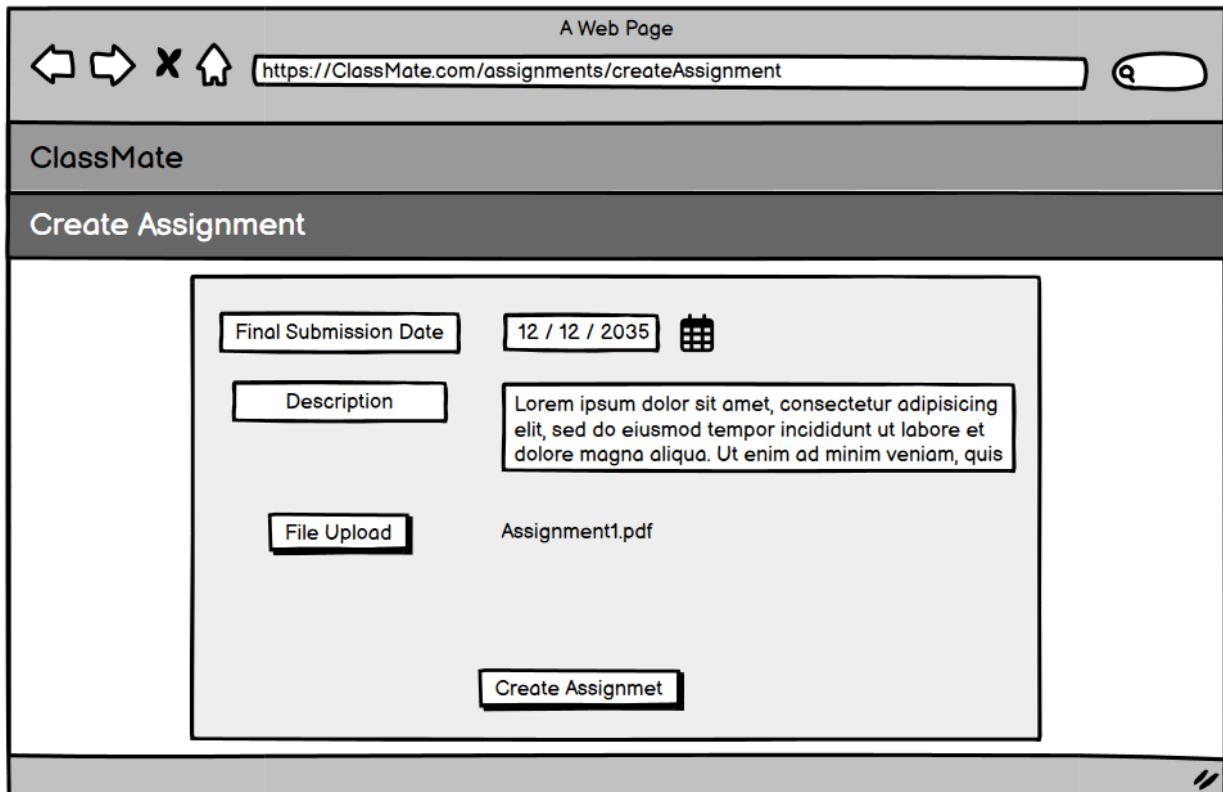


Figure 45: Create Assignment Page - Professor Screen (created by Viral)

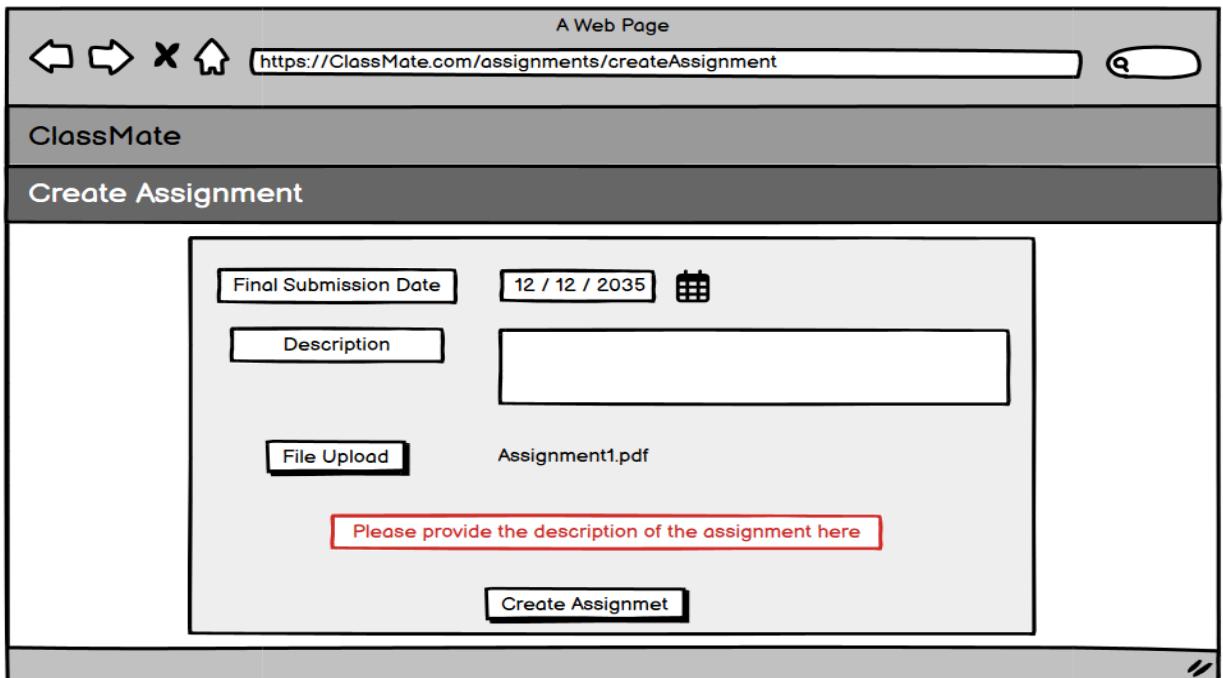


Figure 46: Error validation - description not provided. (Created by Viral)

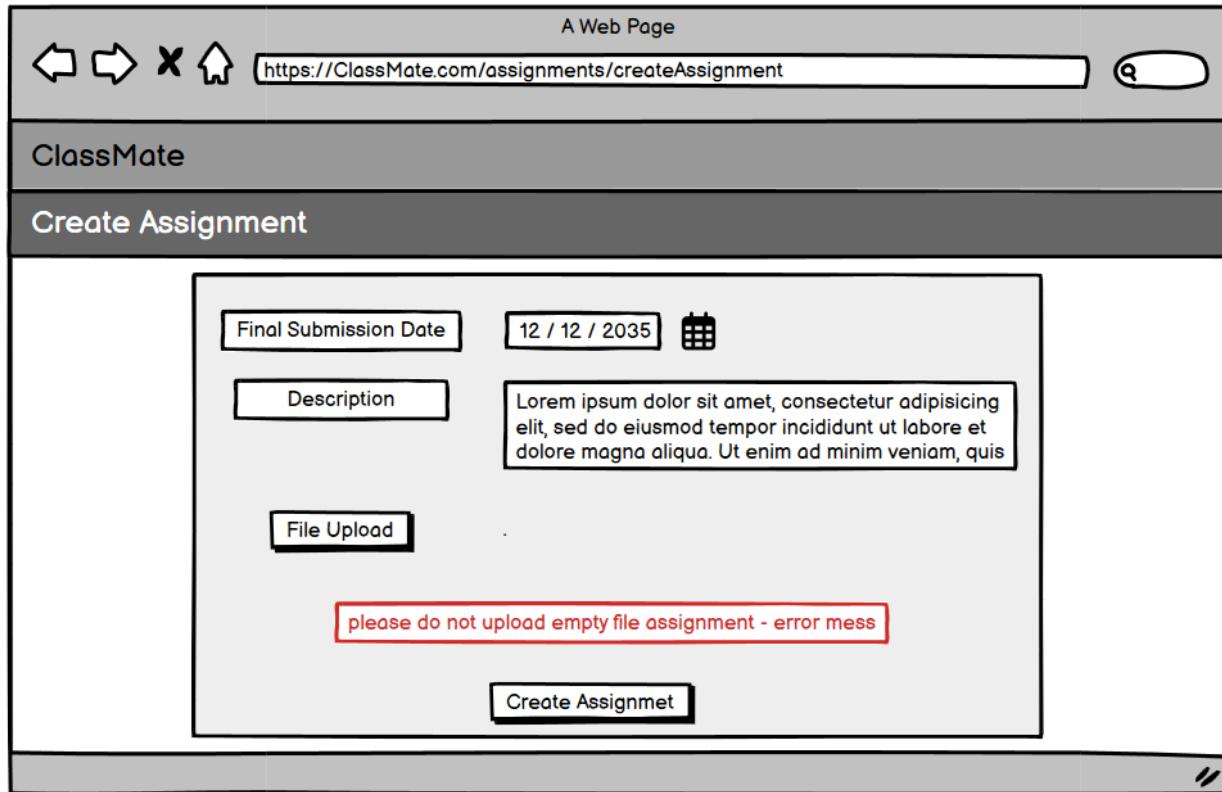


Figure 47: Empty File Uploaded by professor, hence validating. (Created by Viral)

A Web Page		
https://ClassMate.com/assignments/history		
ClassMate		
Assignment History		
Assignments	Status	Submission Deadline
Tutorial link 1	Completed	Date - May 27, 2035
Assignment 1	Completed	Date - June 14, 2035
Assignment 2	Completed	Date - June 14, 2035
Tutorial link 2	Completed	Date - June 7, 2035
Assignment 3	Completed	Date - June 14, 2035

Figure 48: Student Submission History (Created by Viral)

A Web Page		
https://ClassMate.com/assignments/submitAssignment		
ClassMate		
Submit Assignment		
Final Submission Date	A simple text box - final date of submission	
File Upload	Assignment1.pdf	
Comments	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis	
Submit Assignment		

Figure 49: Final Submission of an Assignment (Created by Viral)

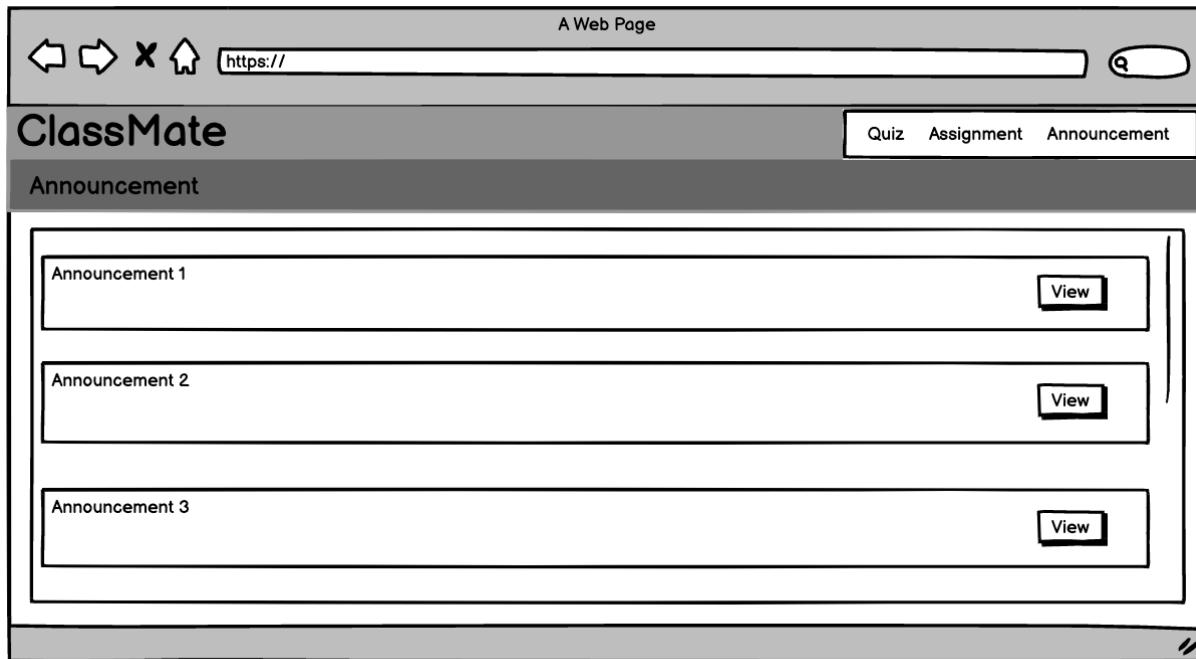


Figure 50: Course Announcements (Created by Viral)

4. Quiz [Raj Soni]

A screenshot of a web browser window titled "A Web Page". The address bar shows "https://". The main content area is titled "ClassMate". A navigation bar at the top right includes "Create Quiz" and "Question Bank". Below this, a section titled "Course 1" displays three quizzes: "Quiz 1", "Quiz 2", and "Quiz 3", each with "Edit" and "Delete" buttons. The page has a standard grey header and footer.

Figure 51: Quiz List(created by Raj)

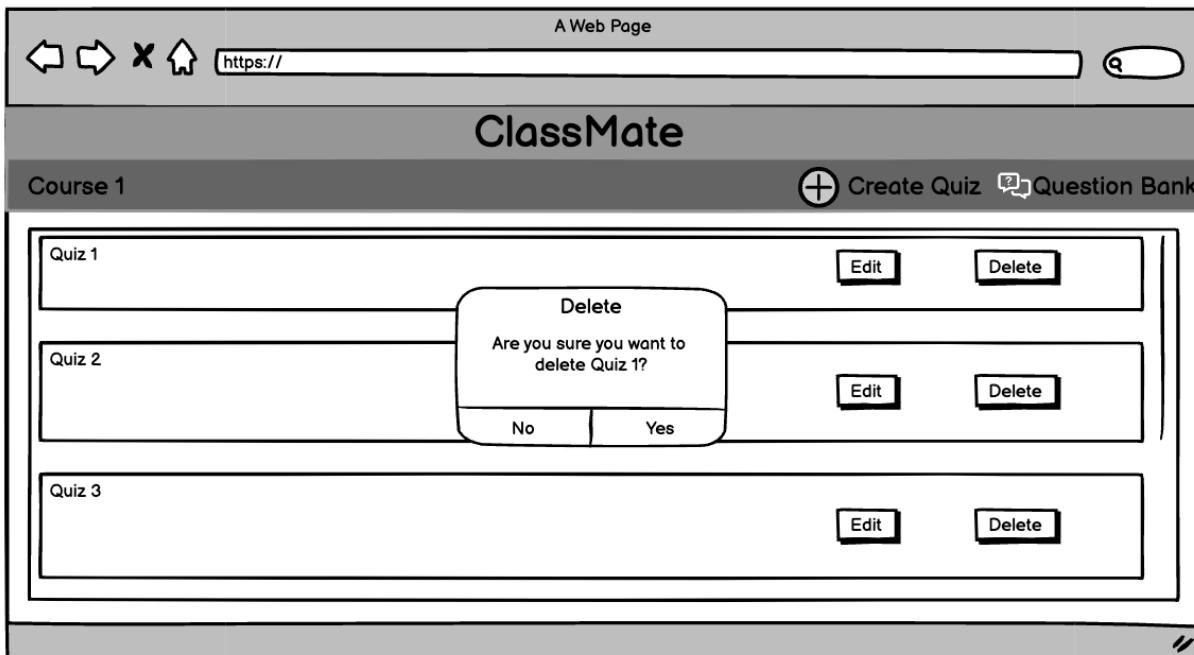


Figure 52:Delete quiz (created by Raj)

Quiz List	Status	Due Date
Quiz 1	Completed	29th May 2023
Quiz 2	Not started yet	29th May 2023

Figure 53:Student View Quiz list (created by Raj)

A Web Page

https://

ClassMate

Create Quiz

Quiz Title *

Description

Start Date * Time Limit * Random Questions

Due Date * No. Of Questions *

Visible Date *

New Question

Question 1

How are you? Semicolon (;) separated options Options 1 Options 2

Correct Option Edit Delete

Question 2

How are you? Semicolon (;) separated options Options 1 Options 2

Correct Option Edit Delete

Save Cancel

Figure 54:Create Quiz (created by Raj)

A Web Page

https://

ClassMate

Edit Quiz

Quiz Title *

Description

Start Date * Due Date * Visible Date *

Time Limit * Random Questions

No. Of Questions *

New Question

Question 1

How are you?

Semicolon (;) separated options

Options 1
Options 2

Correct Option

Edit Delete

Question 2

How are you?

Semicolon (;) separated options

Options 1
Options 2

Correct Option

Edit Delete

Save Cancel

The diagram shows a web browser window with the title 'A Web Page' and URL 'https://'. The main content area is titled 'ClassMate' and 'Edit Quiz'. It features a 'Quiz Title' field with a required asterisk. Below it is a 'Description' input field. To the right are date/time fields: 'Start Date' (with a calendar icon), 'Due Date' (with a calendar icon), 'Visible Date' (with a calendar icon), 'Time Limit' (with a clock icon), and 'Random Questions' (with a radio button). There's also a 'No. Of Questions' field with a required asterisk. A 'New Question' button is located at the top right of the question list. Two questions are listed: 'Question 1' and 'Question 2'. Each question has a text input field ('How are you?'), a note about semicolon-separated options, and two 'Options' input fields ('Options 1' and 'Options 2'). To the right of each question are 'Correct Option' and 'Edit'/'Delete' buttons. At the bottom are 'Save' and 'Cancel' buttons.

Figure 55:Edit Quiz (created by Raj)

A Web Page

https://

ClassMate

Quiz 1

Question 1:
How can I help you?

1 Option 1
 2 Option 2
 3 Option 3
 4 Option 4
 5
 6
 7

Previous Next Submit

Figure 56: Student view of taking quiz (created by Raj)

A Web Page

https://

ClassMate

Question bank

Question 1
How are you?
Semicolon (;) separated options
Options 1
Options 2

+

Correct Option Select Quiz Edit Delete

Question 2
How are you?
Semicolon (;) separated options
Options 1
Options 2

+

Correct Option Select Quiz Edit Delete

Save Cancel

Figure 57: Question bank (created by Raj)

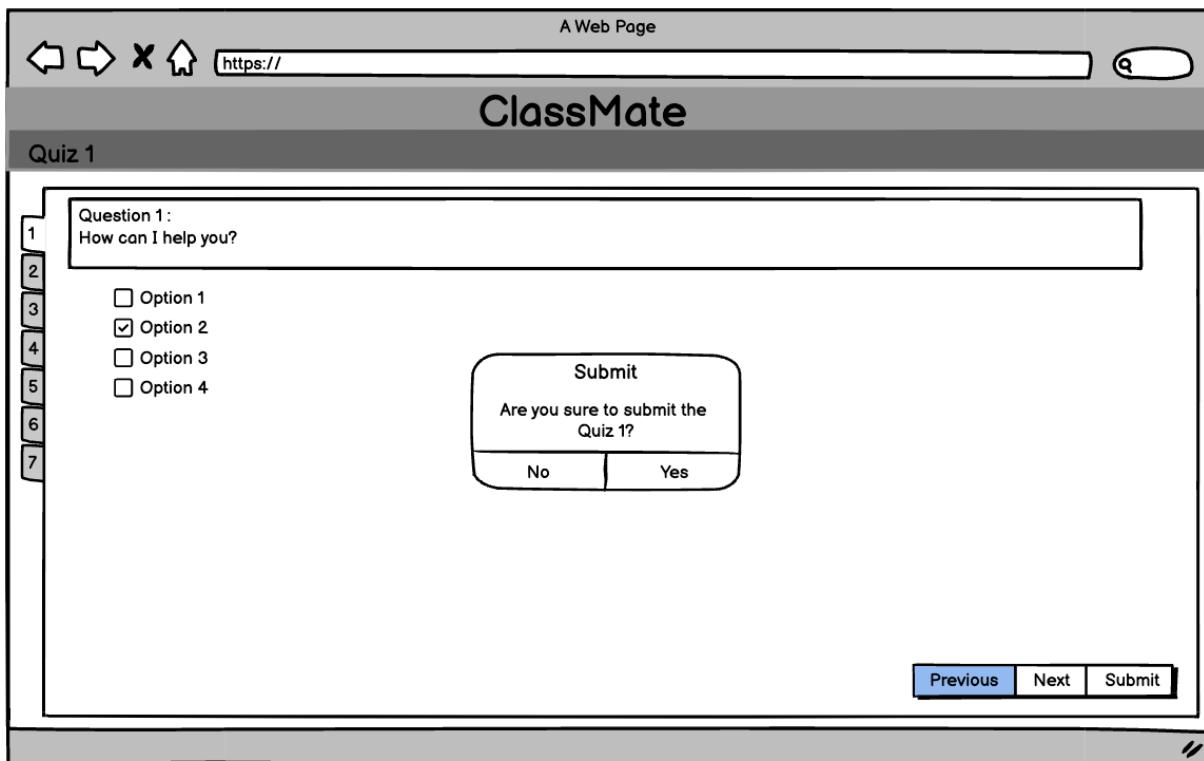


Figure 58: Submit Quiz (created by Raj)

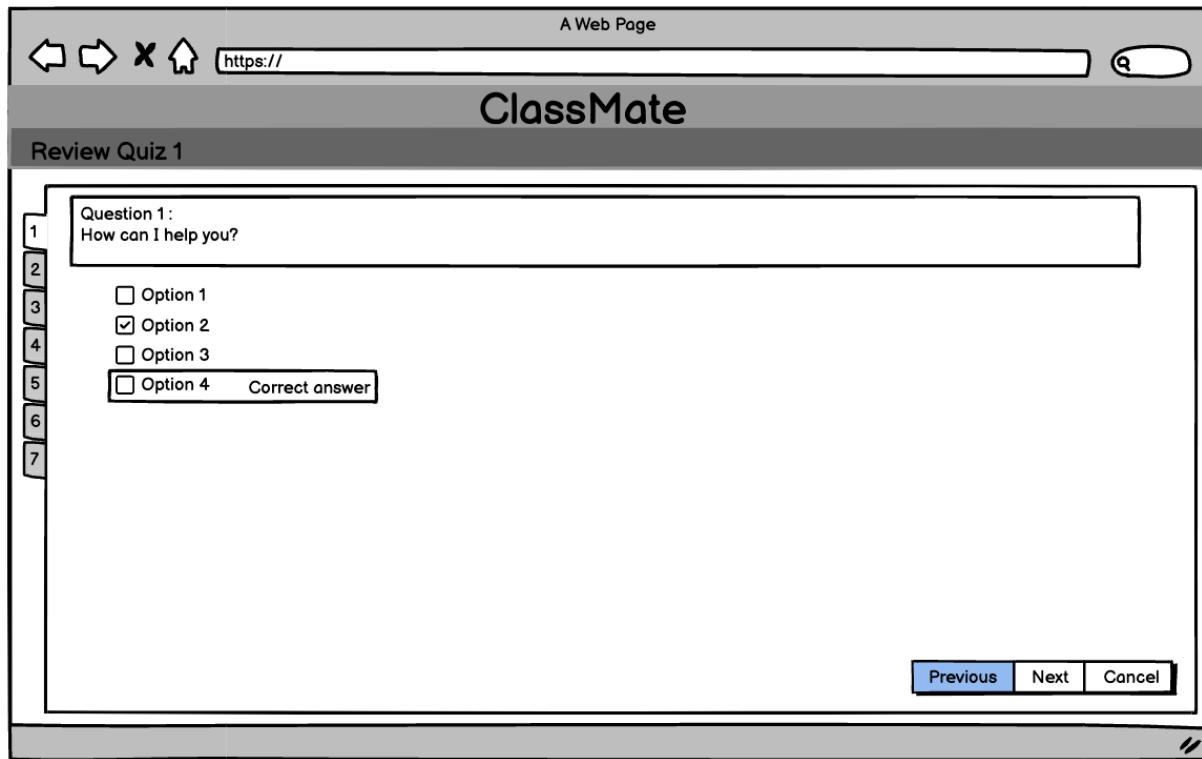


Figure 59: Review quiz(created by Raj)

5. Professor Dashboard [Yatrik Amrutiya]



Figure 60: Professor Dashboard created by Yatrik

The screenshot shows the 'Announcements' section of the Classmate Professor Dashboard. At the top, there are three dots in a red bar, followed by the text 'Professor Dashboard'. Below this is the 'ClassMate' logo and a navigation bar with 'Announcements' and 'Content' tabs. The main area is titled 'Announcements' and contains three items, each with a red header:

- List group item heading**
Lorem ipsum dolor sit amet, consectetur adipiscing
And some small print
- List group item heading**
Lorem ipsum dolor sit amet, consectetur adipiscing
And some small print
- List group item heading**
Lorem ipsum dolor sit amet, consectetur adipiscing
And some small print

Each item has a timestamp '3 days ago' and a small red downward-pointing arrow icon.

Figure 61: Announcements Section created by Yatrik

The screenshot shows the 'Content' section of the Classmate Professor Dashboard. At the top, there are three dots in a red bar, followed by the text 'Professor Dashboard'. Below this is the 'ClassMate' logo and a navigation bar with 'Announcements' and 'Content' tabs. The main area is titled 'Content' and contains two sections, each with a light gray header:

- Lecture 1**
Main Topic
Lorem ipsum dolor sit amet, consectetur adipiscing elit
- Lecture 2**
Main Topic
Lorem ipsum dolor sit amet, consectetur adipiscing elit

Each section includes three small icons: a pencil, a file, and a trash can.

Figure 62: Content Section created by Yatrik

References:

- [1] “Flowchart maker & online diagram software,” *Diagrams.net*. [Online]. Available: <https://app.diagrams.net/>. [Accessed: May 27, 2023]
- [2] “Balsamiq cloud,” *Balsamiq.cloud*. [Online]. Available: <https://balsamiq.cloud/>. [Accessed: May 18, 2023]
- [3] *Uxpressia.com*. [Online]. Available: <https://uxpressia.com/w/Re1XL/p/w6437/p/EbiAh> . [Accessed: May 25, 2023]
- [4] “User Persona Template | Figma Community,” *Figma*. Available: <https://www.figma.com/community/file/1198542860250890717>. [Accessed: May 19, 2023]
- [5] “The Collaborative Interface Design Tool.,” *Figma*, <https://www.figma.com/> [Accessed: May 27, 2023].
- [6] “Super easy wireframing.,” *Mockflow*. [Online]. Available: <https://mockflow.com>. [Accessed May 27, 2023].