USE CASES

Use Case 1.1: User Self-Registration

Use Case ID:	UC-1.1		
Use Case Name:	Register as a Student		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	29 April	Date Last Updated:	30 April

Actor:	Student	
Description:	Allows a student to register using name, unique email, and	
	password.	
Preconditions:	1. User must have a valid email address.	
Postconditions:	1. Student account created and stored securely.	
	2. Email verification may be sent.	
Priority:	High	
Frequency of Use:	Once per new student	
Normal Course of Events:		
	1. Student opens registration page.	
	2. Fills form with name, email, and password.	
	3. Clicks submit.	
	4. Credentials encrypted and stored.	
	5. Success.	
Alternative Courses:	UC-1.1.AC.1: If email already used → display error.	
Exceptions:	UC-1.1.EX.1: No internet connection \rightarrow form not submitted.	
	UC-1.1.EX.2: Weak password \rightarrow error shown.	
Includes:	Password encryption, email validation	
Special Requirements:	Secure password handling, email format validation	
Assumptions:	Student has internet and Student uses updated browser and device	
Notes and Issues:	Email verification step can be added later	

Use Case 1.2: Admin Account Setup by Developer

Use Case ID:	UC-1.2			
Use Case Name:	Initial Admin Account Provisioning			
Created By:	Syeda Andleeb Zehra Last Updated By: Umer Mehboob Khan			
Date Created:	29 April	Date Last Updated:	30 May	

Actor:	System Developer
Description:	System developer creates the first Admin account manually at the
	start of deployment.
Preconditions:	1. System must be installed and accessible to the developer.
Postconditions:	1. Admin credentials predefined and stored securely.
Priority:	Very High
Frequency of Use:	One-time (during system deployment)

Normal Course of Events:	1. Developer accesses database or config.	
	2. Adds admin email and password.	
	3. Saves securely.	
Alternative Courses:	UC-1.2.AC.1: Admin credentials configured via environment	
	variables.	
Exceptions:	UC-1.2.EX.1: File/database write failure \rightarrow log error and retry.	
Includes:	Encryption of admin password	
Special Requirements:	Admin password must follow strict complexity rules	
Assumptions:	Developer has access to system backend	
Notes and Issues:	This step is not exposed through the UI	

Use Case 1.3: User Login

Use Case ID:	UC-1.3		
Use Case Name:	User Login		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	29 April	Date Last Updated:	30 April

Actor:	Student, Admin	
Description:	Allows users to log in using their email and password to access	
	their dashboard.	
Preconditions:	1. Valid account exists.	
	2. Correct credentials used.	
Postconditions:	1. User is redirected to dashboard.	
Priority:	High	
Frequency of Use:	Daily	
Normal Course of Events:		
	2. System checks encrypted credentials.	
	3. If valid → redirect to dashboard.	
Alternative Courses:	UC-1.3.AC.1: "Remember me" selected \rightarrow session token stored.	
Exceptions:	UC-1.3.EX.1: Invalid password \rightarrow show error.	
	UC-1.3.EX.2: Server down \rightarrow login fails.	
Includes:	Encryption, session token	
Special Requirements:	: HTTPS connection, CSRF protection	
Assumptions:	User has access to email and browser	
Notes and Issues:	Consider MFA for Admins in future release	

Use Case 1.4: Profile Management

Use Case ID:	UC-1.4		
Use Case Name:	Profile Management		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	29 April	Date Last Updated:	30 April

Actor:	Student, Admin
Description:	1.Students can view and update their personal information,
including name, email, password, and profile photo.	

Preconditions:	 2.Admins can access and update student profiles for verification or correction. 3.All profile changes are reflected immediately across the system. 1. User (Student/Admin) must be logged into the system.
	Student Must have a valid account and profile.
Postconditions:	 Student's updated profile information is stored securely. Admin can make corrections/updates to student profiles. Profile changes are reflected immediately across all system components (e.g., dashboards, reports, etc.).
Priority:	High
Frequency of Use:	Frequent
Normal Course of Events:	1.1. Student accesses their profile page. 1.2. Student views their current profile details. 1.3. Student selects "Edit Profile" to make changes. 1.4. Student updates name, email, password, and/or profile photo. 1.5. Student submits the changes. 1.6. System validates and securely stores the new information. 1.7. Profile updates are reflected immediately across the system. 2.Admin: 2.1. Admin accesses the student profile page for verification or correction. 2.2. Admin views the current profile details. 2.3. Admin selects "Edit Profile" to update student information. 2.4. Admin updates name, email, password, and/or profile photo. 2.5. Admin submits changes for verification. 2.6. System validates and securely stores the updated profile. 2.7. Changes are reflected immediately across the system.
Alternative Courses:	 UC-1.4.AC.1: If the updated email is already in use → show error. UC-1.4.AC.2: If the password doesn't meet the security requirements → show error.
Exceptions:	 UC-1.4.EX.1: If the student fails to upload a valid profile photo → display an error. UC-1.4.EX.2: If the student or admin loses internet connection during the process → show error and prevent submission. UC-1.4.EX.3: If the new email is invalid (incorrect format) → show error.
Includes:	 Profile data encryption (passwords). Profile photo validation (acceptable formats). Email validation (unique and correctly formatted).
Special Requirements:	 Ensure data privacy and security during profile updates. Profile photo upload must be secure and prevent malicious files. All profile changes must be logged for tracking purposes.
Assumptions:	 Students and Admins have access to the system. Internet connection is stable. User interface allows easy profile editing.

Notes and Issues:	1.Profile photo update can be optional for students.
	2. Admins may need a specific role or permission to update student
	profiles.

<u>Use Case 1.5: Role-Based Access – Student Dashboard</u> <u>Access</u>

Use Case ID:	UC-1.5		
Use Case Name:	Student Role-Based Access	}	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student	
Description:	1. Allows a student to access only features relevant to learning such	
	as enrolled courses, quizzes, progress tracking, and AI suggestions.	
Preconditions:	1. Student must be logged in with a valid account.	
	2. Student role must be correctly assigned.	
Postconditions:	Student sees a personalized dashboard with limited access to	
	student-related features only	
Priority:	High	
Frequency of Use:	Daily	
Normal Course of Events:	1. Student logs in.	
	2. System verifies role = "Student".	
	3. Student dashboard loads with:	
	List of enrolled courses	
	Available quizzes	
	Progress tracking	
	AI learning suggestions	
Alternative Courses:	1. UC-1.5.AC.1: Student role not found → show error and logout.	
	2. UC-1.5.AC.2: No enrolled courses \rightarrow show message with course	
	suggestions.	
Encentions	1. UC-1.5.EX.1: Server failure → dashboard not loaded.	
Exceptions:		
	2. UC-1.5.EX.2: AI suggestion engine unavailable → show fallback	
Includes:	learning tips. 1 .Role verification	
includes:		
Special Requirements:	Role-based UI rendering UI must dynamically adjust based on role	
Special Requirements:	2. Secure access (no ability to access admin areas via URL or JS)	
	2. Secure access (no ability to access admini areas via UKL of 15)	
Assumptions:	Student uses updated browser, logged-in properly	
Notes and Issues:	Future plan to include messaging feature on dashboard	
Trotes and Issues.	rature plan to include messaging reature on dashooald	

<u>Use Case 1.6: Role-Based Access – Admin Role-Based Access</u>

Use Case ID:	UC-1.6		
Use Case Name:	Admin Role-Based Access		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Allows Admin to access user management, course creation, reports,
	and system settings.
Preconditions:	1. Admin must be logged in.
	2. Role must be assigned.
Postconditions:	1. Admin gains access to full system dashboard and controls.
Priority:	Very High
Frequency of Use:	Daily or Weekly
Normal Course of Events:	Admin logs in. Role validated. Full admin dashboard shown.
Alternative Courses:	UC-1.6.AC.1: Admin with limited access → restrict features
Exceptions:	UC-1.6.EX.1: Data load failure \rightarrow log error.
•	UC-1.6.EX.2: Unauthorized access \rightarrow force logout.
Includes:	Role check, logging, and audit trail
Special Requirements:	Admin actions must be logged, MFA recommended
Assumptions:	Admin has proper backend permissions
Notes and Issues:	Consider integrating analytics and monitoring in future updates

Use Case 1.7: Role Assignment

Use Case ID:	UC-1.7		
Use Case Name:	Admin Role-Based Access		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Developer / Admin
Description:	Assigns a specific role (Student/Admin) to a user.
Preconditions:	1. User account must exist.
	2. Admin or system has permission to assign roles.
Postconditions:	1. Role stored securely in database.
Priority:	Medium
Frequency of Use:	Occasionally, during registration or profile updates
Normal Course of Events:	 Admin opens user profile. Selects appropriate role. Saves role to system.
Alternative Courses:	UC-1.7.AC.1: Role assignment via automated script during import.
Exceptions:	UC-1.7.EX.1: Unauthorized role → block.
	UC-1.7.EX.2: Role data missing \rightarrow abort process.

Includes:	Form UI, validation
Special Requirements:	Only known roles should be allowed, backend must be secured
Assumptions:	Admin or dev has full system access
Notes and Issues:	Future: Add option to create custom roles with permission
	sets

Use Case 1.8: Create Course

Use Case ID:	UC-1.8		
Use Case Name:	Create Course		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin	
Description:	Allows the admin to create a new course with title, description,	
	category, subcategory/level.	
Preconditions:	Admin must be logged in and have course creation rights.	
Postconditions:	New course appears in course listing with "Draft" or "Active"	
	status.	
Priority:	High	
Frequency of Use:	Weekly	
Normal Course of Events:	1. Admin navigates to "Create Course" page.	
	2. Fills in course title, description, category, subcategory.	
	3. Saves the course.	
Alternative Courses:	UC-1.8.AC.1: Admin selects from pre-defined categories.	
	UC-1.8.AC.2: Admin uploads image/logo for the course.	
Exceptions:	UC-1.8.EX.1: Category not selected \rightarrow show error.	
	UC-1.8.EX.2: Title already exists \rightarrow show warning.	
Includes:	Form validation, database entry	
Special Requirements:	Title must be unique, description must allow formatting	
Assumptions:	Admin has backend access; categories are pre-defined	
Notes and Issues:	Suggest AI to auto-fill category based on title (future)	

Use Case 1.9: Add and Manage Topics

Use Case ID:	UC-1.9		
Use Case Name:	Add and Manage Topics		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Admin adds multiple topics under a course or subcategory and
	manages them (edit, reorder, deactivate).
Preconditions:	Course must exist; admin logged in.
Postconditions:	Topics appear under course in logical order.
Priority:	High

Frequency of Use:	Weekly	
Normal Course of Events:	1. Admin selects course.	
	2. Clicks "Add Topic".	
	3. Enters topic name and position.	
	4. Saves.	
Alternative Courses:	UC-1.9.AC.1: Admin reorders topics via drag-and-drop.	
Exceptions:	UC-1.9.EX.1: Duplicate topic name in course → block.	
_	UC-1.9.EX.2: Unauthorized user \rightarrow show error.	
Includes:	Sorting logic, position tracking	
Special Requirements:	None	
Assumptions:	Courses can have unlimited topics	
Notes and Issues:	In future, allow auto-ordering based on dependencies	

Use Case 1.10: Upload Topic Content

Use Case ID:	UC-1.10		
Use Case Name:	Upload Topic Content		
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Uploads learning materials under each topic (PDF, video,
	exercises).
Preconditions:	Topic must exist; admin must be logged in.
Postconditions:	Content linked to topic and available to students.
Priority:	Very High
Frequency of Use:	Daily
Normal Course of Events:	1. Admin selects topic.
	2. Clicks "Add Content".
	3. Uploads files and labels.
	4. Saves.
Alternative Courses:	UC-1.10.AC.1: Admin adds YouTube or PDF link instead of file
	upload.
Exceptions:	UC-1.10.EX.1: File size too large → reject.
	UC-1.10.EX.2: Unsupported file format \rightarrow error.
Includes:	File handling, format checking
Special Requirements:	Video player integration, PDF viewer
Assumptions:	Cloud storage integrated
Notes and Issues:	Add preview option for admin before publishing

Use Case 1.11: Tag Topic for AI Suggestions

Use Case ID:	UC-1.11		
Use Case Name:	Tag Topic for AI Suggestion	ons	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Tags each topic with relevant keywords to improve AI-based
	recommendations.
Preconditions:	Topic must exist
Postconditions:	Tags saved to metadata; used by AI
Priority:	Medium
Frequency of Use:	Occasionally
Normal Course of Events:	1. Admin selects topic.
	2. Adds AI tags (e.g., "fractions", "beginner").
	3. Saves tags.
Alternative Courses:	UC-1.11.AC.1: Tags suggested automatically by system
Exceptions:	UC-1.11.EX.1: Invalid tag format → show warning
Includes:	Metadata, tag history
Special Requirements:	AI must access tag DB
Assumptions:	AI is trained on tag library
Notes and Issues:	Add suggestion dropdown to speed up tagging

Use Case 1.12: Progress Tracking per Topic

Use Case ID:	UC-1.12		
Use Case Name:	Progress Tracking per Topi	С	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student
Description:	Students can see their learning progress on each topic within a
	course.
Preconditions:	Student must be logged in and enrolled
Postconditions:	Progress bar or percentage shown for each topic
Priority:	High
Frequency of Use:	Continuous
Normal Course of Events:	 Student views course. System calculates completed videos/quizzes. Progress is shown.
Alternative Courses:	UC-1.12.AC.1: Student views progress history.
Exceptions:	UC-1.12.EX.1: Tracking module not updated \rightarrow show warning.
Includes:	Analytics, completion status
Special Requirements:	Lightweight, fast-loading
Assumptions:	Progress data logged in real-time
Notes and Issues:	Add color-coded progress badges for better UX

Use Case 1.13: Deactivate Course, Topic, or Content

Use Case ID:	UC-1.13		
Use Case Name:	Deactivate Course, Topic, o	or Content	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Admin can deactivate a course, topic, or file without deleting it
	permanently
Preconditions:	User must be Admin and logged in
Postconditions:	Item marked as inactive, hidden from student view
Priority:	Medium
Frequency of Use:	Occasionally
Normal Course of Events:	 Admin navigates to course/topic. Clicks "Deactivate". Confirms action.
Alternative Courses:	UC-1.13.AC.1: Item scheduled to deactivate after a date
Exceptions:	UC-1.13.EX.1: Item already in use → warn admin
Includes:	Status toggle, audit log
Special Requirements:	Visibility settings
Assumptions:	Data is not hard-deleted
Notes and Issues:	Add restore button in future releases

Use Case 1.14: Access Customized Learning Path

Use Case ID:	UC-1.14		
Use Case Name:	Access Customized Learnin	ng Path	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student (Primary), System (Secondary)
Description:	Allows students to view a personalized sequence of learning topics
	tailored to their performance and engagement.
Preconditions:	1. Student is logged in
	2. Performance data is available
Postconditions:	1. Student sees a customized learning roadmap on the dashboard
Priority:	High
Frequency of Use:	Weekly or per course session
Normal Course of Events:	1. Student logs in
	2. System analyzes recent progress
	3. Customized path is generated and displayed
Alternative Courses:	Default sequence shown if student is new or insufficient data exists
Exceptions:	AI model fails to load \rightarrow default path shown, Data not synced
Includes:	None
Special Requirements:	Real-time data sync, UI with flowchart-like display

Assumptions:	Topics are tagged by complexity level and prerequisites
Notes and Issues:	May need instructor override in case of error in AI prediction

Use Case 1.15: Receive Content Recommendations

Use Case ID:	UC-1.15		
Use Case Name:	Receive Content Recomme	ndations	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student (Primary), System (Secondary)
Description:	The system suggests content such as videos, quizzes, or reading
_	materials based on the student's learning behavior.
Preconditions:	1. Student is enrolled in a course
	2. System has at least one completed activity to analyze
Postconditions:	1. Personalized content suggestions are visible to the student
Priority:	High
Frequency of Use:	After completion of activities or assessments
Normal Course of Events:	1. Student completes a task
	2. System analyzes weaknesses
	3. Suggestions are displayed on the dashboard
Alternative Courses:	If AI suggestion is not available, system uses most-viewed
	materials in category
Exceptions:	AI fails to fetch \rightarrow empty suggestion box
Includes:	None
Special Requirements:	Metadata tagging for content, machine learning model
Assumptions:	Content library is rich and diverse
Notes and Issues:	Needs regular updates to recommendation algorithm

Use Case 1.16: Track Progress and Performance

Use Case ID:	UC-1.16		
Use Case Name:	Track Progress and Perforn	nance	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student (Primary), System (Secondary)
Description:	Allows students to track their learning progress, performance
	scores, and achievement badges visually.
Preconditions:	1. Student has started at least one course topic
	2. System has logged interactions
Postconditions:	1. Student dashboard shows updated statistics and analytics
Priority:	Medium
Frequency of Use:	Frequently (on each login/session)
Normal Course of Events:	1. Student logs in
	2. System calculates progress
	3. Progress bars, charts, and scores are displayed

Alternative Courses:	If data missing, show a message like "Progress not available yet"
Exceptions:	Server error → Progress not shown
Includes:	None
Special Requirements:	Data visualization tools integration
Assumptions:	All learning events are recorded in real time
Notes and Issues:	Visual overload should be avoided, key info should be prioritized

Use Case 1.17: Follow AI-Suggested Actions

Use Case ID:	UC-1.17		
Use Case Name:	Follow AI-Suggested Action	ons	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student (Primary), System (Secondary)
Description:	Allows students to follow AI-based guidance such as retrying
	quizzes or reviewing specific weak areas
Preconditions:	1. Weaknesses identified by the AI model
	2. Actionable suggestions are available
Postconditions:	1. Student completes remedial content or follows the suggestion
Priority:	High
Frequency of Use:	After low performance or inactivit
Normal Course of Events:	1. Student sees AI suggestion
	2. Clicks and performs the suggested task
	3. System updates progress
Alternative Courses:	Student ignores or defers the suggestion
Exceptions:	Link to suggested task is broken or task unavailable
Includes:	None
Special Requirements:	Easy navigation to AI-suggested content
Assumptions:	Suggestions are relevant and feasible for the student's level
Notes and Issues:	Engagement tracking required to validate if students act on
	suggestions

Use Case 1.18: Create Quizzes and Assignments

Use Case ID:	UC-1.18		
Use Case Name:	Create Quizzes and Assignment	ments	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Allows admins to create quizzes and assignments linked to specific
	course topics.
Preconditions:	1. Admin is logged in
	2. Relevant course and topic exist
Postconditions:	1. Quiz or assignment is saved and linked to a topic
Priority:	High

Frequency of Use:	As needed during course setup	
Normal Course of Events:	1. Admin selects course topic	
	2. Enters title, instructions, questions, etc.	
	3. Sets time, difficulty, grading	
	4. Submits	
Alternative Courses:	- Admin copies from existing quiz	
	- Admin imports from question bank	
Exceptions:	- Missing required fields	
	- Topic not found	
Includes:	UC-1.19: Define Assessment Settings	
Special Requirements:	Rich text editor, media upload support	
Assumptions:	Admins are trained and aware of grading standards	
Notes and Issues:	Need a template system for quick quiz generation	

Use Case 1.19: Define Assessment Settings

Use Case ID:	UC-1.19		
Use Case Name:	Define Assessment Settings	S	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Admin
Description:	Allows admins to set the duration, difficulty level, and grading
•	criteria for each assessment.
Preconditions:	Admin is creating or editing an assessment
Postconditions:	Assessment settings are saved
Priority:	High
Frequency of Use:	Every time a quiz/assignment is created or edited
Normal Course of Events:	1. Admin opens quiz settings
	2. Selects difficulty (easy/medium/hard)
	3. Sets time limit and grading rubric
	4. Saves changes
Alternative Courses:	Admin uses default settings
Exceptions:	Invalid or missing input (e.g., negative time)
Includes:	None
Special Requirements:	Difficulty tags, grading rubrics stored in system
Assumptions:	Each question is tagged with difficulty
Notes and Issues:	Rubric customization may need training

Use Case 1.20: Attempt Quizzes and Assignments

Use Case ID:	UC-1.20		
Use Case Name:	Attempt Quizzes and Assig	nments	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	Student
Description:	Allows students to attempt quizzes and assignments within given
_	deadlines.
Preconditions:	1. Student is logged in
	2. Assessment is published and within the active time frame
Postconditions:	1. Student submission is recorded
Priority:	High
Frequency of Use:	As per course schedule
Normal Course of Events:	1. Student views available assessments
	2. Starts quiz
	3. Answers questions
	4. Submits on time
Alternative Courses:	Student saves draft or attempts partial submission
Exceptions:	- Late submission → system blocks it
_	- Internet error during attempt
Includes:	UC-1.21: Display AI-Adaptive Questions
Special Requirements:	Auto-save, progress indicator
Assumptions:	Questions load correctly, and browser supports required features
Notes and Issues:	Mobile optimization needed

Use Case 1.21: Display AI-Adaptive Questions

Use Case ID:	UC-1.21		
Use Case Name:	Display AI-Adaptive Quest	ions	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	System	
Description:	System adjusts question difficulty dynamically during quiz based	
	on student's performance in real-time.	
Preconditions:	1. AI engine is enabled	
	2. Student is actively attempting a quiz	
Postconditions:	Student is shown a personalized question flow	
Priority:	Medium to High	
Frequency of Use:	Every quiz session (if adaptive mode is enabled)	
Normal Course of Events:	1. Student answers a question	
	2. System evaluates difficulty match	
	3. Next question is selected accordingly	
Alternative Courses:	Static question order used	

Exceptions:	- AI service unavailable
	- Not enough categorized questions in pool
Includes:	None
Special Requirements:	Tagged question bank, AI model integration
Assumptions:	Question tags are accurate
Notes and Issues:	Needs transparency to prevent bias or frustration

Use Case 1.22: View Results and Feedback

Use Case ID:	UC-1.22		
Use Case Name:	View Results and Feedback	- -	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	System
Description:	Allows students to view quiz/assignment results instantly with detailed performance breakdown and feedback.
Preconditions:	 Assessment is completed and submitted Auto or manual grading is done
Postconditions:	1. Feedback and score are displayed to the student
Priority:	High
Frequency of Use:	After every assessment
Normal Course of Events:	1. Student navigates to results
	2. Views score and breakdown
	3. Reads system-generated or instructor feedback
Alternative Courses:	Feedback is delayed in case of manual review
Exceptions:	- Score miscalculation
	- Feedback not generated
Includes:	None
Special Requirements:	Charts, strength-weakness indicators
Assumptions:	Feedback engine is working
Notes and Issues:	Timely feedback is critical for learning

Use Case 1.23: Prompt Retry or Practice Suggestions

Use Case ID:	UC-1.23		
Use Case Name:	Prompt Retry or Practice St	uggestions	
Created By:	Syeda Andleeb Zehra	Last Updated By:	Umer Mehboob Khan
Date Created:	30 April	Date Last Updated:	1 May

Actor:	System
Description:	Prompts students to retry quizzes or attempt practice material for
	weak areas based on performance.
Preconditions:	1. Student has completed a quiz
	2. System identifies weak areas
Postconditions:	1. Student receives retry/personalized suggestions

Priority:	Medium
Frequency of Use:	After each result feedback
Normal Course of Events:	 System detects low performance Prompts user with retry/practice options Student clicks to engage
Alternative Courses:	Student ignores suggestions
Exceptions:	No available practice material
Includes:	None
Special Requirements:	Tag-based practice bank
Assumptions:	Practice content exists for most learning outcomes
Notes and Issues:	Engagement rate should be tracked