

E-Learning Platform User Workflow

1. Student Workflow

Step 1: Sign-Up and Profile Creation:

- Visit the platform and register an account.
- Log in with secure credentials using JWT after email verification.
- Complete profile details, including learning preferences and subjects of interest.

Step 2: Browse and Enroll in Courses:

- Search for courses by topic or instructor.
- Enroll in chosen courses and receive an enrollment confirmation notification.

Step 3: Access and Navigate Courses:

- Open the course dashboard to view multimedia resources (videos, PDFs).
- Take notes using the integrated Quick Notes feature.

Step 4: Engage in Interactive Modules:

- Participate in adaptive quizzes that adjust question difficulty based on performance.
- Receive instant feedback on quiz responses.

Step 5: Use Communication Features:

- Join study group chats or forums for discussions and queries.
- Receive notifications for instructor replies or course updates.

Step 6: Track Performance:

- View progress metrics such as completion rates and average scores on the dashboard.

Step 7: Completion and Certification:

- Complete all course modules and assessments.
- Receive a certificate of completion (optional) and provide feedback on the course.

2. Instructor Workflow

Step 1: Sign-Up and Profile Setup:

- Register as an instructor and log in with JWT authentication.
- Complete profile details, specifying expertise and teaching interests.

Step 2: Create and Manage Courses:

- Access the course management dashboard.

- Create new courses, upload multimedia content, organize modules, and set adaptive quizzes.
- Use version control for updating course content.

Step 3: Monitor Student Progress:

- Use analytics tools to track student engagement and performance.
- Adapt teaching strategies based on the reports.

Step 4: Interact with Students:

- Respond to queries via real-time chat or discussion forums.
- Post course announcements and updates.

Step 5: Adjust and Optimize Courses:

- Update course material based on feedback and performance data.
- Modify quizzes or content as needed.

3. Admin Workflow

Step 1: Admin Registration and Login:

- Log in with admin credentials using JWT authentication.

Step 2: User Management:

- Manage student and instructor accounts.
- Monitor failed login attempts and unauthorized access logs.

Step 3: Course Oversight:

- View all courses and ensure compliance with platform standards.
- Archive or remove outdated courses.

Step 4: Security Monitoring:

- Oversee authentication, password hashing, and multi-factor authentication (MFA).
- Check audit logs for suspicious activities.

Step 5: Data Backup and Maintenance:

- Schedule and manage data backups for user accounts and course progress.

Step 6: Platform Updates and Notifications:

- Send platform-wide announcements to all users.
- Collect feedback for future updates.