# **Epic List for AI-Powered eLearning Platform**

## **Epic 1: User Authentication and Profile Management**

**Description**: Implement secure user registration, login, and profile management with support for students, instructors, and admins. Includes password recovery, multi-factor authentication, and AI-driven profile personalization (e.g., learning preferences).

* **Key Features**: Sign-up/sign-in, role-based access, profile customization, and GDPR-compliant data handling.
* **SQA Focus**: Test authentication flows, session management, data validation, and security (e.g., SQL injection, XSS).

## **Epic 2: Course Creation and Management**

**Description**: Enable instructors to create, edit, and publish courses with multimedia content (videos, PDFs, quizzes). AI assists in suggesting content structure based on learning objectives.

* **Key Features**: Course editor, content upload, version control, AI-driven content suggestions.
* **SQA Focus**: Test content upload limits, editor functionality, AI suggestion accuracy, and cross-browser compatibility.

## **Epic 3: AI-Powered Personalized Learning Paths**

**Description**: Develop AI algorithms to recommend courses and learning paths based on user performance, interests, and goals. Includes adaptive quizzes and progress tracking.

* **Key Features**: AI recommendation engine, dynamic quiz generation, learning analytics dashboard.
* **SQA Focus**: Validate AI model accuracy, quiz response times, and data privacy in analytics.

## **Epic 4: Interactive Learning Experience**

**Description**: Create engaging learning interfaces with interactive elements like quizzes, discussion forums, and live sessions. AI provides real-time feedback on quiz answers.

* **Key Features**: Quiz builder, forum moderation, live session integration, AI feedback system.
* **SQA Focus**: Test interactivity, real-time performance, scalability of live sessions, and accessibility (WCAG 2.1).

## **Epic 5: Payment and Subscription Management**

**Description**: Implement a secure payment gateway for course purchases and subscriptions, with support for multiple currencies and discount codes.

* **Key Features**: Payment processing, subscription tiers, refund handling, invoice generation.
* **SQA Focus**: Test payment flows, error handling, currency conversion accuracy, and PCI compliance.

## **Epic 6: Admin Dashboard and Reporting**

**Description**: Build an admin panel for managing users, courses, and platform analytics. AI generates insights on user engagement and course performance.

* **Key Features**: User management, course approval, AI-driven reports, exportable analytics.
* **SQA Focus**: Test dashboard responsiveness, data accuracy, report generation, and role-based access control.

## **Epic 7: Mobile App Integration**

**Description**: Develop a mobile app (iOS/Android) for seamless access to courses, offline content, and push notifications for learning reminders.

* **Key Features**: Mobile-responsive UI, offline content sync, push notifications, cross-platform compatibility.
* **SQA Focus**: Test app performance, offline functionality, notification triggers, and device compatibility.

## **Epic 8: AI-Driven Proctoring and Assessment**

**Description**: Implement AI-based proctoring for exams (e.g., facial recognition, activity monitoring) and automated grading for assessments.

* **Key Features**: Proctoring system, AI grading algorithms, result analytics, certificate generation.
* **SQA Focus**: Test proctoring accuracy, grading fairness, certificate generation, and user data security.

## **Epic 9: Multilingual and Accessibility Support**

**Description**: Ensure the platform supports multiple languages (e.g., English, Bengali, Arabic) and meets accessibility standards (WCAG 2.1 AA) for diverse learners.

* **Key Features**: Language switcher, RTL support, screen reader compatibility, high-contrast mode.
* **SQA Focus**: Test language rendering, accessibility compliance, and performance across locales.

## **Epic 10: Integration with Third-Party Tools**

**Description**: Enable integrations with tools like Zoom for live classes, Google Drive for content storage, and LMS APIs for enterprise use.

* **Key Features**: API integrations, OAuth for third-party logins, data sync with external tools.
* **SQA Focus**: Test API endpoints, data sync reliability, OAuth security, and error handling.

**Notes**:

* Each epic can be broken into user stories and tasks in Jira during sprint planning.
* SQA tasks should include functional, performance, security, and accessibility testing for each epic.
* Use Jira’s Scrum board to track epics, with labels for priority (e.g., High, Medium) and status (e.g., To Do, In Progress).