# **User Stories for AI-Powered eLearning Platform**

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

### **User Story 1.1: User Registration**

# **As a** new user, **I want** to register for an account with my email and password, **so that** I can access the eLearning platform and start learning.

# **Acceptance Criteria**:

# Given a valid email and password (minimum 8 characters, 1 uppercase, 1 number), the system creates a user account.

# Given an invalid email format or weak password, the system displays an error message.

# The system sends a verification email to confirm the account.

# The registration form supports accessibility (WCAG 2.1). **SQA Tasks**: Test form validation, email delivery, duplicate email handling, and accessibility compliance.

### **User Story 1.2: Profile Personalization**

# **As a** registered user, **I want** to customize my profile with learning preferences (e.g., topics, difficulty level), **so that** the AI can recommend relevant courses.

# **Acceptance Criteria**:

# Users can select preferences (e.g., programming, beginner level) from a dropdown or input field.

# The system saves preferences securely and reflects them in course recommendations.

# Changes are saved within 2 seconds, with a success message displayed.

# The UI is responsive across mobile and desktop. **SQA Tasks**: Test preference saving, UI responsiveness, data persistence, and AI integration.

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

### **User Story 3.1: Course Recommendations**

# **As a** student, **I want** to receive AI-generated course recommendations based on my profile and progress, **so that** I can find relevant courses to meet my learning goals.

# **Acceptance Criteria**:

# The AI recommends at least 3 courses based on user preferences and past activity.

# Recommendations update within 5 seconds after profile changes.

# Each recommendation includes course title, description, and relevance score.

# Recommendations are accessible via a dedicated dashboard section. **SQA Tasks**: Test AI accuracy, response time, dashboard UI, and edge cases (e.g., no preferences set).

### **User Story 3.2: Adaptive Quiz Generation**

# **As a** student, **I want** to take AI-generated quizzes that adapt to my skill level, **so that** I can assess my understanding and improve.

# **Acceptance Criteria**:

# Quizzes adjust question difficulty based on prior answers (e.g., correct answers trigger harder questions).

# Each quiz has 5–10 questions, with results displayed immediately.

# Results include feedback on correct/incorrect answers.

# Quizzes are mobile-friendly and support offline mode. **SQA Tasks**: Test AI question selection, result accuracy, offline functionality, and performance under load.

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

### **User Story 4.1: Interactive Quiz Interface**

# **As a** student, **I want** to complete interactive quizzes with multimedia elements (e.g., images, videos), **so that** I can engage with course content dynamically.

# **Acceptance Criteria**:

# Quizzes support text, image, and video-based questions.

# Users can submit answers via multiple-choice or text input.

# The system provides immediate feedback on submission.

# The quiz UI meets WCAG 2.1 accessibility standards. **SQA Tasks**: Test multimedia rendering, answer validation, feedback accuracy, and accessibility.

### **User Story 4.2: Discussion Forum Participation**

# **As a** student, **I want** to participate in course discussion forums, **so that** I can collaborate with peers and clarify doubts.

# **Acceptance Criteria**:

# Users can post, reply, and like comments in a course-specific forum.

# Posts are moderated for inappropriate content (e.g., profanity filter).

# The forum supports threaded replies and notifications for responses.

# The forum is accessible on mobile and desktop devices. **SQA Tasks**: Test posting functionality, moderation accuracy, notification triggers, and cross-device compatibility.

# **Notes**:

# Each user story can be assigned story points and linked to its epic in Jira.

# SQA tasks should include manual and automated tests (e.g., Selenium for UI, Postman for APIs).

# Prioritize user stories based on sprint goals (e.g., core authentication before advanced AI features).

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