**Project: SparkSkool QA Testing (Teacher Role)**

URL: <https://app.sparkskool.com/auth/login>

Version: 1.1

**1- Introduction**

This FRD defines the requirements, use cases, assumptions, constraints, and acceptance criteria for the Teacher role in SparkSkool. It will serve as the foundation for QA testing to validate that teachers can successfully manage lessons, exams, and grading with AI support.

**2- Functional Requirements (Teacher Role)**

Authentication:

FR1: The system shall allow teachers to log in with valid credentials.

FR2: The system shall reject invalid login attempts and display an error.

FR3: The system shall allow teachers to log out securely.

FR4: The system shall provide password reset via “Forgot Password.”

Dashboard

FR5: The system shall display a Teacher Dashboard after login.

FR6: The dashboard shall provide navigation to exams, reports, and AI tools

Profile:

FR7: The system shall allow teachers to edit their profiles

FR8: The system shall allow teachers to change the system language

FR9: The system shall allow teachers to upload/change their profile pictures

Exam Management

FR10: The system shall allow teachers to create exams based on uploaded content.

FR11: The system shall allow teachers to create exams based on SparkSkool AI generated content.

Grading & Reports

FR12: The system shall allow teachers to review student submissions.

FR13: The system shall provide AI assistance in grading exams.

FR14: Teachers shall be able to accept, modify, or reject AI grading suggestions.

FR15: The system shall generate performance reports for students or classes.

**3- Non-Functional Requirements**

Performance:

NFR1: Dashboard shall load within 3 seconds.

NFR2: AI suggestions shall appear within 5 seconds.

Security:

NFR3: Login page shall use HTTPS.

NFR4: Teacher accounts shall be password-protected and encrypted.

NFR5: Auto logout after 15 minutes of inactivity.

Usability:

NFR6: Teacher Dashboard shall have clear, intuitive navigation.

NFR7: Error and confirmation messages shall be descriptive.

Compatibility:

NFR8: Application shall work on Chrome, Firefox, and Edge (latest 2 versions).

NFR9: The Teacher Dashboard shall be responsive on desktop and mobile.

**4- System Use Cases/Stories (Teacher Role)**

User Story 1: Teacher Login

Flow:

Teacher enters username and password.

System validates credentials.

If valid → Teacher Dashboard opens.

If invalid → Error message displayed.

User Story 2: Create Lesson

Teacher clicks “Create Lesson.”

Inputs title and content.

Requests optional AI suggestions.

Saves lesson.

Postcondition: Lesson is listed in dashboard.

UC3: Create Exam

Teacher clicks “Create Exam.”

Adds questions and answer options.

Saves and publishes exam.

Postcondition: Exam is listed and available for students.

UC4: AI-Assisted Grading

Teacher opens student submissions.

Clicks “AI Assist for Grading.”

Reviews AI-provided draft grades.

Accepts, modifies, or overrides.

Postcondition: Final grades saved and visible in reports.

UC5: Generate Reports

Teacher navigates to “Reports.”

Selects a student or class.

Generates report.

Postcondition: Report displayed and downloadable.

**5- Assumptions and Constraints**

Assumptions:

- Teachers have valid accounts created by admins.

- Teachers have stable internet connection.

- Teachers access the platform via supported browsers.

Constraints

- Offline functionality is not available.

- AI features rely on backend availability.

- Free/demo teacher accounts may not have all premium features.

**6- Acceptance Criteria**

|  |  |
| --- | --- |
| **Requirement** | **Acceptance Criteria** |
| FR1: Teacher login | Valid credentials → Teacher Dashboard loads |
| FR2: Invalid login | Error message displayed (“Invalid username or password”) |
| FR5: Teacher Dashboard | Displays exams, AI tools, and reports |
| FR10+11: Exam creation | Exam saved and appears in “Exams” list |
| FR13: AI-assisted grading | AI generates draft grades within 5 seconds |
| FR15: Performance reports | Reports generated and downloadable in PDF/Excel |

**7- Appendix**

Glossary:

Lesson: Teaching material created by a teacher.

Exam: Assessment with questions for students.

AI Assist: SparkSkool’s AI feature that helps in lesson suggestions and grading.

Dashboard: Teacher’s homepage with key tools and summaries.