NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

Software Construction & Development.

SMART ACADEMIC ASSISTANCE SYSTEM

MEMBERS

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PROJECT

DELIVERABLE #1

Requirement Specification Document:

- Detailed description of each functionality and its purpose.
- Requirement's specification, including functional and non-functional requirements.

1. Description of Each Functionality and Its Purpose:

- **Register:**
  Purpose: Allows users (students, instructors, and admins) to create accounts on the platform.

- **Login:**
  Purpose: Provides authenticated access to registered users.

- **Enroll in Course:**
  Purpose: Enables students to select and join courses offered on the platform.

- **Assignment:**
  Purpose: Facilitates the submission and evaluation of assignments by students and instructors.

- **Quiz:**
  Purpose: Allows instructors to create quizzes for assessment purposes, and enables students to attempt and complete quizzes.

- **AI Chatbot Interaction:**
  Purpose: Provides personalized learning support and assistance to students through AI-driven interactions.

- **Interview:**
  Purpose: Enables students to participate in interviews for internships and job opportunities offered by collaborating companies.

- **Collaboration:**
  Purpose: Facilitates partnerships and collaborations with external entities, such as companies, for internship and job opportunities for students.

- **Content Management:**
  Purpose: Allows administrators to manage and organize educational content, including lectures, assignments, quizzes, and other course materials.

- **Offer Internship & Job:**
  Purpose: Allows collaborating companies to offer internship and job opportunities to students through the platform.

2. Requirement's Specification, Including Functional and Non-Functional Requirements.

Functional Requirements:

- **User Authentication:** Users must be able to register and login securely using authentication mechanisms such as username/password or email verification.
- **Course Enrollment:** Students should be able to view available courses and enroll in them, while instructors should be able to manage course enrollments.
- **Assignment Submission:** Students should be able to submit assignments, and instructors should be able to view, grade, and provide feedback on submitted assignments.
- **Quiz Management:** Instructors should be able to create quizzes, and students should be able to attempt quizzes, with the system providing automated grading and feedback.
- **AI Chatbot Integration:** The platform should integrate an AI chatbot for personalized learning interactions with students.
- **Interview Scheduling:** Students should be able to schedule interviews for internships and jobs offered by collaborating companies.
- **Collaboration Management:** Administrators should have the ability to manage collaborations with external entities, including onboarding and communication.
- **Content Publishing:** Instructors should be able to publish course materials, and administrators should have oversight and management capabilities.

Non-Functional Requirements:

- **Security:** The platform should implement robust security measures to protect user data and ensure secure access to sensitive information.
- **Scalability:** The system should be able to handle a growing user base and increasing demand for courses and features without compromising performance.
- **Usability:** The user interface should be intuitive and user-friendly, catering to users of varying technical proficiency.
- **Reliability:** The platform should be reliable and available, with minimal downtime or disruptions to user access.

- **Performance:** The platform should be responsive and performant, providing a seamless user experience even under heavy load conditions.