**Project Name: Online Learning Management System**

**Project Description:**

The Online Learning Management System is a web-based application that enables educational institutions and individual instructors to manage their courses and course materials. The platform will allow registered users to create and manage their courses, upload course materials such as lectures, assignments, and quizzes, and grade student submissions. The application will use Spring Boot for the backend and JWT authentication to secure the API endpoints.

**Features:**

**User registration and login:** Users will be able to register for an account with the Online Learning Management System by providing their basic information such as name, email, and password. Once registered, they will be able to log in to their account to access the features of the application.

**User profile management:** Registered users will be able to manage their profile information such as their name, contact details, and preferences. They will also be able to view their course history and progress.

**Course creation and management:** Registered users will be able to create courses, including details such as course name, description, prerequisites, and syllabus. They will also be able to edit or delete their courses as needed.

**Course materials upload and management:** Instructors will be able to upload course materials such as lectures, assignments, and quizzes. They will also be able to manage and organize their course materials.

**Student registration and enrolment in courses:** Students will be able to register for an account and enrol in courses offered by instructors. They will also be able to view their enrolled courses and track their progress.

**Student submissions and grading:** Instructors will be able to receive and grade student submissions such as assignments and quizzes. They will also be able to provide feedback and grades to students.

**Course search and filtering:** Users will be able to search for courses using keywords, filters, and categories. This will help them find courses that match their interests and requirements.

**JWT token-based authentication and authorization:** The application will use JSON Web Tokens (JWTs) for authentication and authorization. This will help ensure that only authorized users are able to access the API endpoints and perform actions such as creating courses or enrolling in courses.

**Technical Requirements:**

* Spring Boot framework for the backend
* Spring Data JPA for data persistence
* MySQL or PostgreSQL for database management
* Spring Security for JWT-based authentication and authorization
* Swagger for API documentation
* Gradle or Maven for dependency management
* Git for version control