

LMS API Documentation

This documentation outlines the available endpoints, request parameters, and expected responses for the Learning Management System (LMS) API.

Authentication API

This section covers the endpoint for user authentication.

POST /api/v1/auth/login

Authenticates a user and returns a JSON Web Token (JWT).

Request Body:

Parameter	Type	Required	Description
email	string	Yes	The user's email address.
password	string	Yes	The user's password.

Responses:

- **200 OK:** Successful login.

```
{  "token": "your_jwt_token"}
```
- **400 Bad Request:** Email or password not provided.

```
{  "error": "Email and password are required."}
```
- **401 Unauthorized:** Invalid credentials.

```
{  "error": "Invalid credentials."}
```
- **500 Internal Server Error:** Server-side error during login.

```
{  "error": "Login failed."}
```

}

Admin API

These endpoints are protected and require an **Admin** role. A valid JWT must be included in the Authorization header as a Bearer token.

Course Management

GET /api/v1/admin/courses

Retrieves a list of all courses.

Responses:

- **200 OK:** Returns an array of course objects.
- **500 Internal Server Error:** Error fetching courses.

GET /api/v1/admin/courses/:courseId

Retrieves a single course by its ID, including its modules.

URL Parameters:

Parameter	Type	Description
courseId	string	The ID of the course.

Responses:

- **200 OK:** Returns the course object.
- **404 Not Found:** Course with the specified ID does not exist.
- **500 Internal Server Error:** Error fetching the course.

POST /api/v1/admin/courses

Creates a new course.

Request Body:

Parameter	Type	Required	Description
title	string	Yes	The title of the course.

description	string	No	A description of the course.
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Responses:

- **201 Created:** Returns the newly created course object.
- **400 Bad Request:** Title is missing.
- **500 Internal Server Error:** Error creating the course.

PUT /api/v1/admin/courses/:courseId

Updates an existing course.

URL Parameters:

Parameter	Type	Description
courseId	string	The ID of the course to update.

Request Body:

Parameter	Type	Required	Description
title	string	No	The new title for the course.
description	string	No	The new description for the course.

Responses:

- **200 OK:** Returns the updated course object.
- **400 Bad Request:** No update data provided.
- **404 Not Found:** Course not found.
- **500 Internal Server Error:** Error updating the course.

DELETE /api/v1/admin/courses/:courseId

Deletes a course.

URL Parameters:

Parameter	Type	Description
courseId	string	The ID of the course to delete.

Responses:

- **204 No Content:** The course was deleted successfully.
- **404 Not Found:** Course not found.
- **500 Internal Server Error:** Error deleting the course.

Module Management

POST /api/v1/admin/courses/:courseId/modules

Creates a new module for a specific course.

URL Parameters:

Parameter	Type	Description
courseId	string	The ID of the course to add the module to.

Request Body:

Parameter	Type	Required	Description
title	string	Yes	The title of the module.
description	string	No	A description of the module.
videoUrl	string	Yes	The URL for the module's video content.

Responses:

- **201 Created:** Returns the newly created module object.
- **400 Bad Request:** Required fields are missing.
- **404 Not Found:** The specified course does not exist.

- **500 Internal Server Error:** Error creating the module.

PUT /api/v1/admin/modules/:moduleId

Updates an existing module.

URL Parameters:

Parameter	Type	Description
moduleId	string	The ID of the module to update.

Request Body:

Parameter	Type	Required	Description
title	string	No	The new title for the module.
description	string	No	The new description for the module.
videoUrl	string	No	The new video URL for the module.

Responses:

- **200 OK:** Returns the updated module object.
- **400 Bad Request:** No update data provided.
- **404 Not Found:** Module not found.
- **500 Internal Server Error:** Error updating the module.

DELETE /api/v1/admin/modules/:moduleId

Deletes a module.

URL Parameters:

Parameter	Type	Description
moduleId	string	The ID of the module to

		delete.
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Responses:

- **204 No Content:** The module was deleted successfully.
- **404 Not Found:** Module not found.
- **500 Internal Server Error:** Error deleting the module.

Student Management

GET /api/v1/admin/students

Retrieves a list of all students.

Responses:

- **200 OK:** Returns an array of student objects.
- **500 Internal Server Error:** Error fetching students.

GET /api/v1/admin/students/:studentId

Retrieves a single student by their ID.

URL Parameters:

Parameter	Type	Description
studentId	string	The ID of the student.

Responses:

- **200 OK:** Returns the student object.
- **404 Not Found:** Student not found.
- **500 Internal Server Error:** Error fetching the student.

POST /api/v1/admin/students

Creates a new student and enrolls them in courses.

Request Body:

Parameter	Type	Required	Description
email	string	Yes	The student's email.

password	string	Yes	The student's password.
courselds	array of strings	Yes	An array of course IDs to enroll the student in.

Responses:

- **201 Created:** Returns the new student object.
- **400 Bad Request:** Missing required fields or invalid course IDs.
- **409 Conflict:** A user with this email already exists.
- **500 Internal Server Error:** Error creating the student.

PUT /api/v1/admin/students/:studentId

Updates a student's course enrollments.

URL Parameters:

Parameter	Type	Description
studentId	string	The ID of the student to update.

Request Body:

Parameter	Type	Required	Description
courselds	array of strings	Yes	The new array of course IDs for the student.

Responses:

- **200 OK:** Returns the updated student object.
- **400 Bad Request:** courselds is not an array.
- **404 Not Found:** Student or a specified course not found.
- **500 Internal Server Error:** Error updating the student.

DELETE /api/v1/admin/students/:studentId

Deletes a student.

URL Parameters:

Parameter	Type	Description
studentId	string	The ID of the student to delete.

Responses:

- **204 No Content:** The student was deleted successfully.
- **404 Not Found:** Student not found.
- **500 Internal Server Error:** Error deleting the student.

Student API

These endpoints are protected and require a **Student** role. A valid JWT must be included in the Authorization header as a Bearer token.

GET /api/v1/student/courses

Retrieves all courses the authenticated student is enrolled in.

Responses:

- **200 OK:** Returns an array of the student's enrolled courses.
- **404 Not Found:** Student not found.
- **500 Internal Server Error:** Error fetching courses.

GET /api/v1/student/courses/:courseId

Retrieves a specific course by ID that the authenticated student is enrolled in, including its modules.

URL Parameters:

Parameter	Type	Description
courseId	string	The ID of the course.

Responses:

- **200 OK:** Returns the course object with modules.
- **403 Forbidden:** The student is not enrolled in this course.
- **500 Internal Server Error:** Error fetching the course.