Student Course Management System - Full API Endpoints Summary\*\*

http://localhost:8080`

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Authentication\*\*

**Register User**

POST http://localhost:8080/api/auth/register

{

"username": "sandra",

"password": "admin123",

"email": "sandra@school.edu",

"role": "ADMIN"

}

**Login User**

POST`http://localhost:8080/api/auth/login`

{

"username": "sandra",

"password": "admin123"

}

**Create Student**

POST http://localhost:8080/students

{

"name": "Alice Johnson",

"email": "alice@school.edu"

}

ADMIN / TEACHER

**View All Students**

http://localhost:8080/students

ADMIN / TEACHER

Update Student

PUT http://localhost:8080/students/{id}

{

"name": "Alice Johnson-Smith",

"email": "alice.smith@school.edu"

}

ADMIN

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Course Management\*\*

**Create Course**

POST http://localhost:8080/courses

{

"courseName": "Data Structures",

"credits": 4

}

ADMIN / TEACHER

**View All Courses**

GET http://localhost:8080/courses

Access ADMIN / TEACHER / STUDENT

Update Course

PUT http://localhost:8080/courses/{courseId}

{

"courseName": "Algorithms",

"credits": 3

}

ADMIN

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Enrollment Management

Enroll Student in Course

http://localhost:8080/enrollments

{

"student": {"id": 1},

"course": {"courseId": 1}

}

ADMIN / TEACHER

**View Enrollments by Student**

http://localhost:8080/enrollments/student/{studentId}

ADMIN / TEACHER / STUDENT (own)

**View Enrollments by Course**

GEThttp://localhost:8080/enrollments/course/{courseId}

ADMIN / TEACHER

**Update Student Grade**

http://localhost:8080/enrollments/{enrollmentId}/grade?grade=A

ADMIN / TEACHER

**Update Enrollment Status**

http://localhost:8080/enrollments/{enrollmentId}/status?status=WITHDRAWN

ADMIN / TEACHER / STUDENT

**Delete Enrollment**

DELETE http://localhost:8080/enrollments/{id}`

ADMIN

---

Analytics & Reports\*\*

**Dashboard Summary**

GET http://localhost:8080/api/analytics/dashboard`

ADMIN / TEACHER

**All Students GPA Summary**

**\*\*GET\*\*** `http://localhost:8080/api/analytics/students/gpa`

**\*\*Access:\*\*** ADMIN / TEACHER

**#### 17️⃣ Specific Student GPA**

GET http://localhost:8080/api/analytics/students/{id}/gpa`

ADMIN / TEACHER / STUDENT (own)

**Dean's List**

GET http://localhost:8080/api/analytics/deans-list`

ADMIN / TEACHER

**Probation List**

GET http://localhost:8080/api/analytics/probation`

ADMIN

**#### 20️⃣ Course Analytics**

GET http://localhost:8080/api/analytics/courses/{courseId}/analytics`

ADMIN / TEACHER

**Student Transcript**

GET`http://localhost:8080/api/analytics/students/{id}/transcript`

ADMIN / TEACHER / STUDENT (own)

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✅ **\*\*Quick End-to-End Test Flow:\*\***

1. `POST /api/auth/register` → Register Admin

2. `POST /api/auth/login` → Login → Get Token

3. `POST /students` → Create Student

4. `POST /courses` → Create Course

5. `POST /enrollments` → Enroll Student

6. `PUT /enrollments/{id}/grade?grade=A` → Grade Student

7. `GET /api/analytics/dashboard` → View Dashboard

8. `GET /api/analytics/students/{id}/gpa` → Verify GPA

Ensured the changes in my application not only reflect in git but also my Docker image is affected and updated A screenshot of a computer

AI-generated content may be incorrect.