

Junior Backend Developer Test (Laravel)

USE CASE

You are responsible for building an API of an e-learning application that will be used by many schools to manage their courses, students, and teachers.

Your application is basically offering the following:

- Teachers can manage courses and groups.
- Students can enroll in courses.
- Groups gather teachers and students. Teachers and students can join multiple Groups.
- Teachers and Students can add posts to a group.
- Each school can only access its own courses, teachers, students

Requirements

1) Build your database

Write the <u>Laravel Migrations</u> that will satisfy the specifications:

n.b. Add any other attribute or entity if needed

Entity	Attributes
School	Name
User (Teacher or Student)	Name, Email (unique), Password
Course	Title, Description
Group	Name
Post	Content, Creation Date

2) Generate sample data to fill your database

Write a <u>Laravel Command</u> that will generate sample data. The command takes as input the number of schools to generate. Each generated school comes with the following:

- 5 Teachers (per school)
- 1 Course (per teacher)
- 10 Students (per school) (not enrolled in any course)

Example for the command signature: php artisan generate:schools {number}



3) Build your RESTful API endpoints

n.b. Add any other endpoint if needed

Make the following endpoints:

- → Register a student in a school. Use <u>Laravel Validation</u> to validate the following:
 - ◆ Name is required and less than 20 characters
 - ◆ Email format is correct and unique within the selected school
 - Password is at least 8 characters long, has at least one alphabetic character and one numeric character
 - POST: api/schools/{school_id}/register
- → Login as a student or teacher.
 - ◆ POST: api/schools/{school_id}/login
- → Enroll in a course. The authenticated user should be a student and member of the school.
 - POST: api/schools/{school_id}/courses/{course_id}
- → List available courses. If the authenticated user is a student, return only courses he is enrolled in. If authenticated user is a teacher return all courses
 - ◆ GET: api/schools/{school_id}/courses