

BrainPOP Backend Developer Exam - Laravel

The goal of this exam is to create a working REST API for accessing and manipulating school entities, using the Laravel PHP framework.

The entities are:

- Teachers: id, username, password, full name, email
- Students: id, username, password, full name, grade (0-12)
- Periods: id, name

Entities relationships:

- A period has only one teacher
- A teacher can teach several periods
- A student can be registered for several periods

Required endpoints specifications:

- Full CRUD operations for all entities, including adding a student to a period and removing a student from a period.
- Fetch all students in a given period
- Fetch all periods associated with a given teacher
- Fetch all students that are linked to a teacher via period
- Login capabilities for both teacher and student
- All responses should return a JSON.
- With the exception of creating teacher and student, all endpoints are limited to authenticated users.

Points and guidelines:

- Please pay attention to the following:
 - Solution design
 - Clean code
- The project should be submitted as a zip file without node_modules/vendor folders
- Bonus points (the following is not in order of importance):
 - Security
 - Validations
 - Response messages handling
 - Documentations
 - Design patterns
 - Tests