Lifecole Backend Test

What is this about

The purpose of this test is to know your ability to create a modern and functional API environment.
Below you'll find the features, the requirements, and the key points you should use while developing.

What we'll evaluate

- You can use Symfony or Laravel as a framework. However, a DDD/Hexagonal style framework is encouraged.
- The use of classes, modules, bundles, and entities is allowed and encouraged.
- The use of Docker, docker-compose, or Kubernetes is allowed and encouraged.
- You can choose the database(s) that you think are the best options to solve the problems and explain why.
- The following are bonus points for the candidate:
    - Code quality
    - Application structure
    - Unit testing
    - Optimization and performance (load times)
    - Scalability
    - HTTP Codes usage
    - Exceptions handler
    - Best practices
    - SOLID principles

What we want you to do

As a user I want to have access to a private (with authorization) Courses API where I can search items given the following criteria:

- Category (Maths, Robotics, Art…)
- Level
- Price (two independent currencies available, euros and EEUU dollars)

When I perform a search that has results, I'd like to be able to get a list of the Courses listing all that information. Also, I want to have the ability to order the listed items by Category, Level, and price.

Also, I want to be able to mark/unmark a Course as a favorite, and I want to filter by favorite courses.

As the Course list tends to infinity, should be paginated as you want. You can select the pagination strategy, it's up to you.

Delivery requirements

The data source must be the data.txt file like a 3r party data provider that only changes one time each day. All the courses that should be displayed are inside this file. You should decide how you want to access and treat this data thinking about performance and best practices.

The prices aren't included in the file. You should generate it with a 3rd party API. The value doesn't need to be real. You can use this service to generate random values http://www.randomnumberapi.com .

You must attach your solution with all the files needed to work in Github/Bitbucket private repository with a complete README with the setup and run instructions.