Test Project

Startech's Days 2022

Day 2: API

Skill : Web Development

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Employer : Forem - Cepegra

# API Development

## Description of the project and the tasks to be carried out

The aim is to manage a list of questions and answers in the field of the environment. Users will be able to participate in a game several times, hence the objects "questions", "games" and "users".

Setting up a database and an API to access it using the routes and methods described below.

You can choose between :

* Self-development with MariaDB and Vanilla or using a framework (Laravel).   
  If the .php   
  extension is visible in the project url, it is accepted but with loss of points.
* Use of the CockpitCMS library available in your personal space. This will result in a loss of points.

Duration: 3 hours 15 minutes.

## Instructions for COMPETITORS

In order to develop a client application in parallel, you must scrupulously respect the following specifications. I draw attention to the importance of the correctness of the Json data to be sent and received, including the typing of the values.

API responses should be in Json and not text.

In the Json answers below you will find :

* \_state is required and set to 1 (for the item to be published).
* POST method : Api-key is a unique and global token for the api (bad secure, I know...). **Give us yours in a file api-key.txt ad the root of your folder.**
* \_cby and \_mby are optional. ("Created by", "modified by" + user id)

### GET /api/content/items/questions

There are 3 types of questions:

* form-multiple because several answers are possible,
* form-only because only one answer is possible
* order where the answers are given in the right order.

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | [  {  "number": 1,  "qtype": "form-multiple",  "question": "Which of the following are proposals that the circular economy seeks to promote?",  "response": {  "answers": [  "Eco-design",  "Recycling",  "Repair of waste",  "Resource extraction",  "Programmed obsolescence", ["Ecodesign", "Recycling", "Repair", "Resource extraction", "Programmed obsolescence"  ],  "validAnswers": [  "Eco-design",  "Recycling",  "Repair of goods  ]  },  "\_state": 1,  "\_modified": 1663155594,  "\_mby": "55b31028326262c97800010f",  "\_created": 1663155594,  "\_cby": "55b31028326262c97800010f",  "\_id": "55fc01e53964365071000089"  },  {  "number": 17,  "qtype": "form-unique",  "question": "Textiles. What is true?",  "response": {  "answers": [  "The textile industry is the second most polluting industry in the world",  "Synthetic fibres are environmentally friendly because they save natural fibres (cotton, linen, silk, wool, etc.).",  "Polyester is not polluting, unlike cotton"  ],  "validAnswers": [  "The textile industry is the second most polluting industry in the world"  ]  },  "\_state": 1,  "\_modified": 1663143324,  "\_mby": "55b31028326262c97800010f",  "\_created": 1663143324,  "\_cby": "55b31028326262c97800010f",  "\_id": "4eabbf40646462565a0001af"  },  {  "number": 44,  "qtype": "ordre",  "question": "Which states/regions are the most polluting? Ranking By volume of greenhouse gases in 2020:",  "response": {  "answers": [  "China",  "The United States",  "The European Union",  "India",  "Russia", [ "Russia" ].  ]  },  "\_state": 1,  "\_modified": 1663149343,  "\_mby": "55b31028326262c97800010f",  "\_created": 1663149240,  "\_cby": "55b31028326262c97800010f",  "\_id": "5232620f3965306c7200005a"  }  ] |

### gET /api/content/items/users

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | [  {  "alias": "stone",  "\_state": 1,  "\_modified": 1666698537,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698537,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95be2b1c636130b9ee00014b"  },      {  "alias": "marcel",  "\_state": 1,  "\_modified": 1666698537,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698537,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95be2b1c636130b95665014b"  }   ] |
| 404 |  |

### Get /api/content/items/users?filter={"alias": "stone"}

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | [  {  "alias": "stone",  "\_state": 1,  "\_modified": 1666698537,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698537,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95be2b1c636130b9ee00014b"  }  ] |
| 200 | [] |

### gET /api/content/item/users/{\_id}

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | {  "alias": "stone",  "\_state": 1,  "\_modified": 1666698537,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698537,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95be2b1c636130b9ee00014b"  } |
| 404 |  |

### POST /api/content/item/users

Body request with headers :

* Content-Type=application/json
* api-key = Your code

|  |
| --- |
| **Data** |
| {  "data":  {  "alias": "pierre2",  "\_state": 1  }  } |

Response :

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | {  "alias": "pierre2",  "\_state": 1,  "\_modified": 1666707617,  "\_mby": null,  "\_created": 1666707617,  "\_cby": null,  "\_id": "9b279c906664341d480002af"  } |
| 403 | {  “error": "Permission denied"  } |

### gET /api/content/items/games

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | [  {  "user": {  "\_model": "users",  "\_id": "95be2b1c636130b9ee00014b"  },  "result": 10,  "\_state": 1,  "\_modified": 1666698748,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698748,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95de49b6663337dbb50002a4"  }  ] |
| 200 | [] |

### gET /api/content/items/games?filter= {"user.\_id":"9b279c906664341d480002af"}

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | [  {  "user": {  "\_model": "users",  "\_id": "9b279c906664341d480002af "  },  "result": 10,  "\_state": 1,  "\_modified": 1666698748,  "\_mby": "941f2ada323434d6ad0003da",  "\_created": 1666698748,  "\_cby": "941f2ada323434d6ad0003da",  "\_id": "95de49b6663337dbb50002a4"  }  ] |
| 200 | [] |

### POST /api/content/item/games

Body request Body request with headers :

* Content-Type=application/json
* api-key = Your code

|  |
| --- |
| **Data** |
| {  "data":  {  "user": {  "\_model": "users",  "\_id": "9b279c906664341d480002af"  },  "result": 80,  "\_state": 1  }  } |

Response :

|  |  |
| --- | --- |
| **Status code** | **Data** |
| 200 | {  "user": {  "\_model": "users",  "\_id": "9b279c906664341d480002af"  },  "result": 80,  "\_state": 1,  "\_modified": 1666707852,  "\_mby": null,  "\_created": 1666707852,  "\_cby": null,  "\_id": "9b4b87a7303131493200009d"  } |
| 403 | {  “error": "Permission denied"  } |

## material to be taken by the cOMPETITORS

Personal keyboard or mouse allowed.

## PROHIBITED MATERIAL DURING THE COMPETITION

It is forbidden to use anything that might disturb your work: mobile phones, radios, MP3s.

No digital storage solution

## rating procedure

**Distribution of points**

|  |  |
| --- | --- |
| Work organisation and self-management | 2 |
| Code-related aspects (semantics, organisation, standards) | 2 |
| Road testing, methods, structures and types | 15 |

## SAFETY INSTRUCTIONS

No

## ANNEXES :

* Technical document

## Can this document, including annexes, BE sent to competitors before the event?

## NO

## 