Test Project

Startech's Days 2022

Day 2: Web application

Skill : Web Development

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Employer : Forem - Cepegra

# Application Development

Question and answer game in the field of the environment. Users can participate several times, hence the "games" and "users" objects provided by the API.

Implementation of an API client application allowing to play along a course by rolling the dice and answering as many questions as possible correctly.

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

Respect the Wireframe while proposing a basic layout.

Display a form asking the user to give their alias.

Via the "users" route, check whether it already exists or not. If it does not exist, create it.

The application displays the board with the "Start" and "End" boxes and the 42 "Questions" boxes.

The timer starts at 30 minutes.

There is one question per box. The number in the box corresponds to the "number" property of the question.

A question can have 3 types:

* single form where only one value can be chosen
* form-multiple where several values can be chosen
* order where the answers are shuffled before being displayed. The user has to put them back in the right order.

The user validates his answer.

Each correct answer earns the user one point. The local counter is incremented.

When the user reaches or passes the "End" box or if the timer reaches zero, the game stops. The final screen is displayed with "Time Out" or "You win". The new game is added to the DB via the games route by passing the player's \_id and result.

The Top 5 is displayed.

A button to restart the process is displayed.

## Instructions for COMPETITORS

You can choose between :

* Development in Vanilla or using a framework (Vue, React or Angular).

Duration: 3.5 hours.

Small security :

* POST method: Api-key is a unique and global token for the API (bad secure, I know...). **Give us yours!**

## Structure of the API provided :

### GET /api/content/items/questions? sort={"number": "asc"}

|  |  |
| --- | --- |
| **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": "order",  "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"  }  ] |
| 404 |  |

### 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 = API-cb40e06ec2cea8be26e638e981ae8c1804b41742

|  |
| --- |
| **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": "Authentication failed"  } |

### 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"  }  ] |
| 404 |  |

### 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"  }  ] |
| 404 |  |

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

Body request Body request with headers :

* Content-Type=application/json
* api-key = API-cb40e06ec2cea8be26e638e981ae8c1804b41742

|  |
| --- |
| **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": "Authentication failed"  } |

## 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 |
| Respect for the wireframe, validity of the HTML code, display of all questions. | 3 |
| Development of client functionalities | 14 |

## SAFETY INSTRUCTIONS

No

## ANNEXES :

* Technical document

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

## NO

## 