

Wizeline Academy Challenge 3

Artillery.io + FakeJS

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Challenge Description

In this challenge the goal is to create a test suite for the TODOIST API, using Artillery and FakeJS. Additionally, the test results will be captured in JSON and HTML report formats.

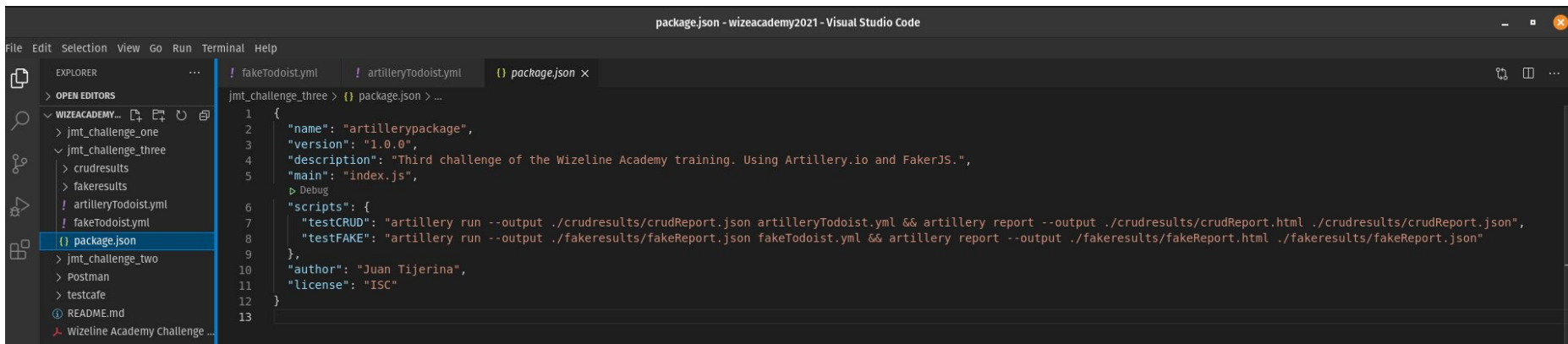
Exercises

CRUD - Build the basic workflow for create, read, update and delete.

FAKE - Build a basic create and delete workflow with randomly generated data.



Package setup for test cases



The screenshot shows the Visual Studio Code interface with the 'package.json' file open in the editor. The Explorer sidebar on the left shows the project structure, including folders for 'jmt_challenge_one' and 'jmt_challenge_three', and files like 'artilleryTodoist.yml', 'fakeTodoist.yml', and 'package.json'. The 'package.json' file is selected and its content is displayed in the editor. The title bar of the window reads 'package.json - wizeacademy2021 - Visual Studio Code'.

```
1 {
2   "name": "artillerypackage",
3   "version": "1.0.0",
4   "description": "Third challenge of the Wizeline Academy training. Using Artillery.io and FakerJS.",
5   "main": "index.js",
6   "scripts": {
7     "testCRUD": "artillery run --output ./crudresults/crudReport.json artilleryTodoist.yml && artillery report --output ./crudresults/crudReport.html ./crudresults/crudReport.json",
8     "testFAKE": "artillery run --output ./fakeresults/fakeReport.json fakeTodoist.yml && artillery report --output ./fakeresults/fakeReport.html ./fakeresults/fakeReport.json"
9   },
10  "author": "Juan Tijerina",
11  "license": "ISC"
12 }
13
```

Important!

Execution requires a Todoist bearer token to be exported.

Execution of the CRUD test

```
jmt_challenge_three > J artilleryTodoist.yml
1  config:
2  target: "https://api.todoist.com/rest/v1"
3  phases:
4  - duration: 5
5    arrivalRate: 1
6    name: Basicload
7  defaults:
8    headers:
9      Authorization: Bearer {{ $processEnvironment.TOKEN }}
10     Content-type: application/json
11  scenarios:
12    # Wizeline Academy Challenge 3
13    - name: "Todoist Basic CRUD"
14      flow:
15        #Get existing tasks
16        - get:
17          url: "/tasks"
18        #Create a new task
19        - post:
20          url: "/tasks"
21          body: '{"content": "Task X", "due_date": "2021-09-01", "due_lang": "en", "priority": 4, "project_id": 2261210765}'
22          capture:
23            json: "$.id"
24            as: "id"
25        #Log the id of the created task
26        - log: "Task created with the id: {{ id }}"
27        #Check the task was created
28        - get:
29          url: "/tasks/{{ id }}"
30        #Update the created task
31        - post:
32          url: "/tasks/{{ id }}"
33          body: '{"content": "Updated Task"}'
34        #Complete task
35        - post:
36          url: "/tasks/{{ id }}/close"
37        #Reopen task
38        - post:
39          url: "/tasks/{{ id }}/reopen"
40        #Delete task
41        - delete:
42          url: "/tasks/{{ id }}"
43        - log: "Deleted task with the id: {{ id }}"
```



Charts

Overall Latency Distribution



Latency At Intervals



```
osblast@pop-os:~/wizeacademy2021/jmt_challenge_three$ npm run test:CRUD
> artillery@0.0.0 test:CRUD
> artillery run --report ./crudresults/crudReport.json artilleryTodoist.yml && artillery report --output ./crudresults/crudReport.html --crudresults/crudReport.json

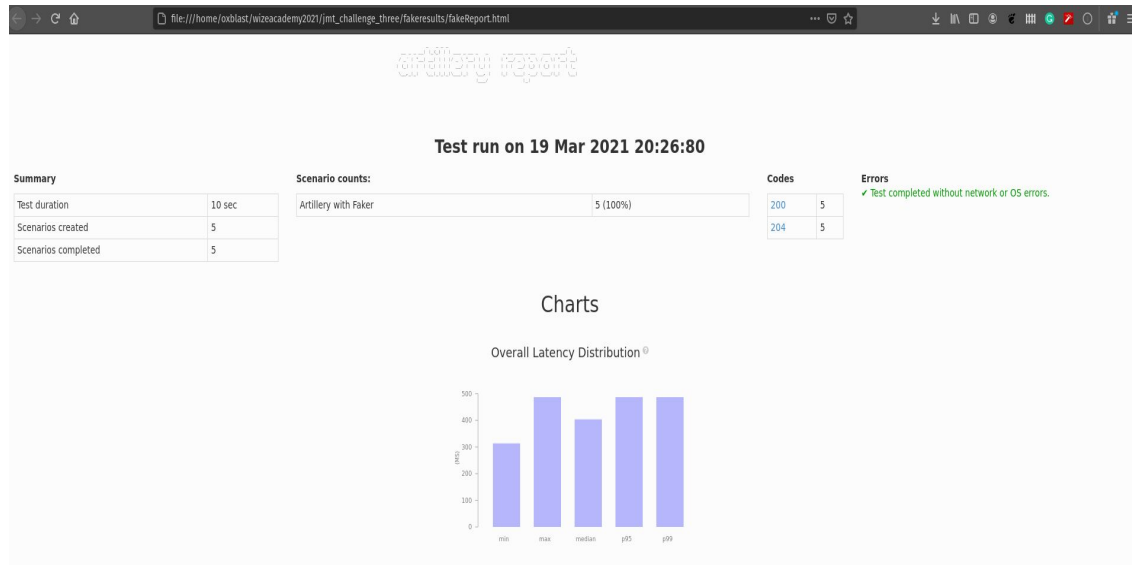
Started phase 0 (Basicload), duration: 5s @ 20:21:07(-0700) 2021-03-19
Task created with the id: 404538012
Task created with the id: 404538022
Task created with the id: 404538029
Deleted task with the id: 404538015
Task created with the id: 404538038
Deleted task with the id: 404538047
Deleted task with the id: 404538029
Deleted task with the id: 404538052
Deleted task with the id: 404538038
Deleted task with the id: 404538047
Report @ 20:21:15(-0700) 2021-03-19
Elapsed time: 8 seconds
Scenarios launched: 5
Scenarios completed: 5
Requests completed: 20
Mean response/sec: 5.04
Response time (msec):
min: 50.6
max: 1384.4
median: 407.8
p50: 826.1
p90: 1384.4
Codes:
200: 15
204: 20
All virtual users finished
Summary report @ 20:21:15(-0700) 2021-03-19
Scenarios launched: 5
Scenarios completed: 5
Requests completed: 20
Mean response/sec: 5.04
Response time (msec):
min: 50.6
max: 1384.4
median: 407.8
p50: 826.1
p90: 1384.4
Scenario counts:
Todoist Basic CRUD: 5 (100%)
Codes:
200: 15
204: 20
Log file: ./crudresults/crudReport.json
Report generated: ./crudresults/crudReport.html
osblast@pop-os:~/wizeacademy2021/jmt_challenge_three$
```

FakerJS execution test

```
jit_challenge_three > | fakedotool
1 config:
2 target: "https://api.todoist.com/rest/v1"
3 phases:
4   - duration: 5
5     arrivalRate: 1
6     name: BasicLoad
7   plugins:
8     faker:
9       locale: en
10  variables:
11    firstName: "$faker.name.firstName"
12    date: "$faker.date.future"
13  defaults:
14    headers:
15      Authorization: Bearer {{ $processEnvironment.TOKEN }}
16      Content-type: application/json
17  scenarios:
18    # Wizeline Academy Challenge 3 with Faker
19    - name: "Artillery with Faker"
20      flow:
21        #Create a new task with faker
22        - post:
23          url: "/tasks"
24          body: '{ "content": "Meeting with {{ firstName }}", "due_datetime": {{ date }}, "due_lang": "en", "priority": 4, "project_id": 2261210785}'
25          capture:
26            json: "$.id"
27            as: "id"
28          - log: "Create meeting {{ id }} with {{ firstName }} on {{ date }}"
29        #Delete task
30        - delete:
31          url: "/tasks/{{ id }}"
32          - log: "Deleting meeting {{ id }} with {{ firstName }} on {{ date }}"
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Report generated: ./crudresults/crudReport.html
wizeline@pop-os:~\$ cd /home/wizeline/2021/jit_challenge_three\$ npm run testFAKE



```
Started phase 0 (BasicLoad), duration: 5s @ 20:26:42(-0700) 2021-03-19
.. Create meeting 4674542600 with Antwon on "2021-08-18T23:42:19.855Z"
.. Deleting meeting 4674542600 with Antwon on "2021-08-18T23:42:19.855Z"
.. Create meeting 4674542610 with Ciara on "2021-03-29T13:34:05.524Z"
.. Deleting meeting 4674542610 with Ciara on "2021-03-29T13:34:05.524Z"
.. Create meeting 4674542629 with Otho on "2022-02-06T22:50:26.653Z"
.. Deleting meeting 4674542629 with Otho on "2022-02-06T22:50:26.653Z"
.. Create meeting 4674542632 with Warren on "2021-07-24T22:40:59.243Z"
.. Deleting meeting 4674542632 with Warren on "2021-07-24T22:40:59.243Z"
.. Create meeting 4674542641 with Bernice on "2022-03-18T19:11:28.759Z"
.. Deleting meeting 4674542641 with Bernice on "2022-03-18T19:11:28.759Z"
```

Plugin required: `npm install -g artillery-plugin-faker`