

QA ENGINEER - TESTS - RAIDIAM-RENAN MARQUES

Task 2: Back-end test

Explore the Open Weather API (<https://openweathermap.org/current>) by making requests to test the following functionalities with any tool, language, or framework you feel comfortable with like Postman or using a script with a programming language like Python or JS. We expect you to test the following flows by also looking for edge case scenarios, applying best practices like DRY, Design Pattern(or others you know), and doing assertions on the responses:

- Current weather data by latitude and longitude
- Current weather data by city name
- Current weather with different units of measurement

Try to create requests to reproduce the following errors:

For this tests: we need to have postman installed, and use the request urls to make the requisitions.

a-400

request url, postman, GET METHOD

<http://api.openweathermap.org/data/2.5/weather?lat={+lat+}&lon={+long+}&appid=a85717f57b6bd30e011747de59dc3a60>

response:

```
{
  "cod": "400",
  "message": "wrong latitude"
}
```

b-401

request url, postman, GET METHOD

<https://api.openweathermap.org/data/2.5/weather?lat=44.34&lon=10.99&appid={fabb726c78c0816cee3f13d00abffcb6}>

response

```
"cod": 401,  
"message": "Invalid API key. Please see https://openweathermap.org/faq#error401 for  
more info."  
}
```

c-404

request url, postman, POST METHOD

<http://bulk.openweathermap.org/samples>
<https://api.openweathermap.org/2.5/weather?q=Rome,Italy&appid=a85717f57b6bd30e011747de59dc3a60>

response:

```
<head>  
<title>404 Not Found</title>  
</head>
```

d-5xx

request, url, postman, DELETE METHOD

<https://api.openweathermap.org/data/2.5/weather?lat=44.34&lon=10.99&appid=a85717f57b6bd30e011747de59dc3a60>

```
{  
  "cod": "405",  
  "message": "Internal error"  
}
```

OBS: I did not found a 5xx error mapped here, but error 405 seems to be interpreting the Internal errors here

e-429-You don't need to write a request or code to this one, just explain how you would reproduce the error 429

request, url postman, GET METHOD

For this tests, we need two things.

From QA Side: account to have access to collections and runners in POSTMAN.

From DEV Side: Set a rate limiting in the server and to have the error mapped

Then use this steps to reproduce the error 429:

- 1- Log in postman
- 2- Create new collection
- 3- Create new request and paste url:
<http://api.openweathermap.org/data/2.5/weather?lat=44.34&lon=10.99&appid=a85717f57b6bd30e011747de59dc3a60>
- 4- Open the collection created and go to "RUNS" tab, click RUN COLLECTION
- 5- Set 1000 iterations (or more, depending on how Devs set the rate limite in the server) in 1000 ms
- 6- Run collection