

Bedrock a Party

Homework 1 – Advanced Software Engineering

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1 Introduction

The homework, called *Bedrock a party* aims to create a RESTful service to manage the parties and the supplies for the latter in Bedrock. In particular, it consists of the calling and handling of the functions in the blueprint file *parties.py*. This implies that most of the work requested was about reading and understanding the skeleton provided. Once the methods were fully understood, they were used following as close as possible the TODO comments which gave direction on what was necessary to code to complete the homework. Finally the program has been tested with the help of *Postman* and *pytest*.

The zip contains this file and the *parties.py* file. If the images are not clear enough they will be in my github [repository](#) with the homework.

2 Tests

The solution has been tested with *pytest* using the *test_party.py* file. Additionally, using *Postman*, to run some more tests.

```
(venv) jager@ubuntu:~/Desktop/Python/Homework/bedrock_a_party/tests$ pytest
===== test session starts =====
platform linux -- Python 3.9.5, pytest-6.2.5, py-1.10.0, pluggy-1.0.0
rootdir: /home/jager/Desktop/Python/Homework, configfile: setup.cfg
plugins: cov-3.0.0
collected 2 items

test_party.py ..

===== warnings summary =====
./../venv/lib/python3.9/site-packages/flask/json/_init_.py:31
/home/jager/Desktop/Python/Homework/venv/lib/python3.9/site-packages/flask/json/_init_.py:31: DeprecationWarning: Importing 'itsdangerous.json' is deprecated and will be removed in ItsDangerous 2.1. Use Python's 'json' module instead.
  _slash_escape = "\\" not in _json.dumps("/")

./../venv/lib/python3.9/site-packages/flask/json/_init_.py:61
/home/jager/Desktop/Python/Homework/venv/lib/python3.9/site-packages/flask/json/_init_.py:61: DeprecationWarning: Importing 'itsdangerous.json' is deprecated and will be removed in ItsDangerous 2.1. Use Python's 'json' module instead.
  class JSONEncoder(_json.JSONEncoder):

./../venv/lib/python3.9/site-packages/flask/json/_init_.py:103
/home/jager/Desktop/Python/Homework/venv/lib/python3.9/site-packages/flask/json/_init_.py:103: DeprecationWarning: Importing 'itsdangerous.json' is deprecated and will be removed in ItsDangerous 2.1. Use Python's 'json' module instead.
  class JSONDecoder(_json.JSONDecoder):

./../venv/lib/python3.9/site-packages/flask/app.py:2459
/home/jager/Desktop/Python/Homework/venv/lib/python3.9/site-packages/flask/app.py:2459: PytestCollectionWarning: cannot collect 'tested_app' because it is not a function.
  def _call(self, environ, start_response):

bedrock_a_party/tests/test_party.py:13 warnings
/home/jager/Desktop/Python/Homework/venv/lib/python3.9/site-packages/flask/json/_init_.py:211: DeprecationWarning: Importing 'itsdangerous.json' is deprecated and will be removed in ItsDangerous 2.1. Use Python's 'json' module instead.
  rv = _json.dumps(obj, **kwargs)

-- Docs: https://docs.pytest.org/en/stable/warnings.html

----- coverage: platform linux, python 3.9.5-final-0 -----
Name                               Stmts   Miss Branch BrPart  Cover   Missing
-----
/home/jager/Desktop/Python/Homework/bedrock_a_party/classes/party.py      64      18      10       2     84%   17, 31, 39-40, 62, 86, 99, 102, 107, 110
/home/jager/Desktop/Python/Homework/bedrock_a_party/views/parties.py       75       9       22       5     94%   26-27, 48, 66->69, 91-94, 100->109, 130, 139-140
TOTAL                               191      19      32       7     87%

0 files skipped due to complete coverage.
Coverage HTML written to dir htmlcov
FAIL Required test coverage of 98% not reached. Total coverage: 87.44%

2 passed, 17 warnings in 0.49s
```

Figure 1: Pytest result.

2.1 Party-related tests

Here it's shown the test of features such as:

- Creating a party.
- Retrieving a party using the party id.
- Getting all the parties loaded in the system and get the number of the latter.

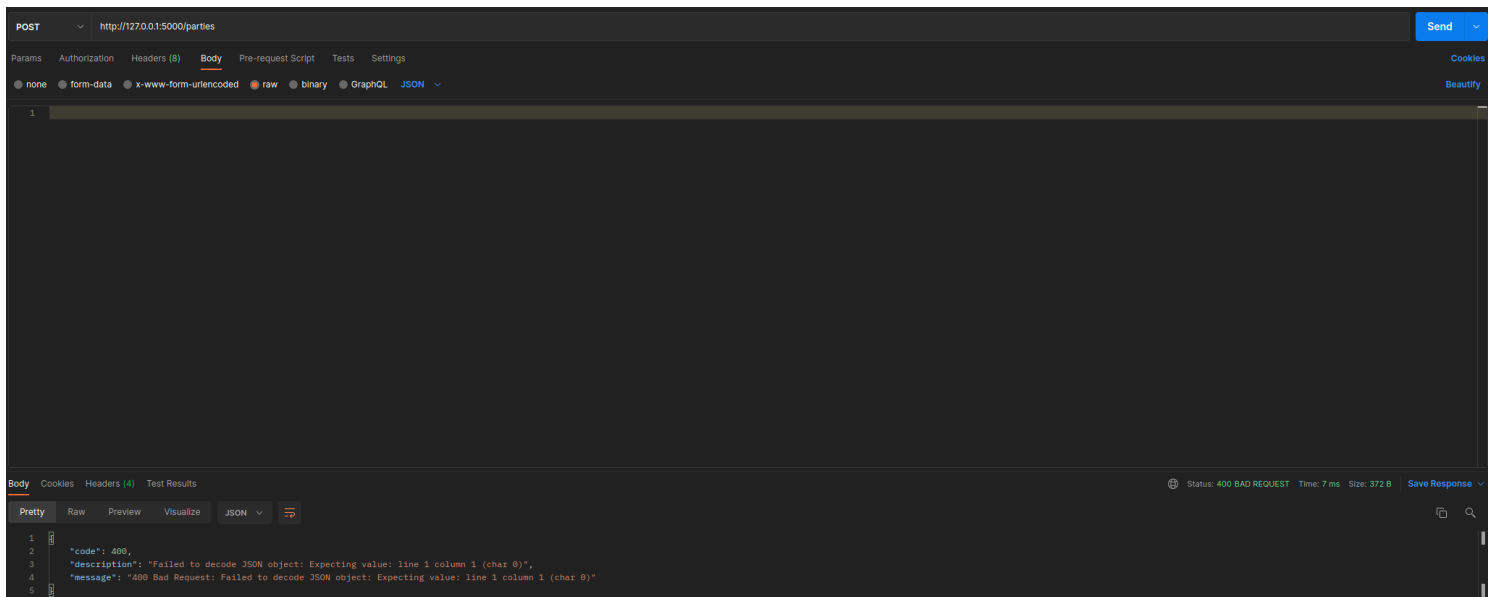


Figure 2: Creating a party with no guests.

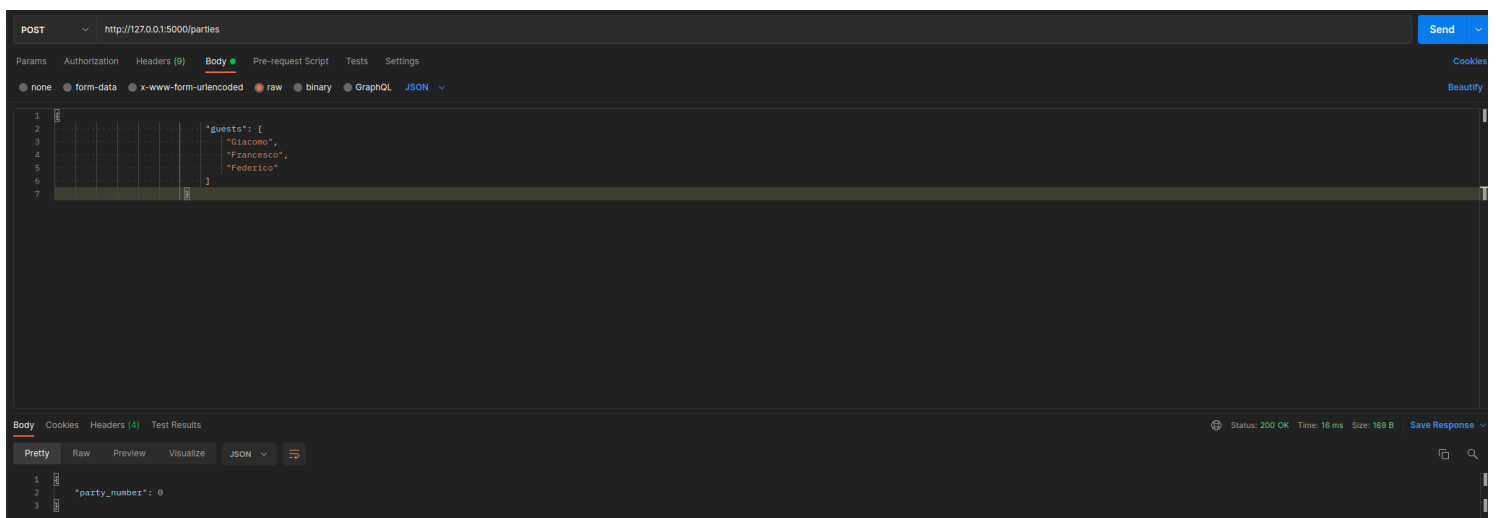


Figure 3: Creating a party.

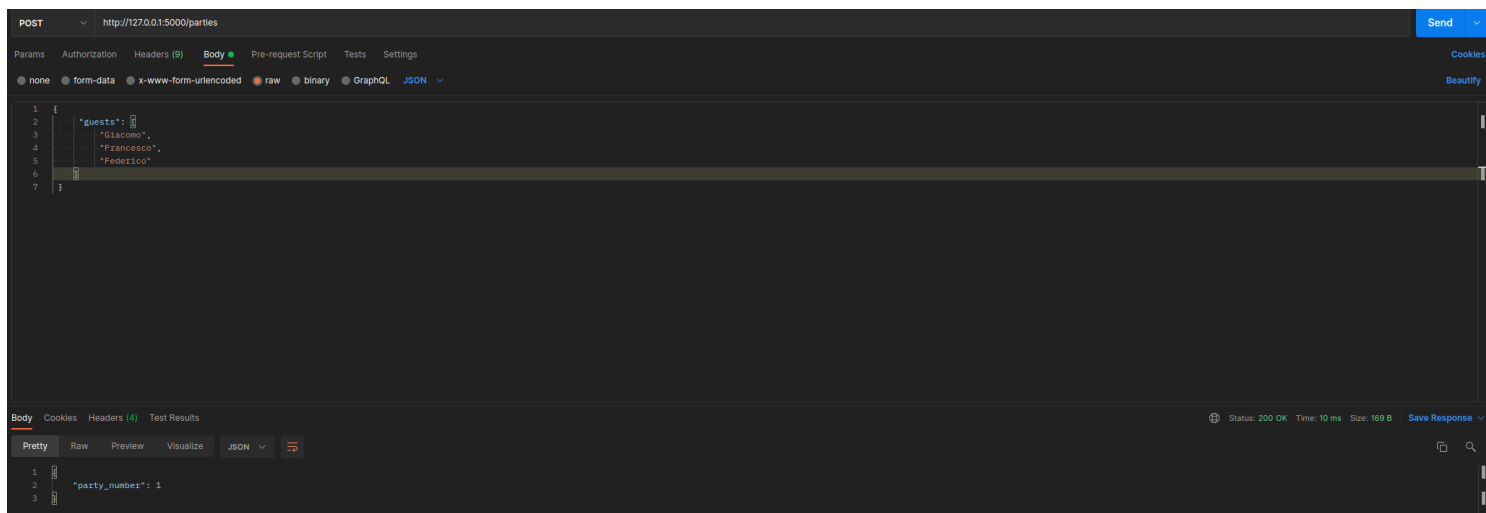


Figure 4: Creating a party.

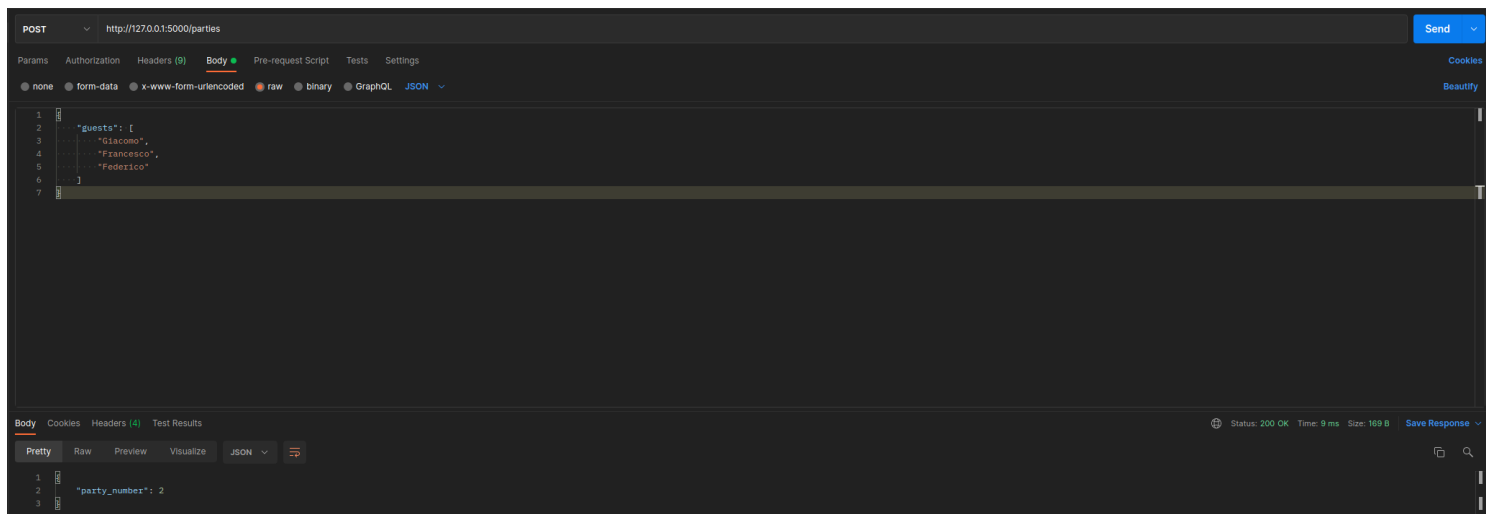


Figure 5: Creating a party.

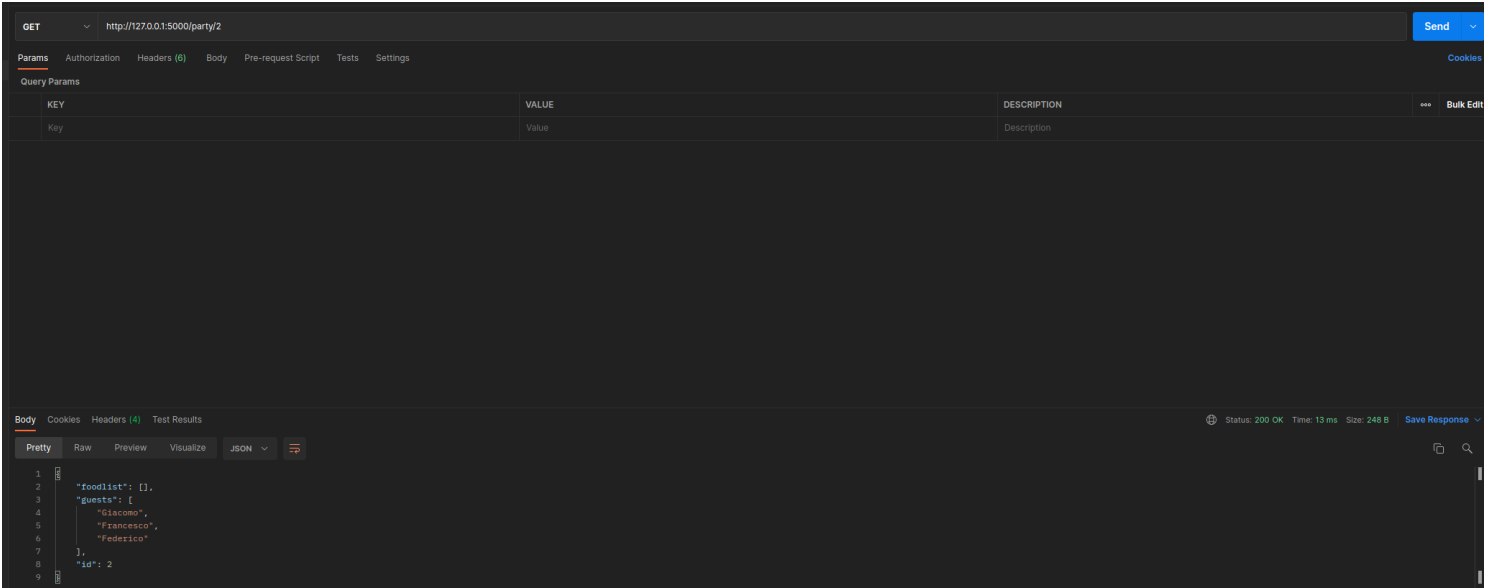


Figure 6: Getting a party using the party’s id.

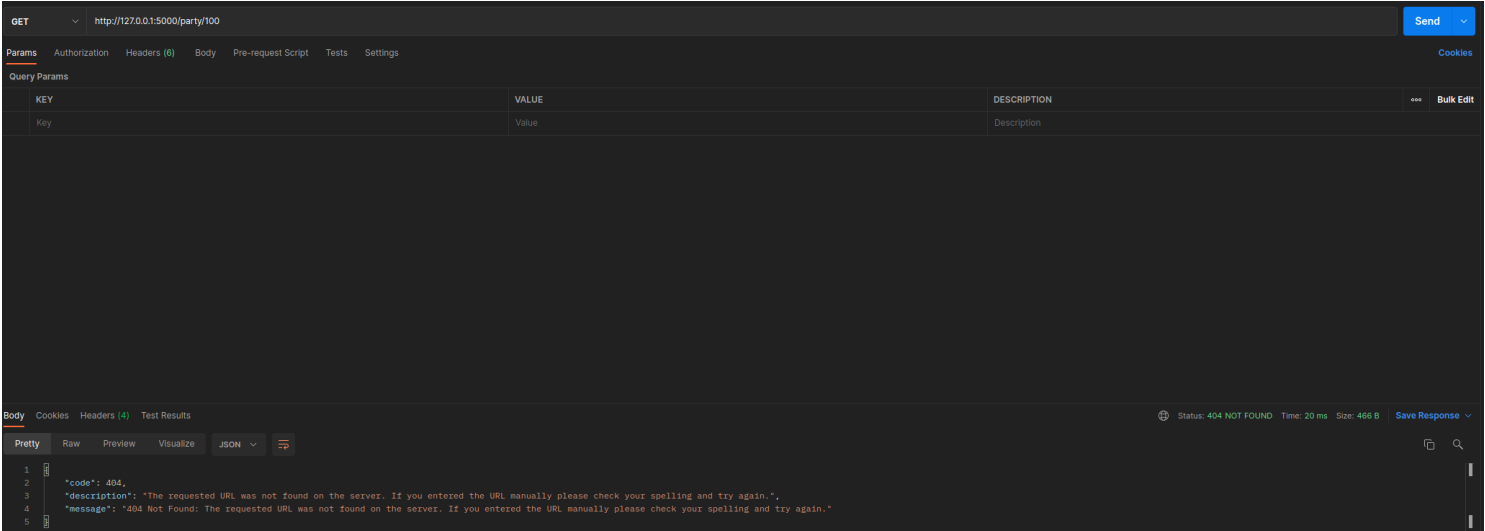


Figure 7: searching for a party that doesn’t exists.

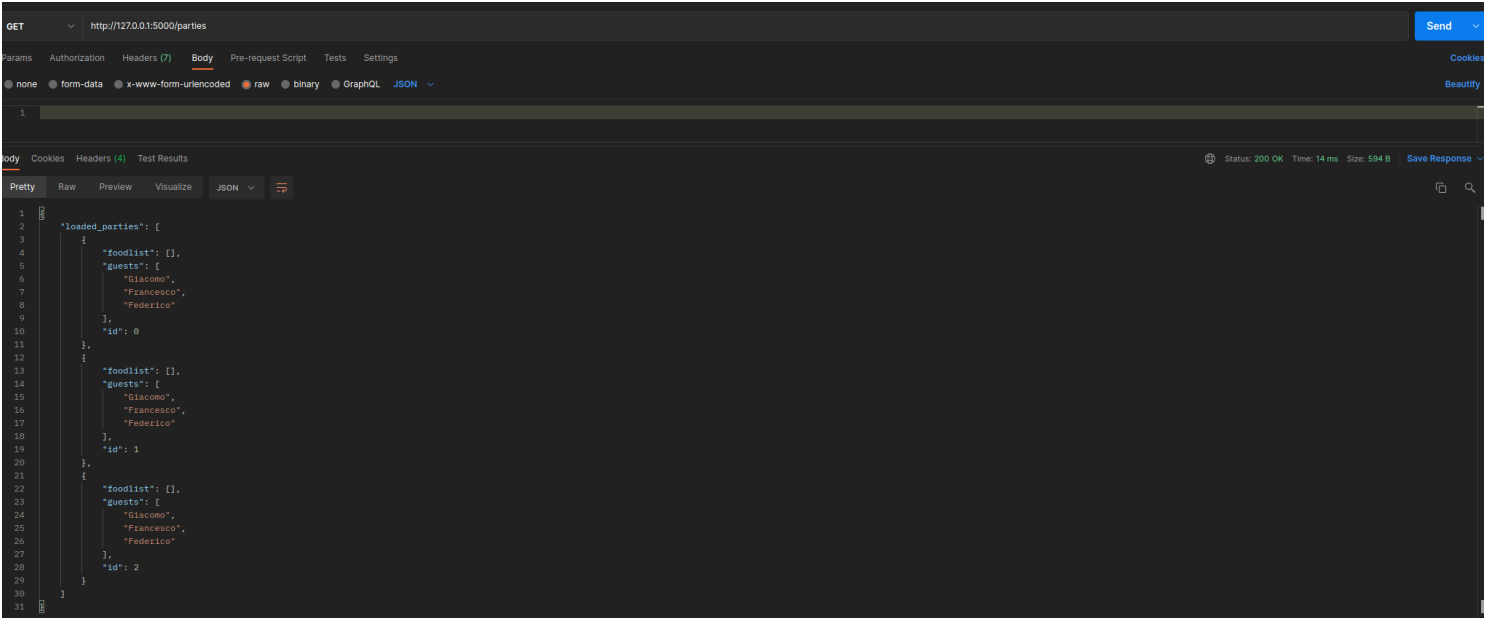


Figure 8: Retrieving all parties that are loaded in the system.

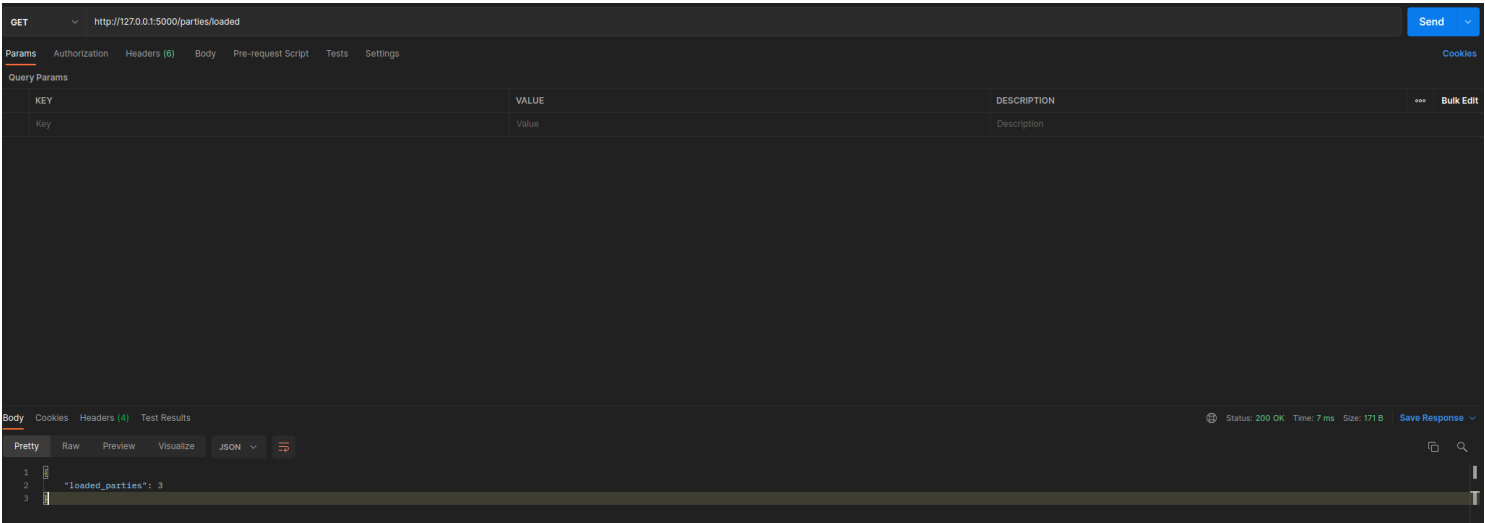


Figure 9: Retrieving the number of parties loaded in the system.



Figure 10: Trying to get all the parties when the list is empty.

2.2 Foodlist-related tests

Here it's shown the test of features such as:

- Adding/Removing a meal from a guest.
- Retrieving the food list of a specific party.

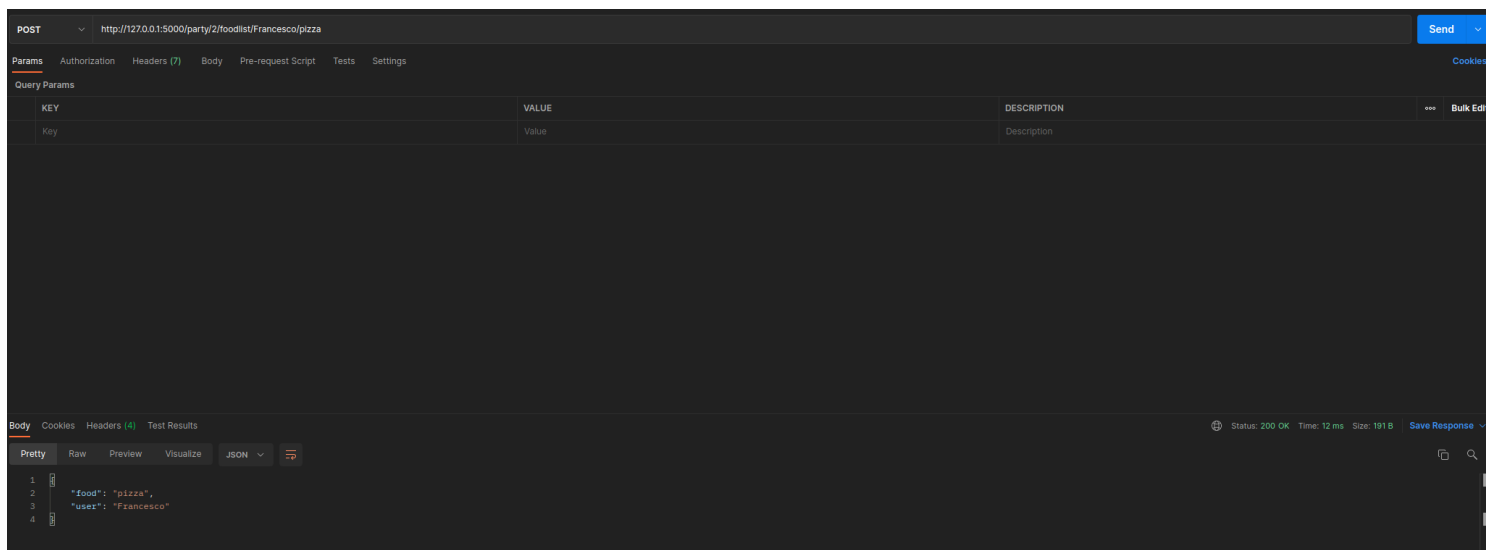


Figure 11: Adding a meal brought by a guest.

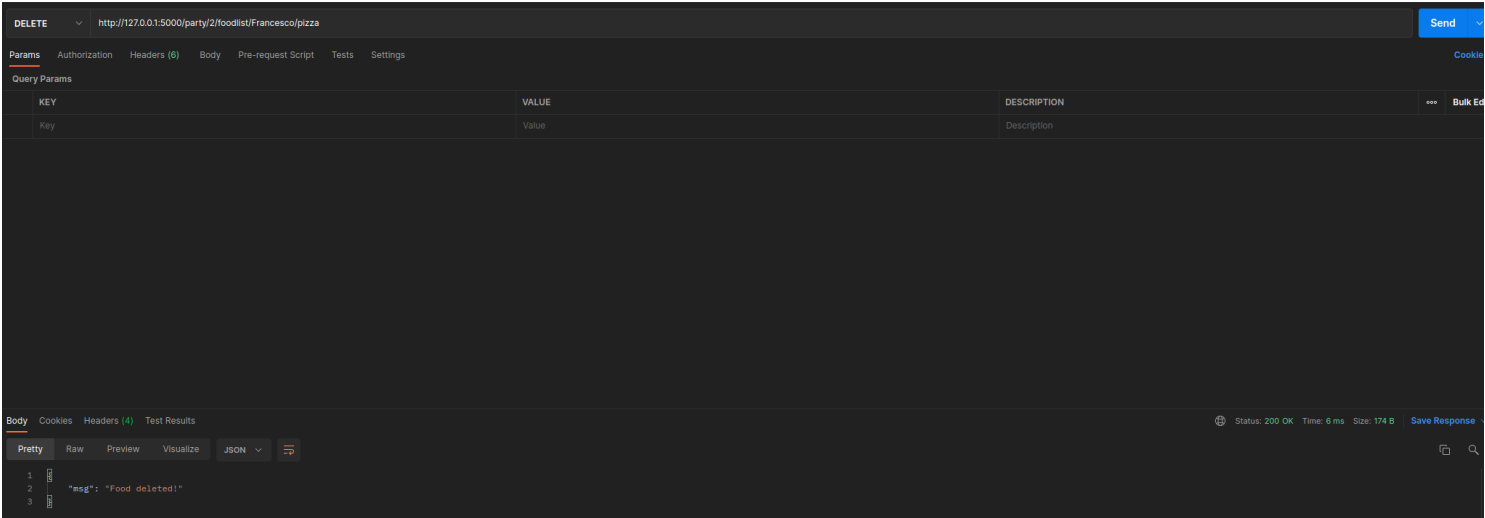


Figure 12: Removing a meal.

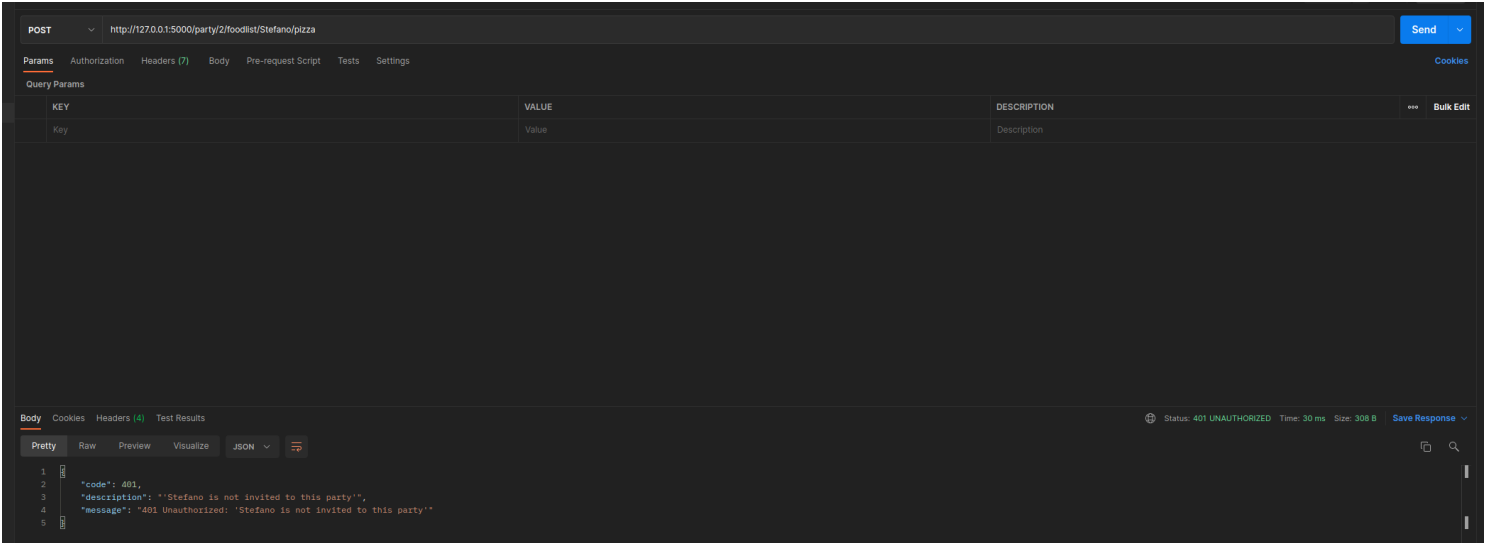


Figure 13: Trying to add a meal brought by an uninvited guest

GET http://127.0.0.1:5000/party/2/foodlist Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (4) Test Results Status: 200 OK Time: 31 ms Size: 231 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "foodlist": [
3     {
4       "food": "pizza",
5       "user": "Francesco"
6     }
7   ]
8 }
```

Figure 14: Retrieving the party food list.