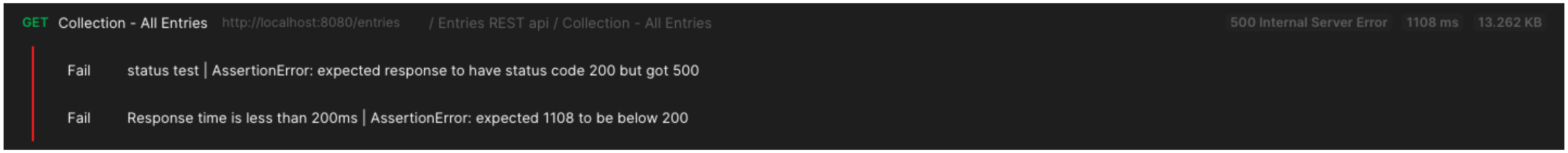
Postman Testing

Description:

Below are screenshots of Postman testing for the RESTful api service. For more detailed testing, please see Postman Testing Json in GitHub.

Analysis of Tests:

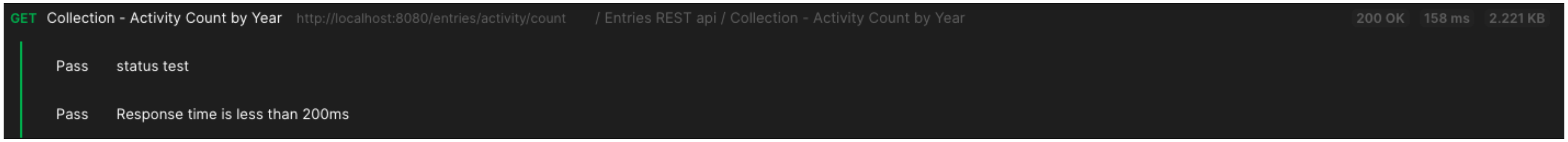
GET Collection - All Entries:



```
GET  Collection - All Entries   http://localhost:8080/entries   / Entries REST api / Collection - All Entries   500 Internal Server Error   1108 ms   13.262 KB

     Fail    status test | AssertionError: expected response to have status code 200 but got 500

     Fail    Response time is less than 200ms | AssertionError: expected 1108 to be below 200
```

The test for this GET request failed. Reveals that further debugging and review is needed. However, it is not of concern as this request is not utilized in developing the front-end. Moreover, this reveals we may need to revisit EntryController, EntryService, or Entry classes.

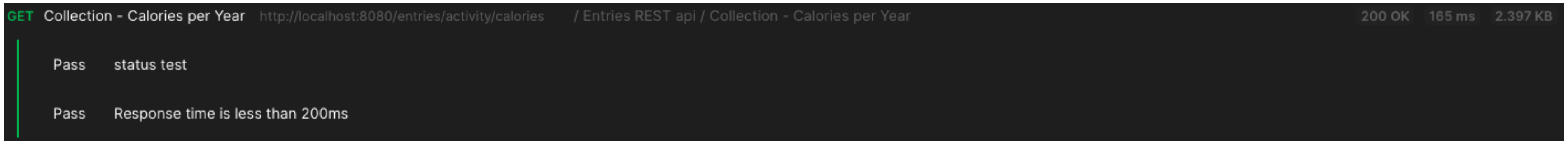
GET Collection - Activity Count by Year:



```
GET  Collection - Activity Count by Year   http://localhost:8080/entries/activity/count   / Entries REST api / Collection - Activity Count by Year   200 OK   158 ms   2.221 KB

     Pass    status test

     Pass    Response time is less than 200ms
```

Test passed - no concern.

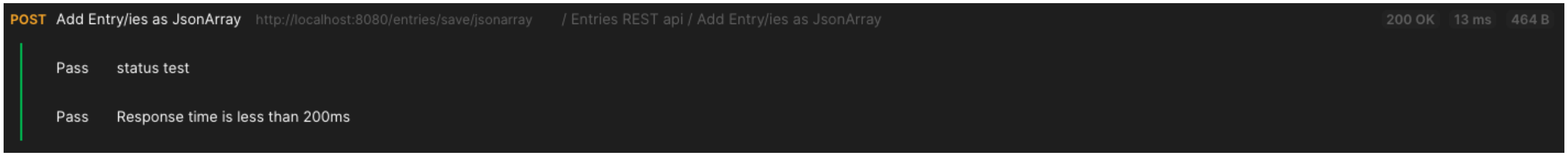
GET Collection - Calories per Year:



```
GET  Collection - Calories per Year  http://localhost:8080/entries/activity/calories   / Entries REST api / Collection - Calories per Year   200 OK  165 ms  2.397 KB

     Pass    status test

     Pass    Response time is less than 200ms
```

Test passed - no concern.

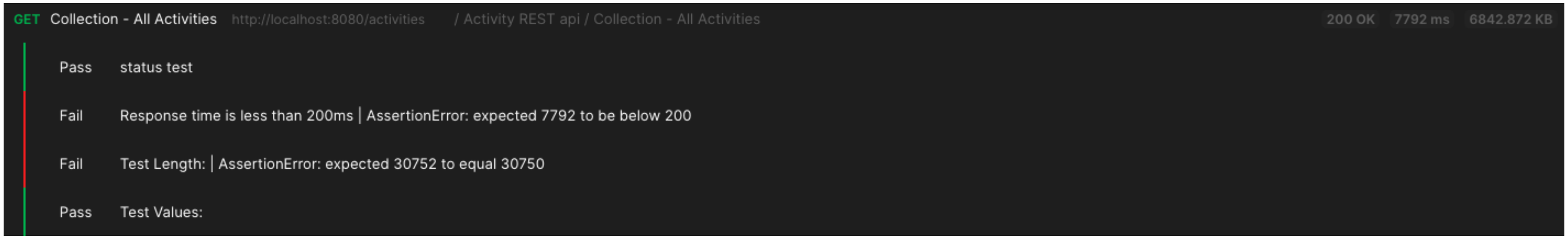
POST Add Entry/ies as JsonArray:



```
POST  Add Entry/ies as JsonArray  http://localhost:8080/entries/save/jsonarray   / Entries REST api / Add Entry/ies as JsonArray   200 OK  13 ms  464 B

     Pass    status test

     Pass    Response time is less than 200ms
```

Test passed - no concern.

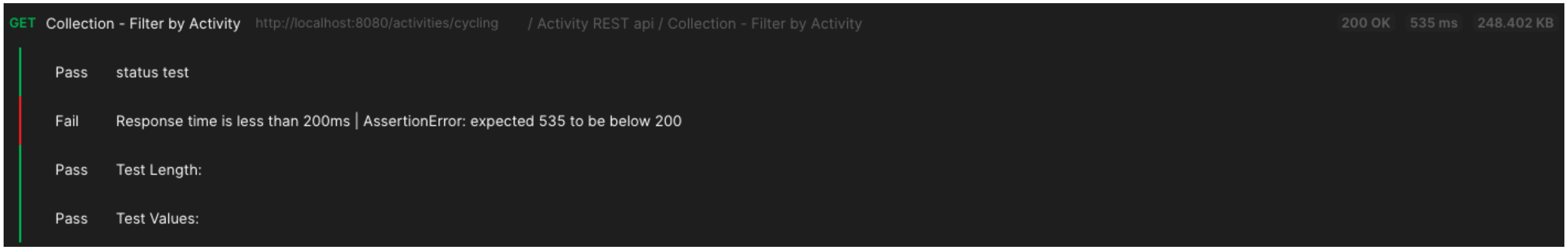
GET Collection - All Activities:



```
GET  Collection - All Activities  http://localhost:8080/activities   / Activity REST api / Collection - All Activities   200 OK  7792 ms  6842.872 KB

     Pass    status test

     Fail    Response time is less than 200ms | AssertionError: expected 7792 to be below 200

     Fail    Test Length: | AssertionError: expected 30752 to equal 30750

     Pass    Test Values:
```

Response time is not ideal, however, it is important to note that this request gets all activities, thus it is expected that the response time will be longer. The threshold does not have to be below 200 ms, and could be increased. However, this does reveal that the duration is not ideal to get all activities. Moreover, the second test failed because the number of elements does not equal the expected number of elements. This is due to two(2) elements being added while testing. Thus, the failed test, which looks at length, should pass when changing the expected value after adding additional activities to the activities collection.

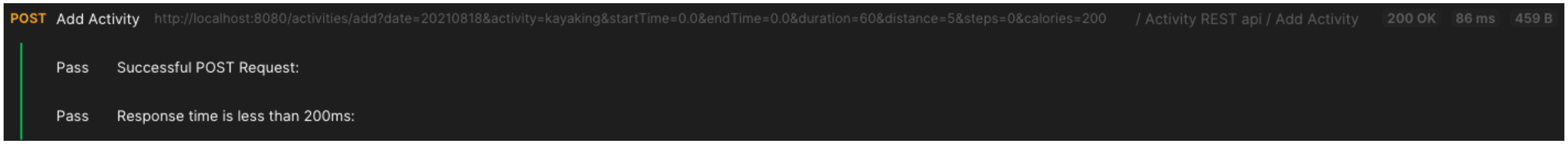
GET Collection - Filter by Activity:



```
GET  Collection - Filter by Activity  http://localhost:8080/activities/cycling    / Activity REST api / Collection - Filter by Activity    200 OK   535 ms   248.402 KB

     Pass     status test

     Fail     Response time is less than 200ms | AssertionError: expected 535 to be below 200

     Pass     Test Length:

     Pass     Test Values:
```

Response time is okay. Test reveals that the response is 535 ms, which is fast in comparison to 7,792 in the previous test.

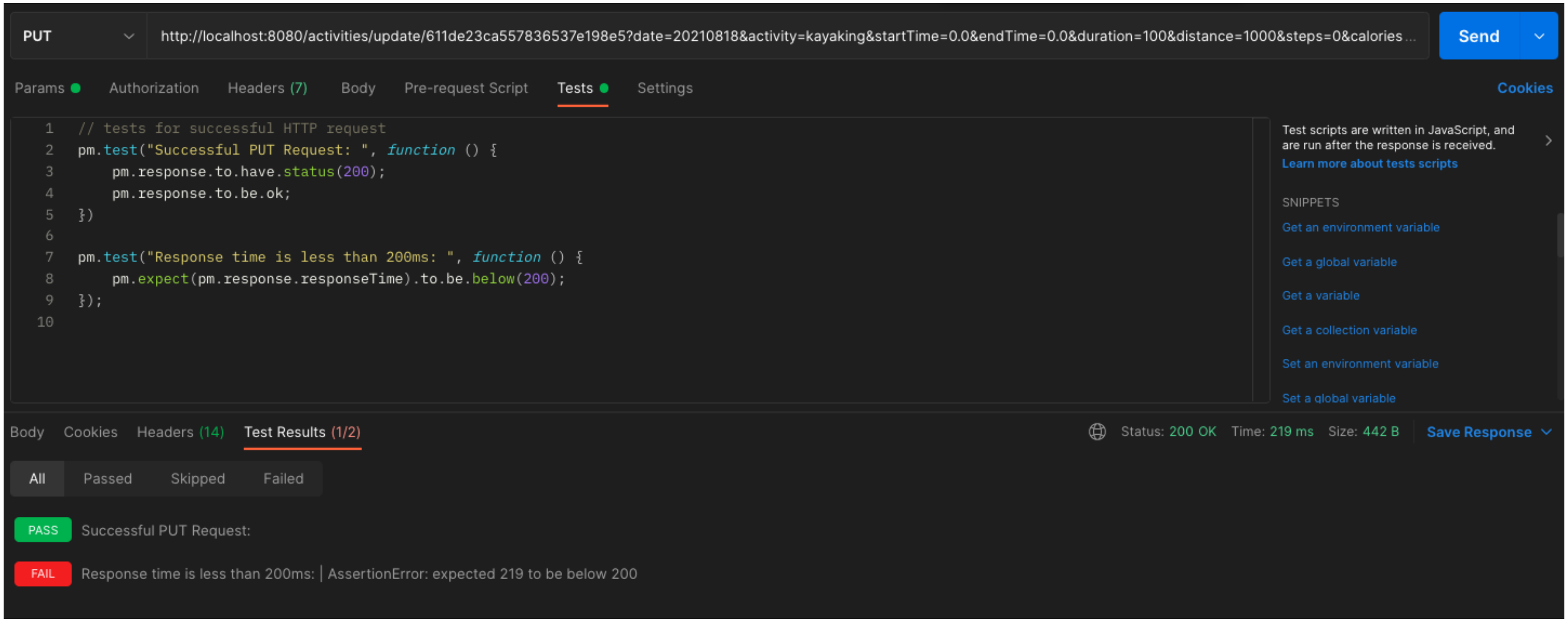
POST Add Activity:



```
POST  Add Activity  http://localhost:8080/activities/add?date=20210818&activity=kayaking&startTime=0.0&endTime=0.0&duration=60&distance=5&steps=0&calories=200    / Activity REST api / Add Activity    200 OK   86 ms   459 B

     Pass     Successful POST Request:

     Pass     Response time is less than 200ms:
```

Test passed - no concern.

PUT Update Activity:



```
http://localhost:8080/activities/update/611de23ca557836537e198e5?date=20210818&activity=kayaking&startTime=0.0&endTime=0.0&duration=100&distance=1000&steps=0&calories ...
```

```
// tests for successful HTTP request
pm.test("Successful PUT Request: ", function () {
    pm.response.to.have.status(200);
    pm.response.to.be.ok;
})

pm.test("Response time is less than 200ms: ", function () {
    pm.expect(pm.response.responseTime).to.be.below(200);
});
```

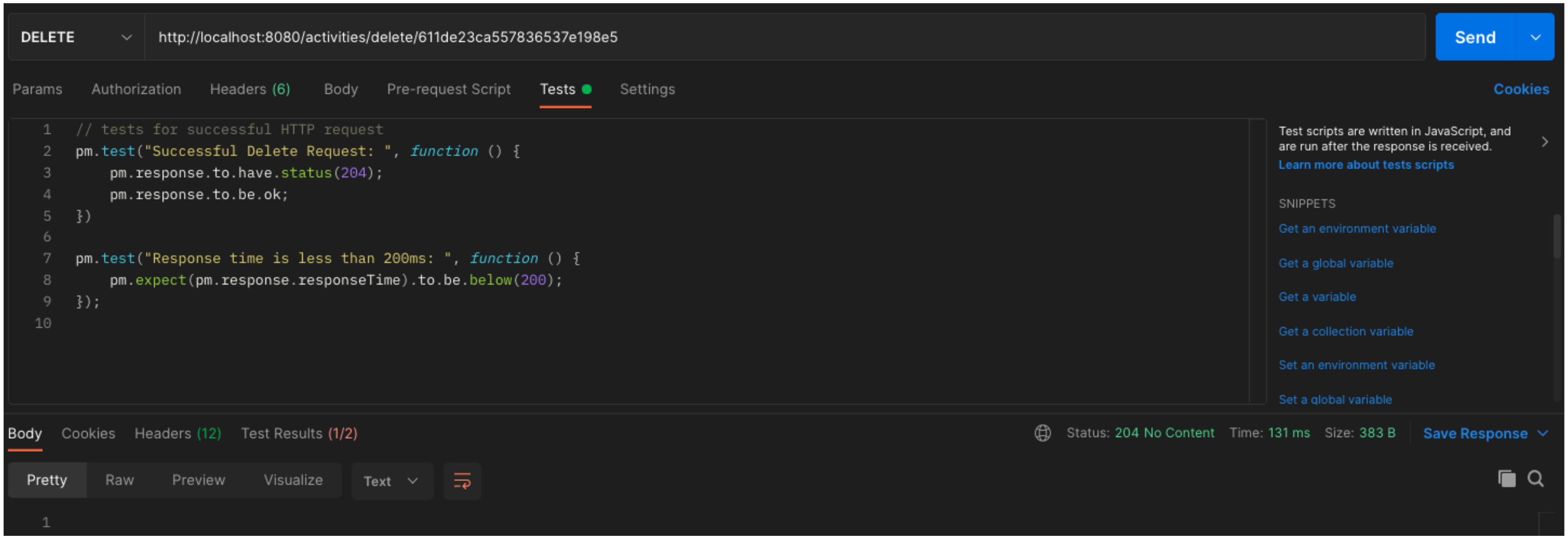
Test scripts are written in JavaScript, and are run after the response is received.
Learn more about tests scripts

Status: 200 OK Time: 219 ms Size: 442 B

```
PASS  Successful PUT Request:
FAIL  Response time is less than 200ms: | AssertionError: expected 219 to be below 200
```

Response time difference is miniscule so there is no concern.

DEL Delete Activity:



DELETE http://localhost:8080/activities/delete/611de23ca557836537e198e5

```
// tests for successful HTTP request
pm.test("Successful Delete Request: ", function () {
    pm.response.to.have.status(204);
    pm.response.to.be.ok;
})

pm.test("Response time is less than 200ms: ", function () {
    pm.expect(pm.response.responseTime).to.be.below(200);
});

```

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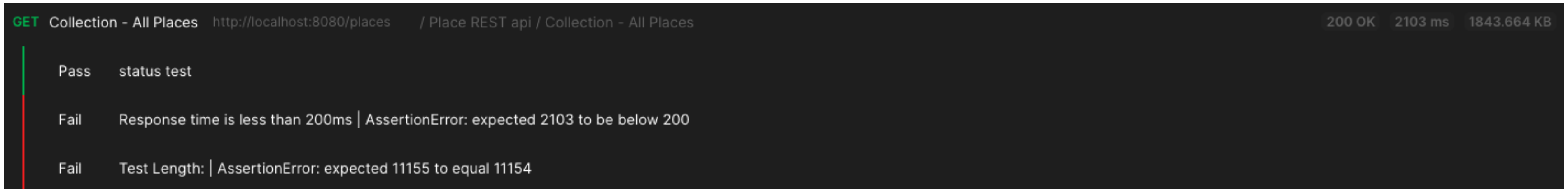
Learn more about tests scripts
SNIPPETS
Get an environment variable
Get a global variable
Get a variable
Get a collection variable
Set an environment variable
Set a global variable
Body
Cookies
Headers (12)
Test Results (1/2)

Status: 204 No Content Time: 131 ms Size: 383 B

It appears the request is successful, however, the test reveals that the response time is slower than expected. This is interesting because it should not take a long time when given an id.

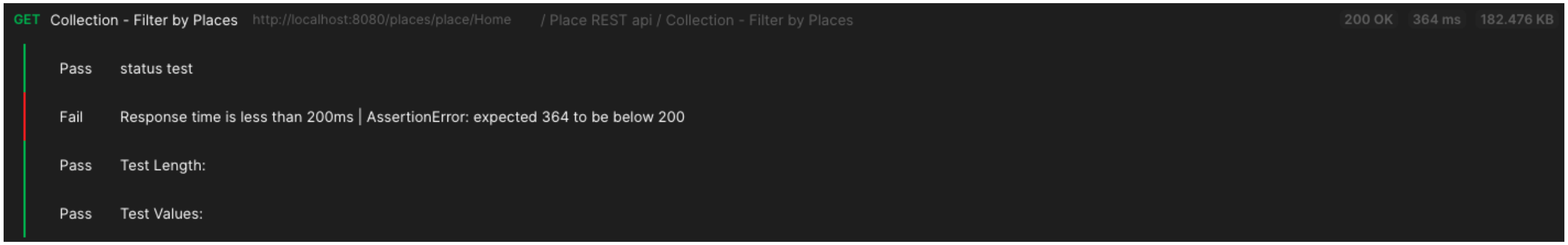
GET Collection - All Places:



```
GET  Collection - All Places  http://localhost:8080/places    / Place REST api / Collection - All Places    200 OK   2103 ms   1843.664 KB

     Pass    status test

     Fail    Response time is less than 200ms | AssertionError: expected 2103 to be below 200

     Fail    Test Length: | AssertionError: expected 11155 to equal 11154
```

Response status passed, however, response time is not ideal. It was expected that this test would fail because this request is getting the entire places collection. Moreover, Test Length did not pass because a POST request was made when testing, thus, the assertion error was to be expected.

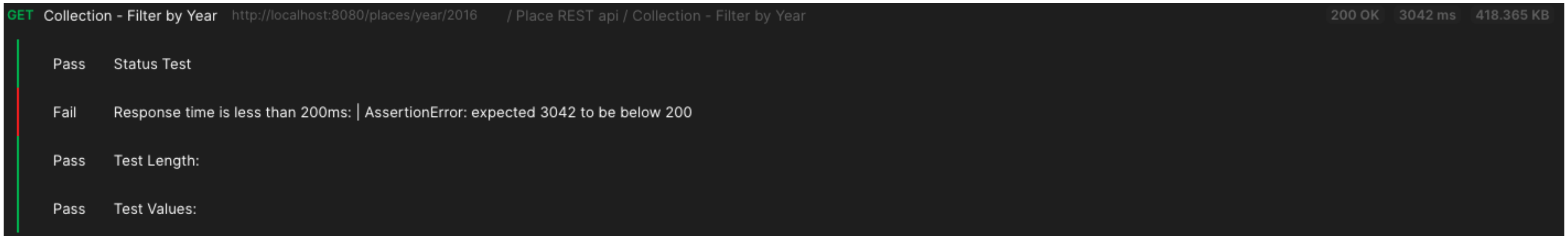
GET Collection - Filter by Places:



```
GET  Collection - Filter by Places  http://localhost:8080/places/place/Home    / Place REST api / Collection - Filter by Places    200 OK   364 ms   182.476 KB

     Pass    status test

     Fail    Response time is less than 200ms | AssertionError: expected 364 to be below 200

     Pass    Test Length:

     Pass    Test Values:
```

Response status passed. Response time is 364 ms, which is a small increase from 200 ms. There’s not too much to be concerned with.

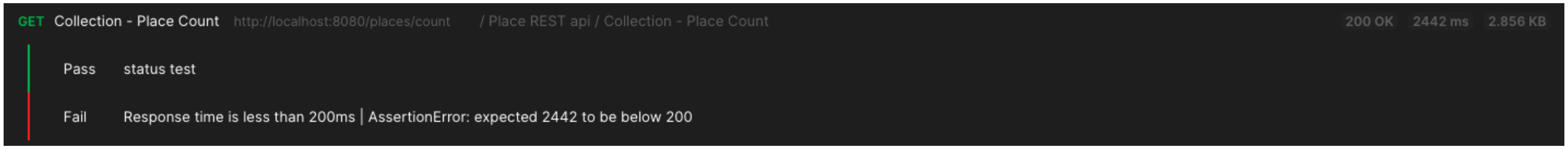
GET Collection - Filter by Year:



```
GET  Collection - Filter by Year   http://localhost:8080/places/year/2016     / Place REST api / Collection - Filter by Year     200 OK   3042 ms   418.365 KB

     Pass     Status Test

     Fail     Response time is less than 200ms: | AssertionError: expected 3042 to be below 200

     Pass     Test Length:

     Pass     Test Values:
```

Response time is not ideal, however, this can be explained because this request is searching the collection for all places that were visited in the given year. This can be marked for further review to make this request faster.

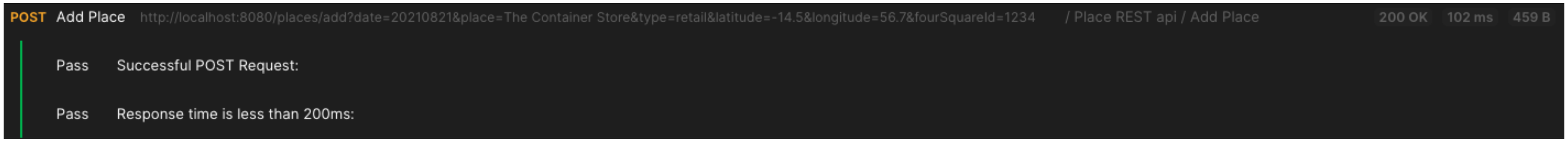
GET Collection - Place Count:



```
GET  Collection - Place Count   http://localhost:8080/places/count     / Place REST api / Collection - Place Count     200 OK   2442 ms   2.856 KB

     Pass     status test

     Fail     Response time is less than 200ms | AssertionError: expected 2442 to be below 200
```

Response time is to be expected because this request is creating a map using a query to get count of the number of times the place appears in the places collection.

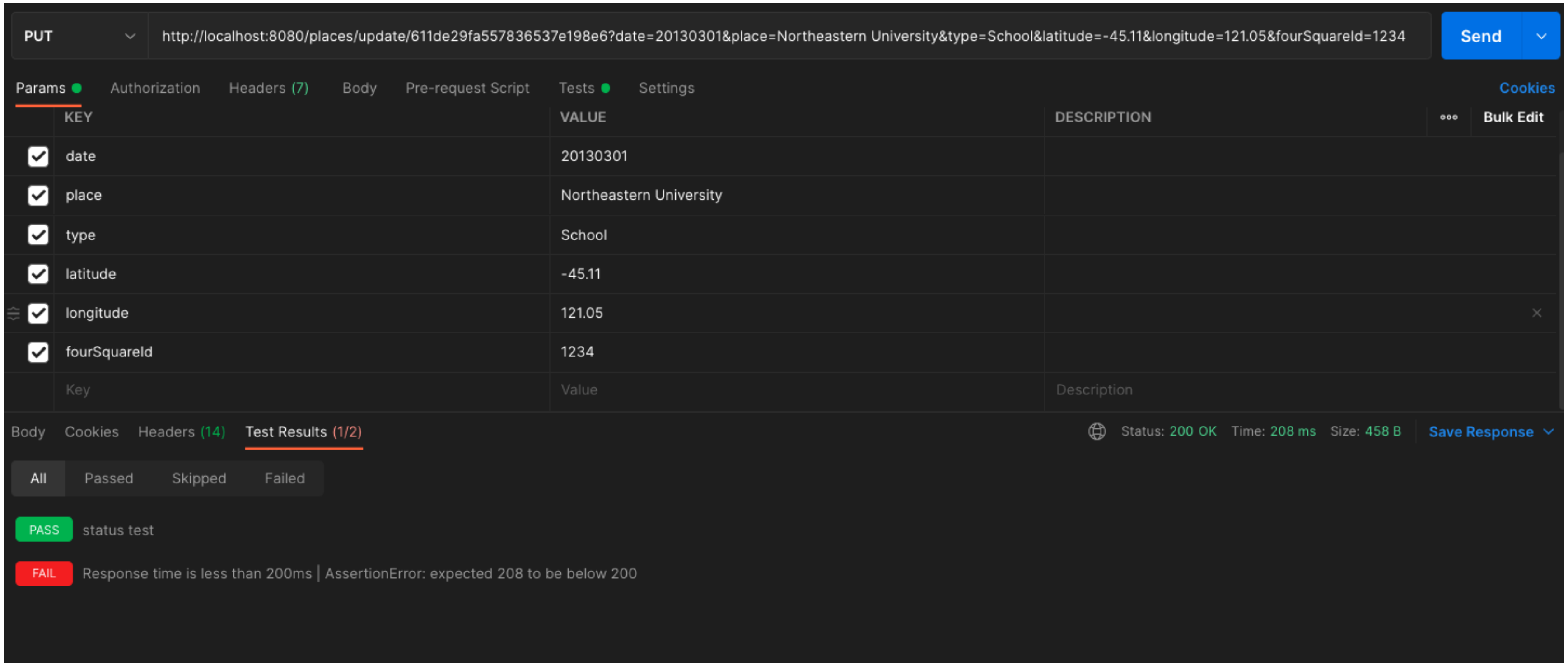
POST Add Place:



```
POST  Add Place   http://localhost:8080/places/add?date=20210821&place=The Container Store&type=retail&latitude=-14.5&longitude=56.7&fourSquareId=1234     / Place REST api / Add Place     200 OK   102 ms   459 B

     Pass     Successful POST Request:

     Pass     Response time is less than 200ms:
```

Tests passed - no concern.

PUT Update Place:



PUT http://localhost:8080/places/update/611de29fa557836537e198e6?date=20130301&place=Northeastern University&type=School&latitude=-45.11&longitude=121.05&fourSquareId=1234

	KEY	VALUE	DESCRIPTION
☑	date	20130301	
☑	place	Northeastern University	
☑	type	School	
☑	latitude	-45.11	
☑	longitude	121.05	
☑	fourSquareId	1234	
	Key	Value	Description

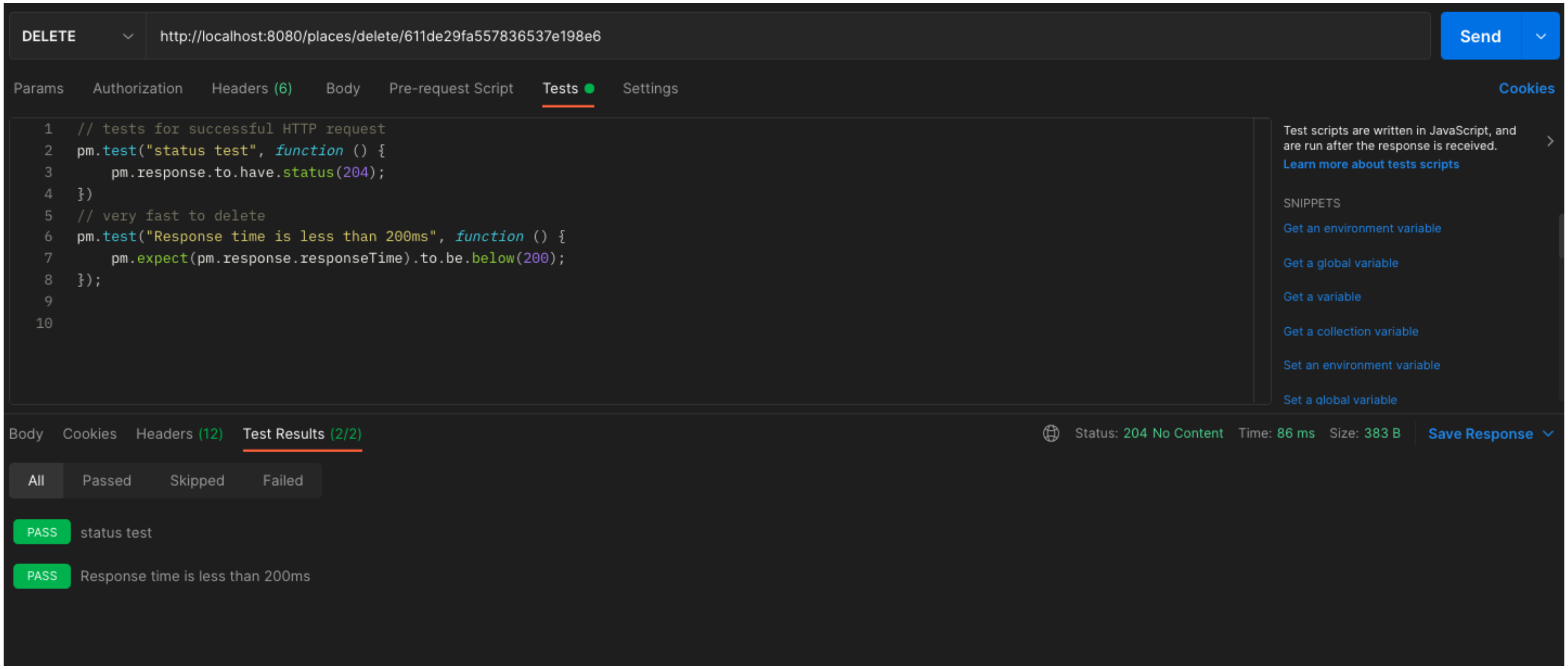
Status: 200 OK Time: 208 ms Size: 458 B

PASS status test

FAIL Response time is less than 200ms | AssertionError: expected 208 to be below 200

Test failed due to response time, however, it differs by 8 ms. Thus it is not concerning as it is still a fast response.

DEL Delete Place:



http://localhost:8080/places/delete/611de29fa557836537e198e6

```
// tests for successful HTTP request
pm.test("status test", function () {
    pm.response.to.have.status(204);
})
// very fast to delete
pm.test("Response time is less than 200ms", function () {
    pm.expect(pm.response.responseTime).to.be.below(200);
});
```

Test scripts are written in JavaScript, and are run after the response is received.
Learn more about tests scripts

Status: 204 No Content Time: 86 ms Size: 383 B

PASS status test

PASS Response time is less than 200ms

Tests passed - no concern.