Server for Asynchronous Protocols Mocking

1. Introduction

The reasons for project (briefly, will tell more in the main body):

* Mocking reduces dependencies between teams [1], [2] (<https://learning.getpostman.com/docs/postman/mock_servers/intro_to_mock_servers/>, <https://medium.com/billie-finanzratgeber/mock-server-save-time-and-money-during-development-and-testing-bf1d74364d84>)
* Mocking helps to develop [1] (<https://learning.getpostman.com/docs/postman/mock_servers/intro_to_mock_servers/>, Automating Web Service Development Using a Unified Model)
* Mocking helps while testing [2], [3] (<https://medium.com/fabricgroup/using-mock-server-with-refit-to-test-restful-api-integration-802f377c4c6e>, <https://medium.com/billie-finanzratgeber/mock-server-save-time-and-money-during-development-and-testing-bf1d74364d84> , Testing Spring MVC Applications, A test driven approach for aspectualizing legacy software using mock systems, RESTful Web Services, Automated Generation of Web Service Stubs Using LTL Satisfiability Solving, A catalogue of stub and driver patterns to support integration testing of aspect-oriented programs)
* No flexible mock servers for asyncronous protocols like websocket or sse [4] (<https://groups.google.com/forum/#!topic/mountebank-discuss/t19u-sc8b6E>)

Short description of outcome

Outline the structure

1. Main body
   1. The benefits of using mock servers

More info than in introduction.

* 1. Analogs for HTTP mocking

Here will be a small description of main mock servers for mocking HTTP servers [5], [6] (<http://www.mbtest.org>, <http://www.mock-server.com> )

* 1. Analogs for asyncronous mocking

The failure to find an implemented server for mocking SSE and Web Socket protocols. Ways to imitate them [4] (<https://groups.google.com/forum/#!topic/mountebank-discuss/t19u-sc8b6E>) and why they are not appropriate in some cases

* 1. Main requirements to the outcome
* Dockerization [7]
* Configuration via REST API
* Actual mocking
* Configuration via JSON
  1. Implementation notes
* Development stack choice
* Components decomposition

1. Conclusion

Sum up the expected outcomes, benefits development teams are going to get when the first implementation is ready.

References

[1] “Intro to mock servers | Postman Learning Center.” Postman.com. https://learning.getpostman.com/docs/postman/mock\_servers/intro\_to\_mock\_servers/ (accessed: Jan. 5, 2019).

[2] L. Alex. “Mock Server — save time and money during development and testing.” MockServer.com. https://medium.com/billie-finanzratgeber/mock-server-save-time-and-money-during-development-and-testing-bf1d74364d84 (accessed: Jan. 5, 2019).

[3] “Using mock-server with Refit to test RESTful API integration.” Medium.com. https://medium.com/fabricgroup/using-mock-server-with-refit-to-test-restful-api-integration-802f377c4c6e (accessed: Jan. 5, 2019).

[4] “WebSocket Support – Группы Google.” Google.com. https://groups.google.com/forum/#!topic/mountebank-discuss/t19u-sc8b6E (accessed: Jan. 15, 2019).

[5] “mountebank - over the wire test doubles.” Mountebank. http://www.mbtest.org/ (accessed: Nov. 19, 2018).

[6] “MockServer.” MockServer.com. http://www.mock-server.com/ (accessed: Nov. 19, 2018).

[7] “Enterprise Container Platform | Docker.” *Docker.com*. https://www.docker.com/ (accessed: Jan. 16, 2019).