## Assignment 3

## **Integration Tests**

Integration tests are one level above unit tests on the testing pyramid: though still relatively small in scale, they already differ significantly from unit tests. *Explain the difference between unit and integration tests*.

**Deliverables** The submission to this exercise must contain all of the following:

- 1. An explanation of the difference in scope between unit and integration tests.
- 2. An explanation of the different purpose that mocking has in unit and integration tests.

## Integration testing

Writing integration tests usually depends on a reliable set of unit tests: only once you are sure that each unit works as intended do you start testing the communication between units. If you skip the unit test phase, you cannot be certain whether detected errors in the integration tests are caused by the communication between units or the units themselves.

For this exercise, we assume that the involved units have been sufficiently tested. In this exercise, test the integration between the

Design and implement integration tests for the communication between the data access object DAO (backend/src/util/dao.py) and the MongoDB database. Follow best practices for integration test design and utilize mocking where applicable.

**Deliverables** The submission to this exercise must contain all of the following:

- 1. A list of test cases, which have been derived using the test design technique.
- 2. An implementation of these test cases in pytest.