Test Report for Group 4 - Milestone 3

Test Overview

Package	Tests	Errors	Failures	Skipped	Success Rate	Time
de.tum.i13.client.communication.impl	8	0	0	0	100%	0.14
de.tum.i13.server.kv.caches	12	0	0	0	100%	0.081
de.tum.i13.shared.parsers	16	0	0	0	100%	0.093
de.tum.i13.lsm	3	0	0	0	100%	0.035
de.tum.i13	5	0	0	2	60%	16.611
de.tum.i13.client	22	0	0	0	100%	1.038
de.tum.i13.shared	13	0	0	0	100%	0.005
de.tum.i13.server.kv	10	0	0	0	100%	0.275

Summary:

Tests	Errors	Failures	Skipped	Success Rate	Time
89	0	0	2	97.753%	18.278

The two skipped tests are the benchmark test cases, which do not make sense to be automated.
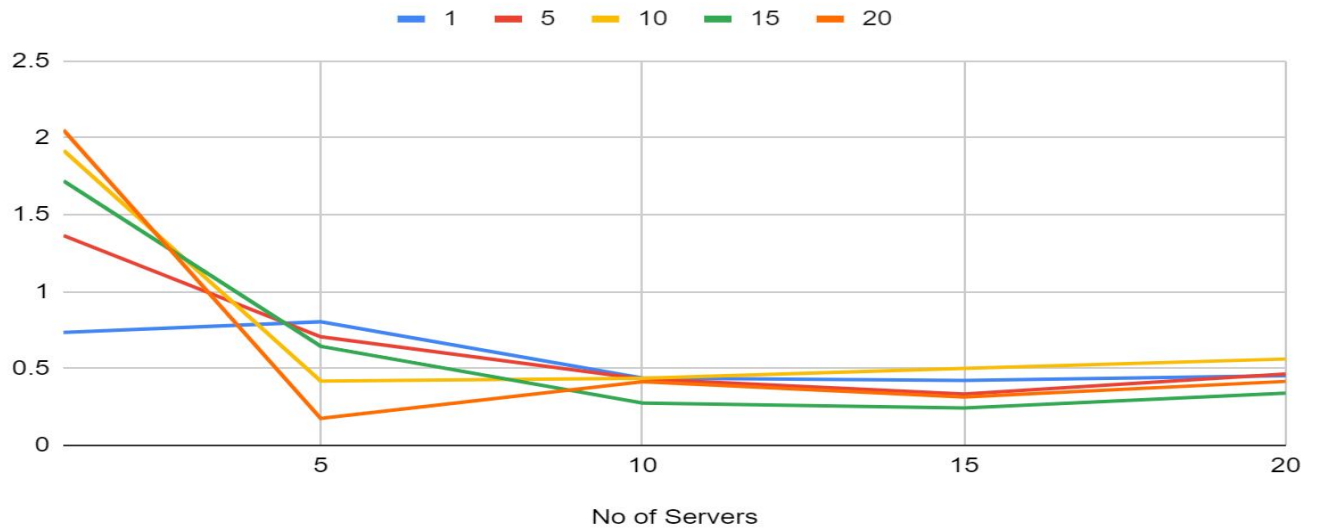
Benchmark Tests

The code for the benchmark tests can be found in `BenchmarkTest::benchmarkAll`. The benchmark test cases rely on a fresh `mvn package build`.
We have conducted the test as follows:

- Start 1 server and increment no of clients from 1 ➤5 ➤ 10 ➤ 15 ➤ 20.
- Followed the same procedure by incrementing no of servers from 1 ➤ 5 ➤ 10 ➤ 15 ➤ 20.
- We used a cache size of 200 and LRU as displacement strategy.

Here are the results.

No of Servers vs Average Latency with no of clients

Depending on the number of client requests, adding more servers clearly pays off in terms of reduced latency. For more than about ten servers, adding more is not really effective anymore. This is due to other delays and management overhead for re-connections.