**Base Performance Report for tradeling.com home page**

**Information Section**

**Release:** 2.4.1

**Created at:** 21 FEB 2021

**Environment:** PROD

**Performed by:** Andrii Notsek

**Scope:** Load Tests, Stress Tests, Endurance Tests

**Used equipment:** MacBook Pro 2019 (2,6 GHz, 16GB DDR4), macOS Big Sur 11.1, JMeter 5.4.1

**Run options:** quick run through JMeter GUI after full system restart

**Notes:** run was performed on PROD at 3 AM to avoid load created by customers

**Restrictions:**

JMeter GUI is not recommended to be used for long time testing, that’s why Endurance Tests were skipped

**Assumptions:**

Application should be used by not more than 50 customers at the same time, sometimes (in evenings) the load could reach 100 customers at the same time.

**Results Section**

**General Results for simple Performance Tests (performed few times for each user group):**

|  |  |  |  |
| --- | --- | --- | --- |
| **Users (Threads)** | **Server load time** | **Server response time** | **Errors** |
| 50 | 5-6 minutes | average 2,8 seconds | none |
| 100 | 5-6 minutes | average 5,7 seconds | none |
| 200 | 5-6 minutes | average 11,7 seconds | none |

**Results Analysis:**

**Load Testing:** Web application shows stable response time (2,8 seconds) when 50 users are using the application at the same time. This follows the best standards of usability.

Even with high expected load in 100 customers application is behaving properly (no errors) and the server response time is acceptable (5,7 seconds).

**Stress Testing:** Application behaves correctly (no errors were discovered) during peak load of 500 users (Stress Testing), but the response time is quite high (11,7 seconds). So, in exceptional situations application server would be able to generate proper response and handle the load.

**Note:** QA Team is in progress of preparing non-GUI tests runs (because JMeter GUI is used mainly for quick tests with small number of users and not long load) to follow the best practices: <https://jmeter.apache.org/usermanual/best-practices.html>

**Attachments Section**

Initial setup for JMeter:

Graphical user interface, text

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

50 users for 5-6 minutes, average response time 3 sec, no errors:

A screenshot of a computer

Description automatically generated

100 users for 5-6 minutes, average response time 6 seconds:

Graphical user interface, application

Description automatically generated

200 users for 5-6 minutes, average response time 12 seconds, no errors:

Graphical user interface, application

Description automatically generated