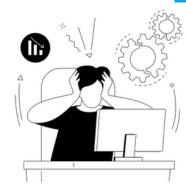# Case Study

JOB DESCRIPTION:

We were approached by a customer with a problem that the application he uses for work is not running properly, it was"lagging terribly" so to speak.

WITH 120 USERS , the site stopped working. We have initiated procedures to diagnose the infrastructure. We started to do load tests we discovered a bottleneck, the database had invalid queries that were crashing it In addition, the web server was also not optimally configured so we updated it as well.

TIME TO UPDATE!

After the proposed changes and retesting, the application worked stably with **OVER 12,000 USERS!**
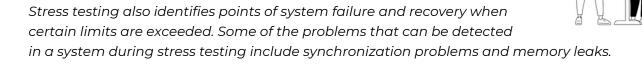
WHAT KIND OF TESTS WE CONDUCTED?

Stress:

Stress testing allows you to assess whether the software performs satisfactorily under adverse or extreme conditions For example, during high network traffic, with a large number of running processes, on inadequate hardware or with maximum resource utilization

ISTQB® Glossary defines it as a type of performance testing done to determine how a system or its module performs at the predicted or specified load limit as well beyond it, with limited access to memory or servers.

Stress testing also identifies points of system failure and recovery when certain limits are exceeded. Some of the problems that can be detected in a system during stress testing include synchronization problems and memory leaks.

Performance:

Performance tests, like security tests, belong to the group of non-functional tests. This means that the object of their examination is not the features of programs.

Performance tests do not verify whether the correct behavior of button fields, forms, drop-down lists, etc., but examine the behavior of applications, services under various load conditions, using the mentioned elements to simulate user actions