



# Teaching performance testing

GÁBOR ÁRPÁD NÉMETH and PÉTER SÓTÉR

*Abstract.* Performance testing plays a vital role in the verification of large scale software systems. It is used for testing the speed, responsiveness, capacity and stability of the investigated system. However, despite the significance of this topic, the effort invested in teaching performance testing in Computer Science is insufficient.

The current paper shows, how the fundamentals of performance testing can be demonstrated to students both from a theoretical and a practical viewpoint through step-by-step practical examples that are used in the industry. It is also discussed how a basic toolchain can be set up for performance tests using only free tools. With the presented examples, the reader will be able to take first steps in the performance testing area.

*Key words and phrases:* performance testing, load tests, load generation, teaching.

*MSC Subject Classification:* 68M15.

GÁBOR ÁRPÁD NÉMETH  
EÖTVÖS LORÁND UNIVERSITY, FACULTY OF INFORMATICS, DEPT. OF COMPUTERALGEBRA  
H-1117 BUDAPEST, PÁZMÁNY PÉTER SÉTÁNY 1/C., HUNGARY

*E-mail:* [nga@inf.elte.hu](mailto:nga@inf.elte.hu)

PÉTER SÓTÉR  
QUALYSOFT PLC, H-1118 BUDAPEST RÉTKÖZ U. 5., BUDAWEST OFFICE BUILDING, HUNGARY

*E-mail:* [peter.soter@qualysoft.com](mailto:peter.soter@qualysoft.com)

*(Received March, 2021)*