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Enhancement in Algorithmic Design for Scalability Measurement of Web Application

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Abstract

Scaling the Web applications with more workload and the number of users becomes very crucial. Performance testing of a Web application specifies the applications' functionality, stability, and robustness. As the scalability testing is the extension of performance testing, it identifies the major workload and alleviates bottlenecks that can hamper the scaling of the application and it specifies the degree to which the test is developed. This paper proposes an algorithmic design for measuring scalability of Web applications to get the

increased performance with few steps to do a test. This design allows adding additional users and working load to the available environment and encountering the linear changes with software and hardware which affect the server performance. An application development process requires careful planning for making scalable application, and it is important to test scalability problems regularly and rigorously.

Keywords

Requirement analysis **Performance**

Scalability design **Scalability testing**

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