

Bangladesh University of Engineering and Technology

Department of Computer Science and Engineering

Assignment (offline) on Automated Testing using JMeter

Apache JMeter is a versatile and open-source load testing tool used to perform performance testing on web applications. JMeter can simulate high user loads by sending HTTP requests to the web server and measuring its performance and responsiveness. JMeter is designed to support comprehensive performance testing. The platform provides in-depth analysis of key performance metrics, such as measuring website response times, determining the maximum load capacity that can be handled, or identifying the causes of performance degradation.

You are required to use Apache JMeter framework for load testing for the given web applications using 50 and 100 samples with a ramp up time of 100 seconds. Recording controllers are set for each web applications separately. You are required to set duration assertion in such a way that both the successful and failed events are observed while running the test plan. Add HTTP(s) test script recorder in your test plan.

Web applications:

1. <https://cse.buet.ac.bd/moodle>
2. <https://cse.buet.ac.bd/home>
3. <https://cse.buet.ac.bd/home/notice>

Deliverables:

1. Submit a word file named yourID_Assessment.docx containing the following key analysis for the above three web applications-
 - (a) Comparisons of shortest, longest and average execution time for both 50 and 100 samples
 - (b) Comparisons of average throughput, average data reception and average data transmission for both 50 and 100 samples.
2. Submit your test plan as yourID_testPlan.jmx file.
3. Submit the test plan results yourID_result.csv file.
4. Generate HTML version of the test analysis and submit it in yourID_html.zip file.

Submission Deadline: 14 Dec 2024, 11:30pm.

Make necessary assumptions, perform necessary setups and set necessary listeners, assertions, logic controller and other tools for successful execution of testing.