1. What type of Performance tests you will start conducting and why?

Answer:

**Capacity Testing:** Tests how many users the system can handle before performance dips below acceptable levels. By testing a software’s capacity it helps developers anticipate issues in terms of scalability and future user-base growth.

**Load Testing:** Confirms that the system can handle the required number of users and still operate at a high level of performance. This ensures that there is no day to day issues in performance.

1. What would be the next performance tests that you will carry and why?

Answer:

**Stress Testing:** Intentionally tries to break the software by simulating a number of users that greatly exceeds expectations.

**Soak Testing:** Simulates high traffic for an extended period of time. Checks the software’s ability to tolerate extended periods of high traffic.

1. Using an open-source Performance Application of your preference, create a Load test which will test the API mentioned in Task 2, using a ramp up of 50 users per minute, duration of 10 min, with 100 concurrent users.

Answer:

Used, open-source : Jmeter

Created API performance test for task2;

Saved file jmx for reference; 