Non Functional Testing

Parameters:

- 1. Performance Testing: Website's performance on increasing the number of users, **Stress** and **Load** testing.
- 2. Vulnerability Testing: Is the website safe. What are the security aspects.
- 3. Compatibility Testing: Is the website compatible with different browsers and systems(Linux, Windows).

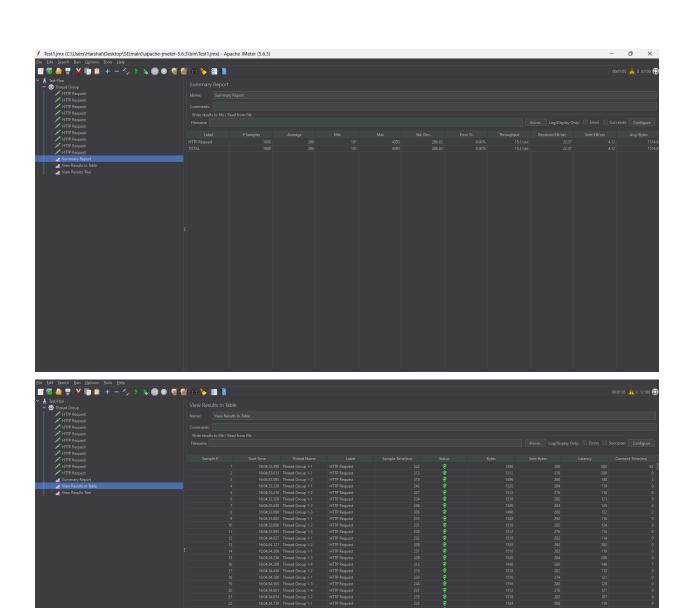
This are the following main parameter we are working on with non-functional tests.

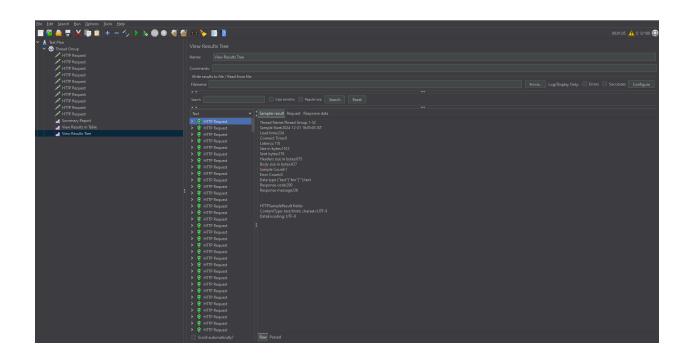
Load Testing

We have performed load testing for different numbers of users(threads) under normal conditions to check the number of users our website can handle. We have used HTTP GET and HTTP POST methods for this check. The following here are the attached screenshots from the Apache Jmeter software.

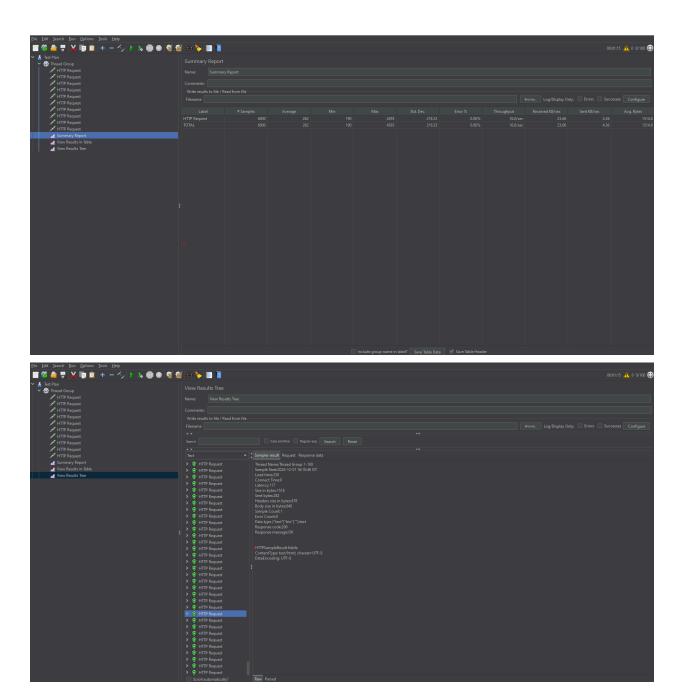
Software used: https://jmeter.apache.org/download_jmeter.cgi

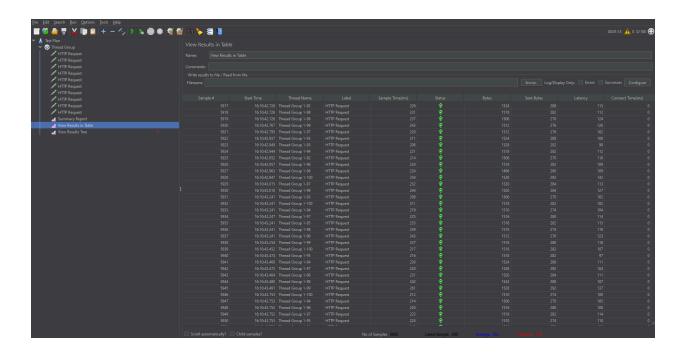
Test 1: For 100 users



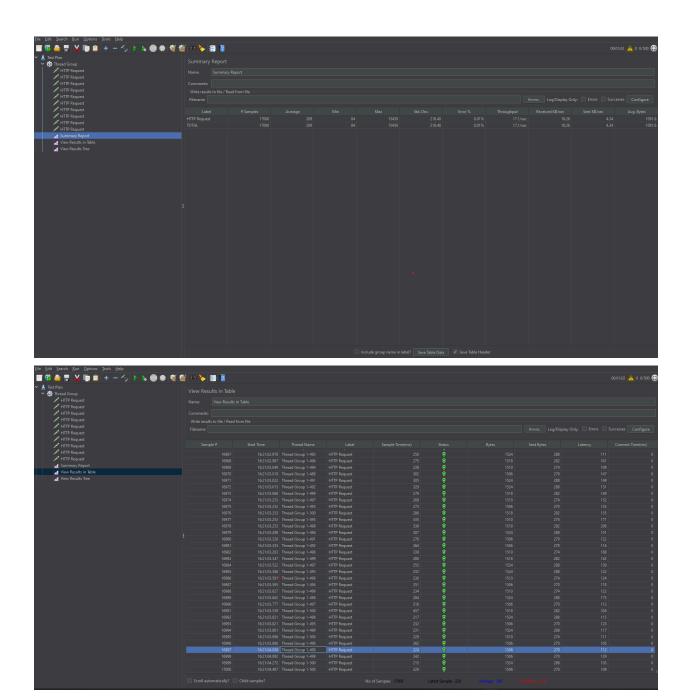


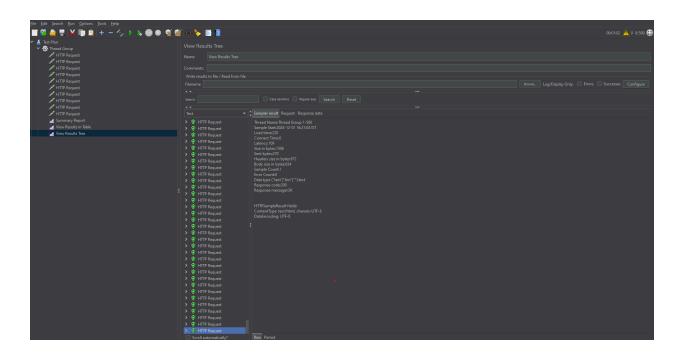
Test 2 : Increasing the loops and users = 100



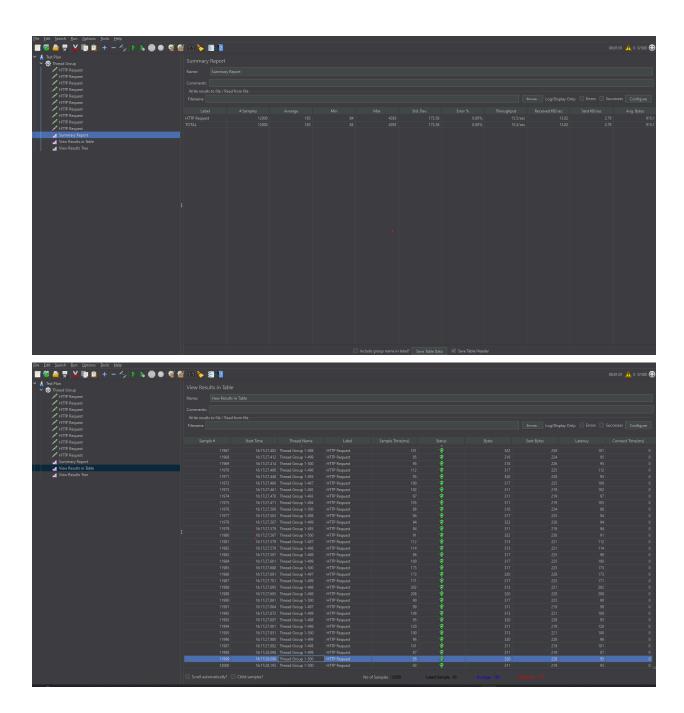


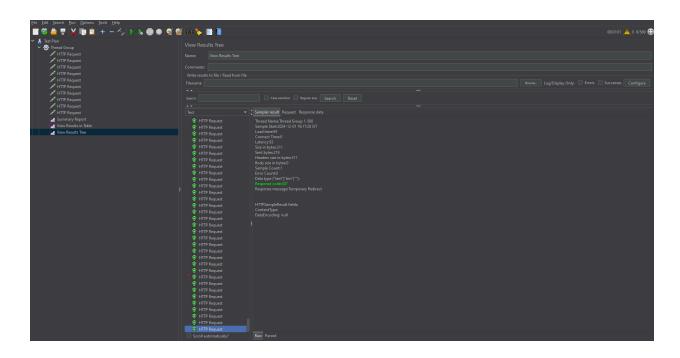
Test 3 : For 500 users using HTTP GET



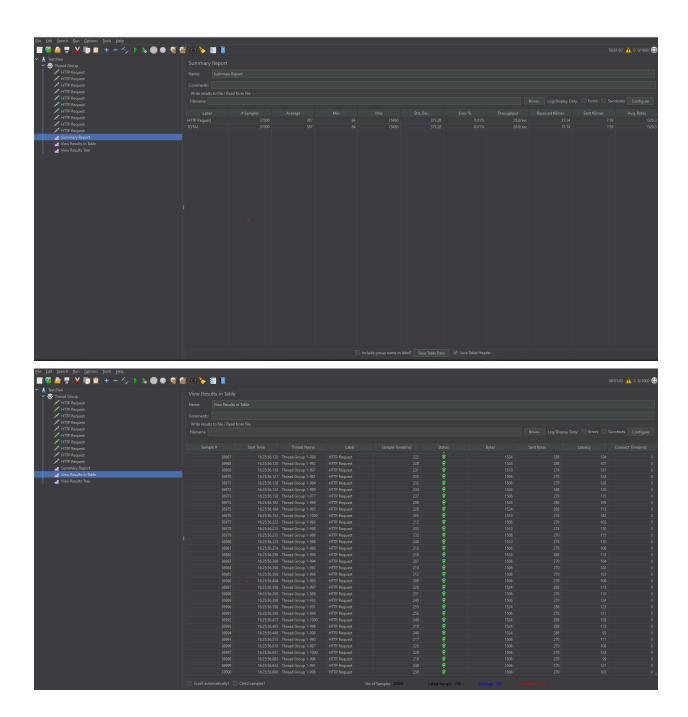


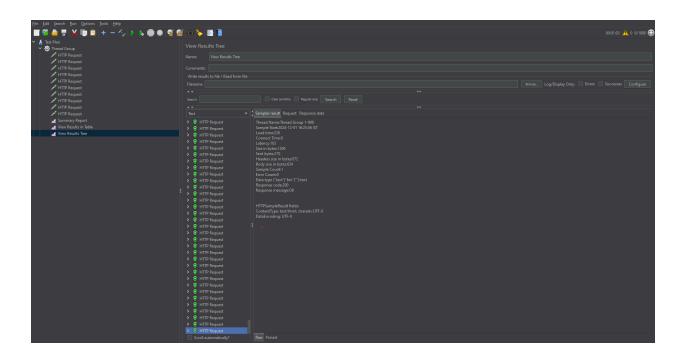
Test 4 : For 500 users using HTTP POST



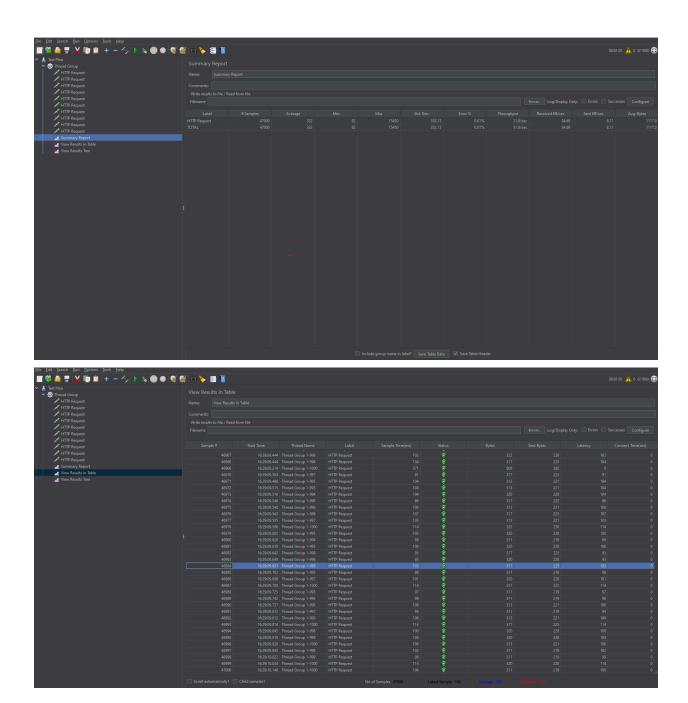


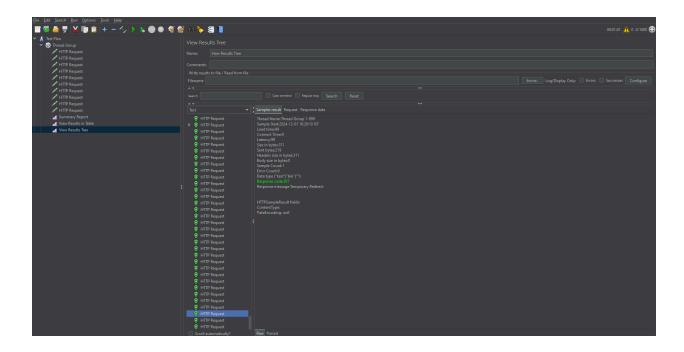
Test 5 : For 1000 users using HTTP GET





Test 6 : For 1000 users using HTTP POST





The following results for the Test 5,6 were conducted for 1000 users with loops = 50. The results state that the website is working in a optimal condition for 1000 users in normal conditions. The load test is successful for 1000 users.