Website of Load Testing using Python Script

Prof. Pansare P[1], Saurabh S Kate[2], Shreyash S Gade[3],
Karan S Rathod[4], Aniket A pawar[5]
Professor, Department of Computer Science and Engineering[1]
Students, Department of Computer Science & Engineering[2,3,4,5]
Navsahyadri Education Society's Group of Institutions, Polytechnic, Pune, Maharashtra, India

Abstract: *Website load testing is a critical process used to evaluate how a web application performs under various levels of user traffic. This project explores the implementation of load testing using Python scripts to simulate real-world user behavior and measure key performance metrics such as response time, throughput, and error rates. By utilizing Python libraries such as requests, Locust, and Selenium, the testing framework allows for the creation of customizable, automated test scenarios that replicate concurrent user access. The results help identify performance bottlenecks, server limitations, and potential points of failure, enabling developers to make informed decisions about system optimization. This approach demonstrates the effectiveness of Python as a powerful tool for load testing and performance evaluation of web applications...*

Keywords: Website load testing