

**Project Design Phase-II**  
**Performance testing**

Date	29 MAY 2023
Team ID	NM2023TMID10674
Project Name	Electronic voting machine using block chain

## **PERFORMANCE TESTING:**

Voter Turnout: Measure the percentage of eligible voters who participate in the election using the EVM. Low voter turnout may indicate accessibility or usability issues.

Transaction Throughput: Evaluate the number of transactions (votes) the system can handle per unit of time, ensuring it can process votes efficiently during peak voting hours.

Latency: Measure the time it takes for a vote to be recorded on the blockchain. Lower latency is desirable to provide quick confirmation to voters.

Block chain Consensus Time: Assess the time it takes for a block to be mined and added to the block chain. Faster block confirmation enhances the real-time nature of the system.

Scalability: Evaluate the system's ability to handle an increasing number of voters and candidates without a significant decrease in performance.

Reliability and Availability: Measure the system's uptime and reliability during the election period. Downtime or unavailability can lead to disenfranchisement.

Security and Integrity: Monitor the system for any security breaches or attempted attacks. The absence of successful attacks is a critical performance metric.

Accuracy: Verify the accuracy of the election results by comparing them with other independent records or audits. Ensure that the EVM accurately reflects the will of the voters.

Block chain Size: Assess the growth of the block chain size over time and evaluate its impact on system performance and storage requirements.

