# Performance Testing Document

## Objective

To evaluate the stability, responsiveness, and scalability of the web application under expected and peak loads.

## Scope

Types of Testing:  
 - Load Testing  
 - Stress Testing  
 - Spike Testing  
 - Endurance Testing  
 - Scalability Testing

## Test Approach

- Requirement Gathering (NFRs)  
- Test Environment Setup  
- Script Development (JMeter)  
- Scenario Design  
- Test Execution  
- Result Analysis & Reporting

## Performance Metrics

- Response Time  
- Throughput  
- Error Rate  
- CPU & Memory Utilization  
- Peak Load Handling

## Tools Used

Apache JMeter, BlazeMeter, Grafana for Monitoring

## Deliverables

- Performance Test Plan  
- Test Scripts  
- Execution Report  
- Analysis Report with Recommendations