Apache JMeter Load Test Report

Test Summary:
• Total Requests: 16,000
• Failed Requests: 2,254 (14.09%)
• Passed Requests: 13,746 (85.91%)
• Test Duration: 3:08 PM - 3:11 PM (~3 minutes)
• APDEX (Application Performance Index): 0.011 (Very Poor)

URL	Error Rate	Observation
/auth/validate	44.07%	Login API heavily failed under high load
/admin/viewAdminModule	25.67%	Admin module failed frequently
/pim/viewMyDetails	24.27%	User profile endpoint unstable
/auth/logout	14.47%	Logout endpoint intermittent failures
/viewMyDetails-0/1	0–18%	Partially stable under load

Error Type	Count	Percentage	Description
NoHttpResponseException	1165	51.7%	Server failed to respond (likely overload)
500 Internal Server Error	382	16.9%	Internal backend issue or crash
502 Bad Gateway	313	13.9%	Gateway or load balancer issue
SSLHandshakeException	312	13.8%	SSL connection dropped under traffic
SocketException: Connection reset	82	3.6%	Server abruptly closed connection

Overall Analysis:
The server failed to maintain stability under heavy load. Approximately 14% of all requests failed, with the majority being due to No Response and SSL errors. The APDEX score (0.011) indicates extremely slow response time and poor user experience.

Recommendations:
1. Reduce concurrent users and retest until error rate is below 1%.
2. Analyze backend logs for root cause of 500 and 502 errors.
3. Increase timeout and enable Keep-Alive to reduce SSL and socket errors.
4. Extend ramp-up period to simulate realistic load increase.
5. Conduct a 10-minute Endurance Test after tuning.
6. Consider optimizing load balancer or increasing server resources.

Conclusion:
The test successfully revealed the system’s performance bottlenecks. The server struggles under high load, with instability in multiple endpoints. Optimization and re-testing are strongly recommended before production deployment.

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