1 Analysis of K6 Performance Test Report

The following section presents a detailed interpretation of the K6 performance testing results generated on **2025-11-09 at 22:24**. The test simulated multiple users interacting with various website endpoints such as the landing page, contact page, and news page.

1.1 Overview

- **Total Requests:** 600
- **Failed Requests:** 0
- **Breached Thresholds:** 0
- **Failed Checks:** 0

All requests were completed successfully with no errors or threshold violations, indicating excellent system stability.

1.2 Response Time Metrics

Metric	Average (ms)	Interpretation
http_req_duration	87.24	Total request duration (excellent performance)
http_req_waiting	87.01	Server processing time
http_req_connecting	1.50	TCP connection setup time
http_req_blocked	3.82	Time spent waiting for connection
iteration_duration	1548.49	Full scenario execution time

Table 1: Response Time Statistics

All response times are within the optimal range (below 200 ms on average).

1.3 Page Group Performance

All endpoints returned HTTP 200 responses, confirming functional correctness and stable latency.

Page	Avg Duration (ms)	Status
Landing Page	145.97	100% Success
Contact Page	146.94	100% Success
News Page	151.81	100% Success

Table 2: Page-Level Performance Metrics

1.4 Load Summary

- **Iterations:** 100
- **Virtual Users:** 2–5
- **Request Rate:** 19.12 requests per second
- **Data Received:** 0.74 MB (0.02 MB/s)
- **Data Sent:** 0.08 MB

The system efficiently managed concurrent virtual users with consistent throughput and minimal data transfer latency.

1.5 Conclusion

The K6 test demonstrates that the web application can handle concurrent traffic efficiently, with:

- No failed requests or threshold breaches.
- Response times consistently under 200 ms.
- 100% pass rate for all page checks.

Overall, the tested system is considered **highly performant, stable, and ready for production deployment**.