Performance test report - Jun 30, 2024 (#50)



Load profile

Peak

Postman collection: MasterThesisOriginal

Report exported on: Jun 30, 2024, 21:29:23 (GMT+1)

Test setup

Virtual users Start time

50 VU Jun 30, 21:23:15 (GMT+1)

Duration End time Environment

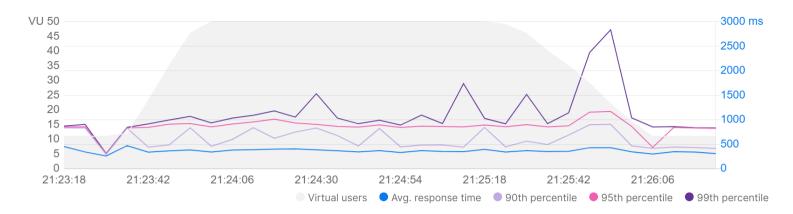
3 minutes Jun 30, 21:26:24 (GMT+1)

1. Summary

| Total requests sent | Throughput | Average response time | Error rate |
|---------------------|-----------------------|-----------------------|------------|
| 14,291 | 75.59 requests/second | 368 ms | 0.01 % |

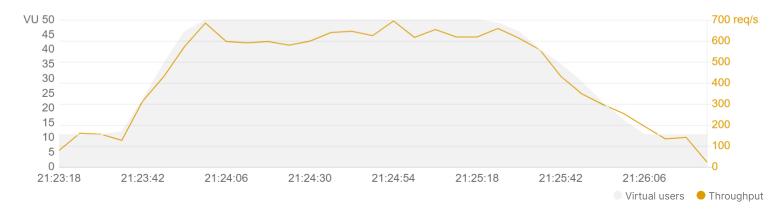
1.1 Response time

Response time trends during the test duration.



1.2 Throughput

Rate of requests sent per second during the test duration.





1.3 Requests with slowest response times

Top 5 slowest requests based on their average response times.

| Request | Resp. time (Avg ms) | 90th (ms) | 95th (ms) | 99th (ms) | Min (ms) | Max (ms) |
|--|------------------------|--------------|--------------|--------------|----------|-------------|
| POST 4- /api/checkout Copy http://{{IP}}:{{PORT}}/api/checkout | 951 | 1,070 | 1,251 | 2,330 | 815 | 2,439 |
| POST 4- /api/checkout http://{{IP}}:{{PORT}}/api/checkout | 939 | 1,060 | 1,272 | 1,676 | 815 | 1,867 |
| POST 4- /api/checkout Copy 2 http://{{IP}}:{{PORT}}/api/checkout | 935 | 1,061 | 1,205 | 1,811 | 818 | 2,350 |
| POST 3- /api/cart Copy 4 http://{{IP}}:{{PORT}}/api/cart | 441 | 463 | 490 | 731 | 414 | 1,126 |
| POST 3- /api/cart Copy 5 http://{{IP}}:{{PORT}}/api/cart | 437 | 463 | 481 | 630 | 414 | 800 |

1.4 Requests with most errors

Top 5 requests with the most errors, along with the most frequently occurring errors for each request.

| Request | Total error count | Error 1 | Error 2 | Other errors |
|---|----------------------|--------------------------------|---------|--------------|
| GET 1- / http://{{IP}}:{{PORT}}/ | 1 | 503 Service Unavailable (1) | - | 0 |

2. Metrics for each request

The requests are shown in the order they were sent by virtual users.

| Request | Total requests | Requests/s | Min (ms) | Avg (ms) | 90th (ms) | Max (ms) | Error % |
|---|----------------|------------|-------------|----------|--------------|-------------|---------|
| GET 1- / http://{{IP}}:{{PORT}}/ | 449 | 2.37 | 221 | 257 | 301 | 958 | 0.22 |



| GET 2- /api/cart http://{{IP}}:{{PORT}}/api/cart | 449 | 2.37 | 217 | 235 | 255 | 711 | 0 |
|--|-----|------|-----|-----|-------|-------|---|
| POST 3- /api/cart | 440 | 2.33 | 414 | 435 | 457 | 940 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 3- /api/cart Copy | 419 | 2.22 | 413 | 432 | 458 | 618 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 4- /api/checkout | 409 | 2.16 | 815 | 939 | 1,060 | 1,867 | 0 |
| http://{{IP}}:{{PORT}}/api/checkout | | | | | | | |
| POST 3- /api/cart Copy 2 | 409 | 2.16 | 414 | 436 | 457 | 1,057 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 3- /api/cart Copy 3 | 409 | 2.16 | 414 | 435 | 464 | 729 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 4- /api/checkout Copy | 409 | 2.16 | 815 | 951 | 1,070 | 2,439 | 0 |
| http://{{IP}}:{{PORT}}/api/checkout | | | | | | | |
| POST 3- /api/cart Copy 4 | 408 | 2.16 | 414 | 441 | 463 | 1,126 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 3- /api/cart Copy 5 | 407 | 2.15 | 414 | 437 | 463 | 800 | 0 |
| http://{{IP}}:{{PORT}}/api/cart | | | | | | | |
| POST 4- /api/checkout Copy 2 | 407 | 2.15 | 818 | 935 | 1,061 | 2,350 | 0 |
| http://{{IP}}::{{PORT}}/api/checkout | | | | | | | |
| GET 5- /api/data | 407 | 2.15 | 215 | 238 | 260 | 695 | 0 |
| http://{{IP}}:{{PORT}}/api/data | | | | | | | |
| GET 6-/api/data?contextKeys=assembly | 407 | 2.15 | 240 | 265 | 283 | 719 | 0 |
| http://{{IP}}:{{PORT}}/api/data?contextKeys=assembly | | | | | | | |
| GET 7- /api/data?contextKeys=binoculars | 407 | 2.15 | 242 | 261 | 289 | 595 | 0 |
| http://{{IP}}:{{PORT}}/api/data?contextKeys=binoculars | | | | | | | |
| GET 8- /api/data?contextKeys=books | 407 | 2.15 | 237 | 257 | 284 | 642 | 0 |
| http://{{IP}}:{{PORT}}/api/data?contextKeys=books | | | | | | | |
| | | | | | | | |



| CET 19-/api/data/contextKeys=telescopes | | | | | | | | |
|--|---|-----|------|-----|-----|-----|-------|---|
| http://((IP)):(IPORT)):/api/Jaroducts/OPUK6V6EV0 | | 407 | 2.15 | 243 | 265 | 286 | 1,156 | 0 |
| http://(ipp)-kiproducts/Jymwwn1n40 | | 406 | 2.15 | 300 | 322 | 355 | 1,003 | 0 |
| http://{(IP}):{(PORT)}/api/products/1YMWWNIN40 GET 13-/api/products/2ZYFJ3GM2N 405 2.14 234 249 269 373 0 GET 14-/api/products/6EVCHSJNUP 403 2.13 230 255 276 931 0 GET 15-/api/products/6EVCHSJNUP 403 2.13 234 253 274 899 0 GET 15-/api/products/6E92ZMYYFZ 403 2.13 234 253 274 899 0 http://{(IP})*{(IPORT)}/api/products/6E92ZMYYFZ 403 2.13 234 253 276 956 0 GET 16-/api/products/9SIQT8TOJO 403 2.13 234 256 276 976 0 GET 17-/api/products/HQTGWGPNH4 403 2.13 234 256 276 976 0 http://{(IP)}*{(IPORT)}/api/products/L9ECAV7KIM 403 2.13 235 251 267 633 0 GET 19-/api/products/L9ECAV7KIM 401 2.12 234 247 264 358 0 | | 406 | 2.15 | 227 | 255 | 276 | 853 | 0 |
| http://{{IP}}- | | 406 | 2.15 | 232 | 251 | 268 | 697 | 0 |
| http://{{IP}}:{{PORT}}/api/products/6692ZMYYFZ 403 2.13 234 253 274 899 0 6ET 15- /api/products/6E92ZMYYFZ 403 2.13 234 253 274 899 0 6ET 16- /api/products/9SiQT8TOJO 403 2.13 233 254 270 956 0 6ET 17- /api/products/HQTGWGPNH4 403 2.13 234 256 276 976 0 6ET 18- /api/products/L9ECAV7KIM 403 2.13 235 251 267 633 0 6ET 19- /api/products/L9ECAV7KIM 401 2.12 234 247 264 358 0 http://{{IP}}:{{PORT}}/api/products/LS4PSXUNUM 401 2.12 234 247 264 358 0 6ET 20- /api/products/OLJCESPC7Z 401 2.12 246 309 356 1,847 0 6ET 21- /api/recommendations? 401 2.12 261 338 428 1,149 0 6ET 21- /api/recommendations? | | 405 | 2.14 | 234 | 249 | 269 | 373 | 0 |
| http://{{IP}}-{{PORT}}/api/products/6E92ZMYYFZ GET 16- /api/products/9SIQT8TOJO | | 403 | 2.13 | 230 | 255 | 276 | 931 | 0 |
| http://{{IP}}:{{PORT}}/api/products/9SIQT8TOJO GET 17- /api/products/HQTGWGPNH4 | | 403 | 2.13 | 234 | 253 | 274 | 899 | 0 |
| http://{{IP}}:{{PORT}}/api/products/HQTGWGPNH4 GET 18- /api/products/L9ECAV7KIM | | 403 | 2.13 | 233 | 254 | 270 | 956 | 0 |
| http://{{IP}}:{{PORT}}/api/products/L9ECAV7KIM GET 19- /api/products/LS4PSXUNUM | | 403 | 2.13 | 234 | 256 | 276 | 976 | 0 |
| http://{{IP}}:{{PORT}}/api/products/LS4PSXUNUM GET 20- /api/products/OLJCESPC7Z | | 403 | 2.13 | 235 | 251 | 267 | 633 | 0 |
| http://{{IP}}:{{PORT}}/api/products/OLJCESPC7Z GET 21- /api/recommendations? | | 401 | 2.12 | 234 | 247 | 264 | 358 | 0 |
| productIds=0PUK6V6EV0 http://{{IP}}:{{PORT}}/api/recommendations? | | 401 | 2.12 | 246 | 309 | 356 | 1,847 | 0 |
| | productIds=0PUK6V6EV0 http://{{IP}}:{{PORT}}/api/recommendations? | 401 | 2.12 | 261 | 338 | 428 | 1,149 | 0 |



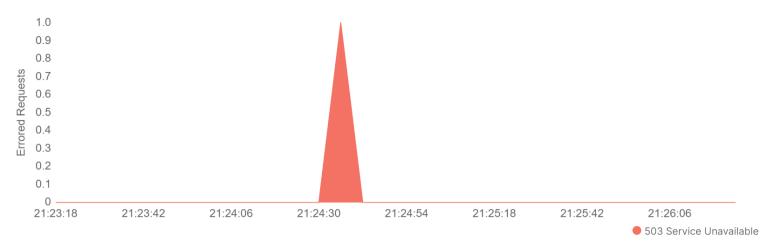
| GET 22- /api/recommendations? productIds=1YMWWN1N4O http://{{IP}}:{{PORT}}/api/recommendations? productIds=1YMWWN1N4O | 401 | 2.12 | 261 | 348 | 427 | 2,845 | 0 |
|---|-----|------|-----|-----|-----|-------|---|
| GET 23- /api/recommendations? productIds=2ZYFJ3GM2N http://{{IP}}:{{PORT}}/api/recommendations? productIds=2ZYFJ3GM2N | 400 | 2.12 | 261 | 338 | 415 | 2,898 | 0 |
| GET 24-/api/recommendations? productIds=66VCHSJNUP http://{{IP}}::{{PORT}}/api/recommendations? productIds=66VCHSJNUP | 400 | 2.12 | 262 | 356 | 463 | 2,836 | 0 |
| GET 25- /api/recommendations? productIds=6E92ZMYYFZ http://{{IP}}:{{PORT}}/api/recommendations? productIds=6E92ZMYYFZ | 400 | 2.12 | 263 | 343 | 434 | 1,142 | 0 |
| GET 26- /api/recommendations? productIds=9SIQT8TOJO http://{{IP}}:{{PORT}}/api/recommendations? productIds=9SIQT8TOJO | 400 | 2.12 | 261 | 349 | 458 | 1,620 | 0 |
| GET 27- /api/recommendations? productIds=HQTGWGPNH4 http://{{IP}}:{{PORT}}/api/recommendations? productIds=HQTGWGPNH4 | 400 | 2.12 | 262 | 345 | 454 | 1,688 | 0 |
| GET 28- /api/recommendations? productIds=L9ECAV7KIM http://{{IP}}:{{PORT}}/api/recommendations?L9ECAV7KIM | 399 | 2.11 | 252 | 344 | 445 | 2,697 | 0 |



3. Errors

3.1 Error distribution over time

Top 5 error classes observed during the test duration.



3.2 Error distribution for requests

Errored requests grouped by error class, along with the error count for each class.

| Error class | Total counts |
|-------------------------|--------------|
| 503 Service Unavailable | 1 |
| GET 1-/ | 1 |



Testing API performance on Postman

Postman enables you to simulate user traffic and observe how your API behaves under load. It also helps you identify any issues or bottlenecks that affect performance.

Learn more about <u>testing API performance</u>.