Tugas 7 Load Test

Script Kode Performance Test

```javascript
test > script.test.js > ...
1   import http from 'k6/http';
2   import { check, sleep } from 'k6';
3   import { htmlReport } from "https://raw.githubusercontent.com/benc-uk/k6-reporter/main/dist/bundle.js";
4   import { textSummary } from "https://jslib.k6.io/k6-summary/0.0.1/index.js";
5
6   export const options = {
7       vus: 10,
8       duration: '10s',
9       thresholds: {
10          http_req_duration: ['p(98)<1000'], // 98% request < 1 detik
11          http_req_failed: ['rate<0.01'],
12          checks: ['rate>0.99']
13      },
14  };
15
16  export default function () {
17      // LOGIN
18      let loginRes = http.post(
19          'https://belajar-bareng.onrender.com/api/login',
20          JSON.stringify({
21              username: 'admin',
22              password: 'admin'
23          }),
24          {
25              headers: { 'Content-Type': 'application/json' },
26          }
27      );
28
29      check(loginRes, {
30          'login status is 200': (r) => r.status === 200,
31          'login response time < 1s': (r) => r.timings.duration < 1000,
32          'token exists': (r) => r.json('token') !== undefined,
33      });
```

```javascript
34
35      // Ambil token
36      let token = loginRes.json('token');
37
38      // GET USERS
39      let usersRes = http.get(
40          'https://belajar-bareng.onrender.com/users',
41          {
42              headers: {
43                  Authorization: `Bearer ${token}`,
44              },
45          }
46      );
47
48      check(usersRes, {
49          'users status is 200': (r) => r.status === 200,
50          'users response time < 1s': (r) => r.timings.duration < 1000,
51      });
52
53      sleep(1);
54  }
55
56  // HTML REPORT
57  export function handleSummary(data) {
58      return {
59          "report/result.html": htmlReport(data),
60          stdout: textSummary(data, { indent: " ", enableColors: true }),
61      };
62  }
```

CLI Report

```
PS D:\BOOTCAMP QA\Bootcamp_QualityAssurance\TUGAS 7 LOAD TEST> k6 run test/script.test.js

         /\      Grafana   /‾/
    /\  /  \     |\  __ /  /
   /  \/    \    | |/ /  /
  /          \   |   (  |  |
 / _____ \  |_|\_\  \_|

     execution: local
        script: test/script.test.js
        output: -

     scenarios: (100.00%) 1 scenario, 10 max VUs, 40s max duration (incl. graceful stop):
              * default: 10 looping VUs for 10s (gracefulStop: 30s)

INFO[0011] [k6-reporter v3.0.3] Generating HTML summary report, with theme: default  source=console
     ✓ login status is 200
     ✓ login response time < 1s
     ✓ token exists
     ✓ users status is 200
     ✓ users response time < 1s

   ✓ checks.........................: 100.00% ✓ 350      ✗ 0
     data_received..................: 290 kB  26 kB/s
     data_sent......................: 38 kB   3.4 kB/s
     http_req_blocked...............: avg=6.18ms   min=0s      med=0s      max=92.08ms p(90)=0s      p(95)=86.04ms
     http_req_connecting............: avg=1.84ms   min=0s      med=0s      max=26.23ms p(90)=0s      p(95)=25.65ms
   ✓ http_req_duration..............: avg=255.63ms min=197.77ms med=244.09ms max=681.18ms p(90)=277.07ms p(95)=296.04ms
       { expected_response:true }...: avg=255.63ms min=197.77ms med=244.09ms max=681.18ms p(90)=277.07ms p(95)=296.04ms
   ✓ http_req_failed................: 0.00%   ✓ 0        ✗ 140
     http_req_receiving.............: avg=319.65µs min=0s      med=0s      max=3.31ms  p(90)=875.34µs p(95)=1.19ms
     http_req_sending...............: avg=455.49µs min=0s      med=417.7µs max=12.42ms p(90)=607.04µs p(95)=779.41µs
     http_req_tls_handshaking.......: avg=4.23ms   min=0s      med=0s      max=64.16ms p(90)=0s      p(95)=59.2ms
     http_req_waiting...............: avg=254.86ms min=197.07ms med=243.27ms max=680.62ms p(90)=276.73ms p(95)=294.9ms
     http_reqs......................: 140     12.620935/s
     iteration_duration.............: avg=1.52s    min=1.41s   med=1.5s    max=2.03s   p(90)=1.57s   p(95)=1.65s
     iterations.....................: 70      6.310467/s
     vus............................: 3       min=3       max=10

running (11.1s), 00/10 VUs, 70 complete and 0 interrupted iterations
default ✓ [======================================] 10 VUs  10s
PS D:\BOOTCAMP QA\Bootcamp_QualityAssurance\TUGAS 7 LOAD TEST>
```

HTML Report

Test Report: 2026-02-12 03:44

TOTAL REQUESTS	FAILED REQUESTS	BREACHED THRESHOLDS	FAILED CHECKS
140	0	0	0

Detailed Metrics · Test Run Details · ☑ Checks & Groups

📈 Trends & Times

	AVG	MIN	MED	MAX	P(90)	P(95)
http_req_blocked	6.18	0.00	0.00	92.08	0.00	86.05
http_req_connecting	1.85	0.00	0.00	26.23	0.00	25.65
http_req_duration	255.64	197.77	244.09	681.18	277.07	296.04
http_req_receiving	0.32	0.00	0.00	3.32	0.88	1.20
http_req_sending	0.46	0.00	0.42	12.42	0.61	0.78
http_req_tls_handshaking	4.24	0.00	0.00	64.17	0.00	59.20
http_req_waiting	254.86	197.07	243.27	680.63	276.73	294.91
iteration_duration	1524.83	1413.57	1501.27	2034.91	1573.13	1659.69

% Rates

	RATE %	PASS COUNT	FAIL COUNT
http_req_failed	0.00%	0.00	140.00

Test Report: 2026-02-12 03:44

TOTAL REQUESTS
140

FAILED REQUESTS
0

BREACHED THRESHOLDS
0

FAILED CHECKS
0

Detailed Metrics · **Test Run Details** · Checks & Groups

CHECKS
Passed	350
Failed	0

ITERATIONS
Total	70
Rate	6.31/s

VIRTUAL USERS
Min	3
Max	10

REQUESTS
Total	140
Rate	12.62/s

DATA RECEIVED
Total	0.29 MB
Rate	0.03 mB/s

DATA SENT
Total	0.04 MB
Rate	0.00 mB/s

Detailed Metrics · Test Run Details · **Checks & Groups**

Other Checks

CHECK NAME	PASSES	FAILURES	% PASS
login status is 200	70	0	100.00
login response time < 1s	70	0	100.00
token exists	70	0	100.00
users status is 200	70	0	100.00
users response time < 1s	70	0	100.00