

Non-functional testing:

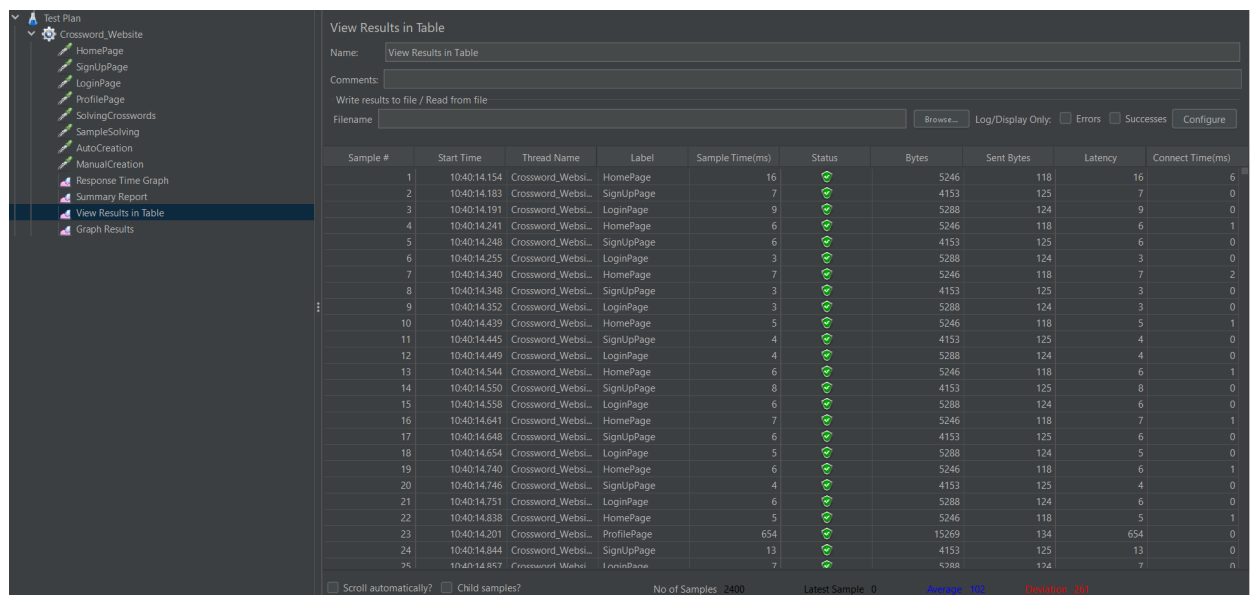
➤ Load testing

- Testing a system or software programme to see if it can handle a large number of users or transactions is known as load testing.
- Many tools, like Jmeter and Webload, can be used to perform load testing. In our case, load testing is being done using the Apache Jmeter tool.

● Low traffic

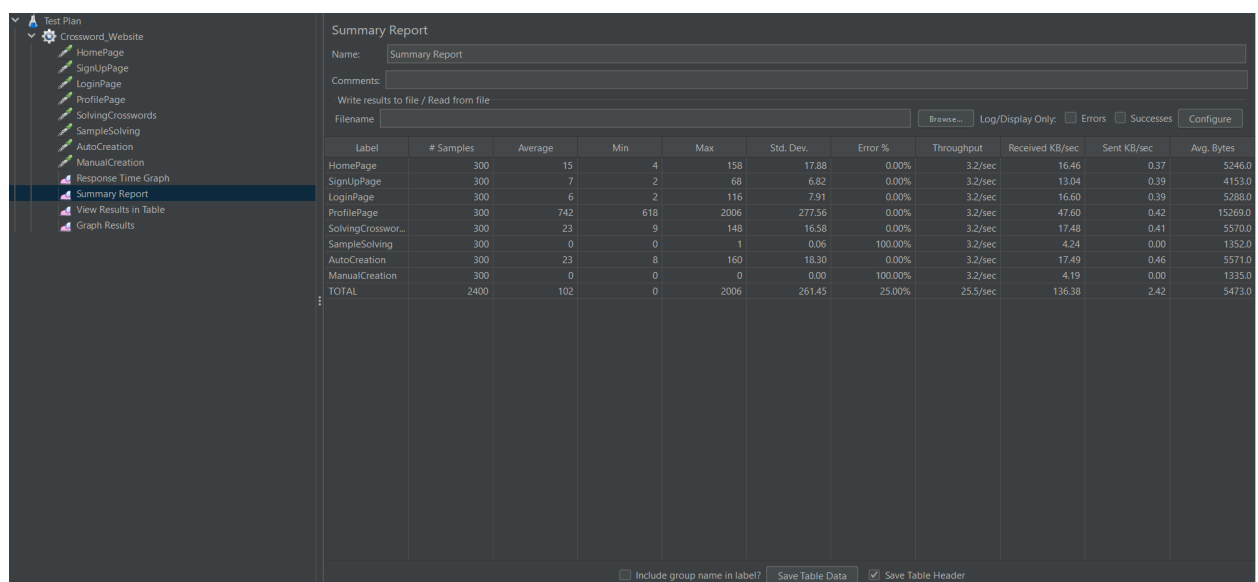
1. No. of users: 100

Ramp-up period(seconds) : 10



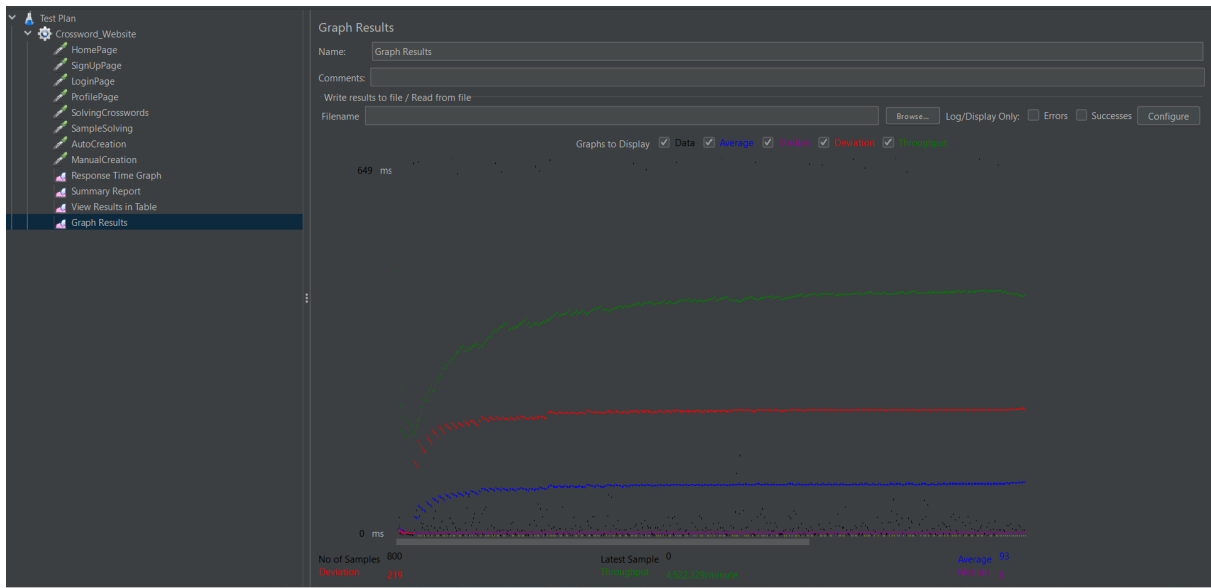
The screenshot shows the 'View Results in Table' window in JMeter. The table displays 24 samples of test results. The columns are: Sample #, Start Time, Thread Name, Label, Sample Time(ms), Status, Bytes, Sent Bytes, Latency, and Connect Time(ms). The test results show a mix of successful requests (green checkmarks) and some failures (red X marks). The status column shows 'Success' for most samples, with some 'Error' and 'Failure' entries. The latency and connect time columns show values in milliseconds.

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1	10:40:14.154	Crossword_Webst...	HomePage	16	Success	5246	118	16	6
2	10:40:14.183	Crossword_Webst...	SignUpPage	7	Success	4153	125	7	0
3	10:40:14.191	Crossword_Webst...	LoginPage	9	Success	5288	124	9	0
4	10:40:14.241	Crossword_Webst...	HomePage	6	Success	5246	118	6	1
5	10:40:14.248	Crossword_Webst...	SignUpPage	6	Success	4153	125	6	0
6	10:40:14.255	Crossword_Webst...	LoginPage	3	Success	5288	124	3	0
7	10:40:14.340	Crossword_Webst...	HomePage	7	Success	5246	118	7	2
8	10:40:14.348	Crossword_Webst...	SignUpPage	3	Success	4153	125	3	0
9	10:40:14.352	Crossword_Webst...	LoginPage	3	Success	5288	124	3	0
10	10:40:14.439	Crossword_Webst...	HomePage	5	Success	5246	118	5	1
11	10:40:14.445	Crossword_Webst...	SignUpPage	4	Success	4153	125	4	0
12	10:40:14.449	Crossword_Webst...	LoginPage	4	Success	5288	124	4	0
13	10:40:14.544	Crossword_Webst...	HomePage	6	Success	5246	118	6	1
14	10:40:14.550	Crossword_Webst...	SignUpPage	8	Success	4153	125	8	0
15	10:40:14.558	Crossword_Webst...	LoginPage	6	Success	5288	124	6	0
16	10:40:14.641	Crossword_Webst...	HomePage	7	Success	5246	118	7	1
17	10:40:14.648	Crossword_Webst...	SignUpPage	6	Success	4153	125	6	0
18	10:40:14.654	Crossword_Webst...	LoginPage	5	Success	5288	124	5	0
19	10:40:14.740	Crossword_Webst...	HomePage	6	Success	5246	118	6	1
20	10:40:14.746	Crossword_Webst...	SignUpPage	4	Success	4153	125	4	0
21	10:40:14.751	Crossword_Webst...	LoginPage	6	Success	5288	124	6	0
22	10:40:14.838	Crossword_Webst...	HomePage	5	Success	5246	118	5	1
23	10:40:14.201	Crossword_Webst...	ProfilePage	654	Success	15269	134	654	0
24	10:40:14.844	Crossword_Webst...	SignUpPage	13	Success	4153	125	13	0



The screenshot shows the 'Summary Report' window in JMeter. The table displays summary statistics for each test element. The columns are: Label, # Samples, Average, Min, Max, Std. Dev., Error %, Throughput, Received KB/sec, Sent KB/sec, and Avg. Bytes. The test results show a mix of successful requests (green checkmarks) and some failures (red X marks). The summary report shows that the test was successful overall, with a throughput of 25.3/sec and an average response time of 102ms.

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HomePage	300	15	4	158	17.88	0.00%	3.2/sec	16.46	0.37	5246.0
SignUpPage	300	7	2	68	6.82	0.00%	3.2/sec	13.04	0.39	4153.0
LoginPage	300	6	2	116	7.91	0.00%	3.2/sec	16.60	0.39	5288.0
ProfilePage	300	742	618	2006	277.56	0.00%	3.2/sec	47.60	0.42	15269.0
SolvingCrosswor...	300	23	9	148	16.58	0.00%	3.2/sec	17.48	0.41	5570.0
SampleSolving	300	0	0	1	0.06	100.00%	3.2/sec	4.24	0.00	1352.0
AutoCreation	300	23	8	160	18.30	0.00%	3.2/sec	17.49	0.46	5571.0
ManualCreation	300	0	0	0	0.00	100.00%	3.2/sec	4.19	0.00	1335.0
TOTAL	2400	102	0	2006	261.45	25.00%	25.3/sec	136.38	2.42	5473.0



2. No. of users: 150
Ramp-up period(seconds) : 14

Test Plan

- Crossword_Website
 - HomePage
 - SignUpPage
 - LoginPage
 - ProfilePage
 - SolvingCrosswords
 - SampleSolving
 - AutoCreation
 - ManualCreation
 - Response Time Graph
 - Summary Report
 - View Results in Table
 - Graph Results

View Results in Table

Name: View Results in Table

Comments:

Write results to file / Read from file

Filename: Log/Display Only: ☐ Errors ☐ Successes

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1176	105203.420	Crossword_Websi...	HomePage	14	✓	13570	134	14	0
1177	105203.524	Crossword_Websi...	SolvingCrosswords	0	✓	13570	131	14	0
1178	105203.539	Crossword_Websi...	SampleSolving	0	✓	1352	0	0	0
1179	105202.855	Crossword_Websi...	ProfilePage	694	✓	15269	134	694	0
1180	105203.549	Crossword_Websi...	SolvingCrosswords	19	✓	5570	131	19	0
1181	105203.539	Crossword_Websi...	AutoCreation	30	✓	5571	145	30	0
1182	105203.569	Crossword_Websi...	ManualCreation	0	✓	1335	0	0	0
1183	105203.569	Crossword_Websi...	SampleSolving	0	✓	1352	0	0	0
1184	105203.569	Crossword_Websi...	AutoCreation	34	✓	5571	145	34	0
1185	105203.603	Crossword_Websi...	ManualCreation	0	✓	1335	0	0	0
1186	105202.946	Crossword_Websi...	ProfilePage	675	✓	15269	134	675	0
1187	105203.622	Crossword_Websi...	SolvingCrosswords	21	✓	5570	131	21	0
1188	105203.643	Crossword_Websi...	SampleSolving	0	✓	1352	0	0	0
1189	105203.023	Crossword_Websi...	ProfilePage	638	✓	15269	134	638	0
1190	105203.644	Crossword_Websi...	AutoCreation	31	✓	5571	145	31	0
1191	105203.676	Crossword_Websi...	ManualCreation	0	✓	1335	0	0	0
1192	105203.662	Crossword_Websi...	SolvingCrosswords	19	✓	5570	131	19	0
1193	105203.682	Crossword_Websi...	SampleSolving	0	✓	1352	0	0	0
1194	105203.683	Crossword_Websi...	AutoCreation	21	✓	5571	145	21	0
1195	105203.704	Crossword_Websi...	ManualCreation	0	✓	1335	0	0	0
1196	105203.107	Crossword_Websi...	ProfilePage	680	✓	15269	134	680	0
1197	105203.787	Crossword_Websi...	SolvingCrosswords	14	✓	5570	131	14	0
1198	105203.801	Crossword_Websi...	SampleSolving	0	✓	1352	0	0	0
1199	105203.802	Crossword_Websi...	AutoCreation	9	✓	5571	145	9	0
1200	105203.812	Crossword_Websi...	ManualCreation	0	✓	1335	0	0	0

☐ Scroll automatically? ☐ Child samples? No of Samples: 1200 Latest Sample: 0 Average: 97 Deviation: 233

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename: Log/Display Only: ☐ Errors ☐ Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HomePage	150	19	3	214	22.10	0.00%	10.8/sec	55.37	1.25	5246.0
SignUpPage	150	9	2	49	7.27	0.00%	10.8/sec	43.85	1.32	4153.0
LoginPage	150	11	2	246	22.94	0.00%	10.8/sec	55.82	1.31	5288.0
ProfilePage	150	684	625	970	45.30	0.00%	10.3/sec	153.89	1.35	15269.0
SolvingCrosswor...	150	31	10	268	30.16	0.00%	10.8/sec	58.67	1.38	5570.0
SampleSolving	150	0	0	0	0.00	100.00%	10.8/sec	14.26	0.00	1352.0
AutoCreation	150	26	8	119	20.53	0.00%	10.8/sec	58.72	1.53	5571.0
ManualCreation	150	0	0	0	0.00	100.00%	10.8/sec	14.09	0.00	1335.0
TOTAL	1200	97	0	970	223.22	25.00%	82.2/sec	439.35	7.80	5473.0



- Medium traffic
3. No. of users: 200
- Ramp-up period(seconds) : 10

View Results in Table

Name: View Results in Table

Comments:

Write results to file / Read from file

Filename: Log/Display Only: ☐ Errors ☐ Successes

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1576	11:06:15.863	Crossword_Websti...	SolvingCrosswords	227	✓	5570	131	227	0
1577	11:06:16.091	Crossword_Websti...	SampleSolving	0	✗	1352	0	0	0
1578	11:06:12.838	Crossword_Websti...	ProfilePage	3274	✓	15269	134	3273	0
1579	11:06:15.934	Crossword_Websti...	AutoCreation	178	✓	5571	145	178	0
1580	11:06:16.112	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1581	11:06:15.967	Crossword_Websti...	SolvingCrosswords	154	✓	5570	131	154	0
1582	11:06:16.121	Crossword_Websti...	SampleSolving	0	✗	1352	0	0	0
1583	11:06:16.017	Crossword_Websti...	AutoCreation	125	✓	5571	145	125	0
1584	11:06:16.142	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1585	11:06:16.029	Crossword_Websti...	AutoCreation	178	✓	5571	145	178	0
1586	11:06:16.207	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1587	11:06:16.017	Crossword_Websti...	SolvingCrosswords	207	✓	5570	131	207	0
1588	11:06:16.225	Crossword_Websti...	SampleSolving	0	✗	1352	0	0	0
1589	11:06:16.043	Crossword_Websti...	AutoCreation	187	✓	5571	145	187	0
1590	11:06:16.230	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1591	11:06:16.092	Crossword_Websti...	AutoCreation	162	✓	5571	145	162	0
1592	11:06:16.254	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1593	11:06:16.112	Crossword_Websti...	SolvingCrosswords	170	✓	5570	131	170	0
1594	11:06:16.283	Crossword_Websti...	SampleSolving	0	✗	1352	0	0	0
1595	11:06:16.122	Crossword_Websti...	AutoCreation	164	✓	5571	145	164	0
1596	11:06:16.286	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1597	11:06:16.226	Crossword_Websti...	AutoCreation	75	✓	5571	145	75	0
1598	11:06:16.301	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0
1599	11:06:16.283	Crossword_Websti...	AutoCreation	25	✓	5571	145	25	0
1600	11:06:16.309	Crossword_Websti...	ManualCreation	0	✗	1335	0	0	0

☐ Scroll automatically? ☐ Child samples?

No of Samples 1600 Latest Sample 0 Average 301 Deviation 809

Summary Report

Name:

Summary Report

Comments:

Write results to file / Read from file

Filename

Browse...

Log/Display Only:

Errors

Successes

Configure

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HomePage	200	526	5	2167	506.65	0.00%	17.4/sec	89.30	2.01	5246.0
SignUpPage	200	88	3	455	108.26	0.00%	17.3/sec	70.22	2.11	4153.0
LoginPage	200	90	3	455	112.40	0.00%	17.3/sec	89.13	2.09	5288.0
ProfilePage	200	2285	764	4078	855.81	0.00%	14.6/sec	217.41	1.91	15269.0
SolvingCrosswor...	200	519	49	1749	312.57	0.00%	15.3/sec	83.05	1.95	5570.0
SampleSolving	200	0	0	0	0.00	100.00%	15.3/sec	20.23	0.00	1352.0
AutoCreation	200	499	25	1470	316.87	0.00%	15.3/sec	83.22	2.17	5571.0
ManualCreation	200	0	0	0	0.00	100.00%	15.4/sec	20.10	0.00	1335.0
TOTAL	1600	501	0	4078	809.15	25.00%	114.5/sec	611.96	10.86	5473.0



4. No. of users: 250
Ramp-up period(seconds) : 8

View Results in Table

Name:

View Results in Table

Comments:

Write results to file / Read from file

Filename

Browse...

Log/Display Only:

☐ Errors

☐ Successes

Configure

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1	11:10:26.496	Crossword_Webst...	HomePage	10	✓	5246	118	10	1
2	11:10:26.506	Crossword_Webst...	SignUpPage	9	✓	4153	125	9	0
3	11:10:26.515	Crossword_Webst...	LoginPage	14	✓	5288	124	14	0
4	11:10:26.530	Crossword_Webst...	HomePage	60	✓	5246	118	60	1
5	11:10:26.590	Crossword_Webst...	SignUpPage	13	✓	4153	125	13	0
6	11:10:26.604	Crossword_Webst...	LoginPage	16	✓	5288	124	16	0
7	11:10:26.592	Crossword_Webst...	HomePage	37	✓	5246	118	37	1
8	11:10:26.561	Crossword_Webst...	HomePage	69	✓	5246	118	69	1
9	11:10:26.629	Crossword_Webst...	SignUpPage	19	✓	4153	125	19	0
10	11:10:26.629	Crossword_Webst...	HomePage	20	✓	5246	118	20	1
11	11:10:26.648	Crossword_Webst...	LoginPage	18	✓	5288	124	18	0
12	11:10:26.631	Crossword_Webst...	SignUpPage	38	✓	4153	125	38	0
13	11:10:26.649	Crossword_Webst...	SignUpPage	26	✓	4153	125	26	0
14	11:10:26.657	Crossword_Webst...	HomePage	23	✓	5246	118	23	3
15	11:10:26.676	Crossword_Webst...	LoginPage	27	✓	5288	124	27	0
16	11:10:26.669	Crossword_Webst...	LoginPage	36	✓	5288	124	36	0
17	11:10:26.681	Crossword_Webst...	SignUpPage	98	✓	4153	125	98	0
18	11:10:26.722	Crossword_Webst...	HomePage	65	✓	5246	118	65	1
19	11:10:26.779	Crossword_Webst...	LoginPage	36	✓	5288	124	36	0
20	11:10:26.689	Crossword_Webst...	HomePage	127	✓	5246	118	127	2
21	11:10:26.787	Crossword_Webst...	SignUpPage	37	✓	4153	125	37	0
22	11:10:26.752	Crossword_Webst...	HomePage	79	✓	5246	118	79	2
23	11:10:26.816	Crossword_Webst...	SignUpPage	20	✓	4153	125	20	0
24	11:10:26.824	Crossword_Webst...	LoginPage	18	✓	5288	124	18	0
25	11:10:26.832	Crossword_Webst...	SignUpPage	16	✓	4153	125	16	0

☐ Scroll automatically?

☐ Child samples?

No of Samples 2000

Latest Sample 0

Average 1029

Deviation 1623

[illegible]



- High traffic
5. No. of users: 300
- Ramp-up period(seconds): 5

View Results in Table

Name: View Results in Table

Comments:

Write results to file / Read from file

Filename: Log/Display Only: ☐ Errors ☐ Successes

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
2376	11:15:32.690	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2377	11:15:32.112	Crossword_Webst...	AutoCreation	591		5571	145	591	0
2378	11:15:32.703	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2379	11:15:32.126	Crossword_Webst...	AutoCreation	594		5571	145	594	0
2380	11:15:32.720	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2381	11:15:32.191	Crossword_Webst...	AutoCreation	549		5571	145	549	0
2382	11:15:32.741	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2383	11:15:32.215	Crossword_Webst...	AutoCreation	540		5571	145	540	0
2384	11:15:32.756	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2385	11:15:32.336	Crossword_Webst...	AutoCreation	444		5571	145	444	0
2386	11:15:32.781	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2387	11:15:32.360	Crossword_Webst...	SolvingCrosswords	443		5570	131	443	0
2388	11:15:32.803	Crossword_Webst...	SampleSolving	0		1352	0	0	0
2389	11:15:32.445	Crossword_Webst...	AutoCreation	374		5571	145	374	0
2390	11:15:32.820	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2391	11:15:32.447	Crossword_Webst...	AutoCreation	375		5571	145	375	0
2392	11:15:32.822	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2393	11:15:32.564	Crossword_Webst...	AutoCreation	296		5571	145	296	0
2394	11:15:32.861	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2395	11:15:32.577	Crossword_Webst...	AutoCreation	303		5571	145	303	0
2396	11:15:32.880	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2397	11:15:32.591	Crossword_Webst...	AutoCreation	296		5571	145	296	0
2398	11:15:32.887	Crossword_Webst...	ManualCreation	0		1335	0	0	0
2399	11:15:32.804	Crossword_Webst...	AutoCreation	117		5571	145	117	0
2400	11:15:32.921	Crossword_Webst...	ManualCreation	0		1335	0	0	0

☒ Scroll automatically? ☐ Child samples? No of Samples 2400 Latest Sample 0 Average 1147 Deviation 2168

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HomePage	300	2218	6	6161	1334.59	0.00%	32.7/sec	167.47	3.77	5246.0
SignUpPage	300	97	3	487	83.73	0.00%	32.7/sec	132.57	3.99	4153.0
LoginPage	300	102	4	330	86.80	0.00%	32.7/sec	168.76	3.96	5288.0
ProfilePage	300	6227	961	10800	1747.88	0.00%	16.6/sec	248.23	2.18	15269.0
SolvingCrosswor...	300	1701	199	5184	876.12	0.00%	17.2/sec	93.79	2.21	5570.0
SampleSolving	300	0	0	0	0.00	100.00%	17.7/sec	23.39	0.00	1352.0
AutoCreation	300	1477	117	5317	816.21	0.00%	17.6/sec	95.73	2.49	5571.0
ManualCreation	300	0	0	0	0.00	100.00%	18.0/sec	23.41	0.00	1335.0
TOTAL	2400	1478	0	10800	2168.30	25.00%	128.9/sec	688.86	12.22	5473.0

➤ Stress testing

- Stress tests help you understand the upper limits of a system's capacity using a load beyond the expected maximum.
- In other words, stress tests help you determine how a system would behave under an extreme load. The goal is more to determine a maximum limit than to identify bottlenecks.
- In order to do stress testing, we have used the Apache JMeter tool.

6. No. of users: 500

Ramp-up periods(seconds): 1

View Results in Table

Name: View Results in Table

Comments:

Write results to file / Read from file

Filename: Log/Display Only: ☐ Errors ☐ Successes

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
3976	11:33:16.637	Crossword_Webst...	SampleSolving	0		1332	0	0	0
3977	11:33:16.514	Crossword_Webst...	SolvingCrosswords	139		5570	131	139	0
3978	11:33:16.655	Crossword_Webst...	SampleSolving	0		1352	0	0	0
3979	11:33:16.546	Crossword_Webst...	AutoCreation	111		5571	145	111	0
3980	11:33:16.658	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3981	11:33:16.575	Crossword_Webst...	AutoCreation	101		5571	145	101	0
3982	11:33:16.677	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3983	11:33:16.564	Crossword_Webst...	AutoCreation	129		5571	145	129	0
3984	11:33:16.694	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3985	11:33:16.581	Crossword_Webst...	AutoCreation	131		5571	145	131	0
3986	11:33:16.712	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3987	11:33:16.552	Crossword_Webst...	AutoCreation	190		5571	145	190	0
3988	11:33:16.742	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3989	11:33:16.584	Crossword_Webst...	AutoCreation	173		5571	145	173	0
3990	11:33:16.757	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3991	11:33:16.603	Crossword_Webst...	AutoCreation	158		5571	145	158	0
3992	11:33:16.761	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3993	11:33:16.591	Crossword_Webst...	AutoCreation	171		5571	145	171	0
3994	11:33:16.762	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3995	11:33:16.614	Crossword_Webst...	AutoCreation	167		5571	145	167	0
3996	11:33:16.782	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3997	11:33:16.637	Crossword_Webst...	AutoCreation	145		5571	145	145	0
3998	11:33:16.783	Crossword_Webst...	ManualCreation	0		1335	0	0	0
3999	11:33:16.656	Crossword_Webst...	AutoCreation	129		5571	145	129	0
4000	11:33:16.785	Crossword_Webst...	ManualCreation	0		1335	0	0	0

☒ Scroll automatically? ☐ Child samples? No of Samples 4000 Latest Sample 0 Average 12 Deviation 100

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HomePage	500	32	0	1419	196.84	97.60%	352.4/sec	914.50	0.97	2657.6
SignUpPage	500	5	0	644	43.87	97.00%	339.4/sec	875.38	1.24	2640.8
LoginPage	500	3	0	369	20.10	96.80%	321.1/sec	840.52	1.24	2680.2
ProfilePage	500	30	0	1767	159.33	96.60%	215.2/sec	635.83	0.96	3024.9
SolvingCrosswor...	500	17	0	1150	109.54	95.60%	203.4/sec	541.31	1.15	2724.9
SampleSolving	500	0	0	0	0.00	100.00%	204.1/sec	269.45	0.00	1352.0
AutoCreation	500	9	0	540	44.31	95.20%	194.3/sec	519.18	1.32	2736.9
ManualCreation	500	0	0	0	0.00	100.00%	194.6/sec	253.74	0.00	1335.0
TOTAL	4000	12	0	1767	100.99	97.35%	1527.9/sec	3572.10	5.19	2394.1

