

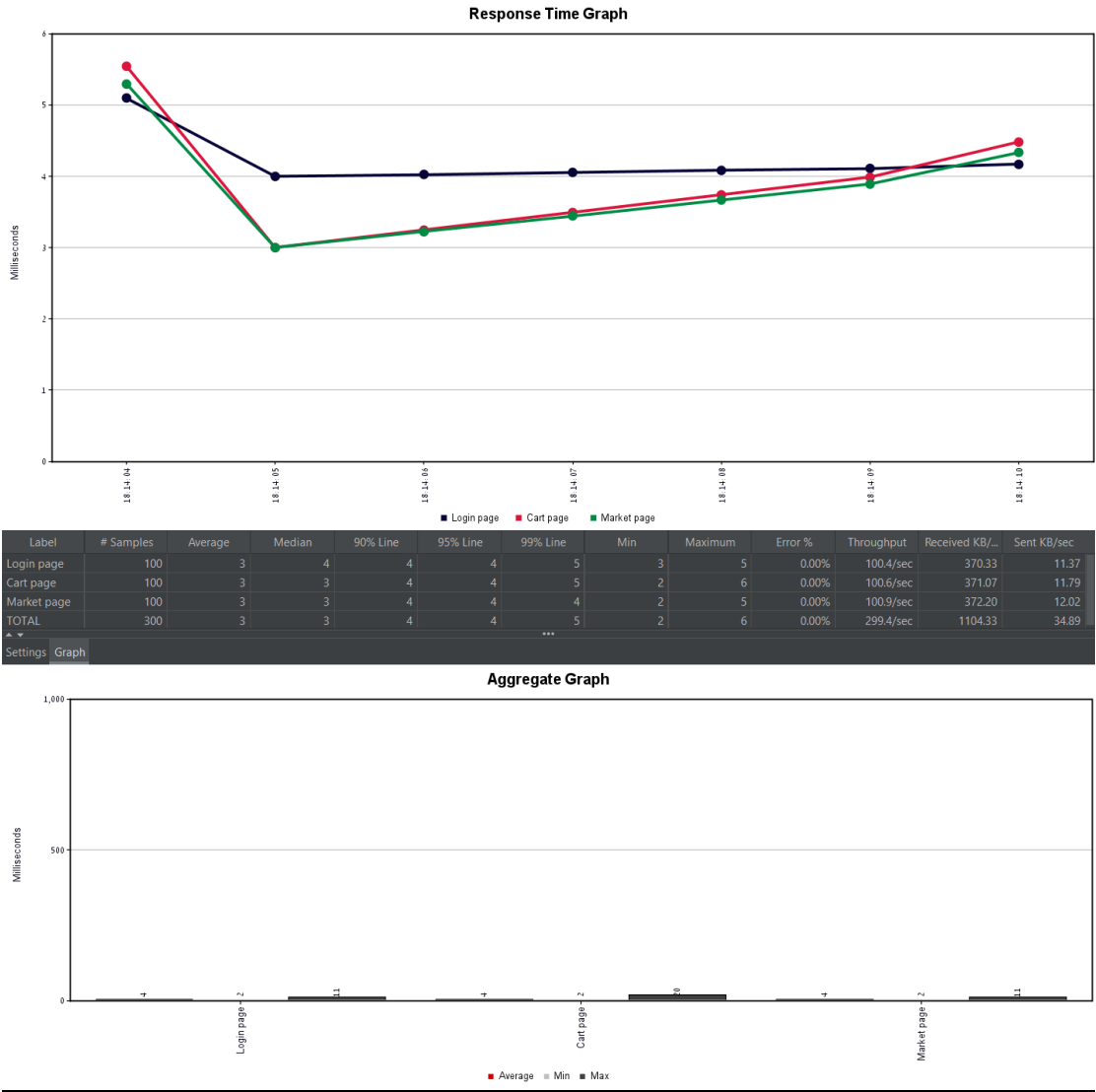
Performance Testing

Test Cases:

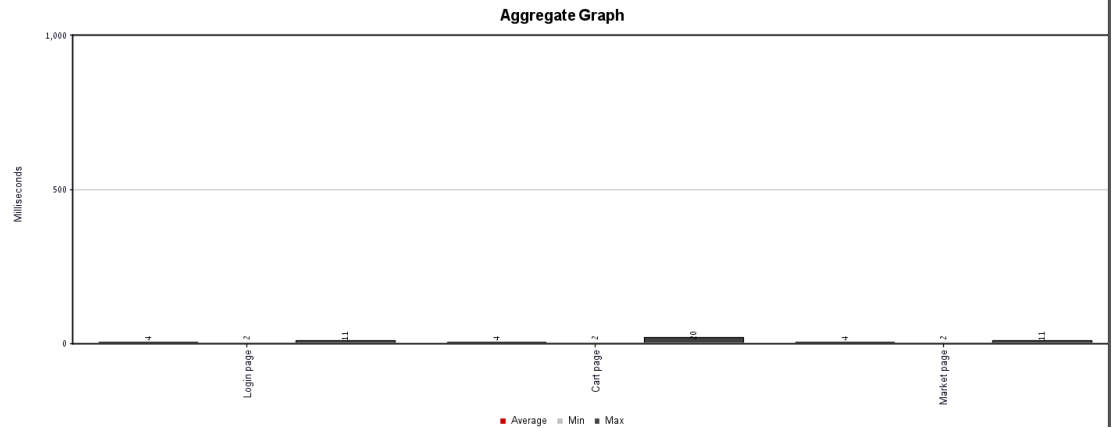
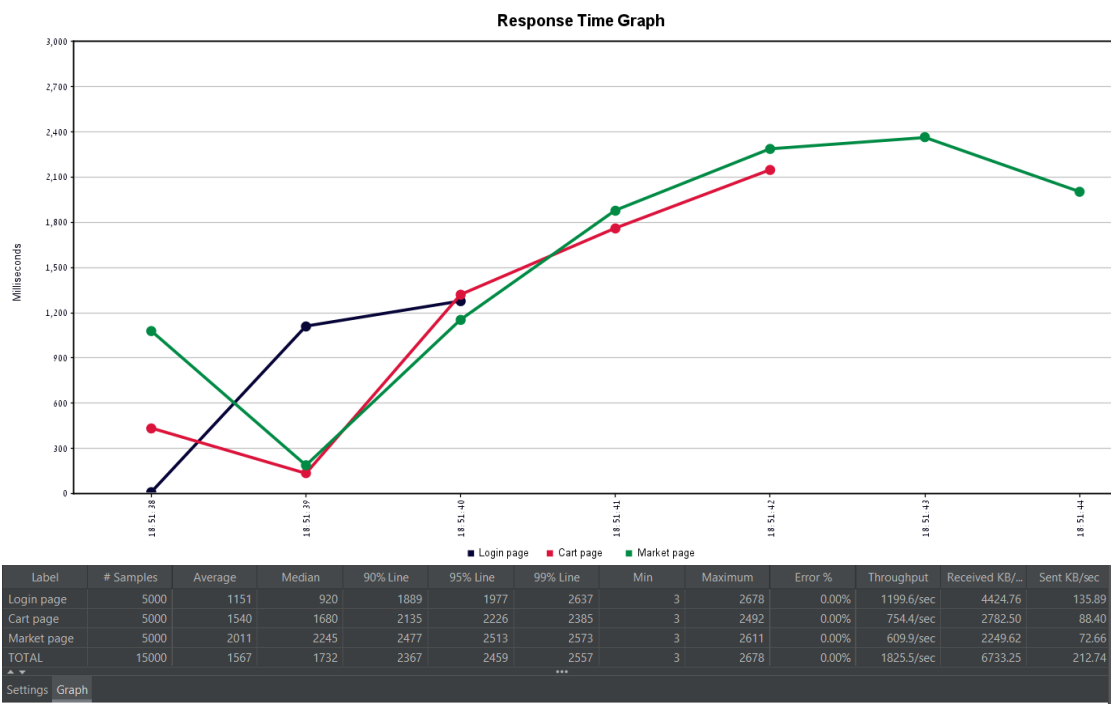
- 1) Guest user in the market page (100 users)
- 2) Guest user in the market page (5000 users)
- 3) Guest user in the market page (10000 users)
- 4) Guest user in the cart page (100 users)
- 5) Guest user in the cart page (5000 users)
- 6) Guest user in the cart page (10000 users)
- 7) Guest user in the login page (100 users)
- 8) Guest user in the login page (5000 users)
- 9) Guest user in the login page (10000 users)
- 10) Register new user, login, go to market page (100 users)
- 11) Register new user, login, go to market page (3000 users)
- 12) Register new user, login, go to market page (8000 users)
- 13) As guest, add eggs to cart, go to cart page, buy cart (100 users)
- 14) As guest, add eggs to cart, go to cart page, buy cart (8000 users)
- 15) Register new user, login, add new store, make another user owner (100 users)
- 16) Register new user, login, add new store, make another user owner (8000 users)

Results:

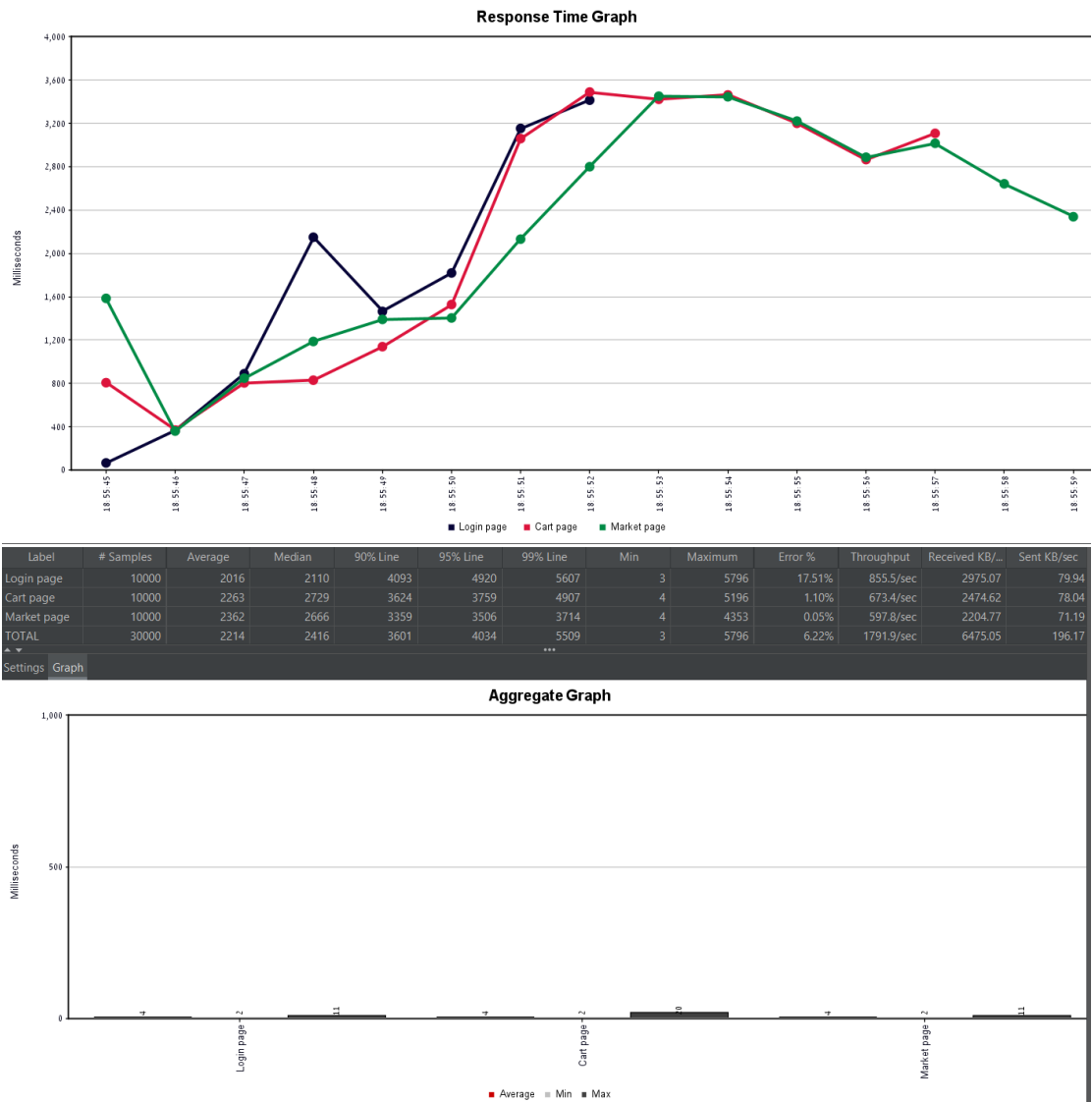
1,4,7: 100 users in less than 1 second



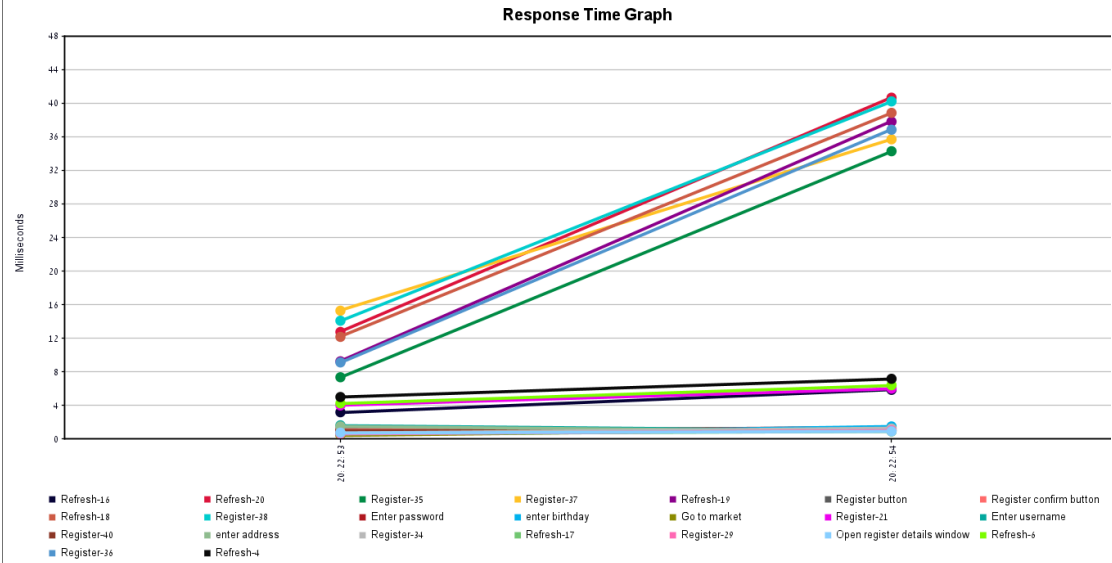
2,5,8: 5000 users in 12 seconds



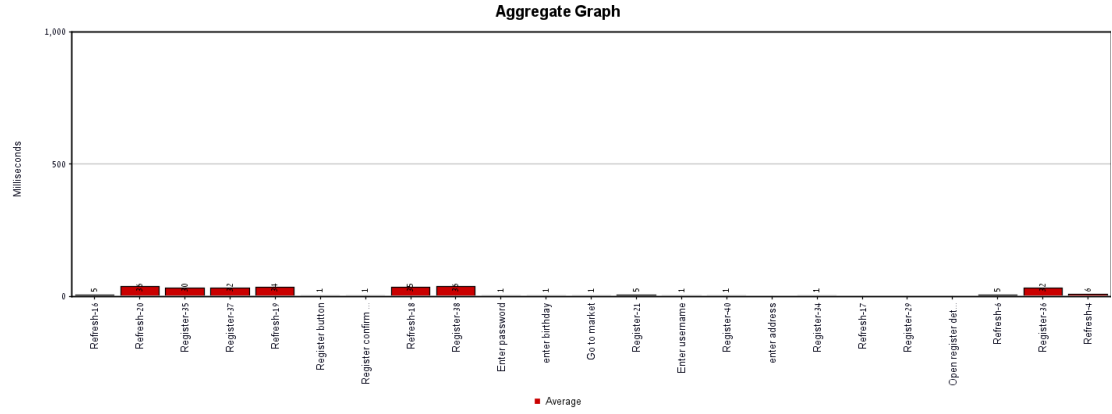
3,6,9: 10000 users in 17 seconds (Sometimes the test raises some errors, so I'm showing that case. Although, I think this is caused by a load on the computer and not on the app).



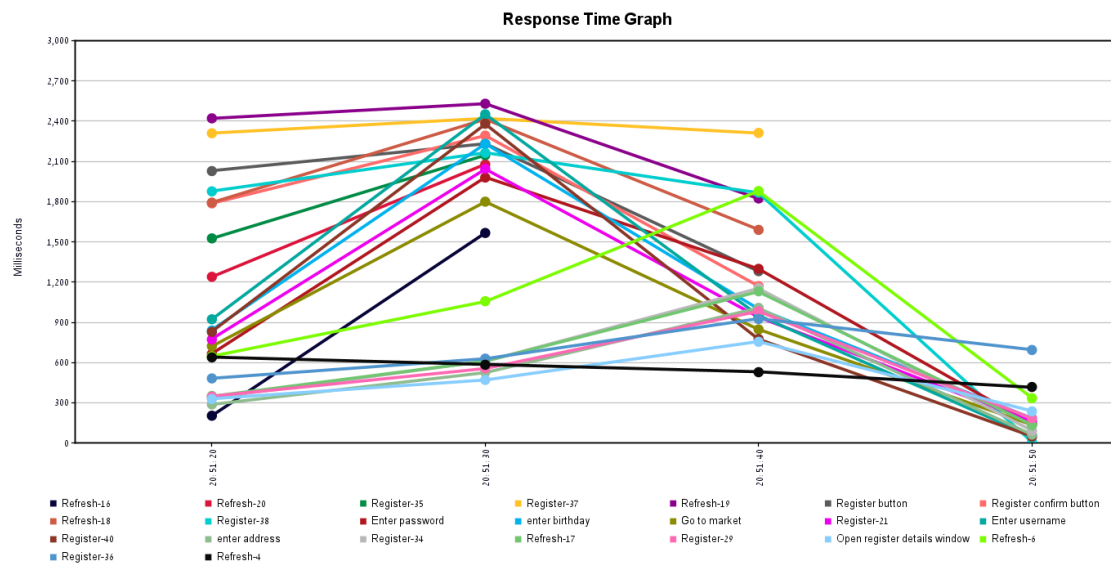
10: 100 users in less than 1 seconds



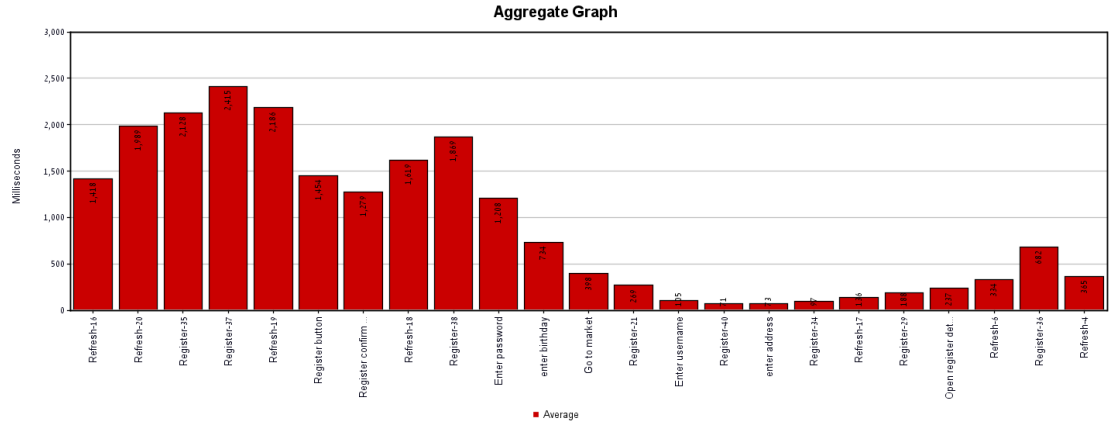
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
Refresh-16	100	5	1	89	12.77	0.00%	100.7/sec	56.15	64.32	571.0
Refresh-20	100	36	1	111	30.87	0.00%	93.8/sec	157.20	30.23	1716.0
Register-35	100	30	1	144	29.22	0.00%	87.6/sec	79.60	28.33	930.0
Register-37	100	32	1	149	32.08	0.00%	88.0/sec	70.49	28.37	820.0
Refresh-19	100	34	1	135	30.55	0.00%	85.6/sec	98.41	27.67	1177.0
Register button	100	1	0	5	0.86	0.00%	86.1/sec	47.99	60.85	571.0
Register confirm...	100	1	0	12	1.83	0.00%	86.1/sec	47.99	54.71	571.0
Refresh-18	100	35	2	103	29.82	0.00%	83.7/sec	37.75	26.15	462.0
Register-38	100	36	1	141	32.87	0.00%	83.4/sec	90.81	26.31	1115.0
Enter password	100	1	0	8	1.39	0.00%	84.1/sec	46.90	62.75	571.0
enter birthday	100	1	0	9	1.85	0.00%	84.0/sec	46.86	56.87	571.0
Go to market	100	1	0	14	1.61	0.00%	84.0/sec	46.86	81.65	571.0
Register-21	100	5	1	77	8.06	0.00%	83.8/sec	204.32	53.13	2496.0
Enter username	100	1	0	5	0.95	0.00%	83.9/sec	25.48	66.69	311.0
Register-40	100	1	0	5	0.88	0.00%	84.0/sec	25.50	54.69	311.0
enter address	100	0	0	6	0.80	0.00%	84.0/sec	25.50	66.74	311.0
Register-34	100	1	0	14	1.53	0.00%	83.9/sec	25.48	58.58	311.0
Refresh-17	100	0	0	4	0.73	0.00%	83.9/sec	25.48	72.01	311.0
Register-29	100	0	0	4	0.77	0.00%	83.8/sec	25.46	49.61	311.0
Open register de...	100	0	0	4	0.68	0.00%	83.8/sec	25.46	52.96	311.0
Refresh-6	100	5	2	17	2.92	0.00%	83.6/sec	184.86	28.42	2264.0
Register-36	100	32	1	128	28.02	0.00%	83.5/sec	191.56	31.49	2348.0
Refresh-4	100	6	2	28	4.08	0.00%	83.8/sec	299.35	32.82	3657.0
TOTAL	2300	11	0	149	22.62	0.00%	1808.2/sec	1734.17	1026.62	982.1



11: 3000 users in 28 seconds

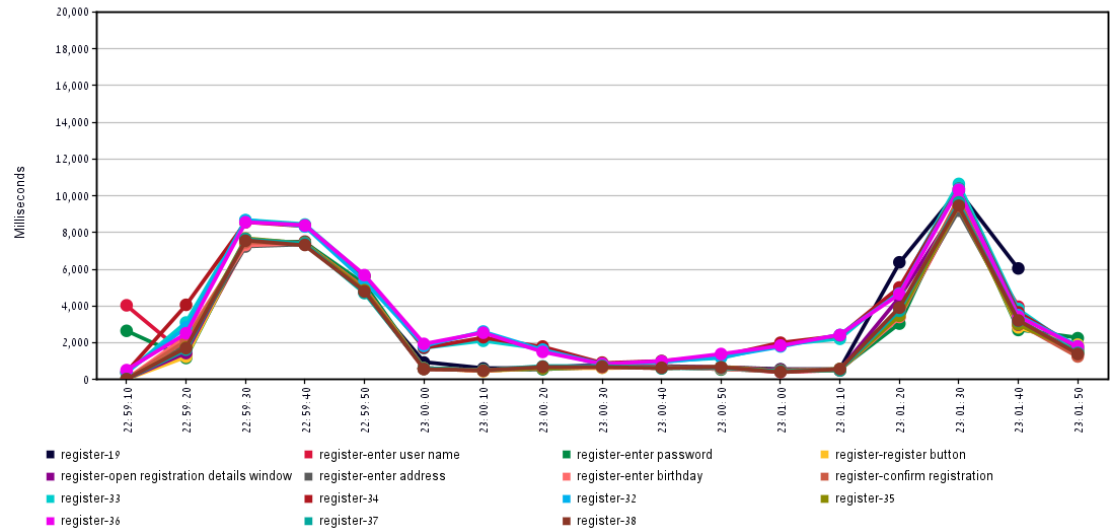


Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
Refresh-16	3000	1418	4	2797	649.89	0.00%	508.3/sec	283.44	324.64	571.0
Refresh-20	3000	1989	1	2994	695.99	0.00%	352.7/sec	591.10	113.67	1716.0
Register-35	3000	2128	1	3193	589.05	0.00%	267.5/sec	242.94	86.47	930.0
Register-37	3000	2415	1	3342	568.35	0.00%	230.8/sec	184.81	74.37	820.0
Refresh-19	3000	2186	1	3313	576.78	0.00%	205.3/sec	235.97	66.36	1177.0
Register button	3000	1454	0	2736	600.17	0.00%	189.6/sec	105.74	134.08	571.0
Register confirm...	3000	1279	0	2744	511.55	0.00%	166.8/sec	92.99	106.02	571.0
Refresh-18	3000	1619	1	2954	508.39	0.00%	153.5/sec	69.28	47.98	462.0
Register-38	3000	1869	1	3446	439.03	0.00%	147.1/sec	160.19	46.40	1115.0
Enter password	3000	1208	0	2649	641.41	0.00%	149.4/sec	83.31	111.46	571.0
enter birthday	3000	734	0	2675	610.03	0.00%	149.9/sec	83.60	101.46	571.0
Go to market	3000	398	0	2468	508.67	0.00%	145.3/sec	81.05	141.23	571.0
Register-21	3000	269	1	2630	391.21	0.00%	131.4/sec	320.20	83.26	2496.0
Enter username	3000	105	0	2451	270.61	0.00%	126.6/sec	38.44	100.61	311.0
Register-40	3000	71	0	2381	189.31	0.00%	141.2/sec	42.87	91.95	311.0
enter address	3000	73	0	2260	169.18	0.00%	153.4/sec	46.59	121.94	311.0
Register-34	3000	97	0	1928	190.32	0.00%	168.9/sec	51.31	117.97	311.0
Refresh-17	3000	136	0	1890	234.76	0.00%	178.3/sec	54.17	153.09	311.0
Register-29	3000	188	0	1283	273.66	0.00%	184.1/sec	55.90	108.93	311.0
Open register de...	3000	237	0	1842	293.75	0.00%	198.0/sec	60.12	125.08	311.0
Refresh-6	3000	334	2	1879	289.87	0.00%	224.4/sec	511.00	76.26	2332.0
Register-36	3000	682	1	2316	497.50	0.00%	256.4/sec	587.89	96.65	2348.0
Refresh-4	3000	365	2	982	303.75	0.00%	278.3/sec	1006.09	108.98	3702.0
TOTAL	69000	924	0	3446	918.45	0.00%	2167.6/sec	2089.24	1230.67	987.0



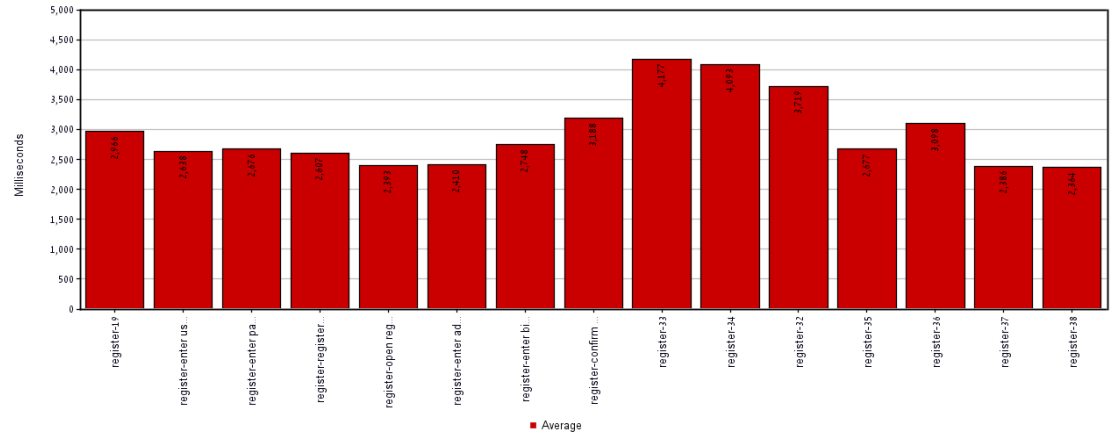
12: 8000 users in 165 seconds

Response Time Graph

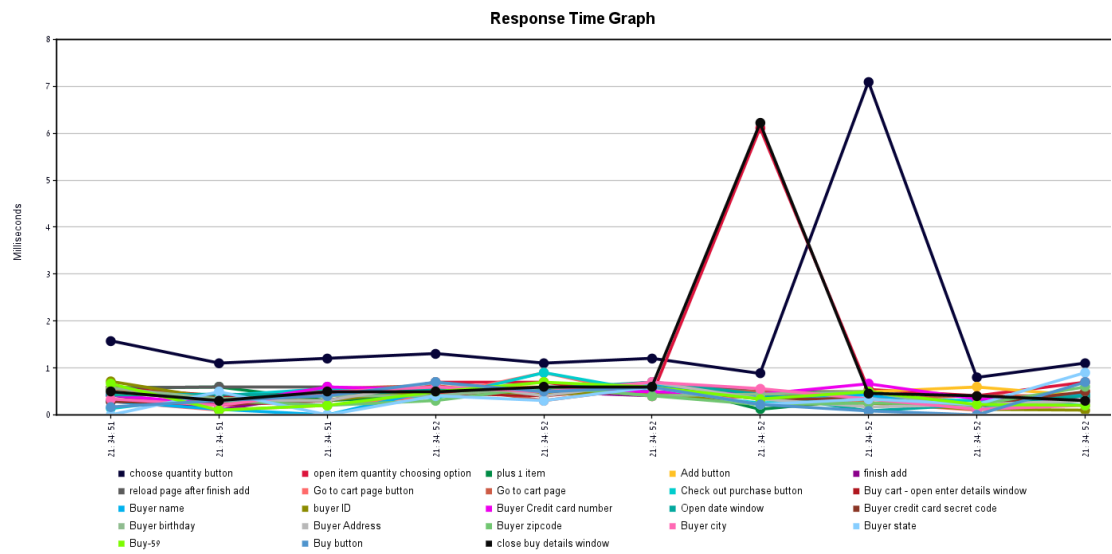


Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received K...	Sent KB/sec	Avg. Bytes
register-19	8000	2966	2	11543	3342.77	0.00%	53.5/sec	130.51	33.94	2496.0
register-enter...	8000	2638	0	11543	2973.52	0.00%	52.9/sec	16.05	42.01	311.0
register-enter...	8000	2676	0	11557	2908.80	0.00%	52.1/sec	15.83	41.58	311.0
register-reg...	8000	2607	0	11558	2769.73	0.00%	51.6/sec	15.66	39.12	311.0
register-op...	8000	2393	0	11557	2641.17	0.00%	51.1/sec	15.53	32.31	311.0
register-ent...	8000	2410	0	11558	2579.62	0.00%	50.7/sec	15.40	40.30	311.0
register-ent...	8000	2748	0	11539	2744.43	0.00%	50.4/sec	15.29	36.68	311.0
register-con...	8000	3188	0	11539	3101.75	0.00%	50.0/sec	15.17	34.34	311.0
register-33	8000	4177	1	14489	3489.00	0.00%	49.3/sec	113.08	18.59	2348.0
register-34	8000	4093	1	14472	3349.39	0.00%	48.8/sec	39.06	18.24	820.0
register-32	8000	3719	1	15596	3267.72	0.00%	48.6/sec	44.15	18.23	930.0
register-35	8000	2677	0	11558	2835.47	0.00%	48.5/sec	14.72	33.85	311.0
register-36	8000	3098	1	14373	3031.87	0.00%	48.3/sec	52.61	17.74	1115.0
register-37	8000	2386	0	11557	2851.21	0.00%	48.3/sec	14.68	49.53	311.0
register-38	8000	2364	0	11547	2819.85	0.00%	48.3/sec	14.68	31.49	311.0
TOTAL	120000	2943	0	15596	3049.22	0.00%	724.1/sec	510.01	468.01	721.3

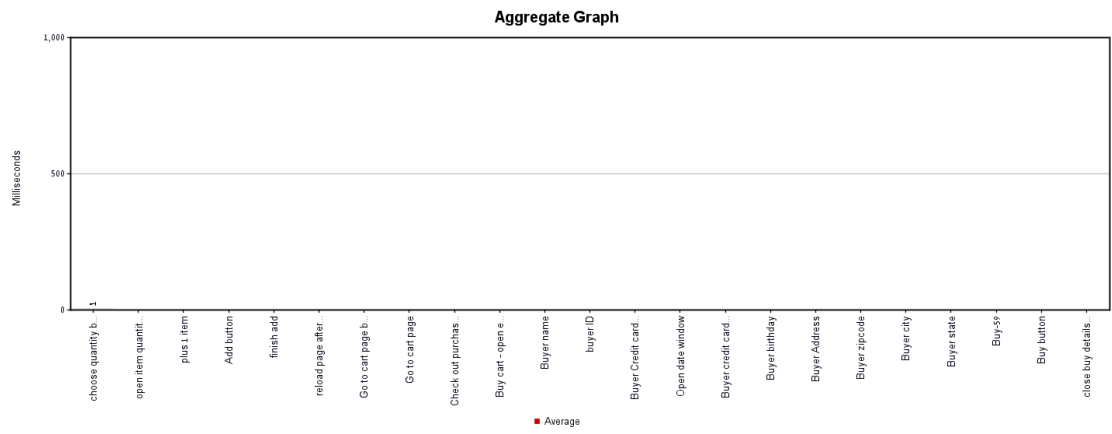
Aggregate Graph



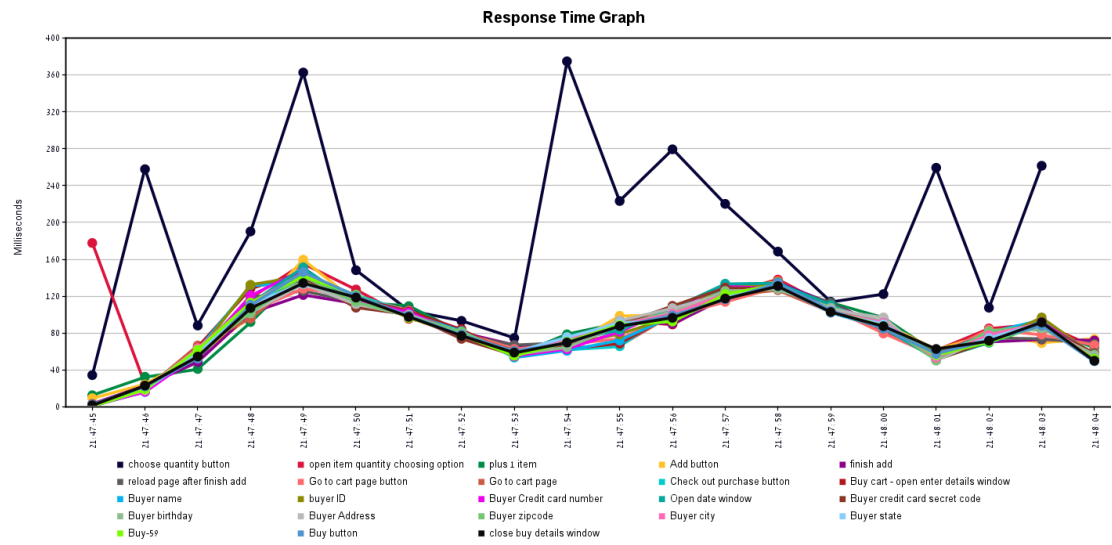
13: 100 users in less than 1 seconds



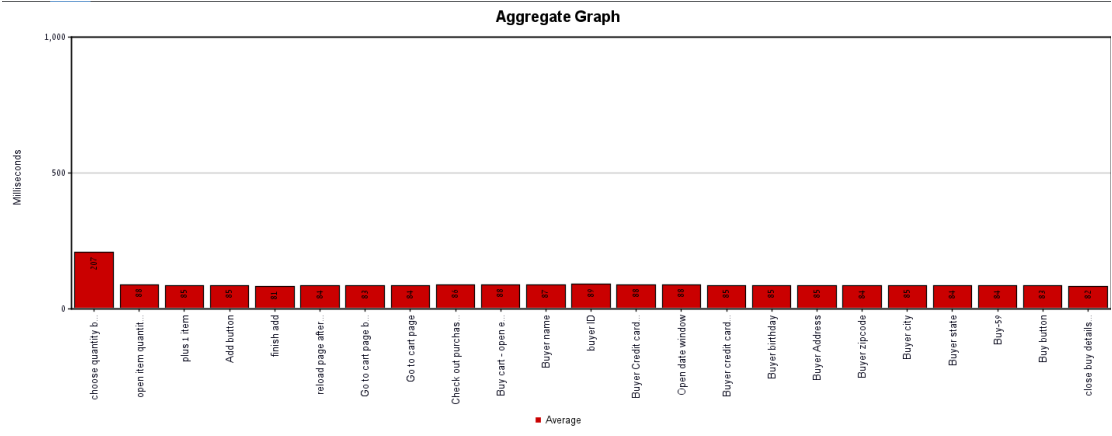
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
choose quantity ...	100	1	0	20	3.36	0.00%	101.0/sec	56.32	72.21	571.0
open item quant...	100	1	0	54	5.35	0.00%	101.4/sec	56.55	68.24	571.0
plus 1 item	100	0	0	1	0.49	0.00%	101.5/sec	56.61	124.23	571.0
Add button	100	0	0	1	0.50	0.00%	101.6/sec	56.67	72.65	571.0
finish add	100	0	0	1	0.48	0.00%	101.6/sec	56.67	53.59	571.0
reload page afte...	100	0	0	2	0.52	0.00%	101.7/sec	56.73	61.20	571.0
Go to cart page ...	100	0	0	1	0.47	0.00%	101.9/sec	56.84	66.30	571.0
Go to cart page	100	0	0	1	0.50	0.00%	101.8/sec	56.78	60.36	571.0
Check out purch...	100	0	0	1	0.49	0.00%	101.9/sec	56.84	73.07	571.0
Buy cart - open ...	100	0	0	1	0.49	0.00%	101.9/sec	56.84	84.81	571.0
Buyer name	100	0	0	1	0.48	0.00%	101.9/sec	56.84	76.85	571.0
buyer ID	100	0	0	1	0.47	0.00%	101.9/sec	56.84	77.35	571.0
Buyer Credit car...	100	0	0	1	0.50	0.00%	102.0/sec	56.90	78.12	571.0
Open date wind...	100	0	0	1	0.50	0.00%	101.9/sec	56.84	111.89	571.0
Buyer credit car...	100	0	0	1	0.49	0.00%	102.0/sec	56.90	76.83	571.0
Buyer birthday	100	0	0	1	0.49	0.00%	102.0/sec	56.90	69.95	571.0
Buyer Address	100	0	0	1	0.49	0.00%	102.0/sec	56.90	76.83	571.0
Buyer zipcode	100	0	0	1	0.48	0.00%	102.0/sec	56.90	77.33	571.0
Buyer city	100	0	0	2	0.53	0.00%	102.1/sec	56.96	76.91	571.0
Buyer state	100	0	0	4	0.59	0.00%	102.2/sec	57.02	76.99	571.0
Buy-59	100	0	0	2	0.51	0.00%	102.1/sec	56.96	55.86	571.0
Buy button	100	0	0	1	0.48	0.00%	102.1/sec	56.96	73.02	571.0
close buy details...	100	0	0	53	5.25	0.00%	102.1/sec	56.96	53.87	571.0
TOTAL	2300	0	0	54	1.80	0.00%	2300.0/sec	1282.52	1686.72	571.0



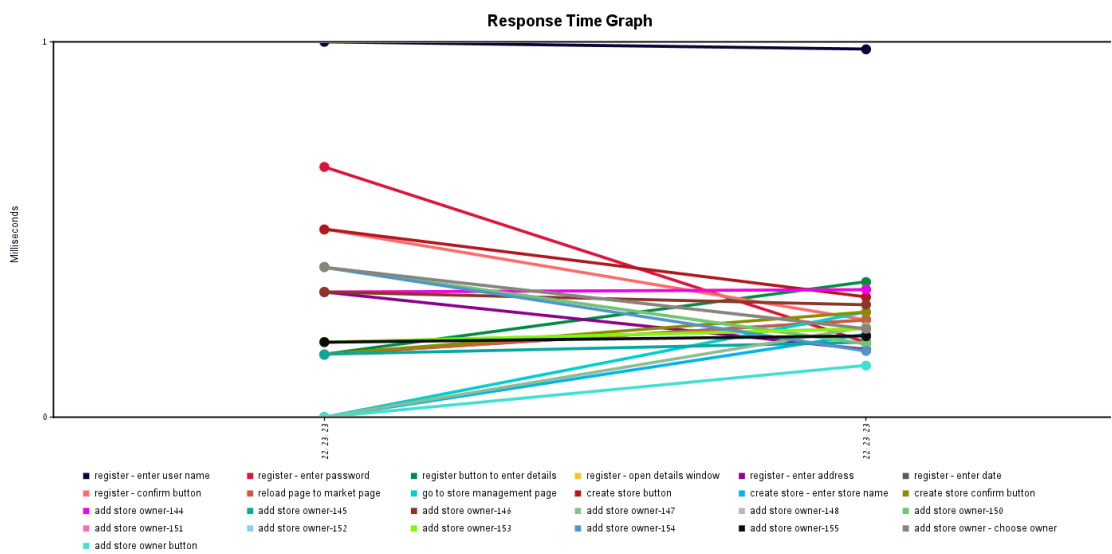
14: 8000 users in 19 seconds (10000 crash the computer)



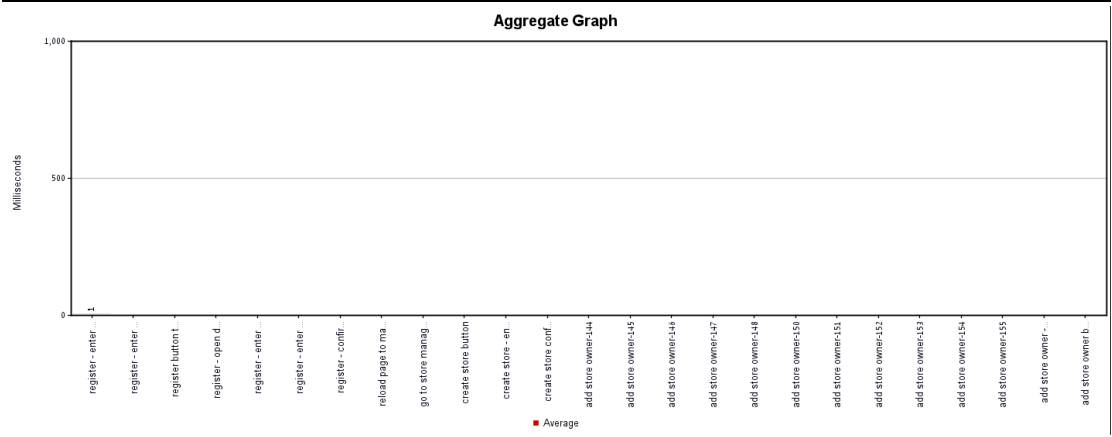
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
choose quantity ...	8000	207	1	1383	226.82	0.00%	432.6/sec	241.25	309.27	571.0
open item quant...	8000	88	0	361	58.28	0.00%	431.0/sec	240.35	290.02	571.0
plus 1 item	8000	85	0	319	56.17	0.00%	429.8/sec	239.65	525.90	571.0
Add button	8000	85	0	320	56.49	0.00%	428.4/sec	238.86	306.21	571.0
finish add	8000	81	0	383	53.83	0.00%	426.8/sec	238.02	225.10	571.0
reload page afte...	8000	84	0	321	53.80	0.00%	424.6/sec	236.77	255.43	571.0
Go to cart page ...	8000	83	0	309	53.60	0.00%	422.8/sec	235.74	274.96	571.0
Go to cart page	8000	84	0	326	55.11	0.00%	421.7/sec	235.17	250.00	571.0
Check out purch...	8000	86	0	356	58.04	0.00%	420.8/sec	234.64	301.62	571.0
Buy cart - open ...	8000	88	0	346	58.87	0.00%	420.0/sec	234.19	349.45	571.0
Buyer name	8000	87	0	373	58.71	0.00%	419.0/sec	233.62	315.85	571.0
buyer ID	8000	89	0	320	58.93	0.00%	418.2/sec	233.19	317.32	571.0
Buyer Credit car...	8000	88	0	346	59.02	0.00%	417.1/sec	232.58	319.34	571.0
Open date wind...	8000	88	0	333	57.86	0.00%	416.1/sec	232.03	456.74	571.0
Buyer credit card...	8000	85	0	321	56.18	0.00%	415.7/sec	231.81	313.00	571.0
Buyer birthday	8000	85	0	327	55.08	0.00%	415.3/sec	231.60	284.74	571.0
Buyer Address	8000	85	0	312	55.32	0.00%	415.2/sec	231.50	312.58	571.0
Buyer zipcode	8000	84	0	307	55.52	0.00%	415.0/sec	231.44	314.53	571.0
Buyer city	8000	85	0	332	56.81	0.00%	415.0/sec	231.39	312.44	571.0
Buyer state	8000	84	0	317	55.12	0.00%	414.9/sec	231.33	312.35	571.0
Buy-59	8000	84	0	321	56.39	0.00%	414.8/sec	231.32	226.86	571.0
Buy button	8000	83	0	311	56.36	0.00%	414.9/sec	231.33	296.55	571.0
close buy details...	8000	82	0	320	55.07	0.00%	414.9/sec	231.33	218.77	571.0
TOTAL	184000	90	0	1383	76.81	0.00%	9533.7/sec	5316.14	6991.58	571.0



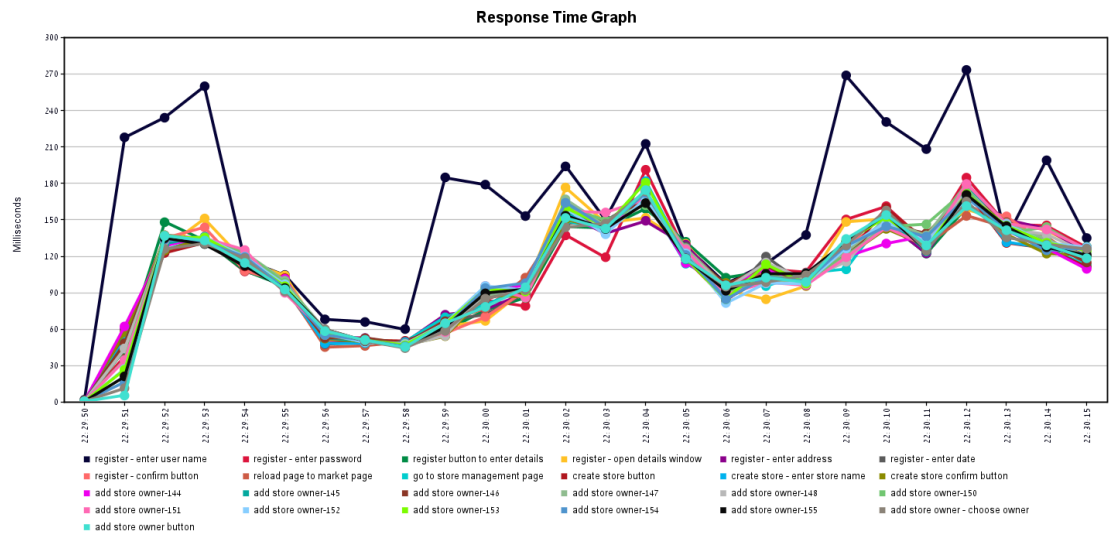
15: 100 users in less than 1 seconds



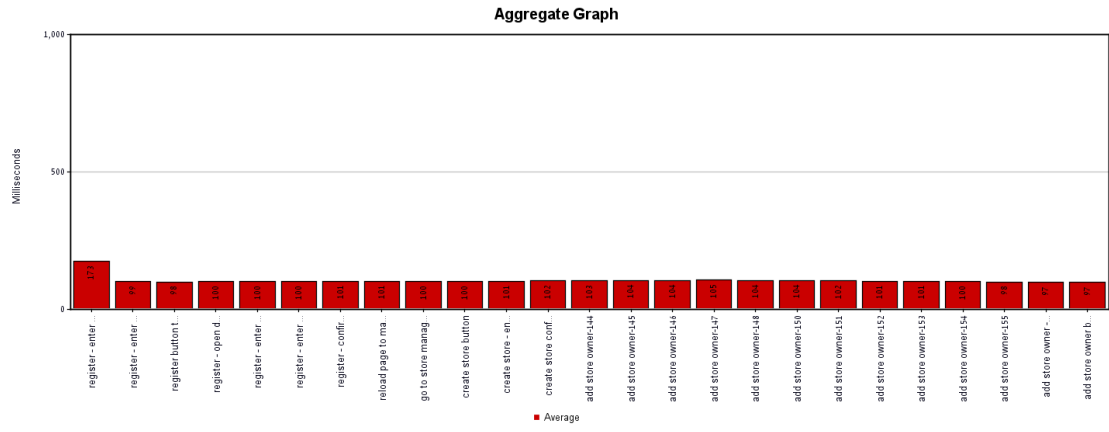
Label ↑	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
add store owner-144	100	0	0	1	0.49	0.00%	101.0/sec	56.32	98.94	571.0
add store owner-145	100	0	0	1	0.48	0.00%	101.0/sec	56.32	66.88	571.0
add store owner-146	100	0	0	1	0.47	0.00%	101.1/sec	56.38	60.83	571.0
add store owner-147	100	0	0	1	0.48	0.00%	101.1/sec	56.38	99.33	571.0
add store owner-148	100	0	0	1	0.45	0.00%	101.0/sec	56.32	80.39	571.0
add store owner-150	100	0	0	1	0.45	0.00%	101.1/sec	56.38	87.39	571.0
add store owner-151	100	0	0	1	0.45	0.00%	101.1/sec	56.38	99.24	571.0
add store owner-152	100	0	0	1	0.47	0.00%	101.1/sec	56.38	66.95	571.0
add store owner-153	100	0	0	1	0.44	0.00%	101.2/sec	56.44	60.89	571.0
add store owner-154	100	0	0	1	0.45	0.00%	101.2/sec	56.44	60.89	571.0
add store owner-155	100	0	0	1	0.47	0.00%	101.2/sec	56.44	173.17	571.0
add store owner button	100	0	0	1	0.46	0.00%	101.3/sec	56.50	72.62	571.0
add store owner - choo...	100	0	0	1	0.47	0.00%	101.2/sec	56.44	111.89	571.0
create store button	100	0	0	1	0.49	0.00%	101.0/sec	56.32	72.40	571.0
create store confirm bu...	100	0	0	1	0.49	0.00%	101.0/sec	56.32	72.40	571.0
create store - enter stor...	100	0	0	1	0.46	0.00%	101.0/sec	56.32	76.65	571.0
go to store managemen...	100	0	0	1	0.47	0.00%	100.9/sec	56.27	104.36	571.0
register button to enter ...	100	0	0	1	0.49	0.00%	101.0/sec	56.32	71.61	571.0
register - confirm button	100	0	0	2	0.50	0.00%	100.9/sec	56.27	64.35	571.0
register - enter address	100	0	0	1	0.47	0.00%	101.0/sec	56.32	75.86	571.0
register - enter date	100	0	0	1	0.48	0.00%	100.9/sec	56.27	68.49	571.0
register - enter passwor...	100	0	0	1	0.44	0.00%	100.9/sec	56.27	75.48	571.0
register - enter user na...	100	1	0	2	0.38	0.00%	100.9/sec	56.27	74.99	571.0
register - open details ...	100	0	0	1	0.49	0.00%	100.9/sec	56.27	58.73	571.0
reload page to market ...	100	0	0	1	0.49	0.00%	101.0/sec	56.32	98.15	571.0
TOTAL	2500	0	0	2	0.49	0.00%	2505.0/sec	1396.84	2035.42	571.0



16: 8000 users in 26 seconds (10000 crash the computer)



Label ↑	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
add store owner-144	8000	103	0	383	65.45	0.00%	306.4/sec	170.85	300.11	571.0
add store owner-145	8000	104	0	350	65.29	0.00%	306.2/sec	170.72	202.71	571.0
add store owner-146	8000	104	0	547	66.82	0.00%	306.1/sec	170.68	184.13	571.0
add store owner-147	8000	105	0	366	67.00	0.00%	305.5/sec	170.38	300.17	571.0
add store owner-148	8000	104	0	383	66.47	0.00%	305.3/sec	170.26	243.02	571.0
add store owner-150	8000	104	0	383	66.68	0.00%	305.2/sec	170.18	263.76	571.0
add store owner-151	8000	102	0	383	67.59	0.00%	305.1/sec	170.10	299.39	571.0
add store owner-152	8000	101	0	383	64.84	0.00%	305.0/sec	170.06	201.93	571.0
add store owner-153	8000	101	0	347	65.29	0.00%	304.9/sec	170.04	183.45	571.0
add store owner-154	8000	100	0	383	64.78	0.00%	304.9/sec	169.99	183.39	571.0
add store owner-155	8000	98	0	533	63.80	0.00%	304.9/sec	169.99	521.59	571.0
add store owner button	8000	97	0	349	64.60	0.00%	304.9/sec	170.00	218.53	571.0
add store owner - choo...	8000	97	0	561	64.54	0.00%	304.9/sec	170.00	337.02	571.0
create store button	8000	100	0	409	63.72	0.00%	307.3/sec	171.38	220.30	571.0
create store confirm bu...	8000	102	0	382	64.69	0.00%	306.7/sec	171.01	219.83	571.0
create store - enter stor...	8000	101	0	358	64.35	0.00%	307.0/sec	171.21	232.98	571.0
go to store managemen...	8000	100	0	457	64.05	0.00%	307.7/sec	171.58	318.22	571.0
register button to enter ...	8000	98	0	392	67.47	0.00%	309.9/sec	172.79	219.70	571.0
register - confirm button	8000	101	0	358	65.66	0.00%	308.2/sec	171.87	196.55	571.0
register - enter address	8000	100	0	389	66.14	0.00%	309.0/sec	172.31	232.06	571.0
register - enter date	8000	100	0	353	64.84	0.00%	308.6/sec	172.09	209.46	571.0
register - enter passwor...	8000	99	0	318	69.92	0.00%	311.4/sec	173.64	232.94	571.0
register - enter user na...	8000	173	0	1218	174.34	0.00%	311.7/sec	173.80	231.63	571.0
register - open details ...	8000	100	0	468	69.01	0.00%	309.5/sec	172.60	180.16	571.0
reload page to market ...	8000	101	0	366	65.15	0.00%	307.9/sec	171.71	299.22	571.0
TOTAL	200000	104	0	1218	74.65	0.00%	7615.6/sec	4246.57	6187.95	571.0



Summary:

התמודדות עם 8000 בקשות בו זמנית תוך עמידה בזמן תגובה של לכל היותר שניה לכל בקשה.

תמיכה בעד 61,000 רשומות.

תמיכה ב-8000 מבקרים במערכת בכל רגע נתון.