

# Raport de testare

**Tip test:** scalabilitate

**Tester:** Cochior-Heghi Lucian

**Sistem:** Laptop ASUS ROG GL552VW-CN090D, Intel® Core™ i7-6700HQ pana la 3.5GHz, 15.6"  
Full HD, 8GB, 1TB, nVIDIA GeForce GTX 950M 4GB, Windows 10 Pro

**Scenariul pe care un user l-a parcurs in procesul de scalabilitate:**





1. Accesarea paginii principale
2. Logare utilizator
3. Accesarea paginii de dashbord
4. Accesarea link-ului "Vezi materii"
5. Selectarea materiei "Introducere in programare"
6. Selectare "temaUnu"
7. Accesarea paginii de dashbord
8. Accesarea link-ului "Vezi materii"
9. Selectarea materiei "Test teme"
10. Selectare "testTema1"
11. Accesarea paginii de dashbord
12. Deconectare.

**Obiectiv:** Testarea performantei precum si resursele care sunt consumate pe server in timp ce 25 de useri interactioneaza concurent cu aplicatia.

**Rezultate:**

Pe partea de hardware aplicatia consuma intre 0,9% - 2,2% din procesor iar memoria este cuprinsa intre 0,8 MB – 1,4MB cand serverul este functional dar nu exista nici un utilizator care sa interactioneze cu acesta, iar cand 25 de utilizatori interactioneaza cu aplicatia facand cereri multiple la server aplicatia consuma 2,2% - 6,8% din procesor iar memoria este cuprinsa intre 1,1MB – 1,7MB depinzand de ce fel d cereri au fost facute de catre clienti

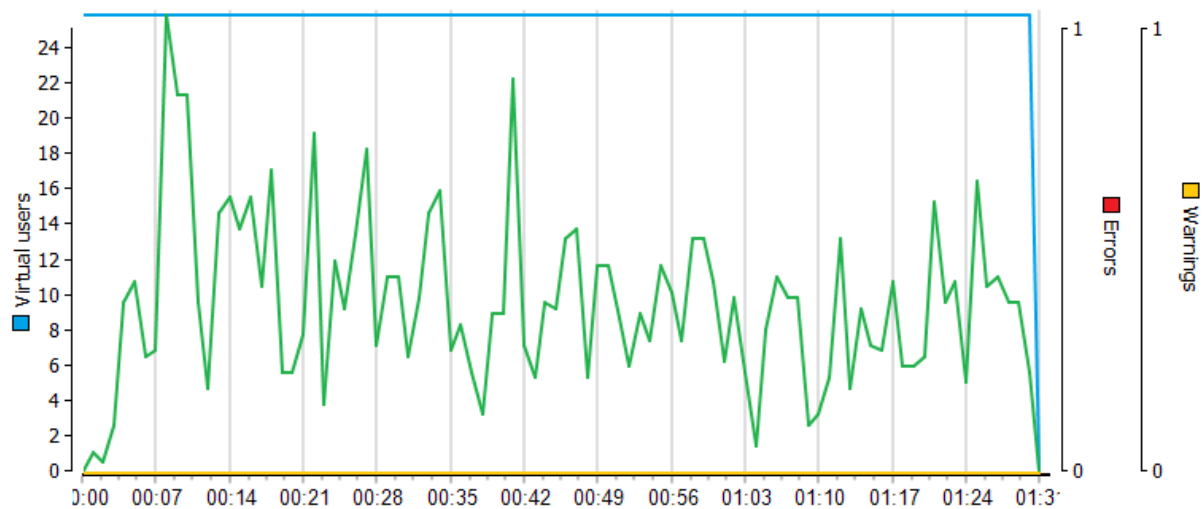
**Seververul ruleaza fara clienti conectati**

ime	2% CPU	62% Memory	5% Disk	0% Network	0% GPU	GPU Engine
apps (8)						
 Google Chrome (12)	0.3%	468.3 MB	0 MB/s	0 Mbps	0%	GPU 0 - 3D
 IntelliJ IDEA (9)	1.2%	1,372.4 MB	0 MB/s	0 Mbps	0%	
 Microsoft Word	0%	52.6 MB	0 MB/s	0 Mbps	0%	
 MCVS2 terminal	0%	1.1 MB	0 MB/s	0 Mbps	0%	

## Serverul ruleaza cu 25 de clienti conectati

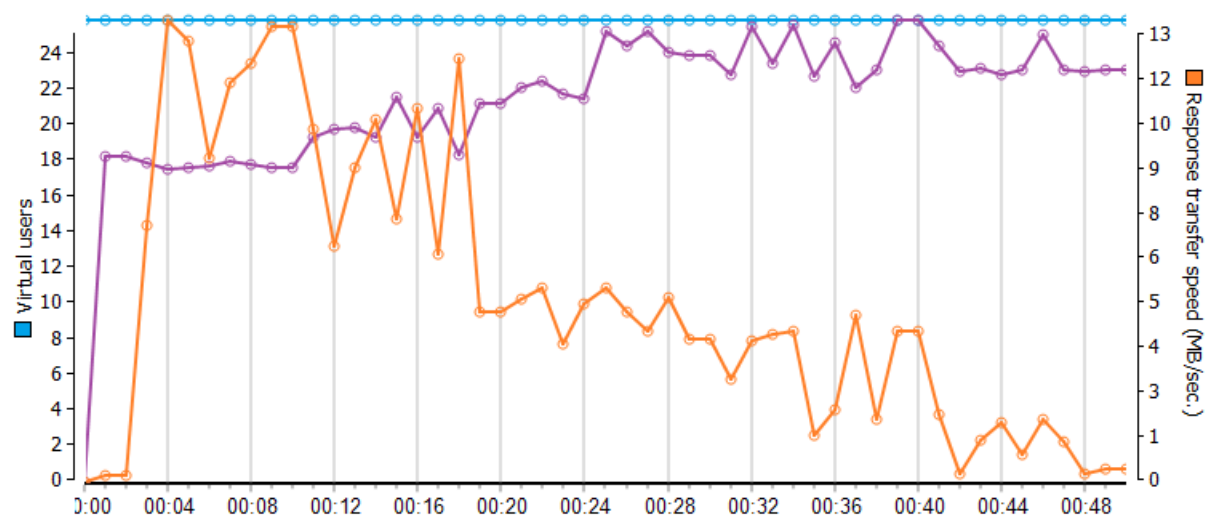
ame	11% CPU	63% Memory	2% Disk	1% Network	7% GPU	GPU Engine
Apps (10)						
Google Chrome (12)	0.1%	443.9 MB	0 MB/s	0 Mbps	0%	GPU 0 -
IntelliJ IDEA (9)	6.1%	1,100.5 MB	0 MB/s	0.1 Mbps	0%	
Microsoft Word	0%	29.4 MB	0 MB/s	0 Mbps	0%	
MSYS2 terminal	0%	1.1 MB	0 MB/s	0 Mbps	0%	
mysqlsh (2)	0%	1.1 MB	0 MB/s	0 Mbps	0%	
Paint	0%	54.9 MB	0 MB/s	0 Mbps	0%	
IntelliJ IDEA (9)						
	4.2%	1,416.6 MB	0 MB/s	0.1 Mbps	0%	

Ca si program pentru testarea scalabilitatii s-a folosit programul “LeadComplete 4” care simula interactiunea cu site-ul a 25 de utilizatori dupa scenariul descris mai sus. Ca si rezultate dupa rularea timp de 1,5 min a aplicatiei avem:



Unde **verde** = cereri reusite, **rosu** = eroare, **galben** = avertizare, **albastru** = useri activi.

Dupa cum se vede pe grafic cererile fluctueaza deoarece clientii utilizati aleg o perioada random intre 1-10sec pentru efectuarea pasilor din scenariul de utilizare. Iar pe partea de erori si avertizari nu a existat nici una.



In graficul de mai sus este prezentata viteza de transfer a rspunsurilor de la server catre clienti. (albastru = client active, galben = viteza de raspuns, mov = viteza de cerere a clientilor).

## Report generat de "LeadComplete 4":

Date / Time		Scenario Completion Time	
Date	26/05/2018	Average	1 m 16.96 s
Start Time of the Test	12:27:43	Maximum	1 m 28.42 s
End Time of the Test	12:29:13	Minimum	1 m 5.50 s
Initialization Time	2.16 s	Transaction Completion Time	
Errors / Warnings		Average	unknown
Total Warnings	0	Maximum	unknown
Warnings Percentage	0.00 %	Minimum	unknown
Total Errors	0	Page Load Time	
Errors Percentage	0.00 %	Average	391 ms
Load Profile (Steady load)		Maximum	1.86 s
Maximum Number of Virtual Users	25	Minimum	2 ms
Minimum Number of Virtual Users	25	Time to First Byte	
Test Duration	1 m 30.02 s	Average	29 ms
Scenarios	45	Maximum	803 ms
Transactions	0	Minimum	1 ms
Pages	434	Time to Last Byte	
Requests	2603	Average	30 ms
90 Percent Response Time	93 ms	Maximum	803 ms
95 Percent Response Time	101 ms	Minimum	1 ms
98 Percent Response Time	233 ms		
99 Percent Response Time	278 ms		
Standard deviation	59 ms		

Pages	Connections	Status	Name	Status	Status Code	Duration	Start	Finish
Master			Scenario1			67 420.65	12:27:43:401	12:28:50:822
Virtual user group			Page 0001 (8080)			1.95	12:27:50:710	12:27:50:712
User #00001			Request 0001 (8080)		302	0.43	12:27:50:711	12:27:50:711
Iteration #0001			Page 0002 (GestIO)			1 030.15	12:27:57:661	12:27:58:691
Iteration #0002			Request 0002 (8443)		200	47.69	12:27:57:681	12:27:57:729
User #00002			Request 0003 (main.css)		200	2.12	12:27:57:831	12:27:57:833
Iteration #0001			Request 0004 (logo.svg)		200	2.65	12:27:57:891	12:27:57:893
Iteration #0002			Request 0005 (1.svg)		200	4.06	12:27:57:901	12:27:57:905
User #00003			Request 0006 (menu.svg)		200	2.24	12:27:57:911	12:27:57:913
Iteration #0001			Request 0007 (home.svg)		200	2.77	12:27:57:921	12:27:57:923
Iteration #0002			Request 0009 (main.js)		200	3.52	12:27:58:187	12:27:58:190
User #00004			Request 0010 (facebook.svg)		200	3.30	12:27:58:196	12:27:58:199
Iteration #0001			Request 0011 (twitter.svg)		200	4.96	12:27:58:206	12:27:58:211
Iteration #0002			Request 0014 (github.svg)		200	5.06	12:27:58:216	12:27:58:221
User #00005			Request 0008 (bootstrap.min.css)		200	39.67	12:27:58:253	12:27:58:292
Iteration #0001			Request 0013 (1.svg)		200	2.32	12:27:58:288	12:27:58:291
Iteration #0002			Request 0012 (profil.png)		200	2.83	12:27:58:288	12:27:58:291
User #00006			Request 0016 (2.svg)		200	6.39	12:27:58:288	12:27:58:295
User #00007			Request 0012 (bootstrap.min.js)		200	46.87	12:27:58:296	12:27:58:337
User #00008			Request 0017 (jquery-3.3.1.min.js)		200	52.50	12:27:58:424	12:27:58:477
User #00009			Request 0018 (popper.min.js)		200	26.75	12:27:58:464	12:27:58:491
User #00010			Page 0003 (login)			873.01	12:27:59:233	12:28:00:105
User #00011			Request 0019 (login)		200	243.96	12:27:59:234	12:27:59:478
User #00012			Request 0020 (8443)		200	48.82	12:27:59:890	12:27:59:939
User #00013			Request 0022 (main.css)		200	3.46	12:27:59:950	12:27:59:954
User #00014			Request 0024 (menu.svg)		200	2.46	12:27:59:961	12:27:59:963
User #00015			Request 0021 (main.js)		200	1.85	12:28:00:092	12:28:00:094
User #00016			Request 0023 (logo.svg)		200	2.40	12:28:00:103	12:28:00:105
User #00017			Page 0004 (Register)			330.29	12:28:02:274	12:28:02:604
User #00018			Request 0025 (materii)		200	94.11	12:28:02:274	12:28:02:369
User #00019			Request 0026 (main.css)		200	2.42	12:28:02:371	12:28:02:373
User #00020			Request 0028 (logo.svg)		200	2.32	12:28:02:381	12:28:02:383

