

ITL LAB: EXPERIMENT 9

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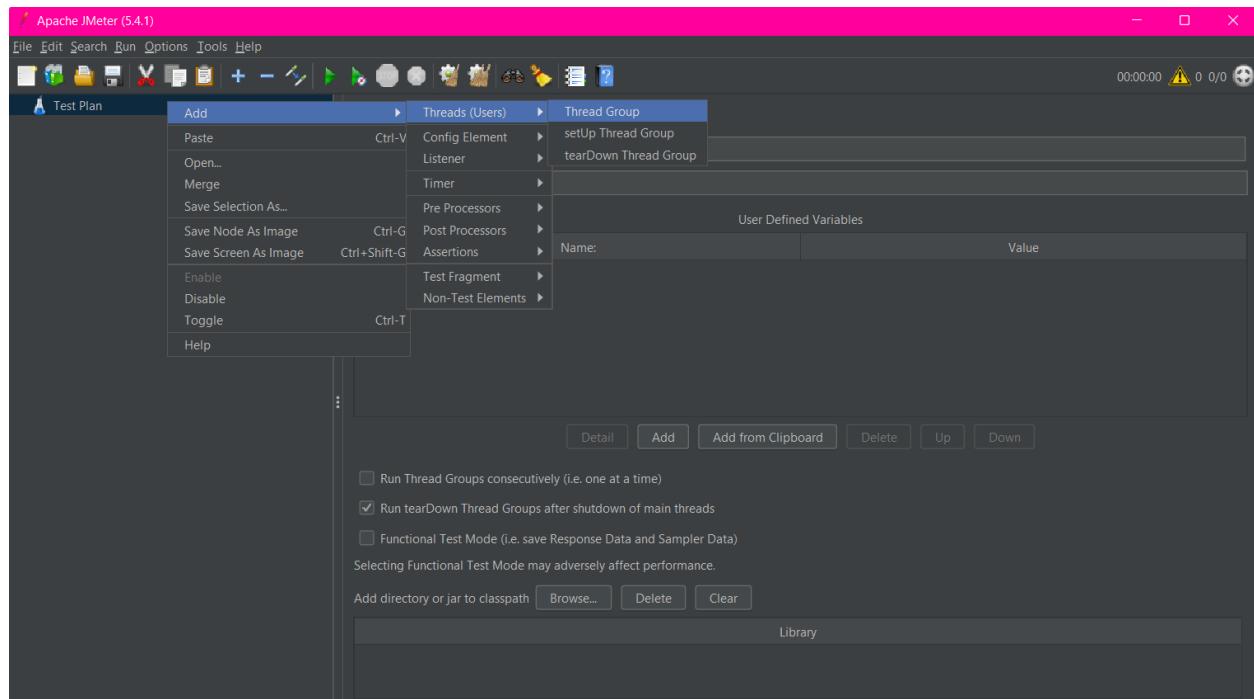
CLASS: TE IT

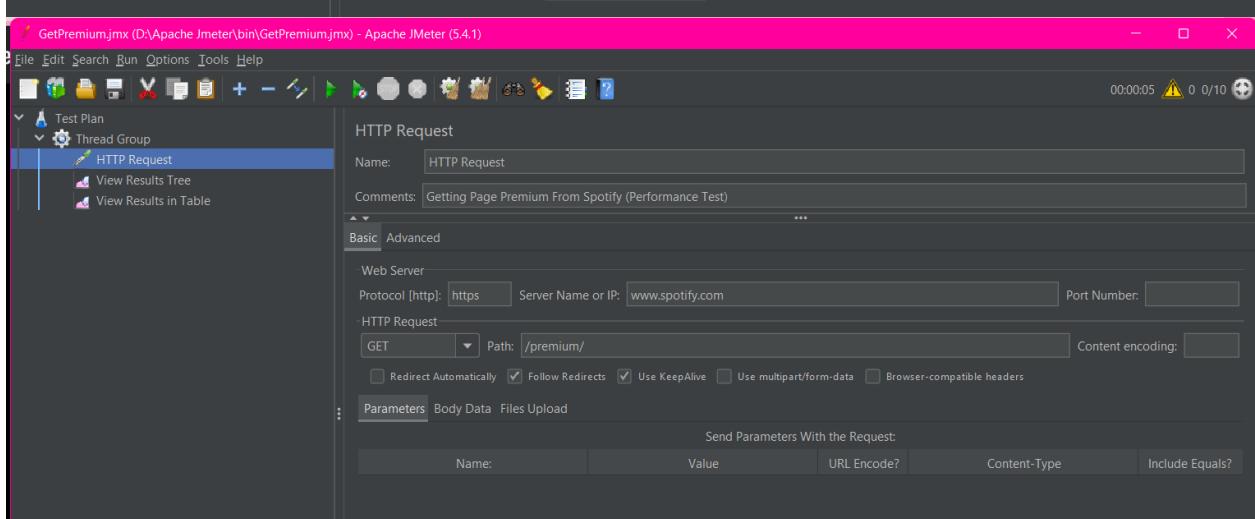
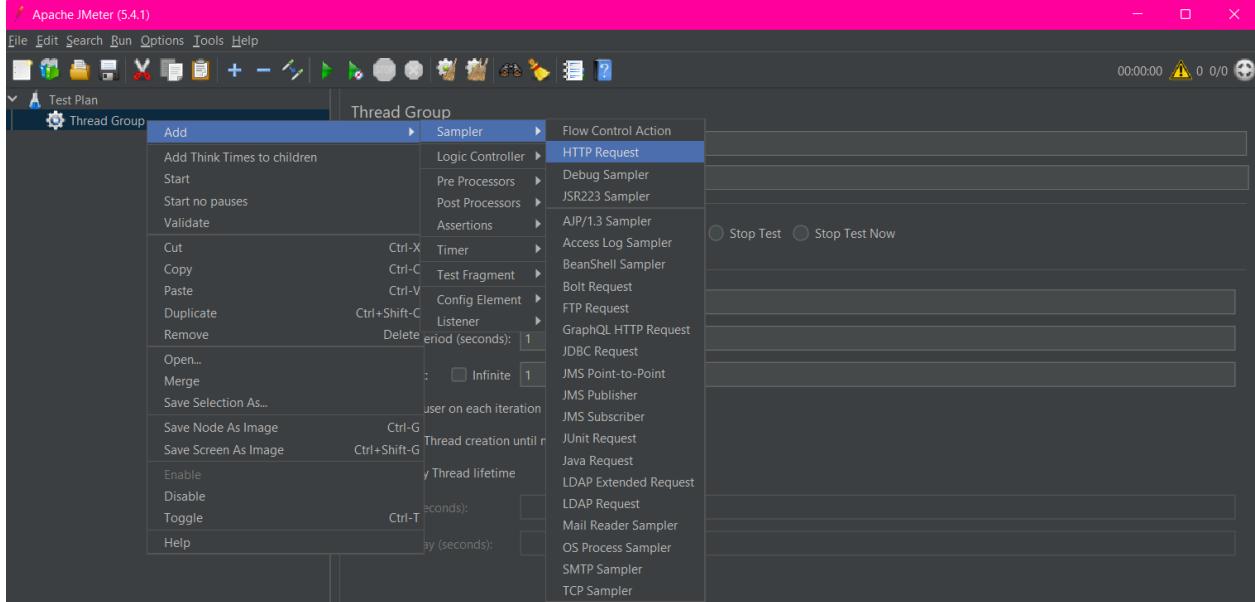
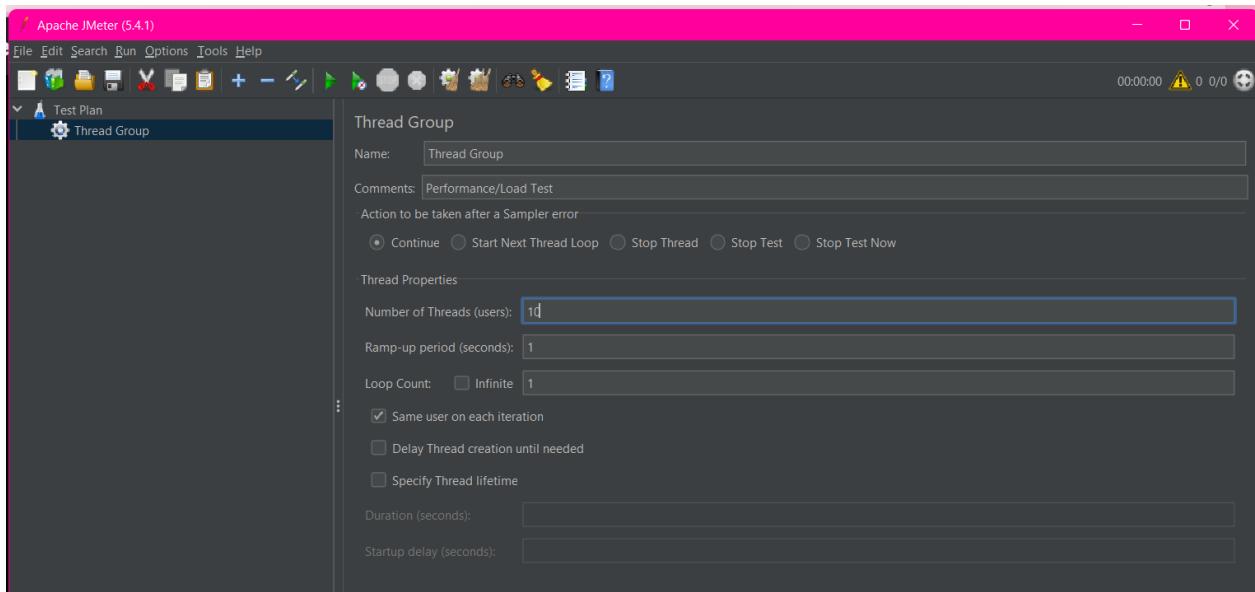
BATCH: D

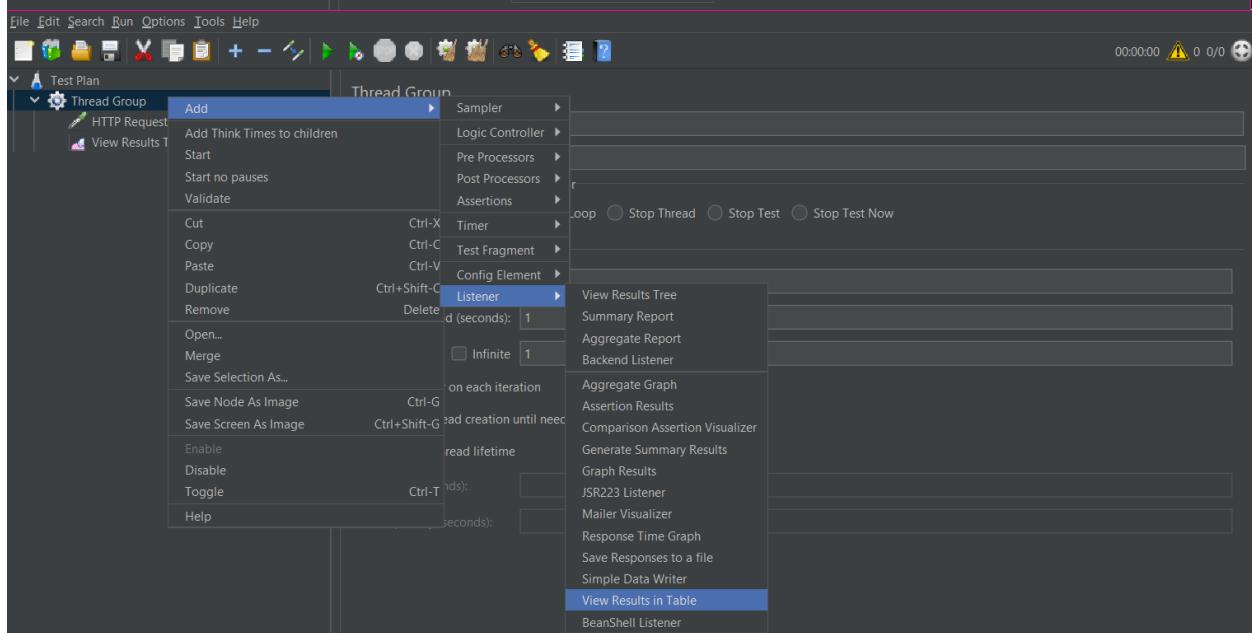
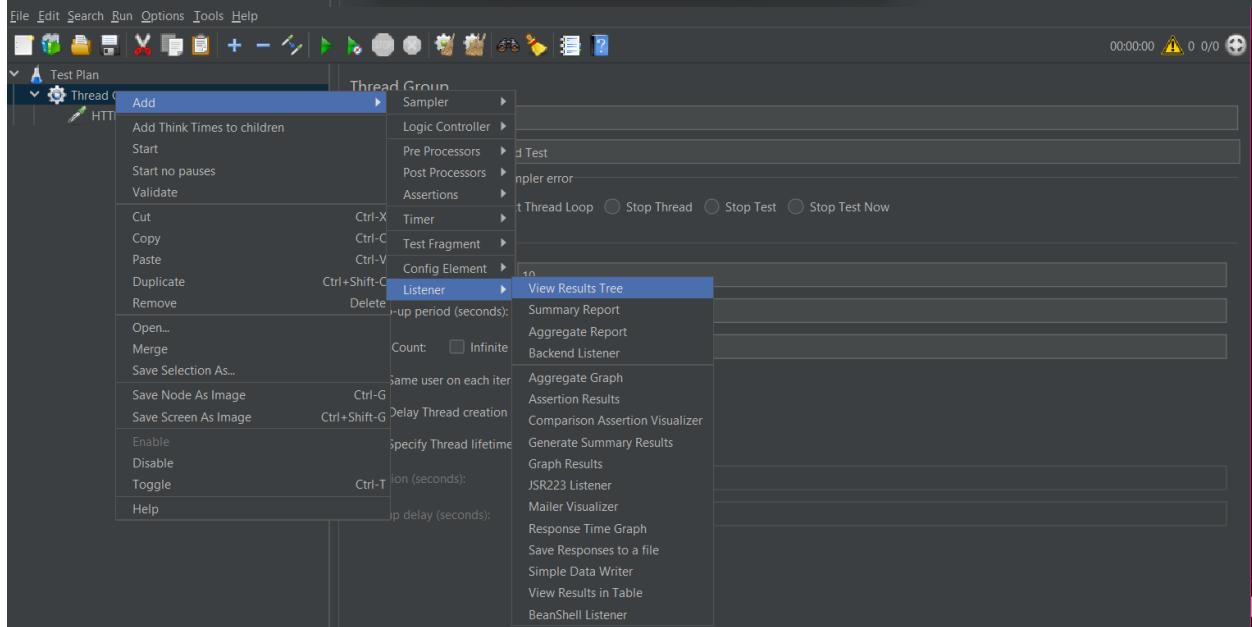
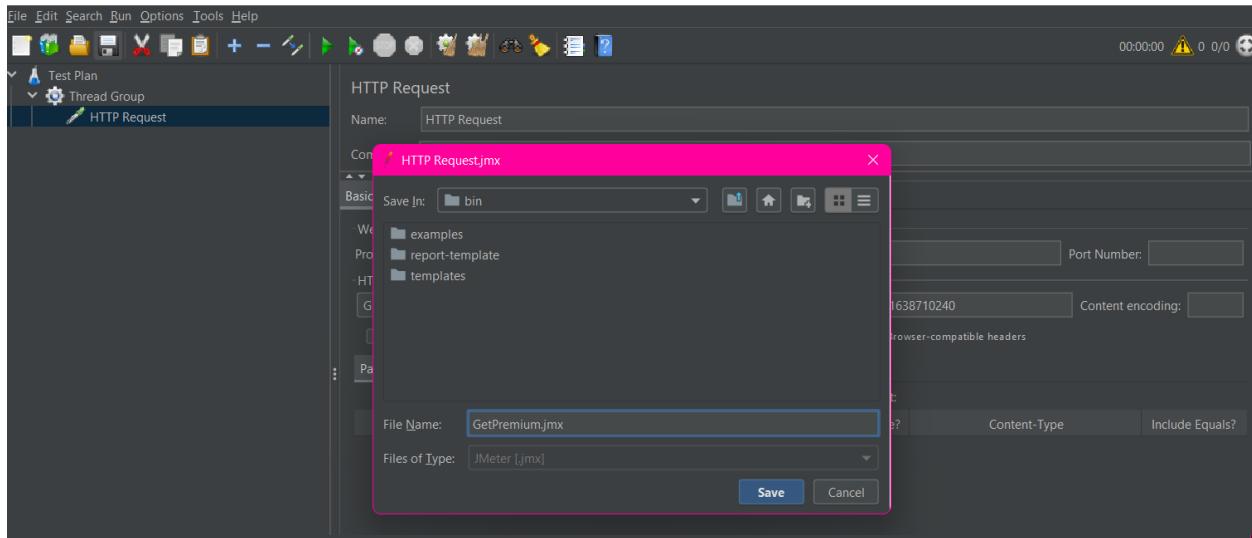
AIM: Perform software testing (integration, performance, automation, functional) on any website of your choice. You can also use any other testing technique not mentioned above.

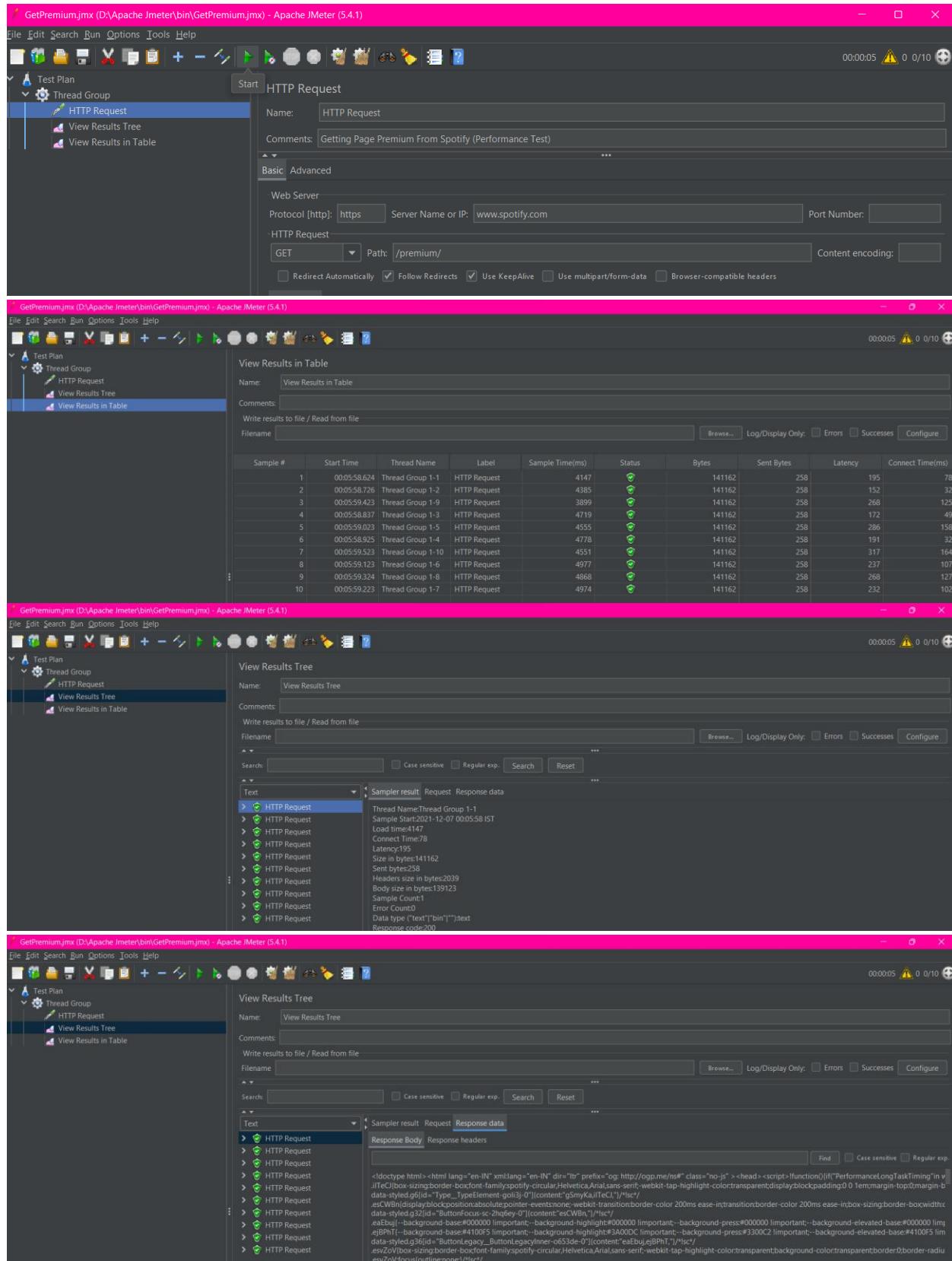
OUTPUT :

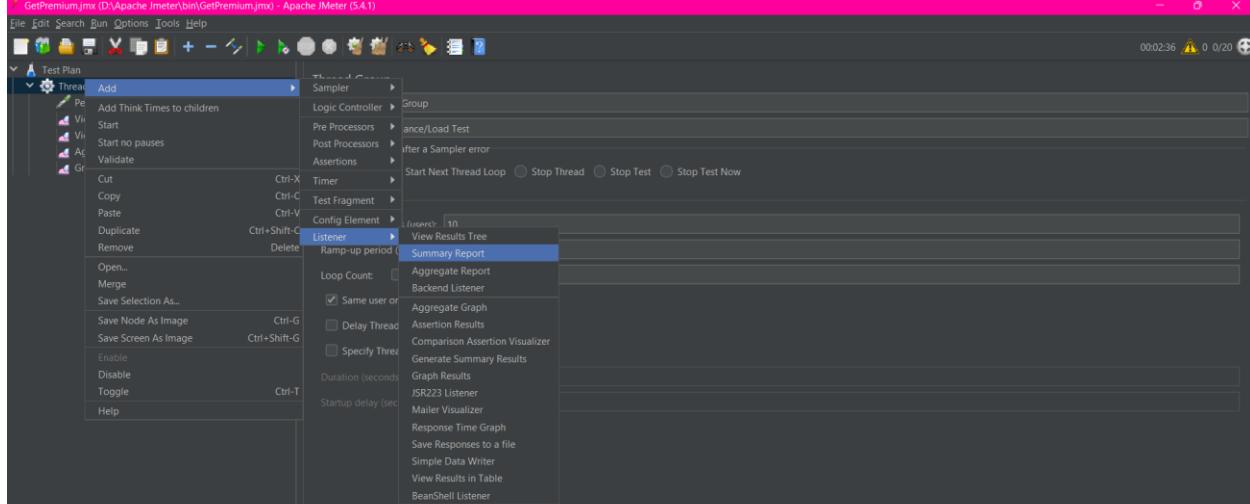
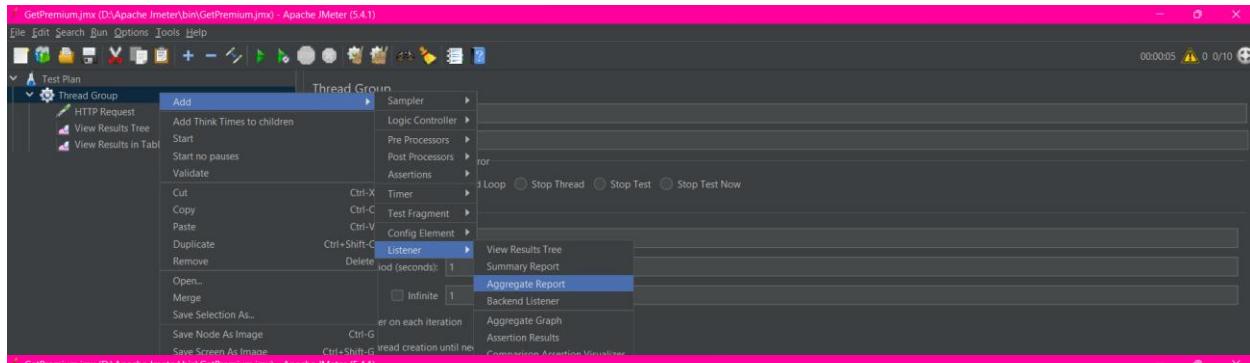
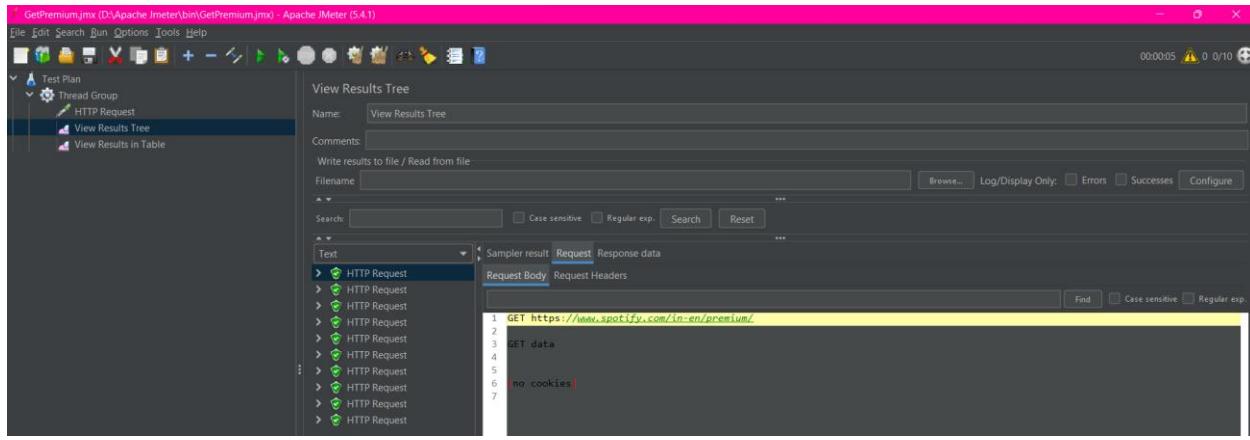
PERFORMANCE TESTING :











GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan Thread Group

HTTP Request View Results Tree View Results in Table Aggregate Report

Add Sampler Logic Controller Pre Processors Post Processors Assertions Stop Thread ○ Stop Test ○ Stop Test Now

Cut Ctrl-X Timer

Copy Ctrl-C Test Fragment

Paste Ctrl-V Config Element

Duplicate Ctrl+Shift-C Listener

Remove Delete (ids): 1

Open... Iteration

Merge

Save Selection As... View Results Tree

Save Node As Image Summary Report

Save Screen As Image Config Element

Enable Iteration until needed

Disable

Toggle

Help Graph Results

JSR223 Listener Mailer Visualizer Response Time Graph Save Responses to a file Simple Data Writer View Results in Table BeanShell Listener

00:00:04 0 0/10

GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan Thread Group

Performance Testing View Results Tree View Results in Table Aggregate Report Graph Results

Name: Thread Group

Comments: Performance/Load Test

Action to be taken after a Sampler error:

(Continue) (Start Next Thread Loop) (Stop Thread) (Stop Test) (Stop Test Now)

Thread Properties

Number of Threads (users): 20

Ramp-up period (seconds): 5

Loop Count: Infinite

Same user on each iteration

Delay Thread creation until needed

Specify Thread lifetime

Duration (seconds):

Startup delay (seconds):

00:01:39 0 20/20

GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan Thread Group

Performance Testing View Results Tree View Results in Table Aggregate Report Graph Results

Shutdown Results

Name: Graph Results

Comments:

Write results to file / Read from file

Filename:

Graphs to Display: Data Average Min Deviation Throughput

Graphs to Display: Data Average Min Deviation Throughput

8964 ms

0 ms

No of Samples: 353

Average: 8049

Min: 10 ms

Max: 8964 ms

Deviation: 1010

Latest Sample: 8468

Interarrival: 10.127 ms/min

00:02:24 0 20/20

GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Aggregate Report

Name: Aggregate Report
Comments:
Write results to file / Read from file
Filename: Browse... Log/Display Only, Errors, Successes, Configure

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughput	Received KB/sec	Sent KB/sec
HTTP Request	394	8006	8227	9144	9525	11335	1089	19484	0.00%	1.8/sec	251.00	0.46
TOTAL	394	8006	8227	9144	9525	11335	1089	19484	0.00%	1.8/sec	251.00	0.46

GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan

Thread Group

Performance Testing

- View Results Tree
- View Results in Table
- Aggregate Report
- Graph Results

Thread

Perf

- Add Think Times to children
- Start
- Start no pauses
- Validate
- Cut
- Copy
- Paste
- Duplicate
- Remove
- Open...
- Merge
- Save Selection As...
- Save Node As Image
- Save Screen As Image
- Enable
- Disable
- Toggle
- Help

Thread Group

Sampler

Logic Controller

Pre Processors

Post Processors

Assertions

Start

Pre/Load Test

Inter a Sampler error

Start Next Thread Loop

Stop Thread

Stop Test

Stop Test Now

users: 10

Loop Count:

Same user on all threads

Delay Thread

Specify Thread

Duration (seconds):

Startup delay (seconds):

Listener

View Results Tree

Summary Report

Aggregate Report

Backend Listener

Aggregate Graph

Assertion Results

Comparison Assertion Visualizer

Generate Summary Results

Graph Results

JSR223 Listener

Mailer Visualizer

Response Time Graph

Save Responses to a file

Simple Data Writer

View Results in Table

BeanShell Listener

GetPremium.jmx (D:\Apache JMeter\bin\GetPremium.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan

Thread Group

Performance Testing

- View Results Tree
- View Results in Table
- Aggregate Report
- Graph Results
- Summary Report
- Simple Data Writer

Simple Data Writer

Name: Simple Data Writer
Comments:
Write results to file / Read from file
Filename: D:\SEM V\ITL\jmeter_report.csv

jmeter_report - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Conditional Formatting Table Styles Cells Editing

Normal Bad Good Neutral Calculation Check Cell

timeStamp elapsed label responseNr dataType success failureMs bytes sentBytes grpThread allThreads URL Latency idleTime Connect

timeStamp	elapsed	label	responseNr	dataType	success	failureMs	bytes	sentBytes	grpThread	allThreads	URL	Latency	idleTime	Connect
1 1.64E+12	3352	Performan	200	OK	Thread GrText	TRUE	141162	258	10	10 https://ww	129	0	22	
2 1.64E+12	129	Performan	302	Found	Thread GrText	TRUE	634	126	10	10 https://ww	129	0	22	
3 1.64E+12	3223	Performan	200	OK	Thread GrText	TRUE	140528	132	10	10 https://ww	273	0	0	
4 1.64E+12	349	Performan	200	OK	Thread GrText	TRUE	141162	258	9	9 https://ww	122	0	15	
5 1.64E+12	122	Performan	302	Found	Thread GrText	TRUE	634	126	9	9 https://ww	122	0	15	
6 1.64E+12	3369	Performan	200	OK	Thread GrText	TRUE	140528	132	9	9 https://ww	213	0	0	
7 1.64E+12	3529	Performan	200	OK	Thread GrText	TRUE	141162	258	8	8 https://ww	126	0	14	
8 1.64E+12	126	Performan	302	Found	Thread GrText	TRUE	634	126	8	8 https://ww	126	0	14	
9 1.64E+12	3403	Performan	200	OK	Thread GrText	TRUE	140528	132	8	8 https://ww	180	0	0	
10 1.64E+12	2597	Performan	200	OK	Thread GrText	TRUE	141162	258	7	7 https://ww	141	0	17	
11 1.64E+12	141	Performan	302	Found	Thread GrText	TRUE	634	126	7	7 https://ww	141	0	17	
12 1.64E+12	3456	Performan	200	OK	Thread GrText	TRUE	140528	132	7	7 https://ww	188	0	0	
13 1.64E+12	3779	Performan	200	OK	Thread GrText	TRUE	141162	258	6	6 https://ww	146	0	19	
14 1.64E+12	146	Performan	302	Found	Thread GrText	TRUE	634	126	6	6 https://ww	146	0	19	
15 1.64E+12	3633	Performan	200	OK	Thread GrText	TRUE	140528	132	6	6 https://ww	183	0	0	
16 1.64E+12	3750	Performan	200	OK	Thread GrText	TRUE	141162	258	5	5 https://ww	195	0	63	
17 1.64E+12	209	Performan	302	Found	Thread GrText	TRUE	634	126	4	4 https://ww	209	0	71	
18 1.64E+12	3650	Performan	200	OK	Thread GrText	TRUE	140528	132	4	4 https://ww	185	0	0	
19 1.64E+12	217	Performan	302	Found	Thread GrText	TRUE	634	126	3	3 https://ww	217	0	61	
20 1.64E+12	3433	Performan	200	OK	Thread GrText	TRUE	140528	132	3	3 https://ww	310	0	0	
21 1.64E+12	3566	Performan	200	OK	Thread GrText	TRUE	141162	258	2	2 https://ww	198	0	67	
22 1.64E+12	198	Performan	302	Found	Thread GrText	TRUE	634	126	2	2 https://ww	198	0	67	
23 1.64E+12	3368	Performan	200	OK	Thread GrText	TRUE	140528	132	2	2 https://ww	204	0	0	
24 1.64E+12	3738	Performan	200	OK	Thread GrText	TRUE	141162	258	1	1 https://ww	218	0	61	
25 1.64E+12	218	Performan	302	Found	Thread GrText	TRUE	634	126	1	1 https://ww	218	0	61	
26 1.64E+12	3520	Performan	200	OK	Thread GrText	TRUE	140528	132	1	1 https://ww	625	0	0	

LOAD TESTING:

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

Load Testing

- Top50 Playlist
- Artist
- Album
- View Results in Table
- Simple Data Writer

Response Duration

- HTTP Request
- Duration Assertion
- View Results in Table

Size Response

- HTTP Request
- Size Assertion
- View Results Tree
- View Results in Table
- Assertion Results

Stress Test

- HTTP Request
- HTTP Request

Thread Group

Name: Load Testing

Comments:

Action to be taken after a Sampler error:

- Continue
- Start Next Thread Loop
- Stop Thread
- Stop Test
- Stop Test Now

Thread Properties

Number of Threads (users): 10

Ramp-up period (seconds): 10

Loop Count: Infinite 10

Same user on each iteration

Delay Thread creation until needed

Specify Thread lifetime

Duration (seconds):

00:00:46 ⚠️ 0 10/10

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

Load Testing

- Top50 Playlist
- Artist
- Album
- View Results in Table
- Simple Data Writer

Response Duration

- HTTP Request
- Duration Assertion
- View Results in Table

Size Response

- HTTP Request
- Size Assertion
- View Results Tree
- View Results in Table
- Assertion Results

Stress Test

- HTTP Request
- HTTP Request

HTTP Request

Name: Top50 Playlist

Comments:

Basic Advanced

Web Server

Protocol [http]: https Server Name or IP: open.spotify.com Port Number:

-HTTP Request

GET Path: /playlist/3779dQZEVxbLZ52XmnySlg Content encoding:

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?

00:01:45 ⚠️ 0 10/10

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

Load Testing

- Top50 Playlist
- Artist
- Album
- View Results in Table
- Simple Data Writer

Response Duration

- HTTP Request
- Duration Assertion
- View Results in Table

Size Response

- HTTP Request
- Size Assertion
- View Results Tree
- View Results in Table
- Assertion Results

Stress Test

- HTTP Request
- HTTP Request

HTTP Request

Name: Artist

Comments:

Basic Advanced

Web Server

Protocol [http]: https Server Name or IP: open.spotify.com Port Number:

-HTTP Request

GET Path: /artist/06HL4z0CvFAxyc27GXpf02 Content encoding:

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

00:01:58 ⚠️ 0 4/10

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

Load Testing

- Top50 Playlist
- Artist
- Album
- View Results in Table
- Simple Data Writer

Response Duration

- HTTP Request
- Duration Assertion
- View Results in Table

Size Response

- HTTP Request
- Size Assertion
- View Results Tree
- View Results in Table
- Assertion Results

Stress Test

- HTTP Request
- HTTP Request

HTTP Request

Name: Album

Comments:

Basic Advanced

Web Server

Protocol [http]: https Server Name or IP: open.spotify.com Port Number:

-HTTP Request

GET Path: /album/6k242qRzov54LcAk4onW9 Content encoding:

00:01:59 ⚠️ 0 0/10

The screenshot shows the Apache JMeter interface with a functional test plan named "Functional Testing.jmx". The left sidebar contains a tree view of test elements, with "View Results in Table" currently selected. The main panel displays the configuration for "View Results in Table" and a detailed table of test results.

View Results in Table Configuration:

- Name: View Results in Table
- Comments:
- Write results to file / Read from file
- Filename: [Input field] | | Log/Display Only: Errors Successes

Test Results Table:

Sample #	Start Time	Thread Name	Label	Sample Time(..)	Status	Bytes	Sent Bytes	Latency	Connect Tim..
1	10:02:07.736	Load Testing...	Top50 Playlist	1124	✓	216210	150	531	31
2	10:02:08.860	Load Testing...	Artist	992	✓	102903	148	456	0
3	10:02:08.735	Load Testing...	Top50 Playlist	1297	✓	216210	150	406	35
4	10:02:09.852	Load Testing...	Album	912	✓	102364	147	280	0
5	10:02:10.032	Load Testing...	Artist	1054	✓	102903	148	328	0
6	10:02:09.735	Load Testing...	Top50 Playlist	1965	✓	216210	150	336	52
7	10:02:11.086	Load Testing...	Album	1247	✓	102364	147	302	0
8	10:02:10.736	Load Testing...	Top50 Playlist	3106	✓	216210	150	394	44
9	10:02:10.764	Load Testing...	Top50 Playlist	3180	✓	216210	150	282	0
10	10:02:11.701	Load Testing...	Artist	2430	✓	102903	148	667	0

Functional testing.jmx (D:\Apache JMeter\bin\functional_testing.jmx) - Apache JMeter (3.4.1)

File Edit Search Run Options Tools Help

00:01:59 0 0/10

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
- View Results in Table**
- Simple Data Writer

Response Duration

- HTTP Request
 - Duration Assertion
 - View Results in Table**

Size Response

- HTTP Request
 - Size Assertion
 - View Results Tree**
 - View Results in Table**
 - Assertion Results

Stress Test

- HTTP Request
- HTTP Request
- Response Assertion
- Assertion Results
- View Results Tree**
- View Results in Table**

Response Testing

- HTTP Request
 - Response Assertion
 - Graph Results**
 - View Results in Table**

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(…)	Status	Bytes	Sent Bytes	Latency	Connect Tim…
281	10:03:59.463	Load Testing...	Album	2380	✓	102364	147	284	0
282	10:04:00.199	Load Testing...	Artist	2134	✓	102903	148	396	0
283	10:04:00.755	Load Testing...	Artist	1808	✓	102903	148	436	0
284	10:03:57.220	Load Testing...	Top50 Playlist	5407	✓	216210	150	332	0
285	10:04:00.629	Load Testing...	Album	2812	✓	102364	147	292	0
286	10:04:02.627	Load Testing...	Artist	1779	✓	102903	148	423	0
287	10:04:01.463	Load Testing...	Artist	3340	✓	102903	148	804	0
288	10:04:02.563	Load Testing...	Album	2412	✓	102364	147	382	0
289	10:03:59.183	Load Testing...	Top50 Playlist	5843	✓	216210	150	294	0
290	10:04:02.333	Load Testing...	Album	2798	✓	102364	147	806	0
291	10:04:00.368	Load Testing...	Top50 Playlist	4915	✓	216210	150	374	0
292	10:04:00.208	Load Testing...	Top50 Playlist	5372	✓	216210	150	403	0
293	10:04:04.407	Load Testing...	Album	1420	✓	102364	147	271	0
294	10:04:04.803	Load Testing...	Album	1295	✓	102364	147	276	0
295	10:04:05.026	Load Testing...	Artist	1128	✓	102903	148	393	0
296	10:04:05.283	Load Testing...	Artist	1188	✓	102903	148	372	0
297	10:04:05.581	Load Testing...	Artist	1198	✓	102903	148	430	0
298	10:04:06.155	Load Testing...	Album	693	✓	102364	147	273	0
299	10:04:06.471	Load Testing...	Album	778	✓	102364	147	400	0
300	10:04:06.779	Load Testing...	Album	644	✓	102364	147	262	0

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
	timeStamp	elapsed	label	responseC	responseB	threadNan	dataType	success	failureMes	bytes	sentBytes	grpThread	allThreads	URL	Latency	IdleTime	Connect						
1	1.64E+12	1124	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	2	2 https://op	531	0	31							
2	1.64E+12	992	Artist	200	OK	Load Test	text	TRUE		102903	148	3	3 https://op	456	0	0							
3	1.64E+12	1297	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	3	3 https://op	406	0	35							
5	1.64E+12	912	Album	200	OK	Load Test	text	TRUE		102364	147	4	4 https://op	280	0	0							
6	1.64E+12	1054	Artist	200	OK	Load Test	text	TRUE		102903	148	4	4 https://op	328	0	0							
7	1.64E+12	1965	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	4	4 https://op	336	0	52							
8	1.64E+12	1247	Album	200	OK	Load Test	text	TRUE		102364	147	5	5 https://op	302	0	0							
9	1.64E+12	3106	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	7	7 https://op	394	0	44							
10	1.64E+12	3180	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	7	7 https://op	282	0	0							
11	1.64E+12	2430	Artist	200	OK	Load Test	text	TRUE		102903	148	7	7 https://op	667	0	0							
12	1.64E+12	3369	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	8	8 https://op	350	0	54							
13	1.64E+12	2153	Album	200	OK	Load Test	text	TRUE		102364	147	9	9 https://op	270	0	0							
14	1.64E+12	2537	Artist	200	OK	Load Test	text	TRUE		102903	148	9	9 https://op	368	0	0							
16	1.64E+12	2548	Artist	200	OK	Load Test	text	TRUE		102903	148	9	9 https://op	371	0	0							
17	1.64E+12	4287	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	9	9 https://op	491	0	0							
18	1.64E+12	4350	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	454	0	79							
18	1.64E+12	3087	Artist	200	OK	Load Test	text	TRUE		102903	148	10	10 https://op	550	0	0							
19	1.64E+12	1913	Artist	200	OK	Load Test	text	TRUE		102903	148	10	10 https://op	481	0	0							
20	1.64E+12	2311	Album	200	OK	Load Test	text	TRUE		102364	147	10	10 https://op	267	0	0							
21	1.64E+12	5453	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	410	0	75							
22	1.64E+12	3178	Album	200	OK	Load Test	text	TRUE		102364	147	10	10 https://op	290	0	0							
23	1.64E+12	3233	Artist	200	OK	Load Test	text	TRUE		102903	148	10	10 https://op	404	0	0							
24	1.64E+12	5706	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	374	0	79							
25	1.64E+12	3013	Album	200	OK	Load Test	text	TRUE		102364	147	10	10 https://op	354	0	0							
26	1.64E+12	3000	Album	200	OK	Load Test	text	TRUE		102364	147	10	10 https://op	329	0	0							
27	1.64E+12	5922	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	568	0	179							
28	1.64E+12	5608	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	560	0	0							
29	1.64E+12	2793	Artist	200	OK	Load Test	text	TRUE		102903	148	10	10 https://op	521	0	0							
30	1.64E+12	2405	Album	200	OK	Load Test	text	TRUE		102364	147	10	10 https://op	309	0	0							
31	1.64E+12	6189	Top50 Play	200	OK	Load Test	text	TRUE		216210	150	10	10 https://op	438	0	86							

FUNCTIONAL LOGIN TESTING WITH JMETER & BLAZEMETER:

The screenshot illustrates the process of performing functional login testing using JMeter and the BlazeMeter extension.

BlazeMeter Extension Page: The top part shows the BlazeMeter extension page in the Chrome Web Store. It includes the extension icon, name, developer information (Offered by: BlazeMeter by Perforce), rating (4.5 stars, 144 reviews), and user count (100,000+ users). Navigation links like Overview, Privacy practices, Reviews, Support, and Related are visible.

Spotify Login Test in JMeter: The bottom part shows the Apache JMeter interface. A thread group named "Test" is expanded, showing a list of recorded URLs related to the Spotify login process. An "HTTP Request" sampler is selected, configured for the URL `https://accounts.spotify.com/login/password`. The "Basic" tab is active, showing the protocol (HTTP), port (80), method (POST), path (/login/password), and parameters. The "Parameters" table lists the following fields:

Name	Value	URL Encode?	Content-Type
remember	true	<input checked="" type="checkbox"/>	text/plain
password	aarti0208	<input checked="" type="checkbox"/>	text/plain
continue	<code>https://open.spotify.com/_noul_?i2l=1&nd=1</code>	<input checked="" type="checkbox"/>	text/plain
recaptchaToken	03AGdBq26xpYNBrx8QMmEuI GTVf6kUOLoEj9NAPStjMS...	<input checked="" type="checkbox"/>	text/plain
username	shreya.shetty@spit.ac.in	<input checked="" type="checkbox"/>	text/plain

LOGINTEST.jmx (D:\Apache Jmeter\bin\LOGINTEST.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Thread Group

- Name: Thread Group
- Comments:
- Action to be taken after a Sampler ends:
 - Continue
 - Start Next Thread

Test

- Add Think Times to children
- Start
- Start no pauses
- Validate
- Cut
- Copy
- Paste
- Duplicate
- Remove
- Open...
- Merge
- Save Selection As...
- Save Node As Image
- Save Screen As Image
- Enable
- Disable
- Toggle
- Help

Sampler

- Logic Controller
- Pre Processors
- Post Processors
- Assertions
- Timer
- Test Fragment
- Config Element
- Listener

View Results Tree

Summary Report

Aggregate Report

Backend Listener

Aggregate Graph

Assertion Results

Comparison Assertion Visualizer

Generate Summary Results

Graph Results

JSR223 Listener

Mailer Visualizer

Response Time Graph

Save Responses to a file

Simple Data Writer

View Results in Table

BeanShell Listener

00:02:03 1 0/20

LOGINTEST.jmx (D:\Apache Jmeter\bin\LOGINTEST.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Test Plan

- Name: LOGINTEST
- Comments: This test plan was created by the BlazeMeter converter v3.0.20. Please contact support@blazemeter.com for further support.

User Defined Variables

Name:	Value:

Detail Add Add from Clipboard Delete Up Down

Run Thread Groups consecutively (i.e. one at a time)

00:02:03 1 0/20

LOGIN.jmx (D:\Apache Jmeter\bin\LOGIN.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

HTTP Request

- Name: https://accounts.spotify.com/login/password
- Comments:

Basic Advanced

Web Server

- Protocol [http]: https
- Server Name or IP: \${BASE_URL_2}
- Port Number:

HTTP Request

- Method: POST
- Path: /login/password
- Content encoding:

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
remember	true	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
password	aarti0208	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
continue	https://www.spotify.com/in-en/account...	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
recaptchaToken	03AGdBg24nf047B5qQmo4jkQUmnEzP...	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
username	shreya.shetty@spit.ac.in	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>

00:00:00 1 0/0

RESPONSE DURATION :

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

00:00:12 ⚠ 0 0/15 ⏹

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration**
 - HTTP Request
 - Duration Assertion
 - View Results in Table

Thread Group

Name: Response Duration

Comments:

Action to be taken after a Sampler error:
 Continue
 Start Next Thread Loop
 Stop Thread
 Stop Test
 Stop Test Now

Thread Properties

Number of Threads (users): 15

Ramp-up period (seconds): 1

Loop Count: Infinite 1

Same user on each iteration

Delay Thread creation until needed

Specify Thread lifetime

Duration (seconds):

Startup delay (seconds):

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

00:00:12 ⚠ 0 0/15 ⏹

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration**
 - HTTP Request**
 - Duration Assertion
 - View Results in Table

HTTP Request

Name: HTTP Request

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: open.spotify.com Port Number:

-HTTP Request

GET Path: /playlist/37i9dQZEVXbLZ52XmnySlg Content encoding:

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

00:02:33 ⚠ 0 0/10 ⏹

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration**
 - HTTP Request

Add

- Insert Parent
- Cut Ctrl-X
- Copy Ctrl-C
- Paste Ctrl-V
- Duplicate Ctrl+Shift-C
- Remove Delete
- Open...
- Merge
- Save Selection As...
- Save as Test Fragment
- Save Node As Image Ctrl-G
- Save Screen As Image Ctrl+Shift-G
- Enable
- Disable
- Toggle Ctrl-T
- Help

HTTP Request

Name: HTTP Request

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: open.spotify.com Port Number:

-HTTP Request

GET Path: /playlist/37i9dQZEVXbLZ52XmnySlg Content encoding:

Use KeepAlive Use multipart/form-data Browser-compatible headers

Assertions

Response Assertion

- JSON Assertion
- Size Assertion
- JSR223 Assertion
- XPath Assertion
- Config Element
- Compare Assertion
- Duration Assertion
- HTML Assertion
- JSON JMESPath Assertion
- MD5Hex Assertion
- SMIME Assertion
- XML Assertion
- XML Schema Assertion
- XPath Assertion
- BeanShell Assertion

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
open.spotify.com	XmnySlg			

Detail Add Add from Clipboard Delete Up Down

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

Duration Assertion

Name: Duration Assertion
Comments:
- Apply to: Main sample and sub-samples Main sample only Sub-samples only
- Duration to Assert
Duration in milliseconds: 10000

View Results in Table

Name: View Results in Table
Comments:
Write results to file / Read from file
Filename: Browse... Log/Display Only: Errors Successes

Sample #	Start Time	Thread Name	Label	Sample Time(...)	Status	Bytes	Sent Bytes	Latency	Connect Time...
1	09:31:29.771	Response Du...	HTTP Request	8267	✓	216400	300	118	5
2	09:31:29.836	Response Du...	HTTP Request	9342	✓	216400	300	121	18
3	09:31:30.038	Response Du...	HTTP Request	9206	✓	216400	300	119	12
4	09:31:29.904	Response Du...	HTTP Request	9410	✓	216400	300	106	5
5	09:31:29.971	Response Du...	HTTP Request	9479	✓	216400	300	128	19
6	09:31:30.105	Response Du...	HTTP Request	9671	✓	216400	300	122	11
7	09:31:30.708	Response Du...	HTTP Request	9087	✓	216400	300	216	58
8	09:31:30.440	Response Du...	HTTP Request	9442	✓	216400	300	228	101
9	09:31:30.172	Response Du...	HTTP Request	9923	✓	216400	300	123	10
10	09:31:30.372	Response Du...	HTTP Request	9851	✓	216400	300	193	10
11	09:31:30.640	Response Du...	HTTP Request	9619	✓	216400	300	179	31
12	09:31:30.573	Response Du...	HTTP Request	10223	✗	216400	300	190	28
13	09:31:30.306	Response Du...	HTTP Request	10833	✗	216400	300	133	13
14	09:31:30.239	Response Du...	HTTP Request	11389	✗	216400	300	134	24
15	09:31:30.508	Response Du...	HTTP Request	11506	✗	216400	300	190	69

SIZE RESPONSE :

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

HTTP Request

Name: HTTP Request
Comments:
Basic Advanced
Web Server
Protocol [http]: Server Name or IP: open.spotify.com Port Number:
HTTP Request
GET Path: /playlist/37/90QZEVxbLZ52XmnySjg Content encoding:
 Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers
Parameters Body Data Files Upload
Send Parameters With the Request:

Name:	Value:	URL Encode?	Content-Type:	Include Equals?
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Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results

Size Assertion

Name: Size Assertion

Comments:

Apply to:

Main sample and sub-samples Main sample only Sub-samples only JMeter Variable Name to use

Response Size Field to Test

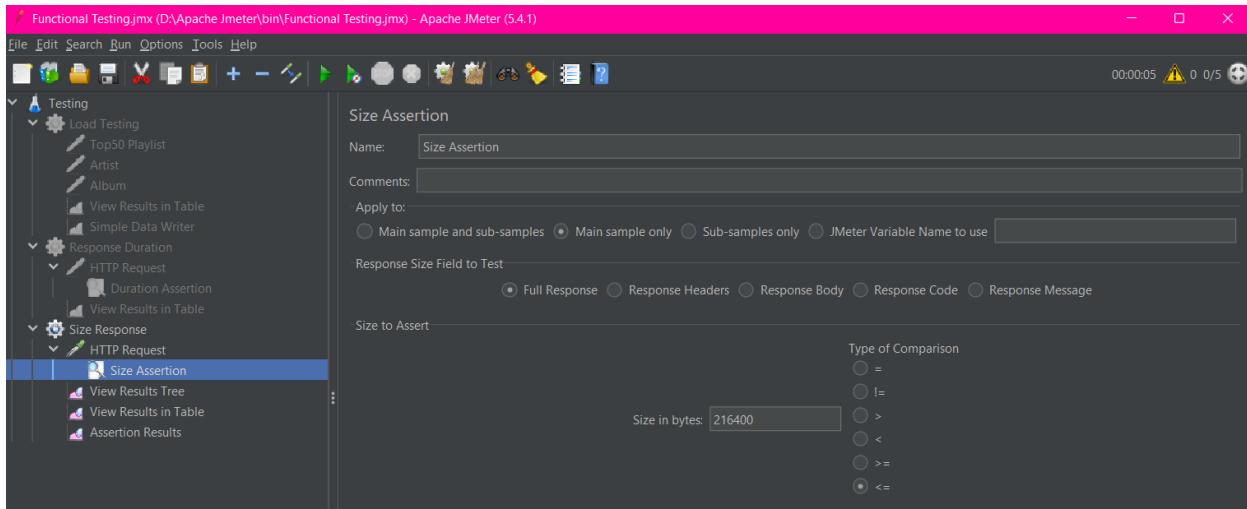
Full Response Response Headers Response Body Response Code Response Message

Size to Assert

Type of Comparison

= != > < >= <=

Size in bytes: 216400



Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results

View Results Tree

Name: View Results Tree

Comments: Write results to file / Read from file

Filename: Browse... Log/Display Only: Errors Successes Configure

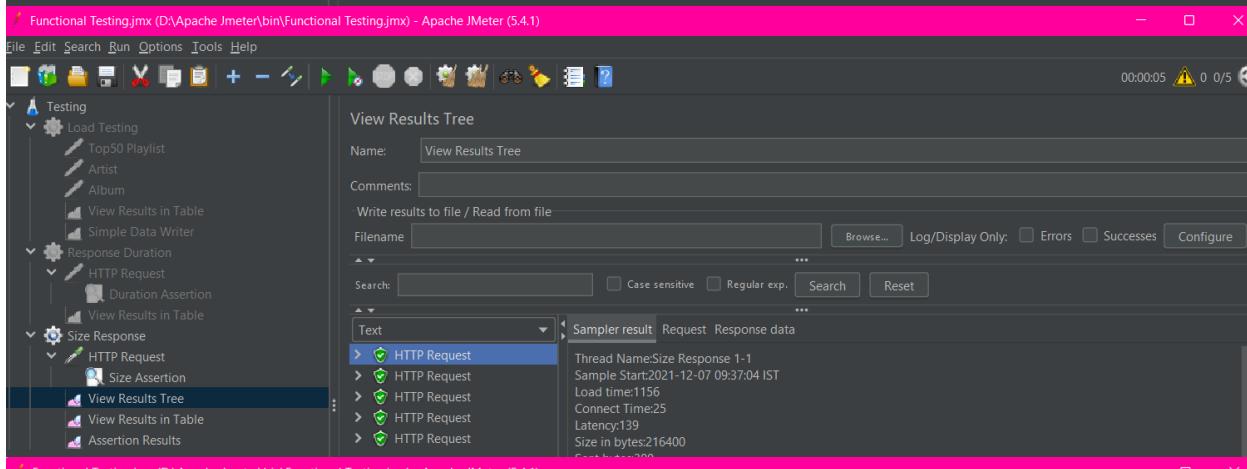
Search: Case sensitive: Regular exp: Search Reset

Text

HTTP Request

Sampler result Request Response data

Thread Name:Size Response 1-1
Sample Start:2021-12-07 09:37:04 IST
Load time:1156
Connect Time:25
Latency:139
Size in bytes:216400
Content type:208



Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results

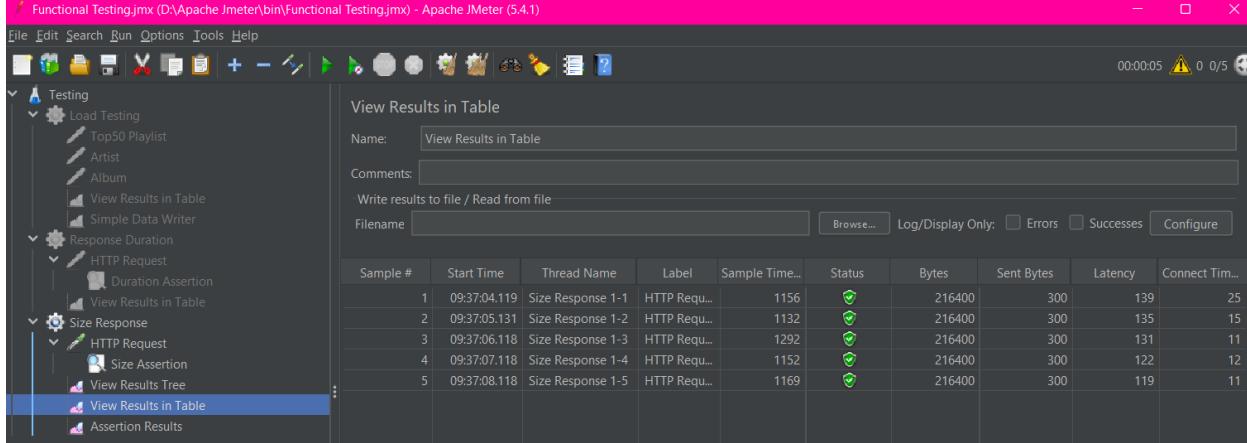
View Results in Table

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...	Status	Bytes	Sent Bytes	Latency	Connect Tim...
1	09:37:04.119	Size Response 1-1	HTTP Requ...	1156	✓	216400	300	139	25
2	09:37:05.131	Size Response 1-2	HTTP Requ...	1132	✓	216400	300	135	15
3	09:37:06.118	Size Response 1-3	HTTP Requ...	1292	✓	216400	300	131	11
4	09:37:07.118	Size Response 1-4	HTTP Requ...	1152	✓	216400	300	122	12
5	09:37:08.118	Size Response 1-5	HTTP Requ...	1169	✓	216400	300	119	11



Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results

Assertion Results

Name: Assertion Results

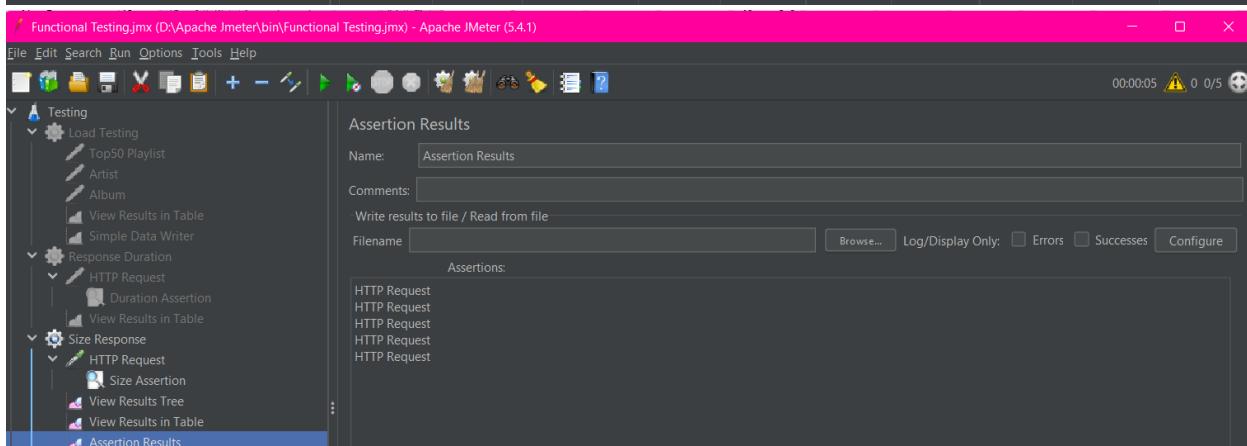
Comments:

Write results to file / Read from file

Filename: Browse... Log/Display Only: Errors Successes Configure

Assertions:

- HTTP Request



STRESS TEST :

Functional Testing.jmx (D:\Apache JMeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

Thread Group

Name: Stress Test

Comments:

Action to be taken after a Sampler error:

Continue Start Next Thread Loop Stop Thread Stop Test Stop Test Now

Thread Properties

Number of Threads (users): 5

Ramp-up period (seconds): 1

Loop Count: Infinite 2

Same user on each iteration

Delay Thread creation until needed

Specify Thread lifetime

Duration (seconds):

Startup delay (seconds):

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results
- Stress Test
 - HTTP Request
 - HTTP Request
 - Response Assertion
 - Assertion Results
 - View Results Tree
 - View Results in Table

Functional Testing.jmx (D:\Apache JMeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

HTTP Request

Name: HTTP Request

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: open.spotify.com Port Number:

HTTP Request

GET Path: /artist/06HL4z0CvFacyc27GXpf0

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results
- Stress Test
 - HTTP Request
 - HTTP Request
 - Response Assertion
 - Assertion Results
 - View Results Tree
 - View Results in Table

Functional Testing.jmx (D:\Apache JMeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

HTTP Request

Name: HTTP Request

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: open.spotify.com Port Number:

HTTP Request

GET Path: /album/6kZ42qRzov54LcAk4onW9

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?

Testing

- Load Testing
 - Top50 Playlist
 - Artist
 - Album
 - View Results in Table
 - Simple Data Writer
- Response Duration
 - HTTP Request
 - Duration Assertion
 - View Results in Table
- Size Response
 - HTTP Request
 - Size Assertion
 - View Results Tree
 - View Results in Table
 - Assertion Results
- Stress Test
 - HTTP Request
 - HTTP Request
 - Response Assertion
 - Assertion Results
 - View Results Tree
 - View Results in Table

The screenshot shows the Apache JMeter interface with the title bar "Functional Testing.jmx (D:\Apache JMeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)". The left sidebar contains a tree view of test elements under "Testing", including "Load Testing", "Response Duration", "Size Response", and "Stress Test". The "Response Assertion" element is selected and highlighted in blue. The main panel displays the "Response Assertion" configuration dialog. The "Name:" field is set to "Response Assertion". The "Comments:" field is empty. The "Apply to:" section includes radio buttons for "Main sample and sub-samples", "Main sample only" (which is selected), "Sub-samples only", and "JMeter Variable Name to use". The "Field to Test" section has radio buttons for "Text Response", "Request Headers", "Request Data", "Response Code" (which is selected), "URL Sampled", "Response Message", "Document (text)", and "Response Headers". The "Pattern Matching Rules" section shows radio buttons for "Contains", "Matches", "Equals", "Substring" (which is selected), "Not", and "Or". The "Patterns to Test" section shows the value "1 200" in the input field. The status bar at the bottom right shows "00:00:07" and "0 0/5".

The screenshot shows the Apache JMeter interface with the 'Functional Testing.jmx' file open. The left sidebar displays a tree view of test elements under the 'Testing' category, including 'Load Testing', 'Response Duration', 'Size Response', and 'Stress Test'. The 'Assertion Results' element under 'Stress Test' is selected and highlighted with a blue background. The main panel is titled 'Assertion Results' and contains the following configuration fields:

- Name: Assertion Results
- Comments: (empty)
- Write results to file / Read from file
- Filename: (empty)
- Log/Display Only:
- Errors:
- Successes:
- Configure:

Below these fields, the 'Assertions:' section lists 15 'HTTP Request' entries, each preceded by a small pink square icon.

The screenshot shows the Apache JMeter interface with the 'Functional Testing.jmx' file open. The left sidebar contains a tree view of test elements under the 'Testing' category, including 'Load Testing', 'Response Duration', 'Size Response', and 'Stress Test'. The 'View Results in Table' listener is selected, which is indicated by a blue border around its icon in the toolbar. The main panel displays the results of a stress test. The results table has the following columns: Sample #, Start Time, Thread Name, Label, Sample Time(...), Status, Bytes, Sent Bytes, Latency, and Connect Time.. The table contains 14 rows of data, each representing a request from the stress test. The status column shows green checkmarks for most requests, indicating they were successful. The 'Configure' button at the bottom right of the table allows for further customization of the results table.

Sample #	Start Time	Thread Name	Label	Sample Time(...)	Status	Bytes	Sent Bytes	Latency	Connect Time..
1	09:43:49.389	Stress Test 1-1	HTTP Request	911	✓	103091	296	107	7
2	09:43:49.588	Stress Test 1-2	HTTP Request	1016	✓	103091	296	120	15
3	09:43:49.789	Stress Test 1-3	HTTP Request	1313	✓	103091	296	139	19
4	09:43:49.988	Stress Test 1-4	HTTP Request	2276	✓	103091	296	228	8
5	09:43:50.300	Stress Test 1-1	HTTP Request	2100	✓	102551	294	112	0
6	09:43:50.188	Stress Test 1-5	HTTP Request	2296	✓	103091	296	135	11
7	09:43:50.604	Stress Test 1-2	HTTP Request	1883	✓	102551	294	124	0
8	09:43:51.103	Stress Test 1-3	HTTP Request	1752	✓	102551	294	134	0
9	09:43:52.265	Stress Test 1-4	HTTP Request	1261	✓	102551	294	120	0
10	09:43:52.401	Stress Test 1-1	HTTP Request	1655	✓	103091	296	120	0
11	09:43:52.485	Stress Test 1-5	HTTP Request	1640	✓	102551	294	116	0
12	09:43:52.488	Stress Test 1-2	HTTP Request	1677	✓	103091	296	113	0
13	09:43:52.855	Stress Test 1-3	HTTP Request	1451	✓	103091	296	130	0
14	09:43:53.526	Stress Test 1-4	HTTP Request	1003	✓	103091	296	122	0

RESPONSE(INFINITE LOOP):

The screenshot shows the Apache JMeter interface with three windows open, illustrating a setup for an infinite response loop test.

Top Window (Thread Group):

- Name:** Response Testing
- Action to be taken after a Sampler error:** Continue (radio button selected)
- Number of Threads (users):** 5
- Ramp-up period (seconds):** 5
- Loop Count:** Infinite
- Thread Properties:**
 - Same user on each iteration
 - Delay Thread creation until needed
 - Specify Thread lifetime
 - Duration (seconds):** [empty field]
 - Startup delay (seconds):** [empty field]

Middle Window (HTTP Request):

- Name:** HTTP Request
- Web Server:**
 - Protocol [http]:** https
 - Server Name or IP:** open.spotify.com
 - Port Number:** [empty field]
- HTTP Request:**
 - Method:** GET
 - Path:** /album/6kZ42qRrzov54LcAk4onW9
 - Content encoding:** [empty field]
 - Parameters:** [empty table]
 - Body Data:** [empty table]
 - Files Upload:** [empty table]

Bottom Window (Response Assertion):

- Name:** Response Assertion
- Apply to:** Main sample only (radio button selected)
- Field to Test:**
 - Text Response
 - Response Code
 - Response Message
 - Response Headers
 - URL Sampled
 - Document (text)
 - Ignore Status
- Pattern Matching Rules:**
 - Contains
 - Matches
 - Equals
 - Substring
 - Not
 - Or
- Patterns to Test:**

Patterns to Test				
1	200	304	404	500
1	200	304	404	500

Functional Testing.jmx (D:\Apache Jmeter\bin\Functional Testing.jmx) - Apache JMeter (5.4.1)

File Edit Search Run Options Tools Help

View Results in Table

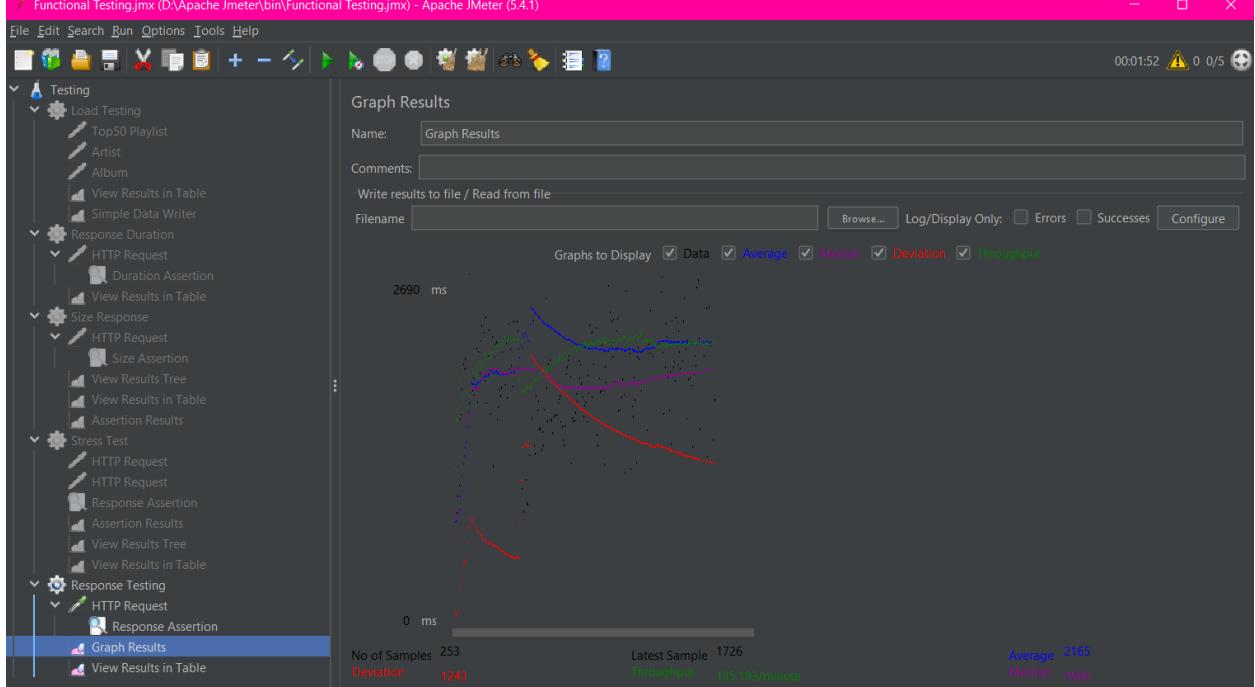
Name: View Results in Table

Comments:

Write results to file / Read from file

Filename: Browse... Log/Display Only: Errors Successes Configure

Sample #	Start Time	Thread Name	Label	Sample Time(...)	Status	Bytes	Sent Bytes	Latency	Connect Tim...
1	09:49:37.211	Response Te...	HTTP Request	896	✓	102364	147	263	41
2	09:49:38.107	Response Te...	HTTP Request	696	✓	102364	147	260	0
3	09:49:38.209	Response Te...	HTTP Request	820	✓	102364	147	323	34
4	09:49:38.803	Response Te...	HTTP Request	866	✓	102364	147	235	0
5	09:49:39.030	Response Te...	HTTP Request	993	✓	102364	147	252	0
6	09:49:39.209	Response Te...	HTTP Request	1070	✓	102364	147	301	38
7	09:49:39.670	Response Te...	HTTP Request	1570	✓	102364	147	356	0
8	09:49:40.023	Response Te...	HTTP Request	1611	✓	102364	147	256	0
9	09:49:40.279	Response Te...	HTTP Request	1811	✓	102364	147	295	0
10	09:49:40.209	Response Te...	HTTP Request	1998	✓	102364	147	474	47
11	09:49:41.240	Response Te...	HTTP Request	1962	✓	102364	147	252	0
12	09:49:41.210	Response Te...	HTTP Request	2043	✓	102364	147	458	90
13	09:49:41.635	Response Te...	HTTP Request	1965	✓	102364	147	325	0
14	09:49:42.208	Response Te...	HTTP Request	3013	✓	102364	147	251	0
15	09:49:42.091	Response Te...	HTTP Request	3197	✓	102364	147	237	0
16	09:49:43.254	Response Te...	HTTP Request	2690	✓	102364	147	581	0
17	09:49:43.203	Response Te...	HTTP Request	3060	✓	102364	147	277	0
18	09:49:43.600	Response Te...	HTTP Request	3019	✓	102364	147	1475	0
19	09:49:45.221	Response Te...	HTTP Request	1798	✓	102364	147	262	0
20	09:49:45.289	Response Te...	HTTP Request	1890	✓	102364	147	390	0



CONCLUSION: In this experiment, I implemented performed software testing using Apache Jmeter.