Assignment No 5

Advanced Database System Lab(5CS372)

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Problem Statement:

Do the performance tuning for Assignment No.3 & 4.

Solution:

Today's consumer is impatient. In fact, online shoppers list slow page load times as the second most frustrating part of online shopping.

So, if our site takes too long to load or if the page layout is unstable, it's likely your visitors will get frustrated and go elsewhere.

Website performance measures the responsiveness of your website and how quickly it loads, offering up insights to help us optimize our site to ensure it's as fast and user-friendly as possible.

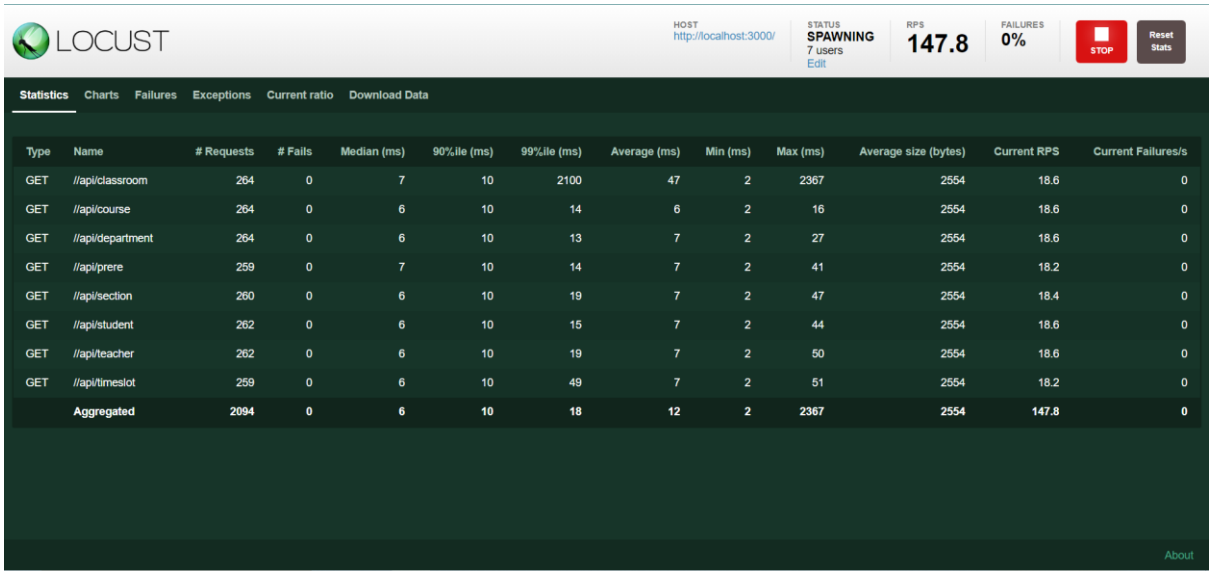
Here we use Locust to measure performance of website. Locust is a tool that creates a set of testing functions that simulate a heavy number of users. This will determine the main breaking point in terms of performance, security, and application load management. For load testing, Locust uses Python.

It is user-friendly web-based UI. Brings a set of dashboards, visualizations, and test reports that summarize the load testing process.

Provides the testing team with a complete picture of the test's current performance.

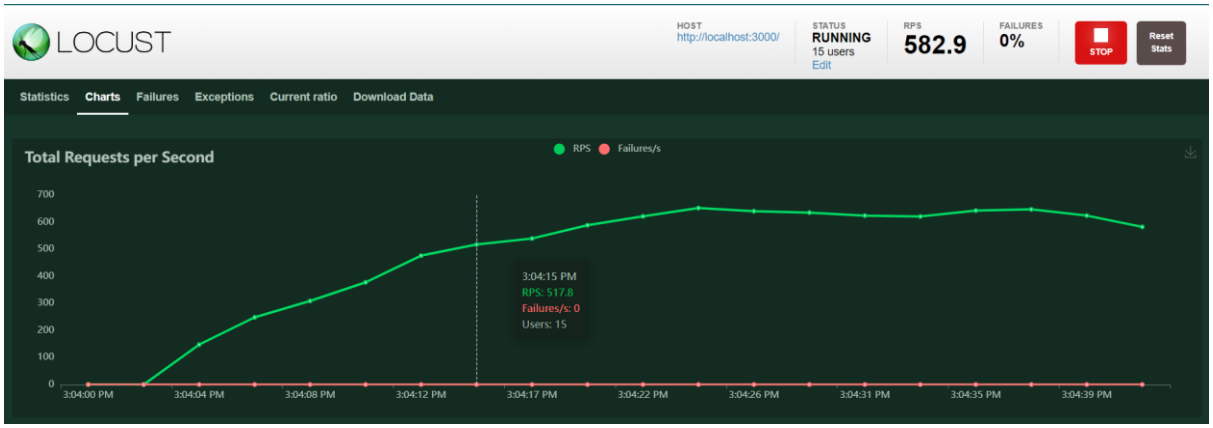
Enables the testing team to run multiple test scripts to find out the main performance and load handling problems.

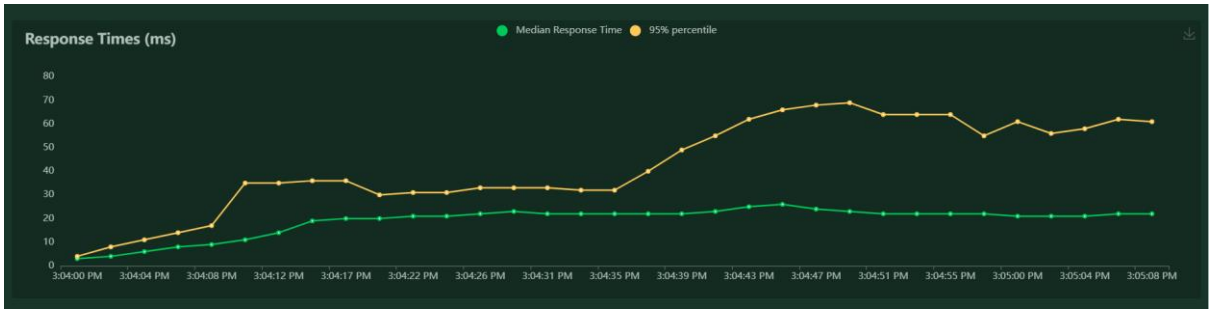
Here is the result of website which no. of user is 15:

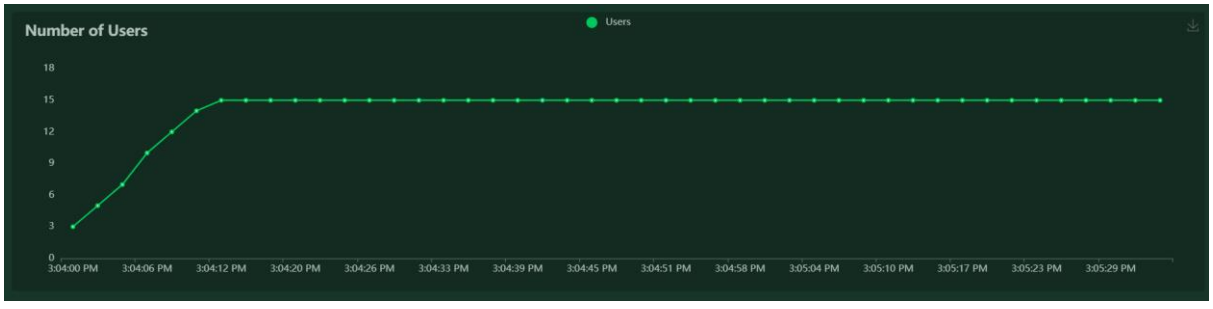


Type	Name	# Requests	# Fails	Median (ms)	90%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	//api/classroom	264	0	7	10	2100	47	2	2367	2554	18.6	0
GET	//api/course	264	0	6	10	14	6	2	16	2554	18.6	0
GET	//api/department	264	0	6	10	13	7	2	27	2554	18.6	0
GET	//api/prere	259	0	7	10	14	7	2	41	2554	18.2	0
GET	//api/section	260	0	6	10	19	7	2	47	2554	18.4	0
GET	//api/student	262	0	6	10	15	7	2	44	2554	18.6	0
GET	//api/teacher	262	0	6	10	19	7	2	50	2554	18.6	0
GET	//api/timeslot	259	0	6	10	49	7	2	51	2554	18.2	0
	Aggregated	**2094**	**0**	**6**	**10**	**18**	**12**	**2**	**2367**	**2554**	**147.8**	**0**

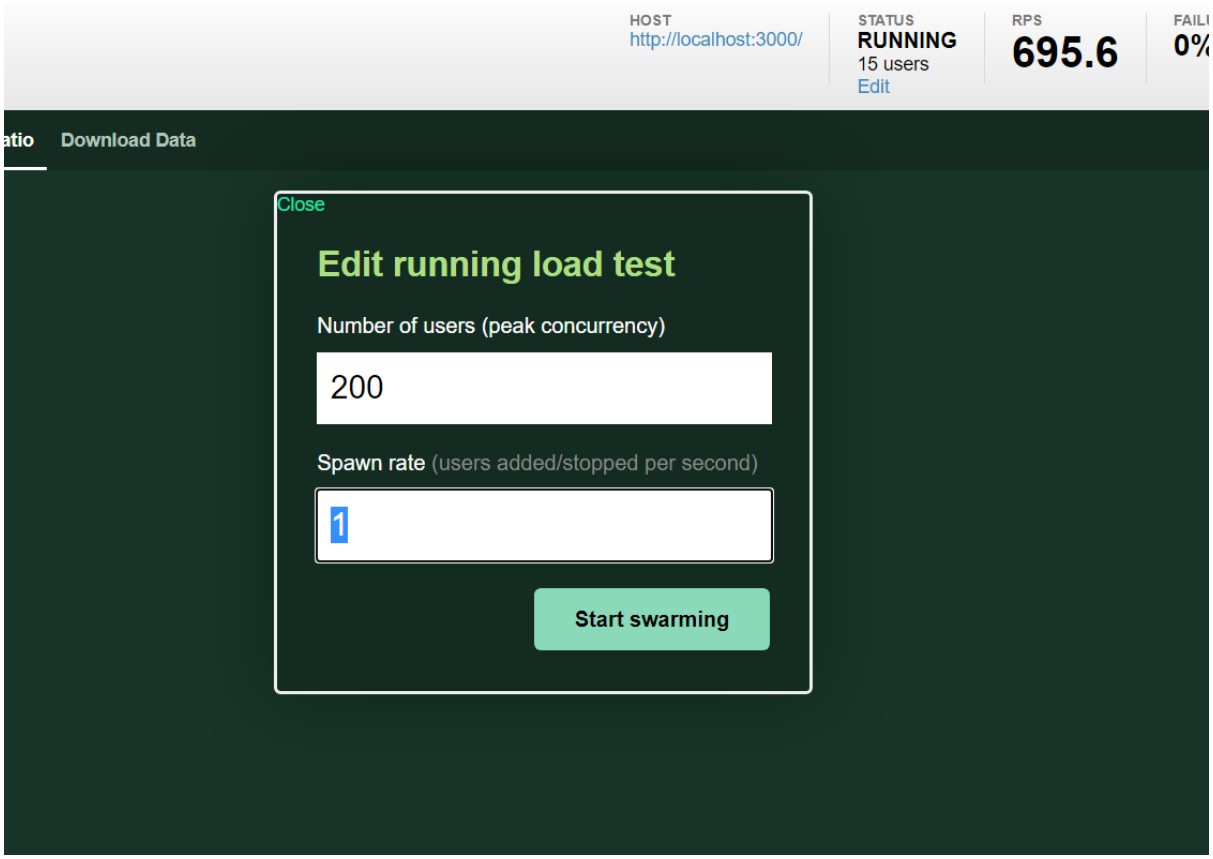
Here is the chart:

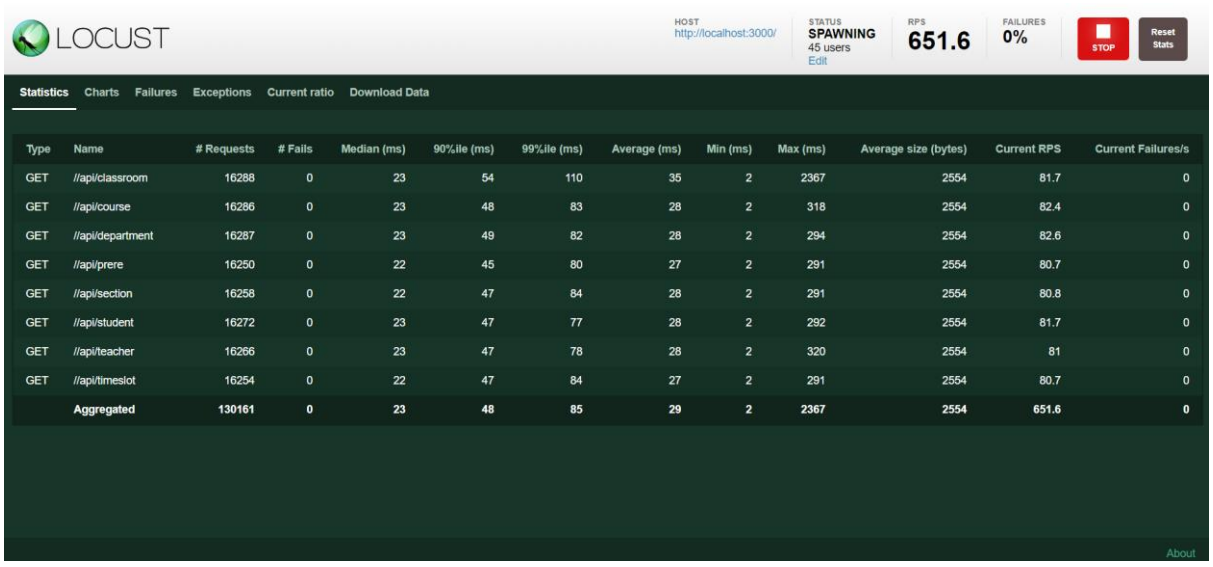




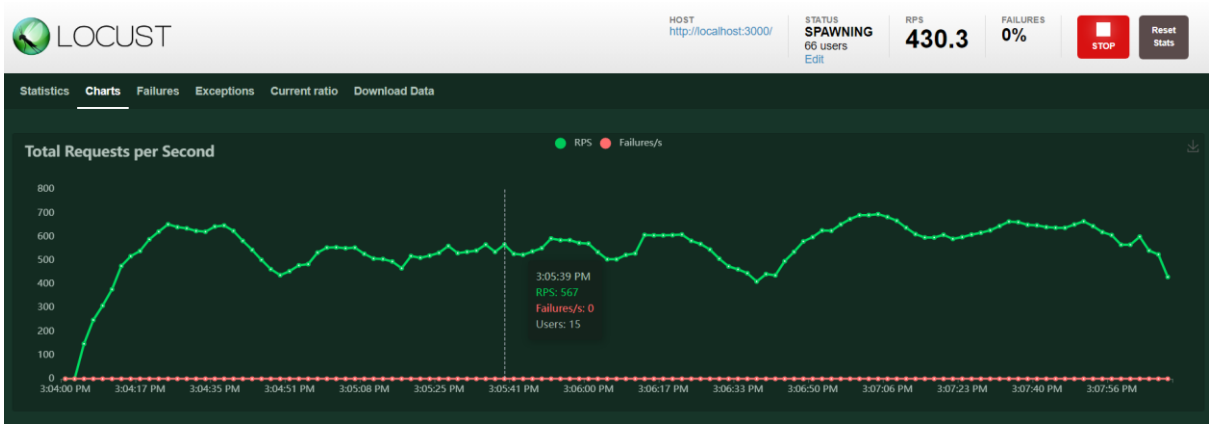


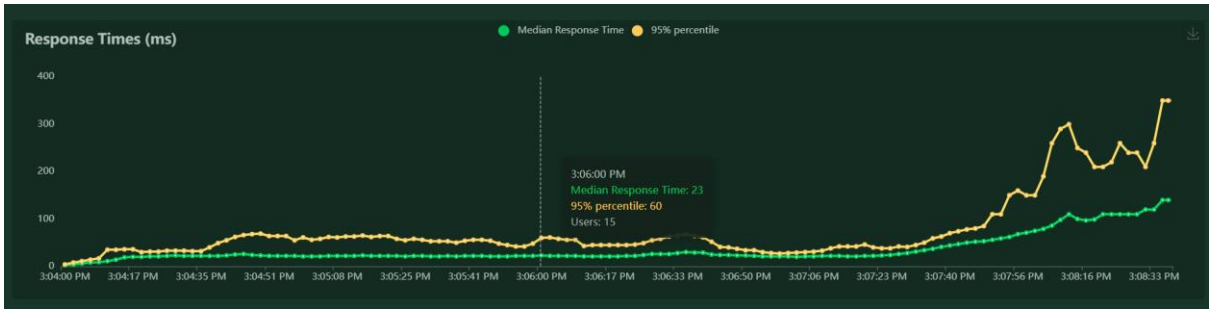
Here no of user is 200:

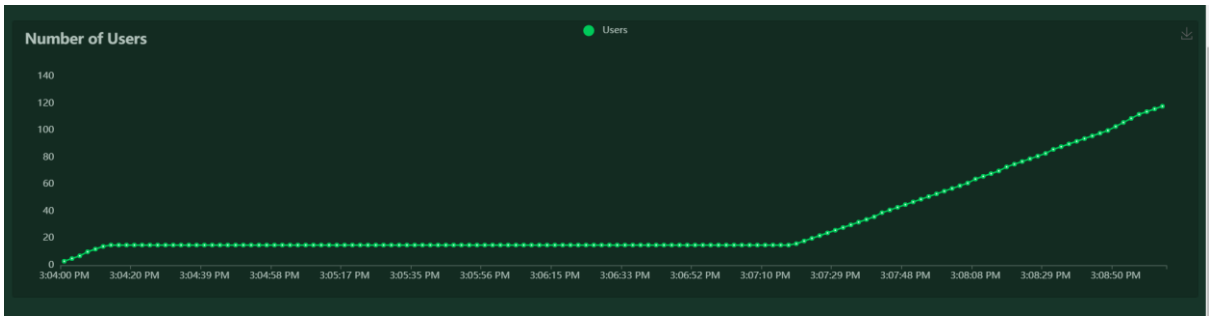




Type	Name	# Requests	# Fails	Median (ms)	90%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	//api/classroom	16288	0	23	54	110	35	2	2367	2554	81.7	0
GET	//api/course	16286	0	23	48	83	28	2	318	2554	82.4	0
GET	//api/department	16287	0	23	49	82	28	2	294	2554	82.6	0
GET	//api/prere	16250	0	22	45	80	27	2	291	2554	80.7	0
GET	//api/section	16258	0	22	47	84	28	2	291	2554	80.8	0
GET	//api/student	16272	0	23	47	77	28	2	292	2554	81.7	0
GET	//api/teacher	16266	0	23	47	78	28	2	320	2554	81	0
GET	//api/timeslot	16254	0	22	47	84	27	2	291	2554	80.7	0
	Aggregated	**130161**	**0**	**23**	**48**	**85**	**29**	**2**	**2367**	**2554**	**651.6**	**0**







Conclusion:

From this we get to know how to check performance of the website using locust website, and also get to know if no of users is increased then what is the performance of website.