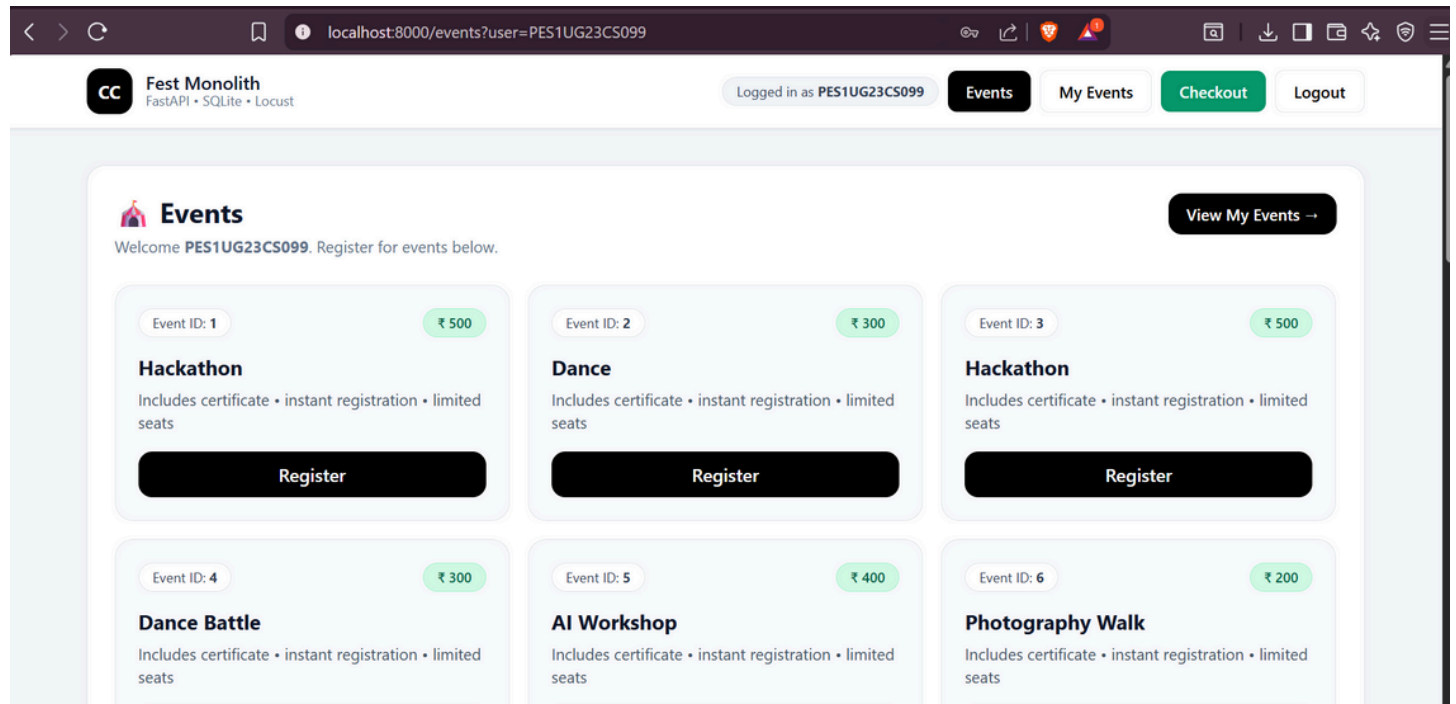


CC LAB-2

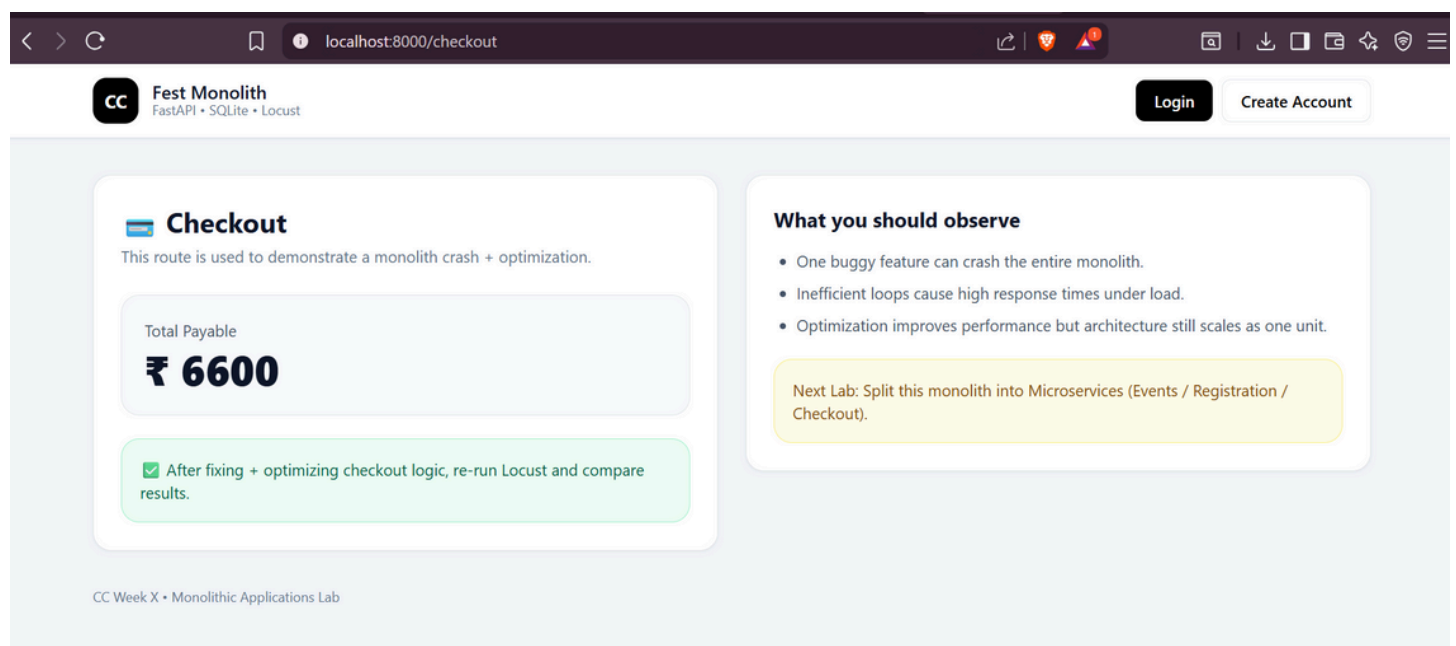
ARCHI PANKAJ

PES1UG23CS099

SS1:



SS2:



SS4:before

C:\Windows\System32\cmd.e

[2026-01-29 18:53:18,956] LAPTOP-058C27QA/INFO/locust.main: Shutting down (exit code 0)

Type	Name	Avg	Min	Max	Med	# reqs	# fai
ls						req/s	failures/s
GET	/checkout	109	6	2040	8	0.67	0.00
Aggregated		109	6	2040	8	0.67	0.00

Response time percentiles (approximated)

Type	Name	50%	66%	75%	80%	90%	95%	98%	99%	99.9%	99.99%	100%
# reqs												
GET	/checkout	8										
9		9	9	11	2000	2000	2000	2000	2000	2000	2000	2000
20												
Aggregated		8										
9		9	9	11	2000	2000	2000	2000	2000	2000	2000	2000
20												

(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>

localhost:8089

LOCUST

STATISTICS

95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures
2000	2000	109.7	7	2040	2797	0.7	0
2000	2000	109.7	7	2040	2797	0.7	0

ABOUT

localhost:8089

LOCUST

Host

http://localhost:8000

Status

STOPPED

RPS

0.7

Failures

0%

NEW

RESET

STATISTICS

CHARTS

FAILURES

EXCEPTIONS

CURRENT RATIO

DOWNLOAD DATA

LOGS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/checkout	20	0	8	2000	2000	109.7	7	2040	2797	0.7	0
	Aggregated	20	0	8	2000	2000	109.7	7	2040	2797	0.7	0

SS5:after

C:\Windows\System32\cmd.e

```
def python_check_callback(self, watcher_ptr): # pylint:disab
le=unused-argument

KeyboardInterrupt
2026-01-29T13:33:53Z
[2026-01-29 19:03:53,358] LAPTOP-058C27QA/INFO/locust.main: Shut
ting down (exit code 0)
Type Name # reqs # fails | Avg Min Max M
ed | req/s failures/s
-----|-----|-----|-----|-----|-----|-----|
GET /checkout 19 0(0.00%) | 115 5 2073
6 | 0.65 0.00
-----|-----|-----|-----|-----|-----|
Aggregated 19 0(0.00%) | 115 5 207
3 6 | 0.65 0.00

Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98%
99% 99.9% 99.99% 100% # reqs
-----|-----|-----|-----|-----|-----|-----|
GET /checkout 6 7 7 7 8 2100
2100 2100 2100 2100 19
-----|-----|-----|-----|-----|-----|
Aggregated 6 7 7 7 8 2100
2100 2100 2100 2100 19

(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>
```

localhost:8089

LOCUST

Hosthttp://localhost:8000StatusSTOPPEDRPS0.7Failures0%NEWRESET

STATISTICSCHARTSFAILURESEXCEPTIONSCURRENT RATIODOWNLOAD DATALOGS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/checkout	19	0	6	2100	2100	115.34	6	2073	2797	0.7	0
	Aggregated	19	0	6	2100	2100	115.34	6	2073	2797	0.7	0

localhost:8089

LOCUST

Hosthttp://localhost:8000StatusSTOPPEDRPS0.7Failures0%NEWRESET

STATISTICSCHARTSFAILURESEXCEPTIONSCURRENT RATIODOWNLOAD DATALOGS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/checkout	19	0	6	2100	2100	115.34	6	2073	2797	0.7	0
	Aggregated	19	0	6	2100	2100	115.34	6	2073	2797	0.7	0

SS6:before events

Type Name Avg Min Max Med | req/s # reqs # fai
ls | req/s failures/s
-----|-----|-----|-----|-----|-----|-----|
GET /events?user=locust_user 16 0(0.00
%) | 465 283 2377 350 | 0.55 0.00
-----|-----|-----|-----|-----|-----|
Aggregated 16 0(0.00
%) | 465 283 2377 350 | 0.55 0.00

Response time percentiles (approximated)
Type Name 50% 66
% 75% 80% 90% 95% 98% 99% 99.9% 99.99% 100%
reqs
-----|-----|-----|-----|-----|-----|-----|
GET /events?user=locust_user 350 36
0 370 370 390 2400 2400 2400 2400 2400
16
-----|-----|-----|-----|-----|-----|
Aggregated 350 36
0 370 370 390 2400 2400 2400 2400 2400
16

(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>
(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>

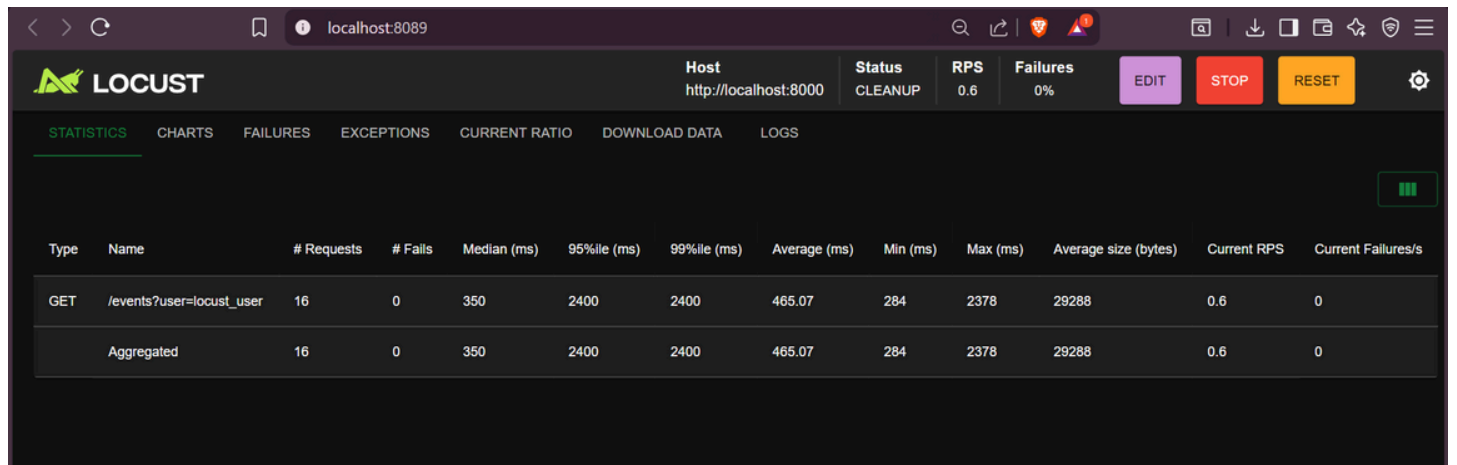
localhost:8089

LOCUST

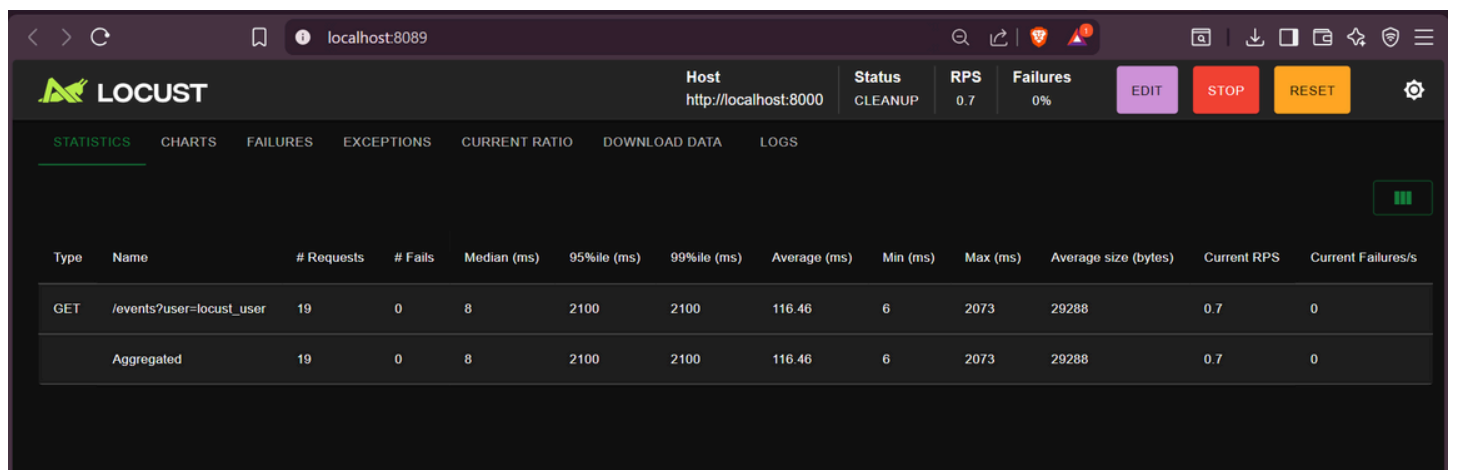
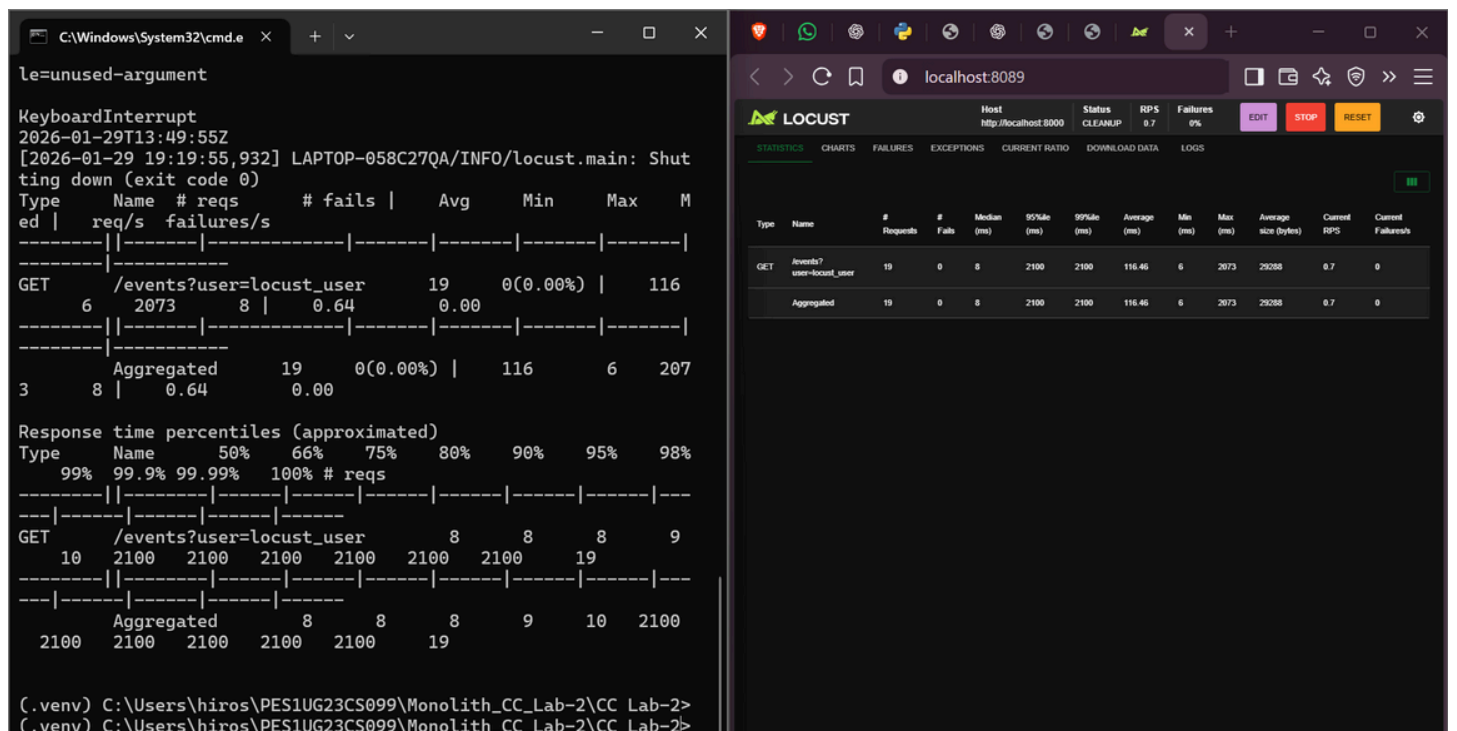
Hosthttp://localhost:8000StatusCLEANUPRPS0.6Failures0%EDITSTOPRESET

STATISTICSCHARTSFAILURESEXCEPTIONSCURRENT RATIODOWNLOAD DATALOGS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/events?user=locust_user	16	0	350	2400	2400	465.07	284	2378	29088	0.6	0
	Aggregated	16	0	350	2400	2400	465.07	284	2378	29088	0.6	0



SS7:after events



SS8: BEFORE MY EVENTS

C:\Windows\System32\cmd.e

le=unused-argument

KeyboardInterrupt
2026-01-29T13:49:55Z
[2026-01-29 19:19:55,932] LAPTOP-058C27QA/INFO/locust.main: Shutting down (exit code 0)
Type Name # reqs # fails | Avg Min Max M
ed | req/s failures/s
-----|-----|-----|-----|-----|-----|
GET /events?user=locust_user 19 0(0.00%) | 116
6 2073 8 | 0.64 0.00
-----|-----|-----|-----|-----|-----|
Aggregated 19 0(0.00%) | 116 6 207
3 8 | 0.64 0.00

Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98%
99% 99.9% 99.99% 100% # reqs
-----|-----|-----|-----|-----|-----|-----|-----|
GET /events?user=locust_user 8 8 8 9
10 2100 2100 2100 2100 2100 2100 19
-----|-----|-----|-----|-----|-----|-----|
Aggregated 8 8 8 9 10 2100
2100 2100 2100 2100 2100 19

(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>
(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>

localhost:8089

LOCUST

Host http://localhost:8000 Status CLEANUP RPS 0.7 Failures 0% EDIT STOP RESET

STATISTICS CHARTS FAILURES EXCEPTIONS CURRENT RATIO DOWNLOAD DATA LOGS

11

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/events?user=locust_user	19	0	8	2100	2100	116.46	6	2073	29088	0.7	0
	Aggregated	19	0	8	2100	2100	116.46	6	2073	29088	0.7	0

localhost:8089

LOCUST

Host http://localhost:8000 Status CLEANUP RPS 0.7 Failures 0% EDIT STOP RESET

STATISTICS CHARTS FAILURES EXCEPTIONS CURRENT RATIO DOWNLOAD DATA LOGS

11

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/events?user=locust_user	19	0	8	2100	2100	116.46	6	2073	29288	0.7	0
	Aggregated	19	0	8	2100	2100	116.46	6	2073	29288	0.7	0

SS9: AFTER MY EVENTS

C:\Windows\System32\cmd.e

le=unused-argument

KeyboardInterrupt
2026-01-29T13:59:28Z
[2026-01-29 19:29:28,315] LAPTOP-058C27QA/INFO/locust.main: Shutting down (exit code 0)
Type Name # reqs # fails | Avg Min Max M
ed | req/s failures/s
-----|-----|-----|-----|-----|-----|
GET /my-events?user=locust_user 17 0(0.00%) | 1
31 6 2122 7 | 0.60 0.00
-----|-----|-----|-----|-----|-----|
Aggregated 17 0(0.00%) | 131 6 212
2 7 | 0.60 0.00

Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98%
99% 99.9% 99.99% 100% # reqs
-----|-----|-----|-----|-----|-----|-----|-----|
GET /my-events?user=locust_user 7 7 8
8 8 2100 2100 2100 2100 2100 2100 17
-----|-----|-----|-----|-----|-----|-----|
Aggregated 7 7 8 8 2100
2100 2100 2100 2100 17

(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>
(.venv) C:\Users\hiros\PES1UG23CS099\Monolith_CC_Lab-2\CC Lab-2>

localhost:8089

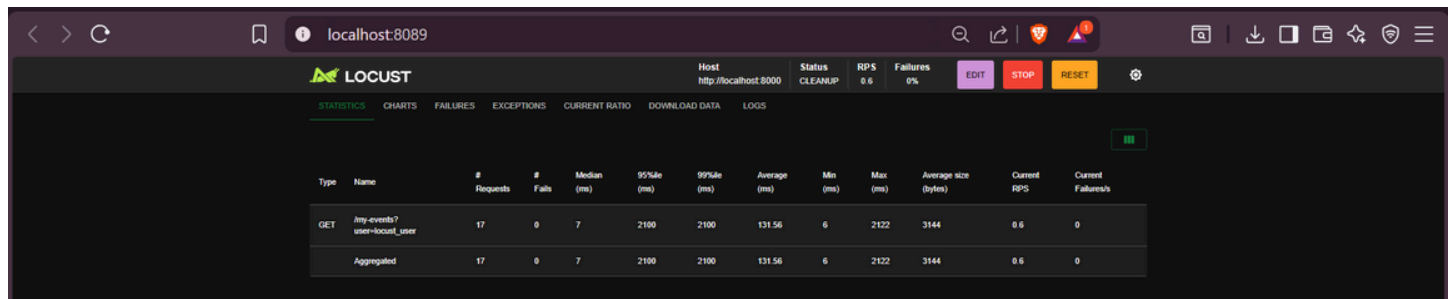
LOCUST

Host http://localhost:8000 Status CLEANUP RPS 0.6 Failures 0% EDIT STOP RESET

STATISTICS CHARTS FAILURES EXCEPTIONS CURRENT RATIO DOWNLOAD DATA LOGS

11

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
GET	/my-events?user=locust_user	17	0	7	2100	2100	131.56	6	2122	3144	0.6	0
	Aggregated	17	0	7	2100	2100	131.56	6	2122	3144	0.6	0



Route-1:

What was the bottleneck?

The /events page had an unnecessary loop that kept running every time the page was loaded. This extra computation didn't serve any real purpose and slowed down the response.

What change did you make?

I removed the unnecessary loop and kept only the required database query and page rendering logic.

Why did the performance improve?

Since the extra computation was removed, the server had less work to do for each request, which reduced the response time and improved overall performance.

Route-2:

What was the bottleneck?

The /my-events route contained a loop that performed meaningless iterations on every request, which increased processing time.

What change did you make?

I removed the redundant loop so that the route only executes the database query and displays the results.

Why did the performance improve?

By eliminating unnecessary processing, the route became lighter and faster, resulting in better performance under load.

Short explanation of optimizations

For the /events route, an unnecessary CPU-intensive loop was present inside the route handler. This loop performed meaningless computations on every request. Removing this loop significantly reduced processing overhead and improved the route's performance under load.

Similarly, the /my-events route contained a dummy loop that wasted CPU cycles for each request. After removing this redundant computation, the route became lighter and responded faster.

Overall, these optimizations improved the performance of individual routes without changing the application's architecture. The application remains monolithic, as all components still run within a single codebase and deployment unit, but internal logic improvements led to better efficiency and responsiveness.