



- Name: SNEHA VERMA
- SRN: PES1UG23AM309
- Lab: 02

```
(.venv) C:\Users\ASUS\PES1UG23AM309\CCLab-2\CCLab-2>python insert_events.py
✓ Events inserted successfully!
```

```
(.venv) C:\Users\ASUS\PES1UG23AM309\CCLab-2\CCLab-2>uvicorn main:app
INFO: Started server process [22812]
INFO: Waiting for application startup.
INFO: Application startup complete.
INFO: Uvicorn running on http://127.0.0.1:8000 (Press CTRL+C to quit)
```


Fest Monolith
FastAPI • SQLite • Locust

Logged in as **PES1UG23AM309**
[Events](#)
[My Events](#)
[Checkout](#)
[Logout](#)


Events
[View My Events →](#)

Welcome **PES1UG23AM309**. Register for events below.

Event ID: 1 ₹ 500 Hackathon Includes certificate • instant registration • limited seats Register	Event ID: 2 ₹ 300 Dance Includes certificate • instant registration • limited seats Register
Event ID: 3 ₹ 500 Hackathon Includes certificate • instant registration • limited seats Register	Event ID: 4 ₹ 300 Dance Battle Includes certificate • instant registration • limited seats Register
Event ID: 5 ₹ 400 AI Workshop	Event ID: 6 ₹ 200 Photography Walk



Monolith Failure

HTTP 500

One bug in one module impacted the **entire application**.

Error Message
division by zero

Why did this happen?

Because this is a **monolithic application**: all modules share the same runtime and deployment. When one feature crashes, it affects the whole system.

What should you do in the lab?

- Take a screenshot (crash demonstration)
- Fix the bug in the indicated module
- Restart the server and verify recovery

[Back to Events](#)[Login](#)

CC Week X • Monolithic Applications Lab

```
*****
File "C:\Users\ASUS\PES1UG23AM309\CCLab-2\CCLab-2\.venv\Lib\site-packages\anyio\_backends\_asyncio.py", line 986, in run
    result = context.run(func, *args)
File "C:\Users\ASUS\PES1UG23AM309\CCLab-2\CCLab-2\main.py", line 113, in checkout
    total = checkout_logic()
File "C:\Users\ASUS\PES1UG23AM309\CCLab-2\CCLab-2\checkout\__init__.py", line 9, in checkout_logic
    1 / 0
ZeroDivisionError: division by zero
```



Checkout

This route is used to demonstrate a monolith crash + optimization.

Total Payable

₹ 9500

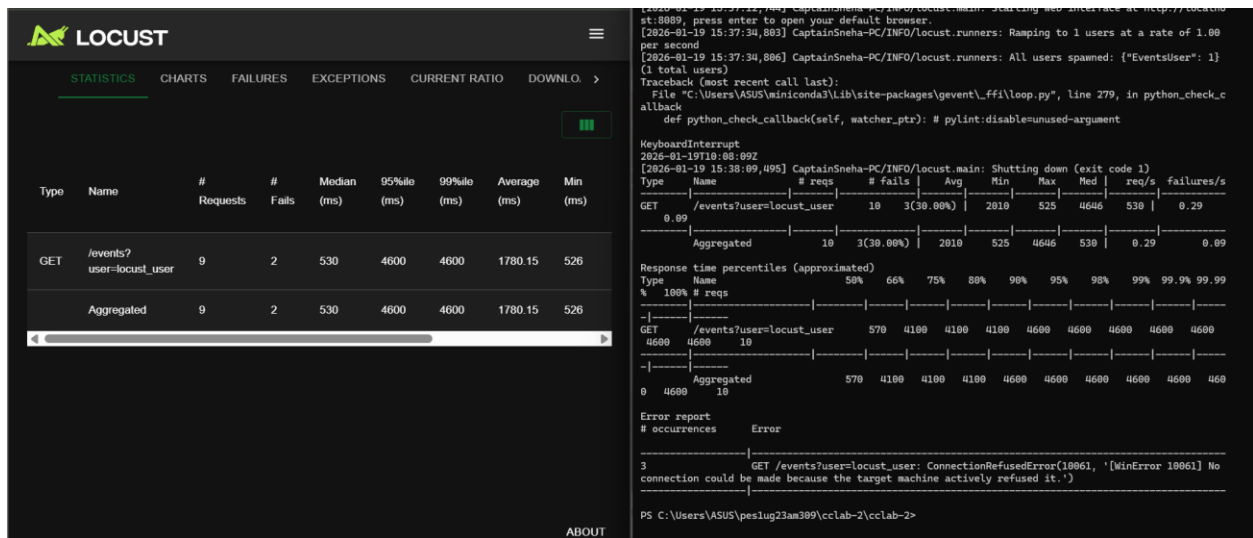
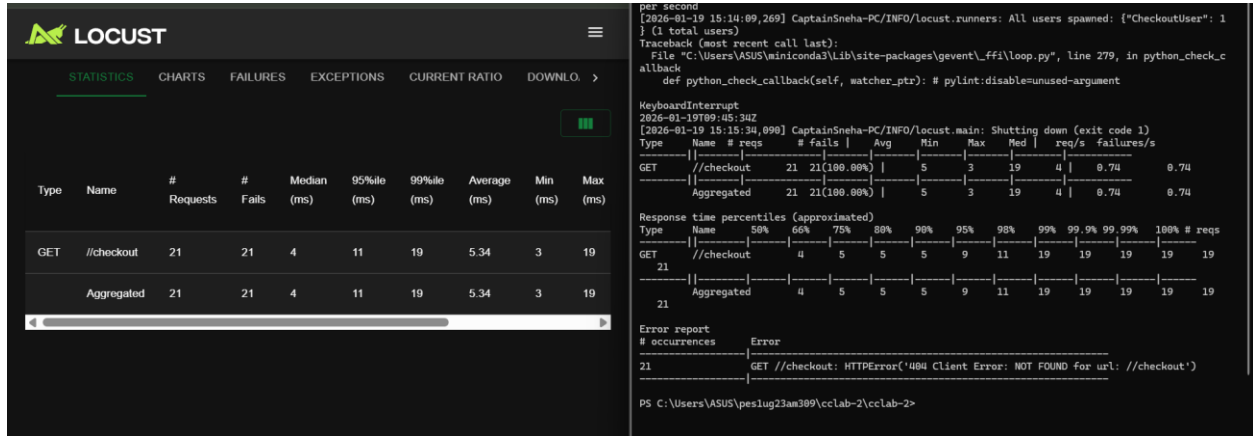
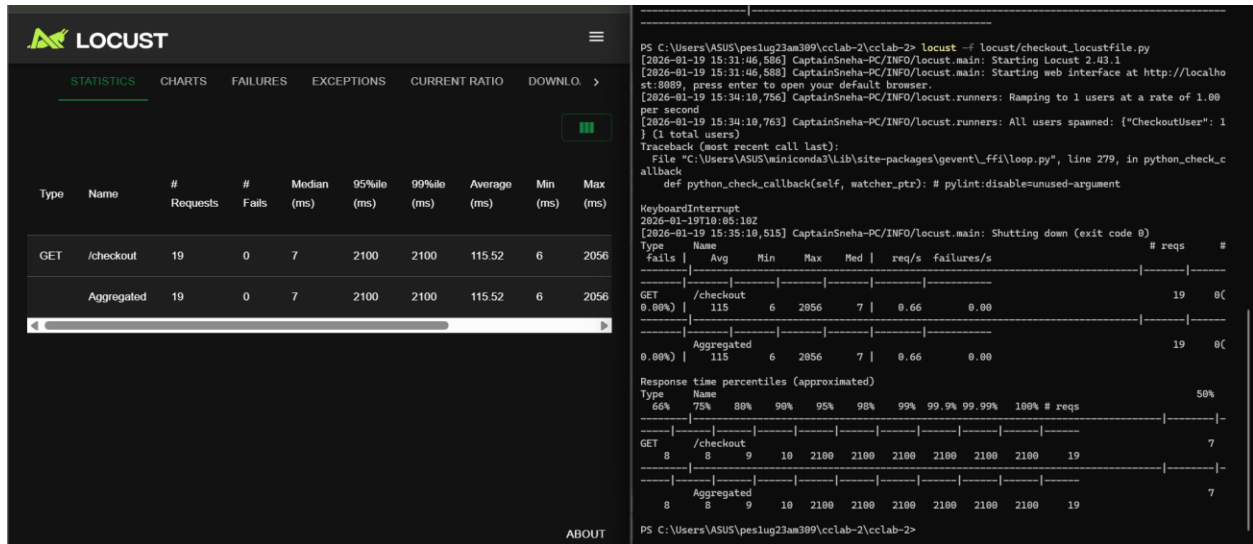
✅ After fixing + optimizing checkout logic, re-run Locust and compare results.

What you should observe

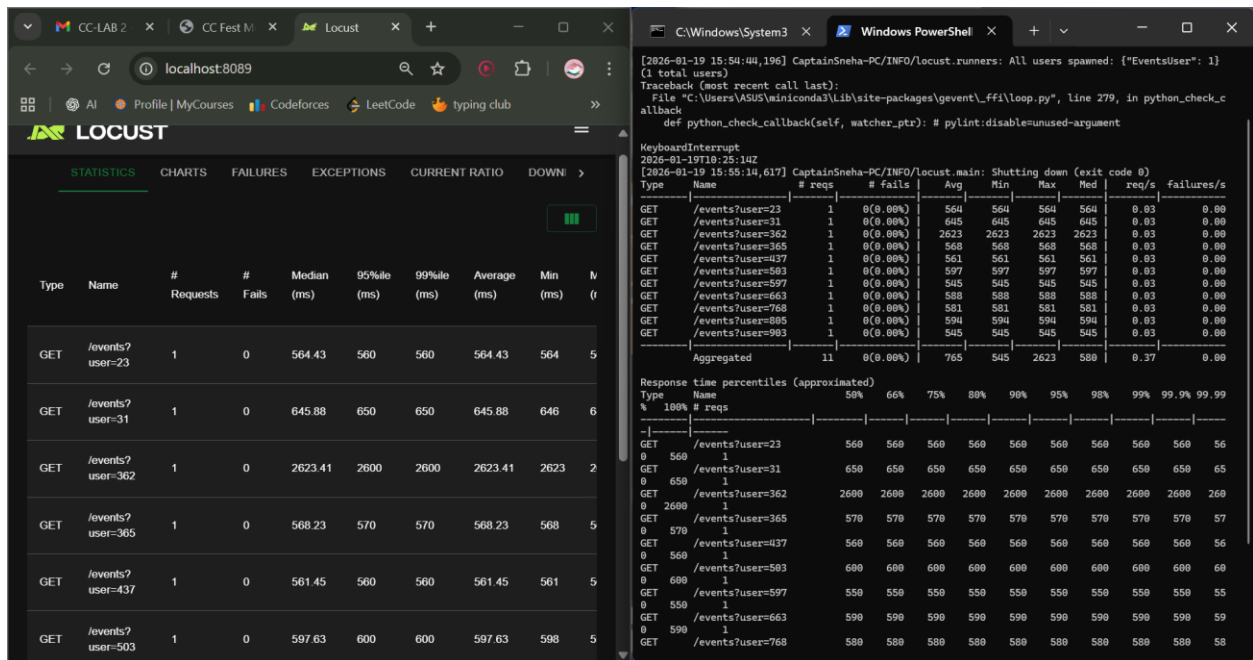
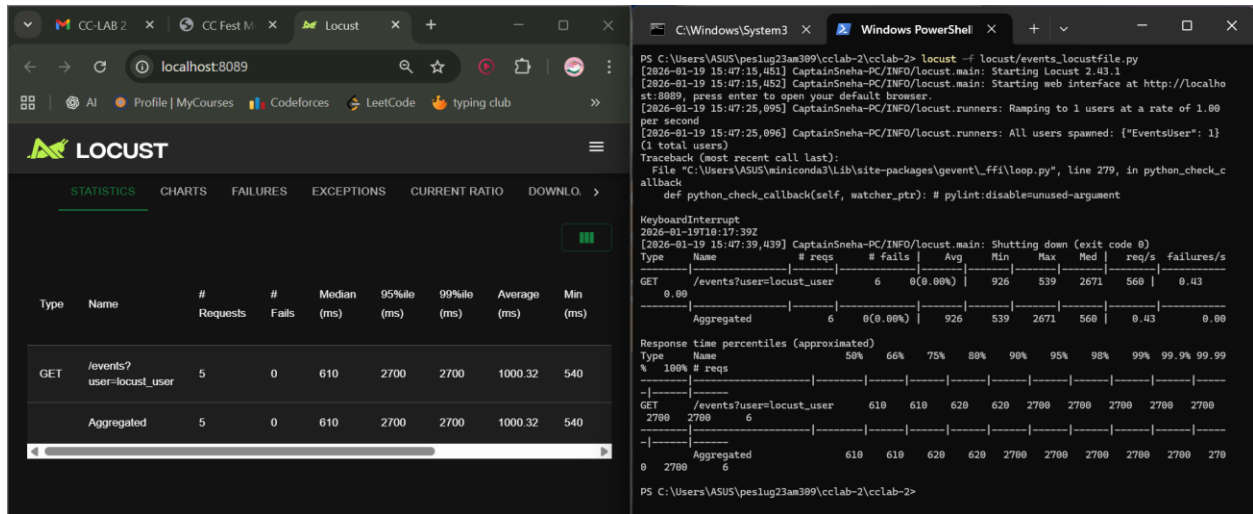
- One buggy feature can crash the entire monolith.
- Inefficient loops cause high response times under load.
- Optimization improves performance but architecture still scales as one unit.

Next Lab: Split this monolith into Microservices (Events / Registration / Checkout).

CC Week X • Monolithic Applications Lab



Events:



MyEvent:

CC-LAB 2CC Fest MLocust

localhost:8089

AIProfile | MyCoursesCodeforcesLeetCodetyping club

LOCUST

STATISTICSCHARTSFAILURESEXCEPTIONSCURRENT RATIODOWNLO

STATISTICS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)
GET	/my-events	16	0	220	2300	2300	343.52	199	2304
Aggregated		16	0	220	2300	2300	343.52	199	2304

C:\Windows\System32Windows PowerShell

PS C:\Users\ASUS\peslug23am309\cclab-2> locust -f locust/myevents_locustfile.py
[2026-01-19 15:58:27,916] CaptainSneha-PC/INFO/Locust.main: Starting Locust 2.43.1
[2026-01-19 15:58:27,918] CaptainSneha-PC/INFO/Locust.main: Starting web interface at http://localhost:8089, press enter to open your default browser.
[2026-01-19 15:58:40,680] CaptainSneha-PC/INFO/Locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2026-01-19 15:58:40,691] CaptainSneha-PC/INFO/Locust.runners: All users spawned: {"MyEventsUser": 1} (1 total users)
WARNING: gevent: Unhandled error with no watcher
Traceback (most recent call last):
File "C:\Users\ASUS\miniconda3\Lib\site-packages\gevent\libuv\loop.py", line 39, in python_queue_callback
def python_queue_callback(self, watcher_ptr, revents):

KeyboardInterrupt
Traceback (most recent call last):
File "C:\Users\ASUS\miniconda3\Lib\site-packages\gevent\libuv\loop.py", line 279, in python_check_callback
def python_check_callback(self, watcher_ptr): # pylint: disable=unused-argument

KeyboardInterrupt
2026-01-19T18:29:09Z
[2026-01-19 15:59:09,436] CaptainSneha-PC/INFO/Locust.main: Shutting down (exit code 0)
Type Name # reqs # fails Avg Min Max Med req/s failures/s
GET /my-events 17 0(0.00%) 335 198 2303 220 0.60 0.00
Aggregated 17 0(0.00%) 335 198 2303 220 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 220 220 220 220 250 2300 2300 2300 2300 230
0 2300 17
Aggregated 220 220 220 220 250 2300 2300 2300 2300 230
0 2300 17

PS C:\Users\ASUS\peslug23am309\cclab-2>

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localhost:8089

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LOCUST

STATISTICSCHARTSFAILURESEXCEPTIONSCURRENT RATIODOWNLO

STATISTICS

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)
GET	/my-events?user=locust_user	6	0	200	2300	2300	554.6	197
Aggregated		6	0	200	2300	2300	554.6	197

C:\Windows\System32Windows PowerShell

PS C:\Users\ASUS\peslug23am309\cclab-2> locust -f locust/myevents_locustfile.py
[2026-01-19 15:56:42,887] CaptainSneha-PC/INFO/Locust.main: Starting Locust 2.43.1
[2026-01-19 15:56:42,888] CaptainSneha-PC/INFO/Locust.main: Starting web interface at http://localhost:8089, press enter to open your default browser.
[2026-01-19 15:56:52,420] CaptainSneha-PC/INFO/Locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2026-01-19 15:56:52,430] CaptainSneha-PC/INFO/Locust.runners: All users spawned: {"MyEventsUser": 1} (1 total users)
Traceback (most recent call last):
File "C:\Users\ASUS\miniconda3\Lib\site-packages\gevent\libuv\loop.py", line 279, in python_check_callback
def python_check_callback(self, watcher_ptr): # pylint: disable=unused-argument

KeyboardInterrupt
2026-01-19T18:27:07Z
[2026-01-19 15:57:07,372] CaptainSneha-PC/INFO/Locust.main: Shutting down (exit code 0)
Type Name # reqs # fails Avg Min Max Med req/s failures/s
GET /my-events?user=locust_user 8 0(0.00%) 469 196 2292 210 0.57
0.00
Aggregated 8 0(0.00%) 469 196 2292 210 0.57 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 210 220 220 220 2300 2300 2300 2300 230
0 2300 2300 8
0 2300 210 220 220 220 2300 2300 2300 2300 230
0 2300 8

PS C:\Users\ASUS\peslug23am309\cclab-2>