

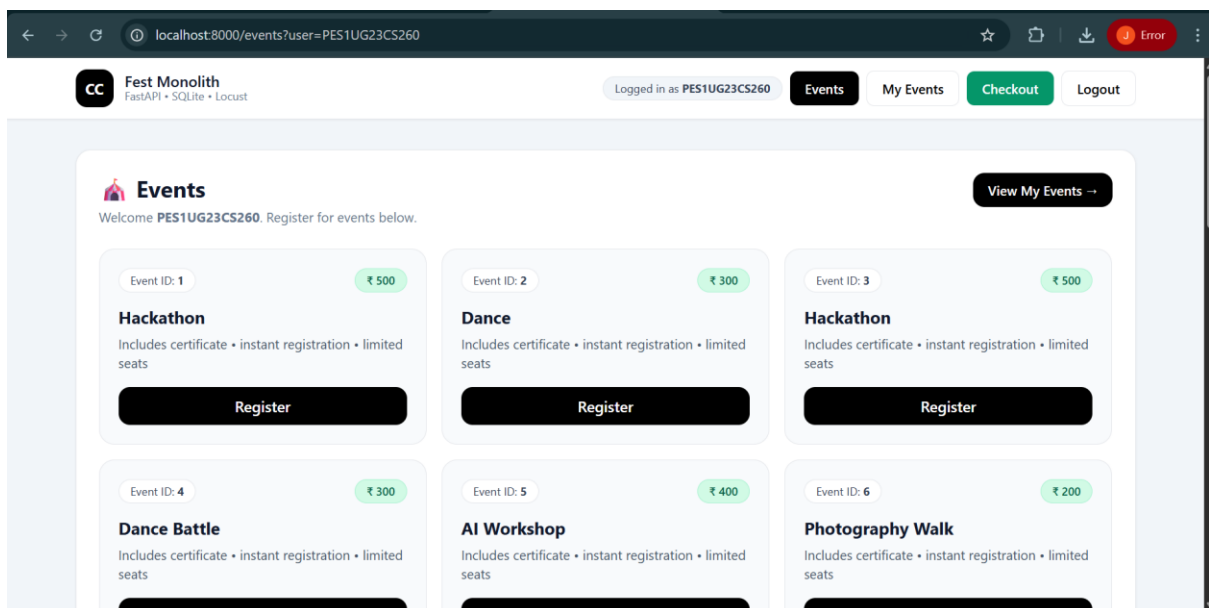
LAB 2 - MONOLITHIC ARCHITECTURE

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Section:	E

Github repo:

https://github.com/beatriz-1347/PES1UG23CS260_CC_Lab-2.git

SS1:



SS2:

Monolithi x Lab 2 Inst x Locust x +

localhost:8089

LOCUST

Host: http://localhost:8000

Status: STOPPED

RPS: 0.5

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)	C	R
GET	/events?user=locust_user	16	0	300	2300	2300	437.7	248	2338	21138	0	
Aggregated												

main.py

init.py

CC_Lab-2 > checkout > _init_.py > checkout_logic

def checkout_logic():

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SS8:

Locust Web UI showing statistics for host http://localhost:8000. Status: STOPPED, RPS: 0.6, Failures: 0%. The table shows 18 requests for GET /my-events?user=locust_user with an average response time of 186.26ms.

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	C	R
GET	/my-events?user=locust_user	18	0	65	2200	2200	186.26	50	2171	3144	0	
Aggregated		18	0	65	2200	2200	186.26	50	2171	3144	0	

```

main.py
def events(request: Request, user: str):
    db = get_db()
    rows = db.execute("SELECT * FROM events").fetchall()

    return templates.TemplateResponse(
        "events.html",
        {"request": request, "events": rows, "user": user}
    )

Terminal:
PS C:\Users\japhi\OneDrive\Desktop\PE310623CS260\CC_Lab-2> locust -f locust/myevents_locustfile.py
[2026-01-30 11:38:48,886] Beatriz/INFO/locust.main: Starting Locust 2.43.1
[2026-01-30 11:38:48,887] Beatriz/INFO/locust.main: Starting web interface at http://localhost:8089, press enter to open your default browser.
[2026-01-30 11:38:59,756] Beatriz/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2026-01-30 11:38:59,759] Beatriz/INFO/locust.runners: All users spawned: ("MyEventsUser": 1) (1 total users)
Traceback (most recent call last):
  File "C:\Users\japhi\AppData\Local\Programs\Python\Python312\Lib\site-packages\event_ffl\loop.py", line 279, in python_check_callback
    def python_check_callback(self, watcher_ptr): # pylint:disable=unused-argument
KeyboardInterrupt
2026-01-30 11:40:09,297] Beatriz/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 18 0(0.00%) 186 50 2170 65 | 0.61 0.00
Aggregated 18 0(0.00%) 186 50 2170 65 | 0.61 0.00
Response time percentiles (approximated)
Type Name 50% 60% 75% 80% 90% 95% 98% 99% 99.9% 99.99%
GET /my-events?user=locust_user 65 76 87 94 110 2200 2200 2200 2200 2200
Aggregated 65 76 87 94 110 2200 2200 2200 2200 2200

```

SS9:

Locust Web UI showing statistics for host http://localhost:8000. Status: STOPPED, RPS: 0.7, Failures: 0%. The table shows 19 requests for GET /my-events?user=locust_user with an average response time of 118.57ms.

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	C	R
GET	/my-events?user=locust_user	19	0	6	2100	2100	118.57	3	2133	3144	0	
Aggregated		19	0	6	2100	2100	118.57	3	2133	3144	0	

```

main.py
def my_events(request: Request, user: str):
    rows = db.execute(
        SELECT events.name, events.fee
        FROM events
        JOIN registrations ON events.id = registrations.event_id
        WHERE registrations.username=?
        , (user,)
    ).fetchall()

    return templates.TemplateResponse(
        "my_events.html",
        {"request": request, "rows": rows, "user": user}
    )

Terminal:
[2026-01-30 11:41:28,999] Beatriz/INFO/locust.runners: All users spawned: ("MyEventsUser": 1) (1 total users)
Traceback (most recent call last):
  File "C:\Users\japhi\AppData\Local\Programs\Python\Python312\Lib\site-packages\event_ffl\loop.py", line 279, in python_check_callback
    def python_check_callback(self, watcher_ptr): # pylint:disable=unused-argument
KeyboardInterrupt
2026-01-30 11:42:03,419] Beatriz/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 19 0(0.00%) 118 3 2132 6 | 0.65 0.00
Aggregated 19 0(0.00%) 118 3 2132 6 | 0.65 0.00
Response time percentiles (approximated)
Type Name 50% 60% 75% 80% 90% 95% 98% 99% 99.9% 99.99%
GET /my-events?user=locust_user 6 7 8 9 11 2100 2100 2100 2100 2100
Aggregated 6 7 8 9 11 2100 2100 2100 2100 2100

```


Short explanation:

1) Route: /events

Bottleneck: Repeated looping and extra processing per request.

Change: Simplified logic and removed unnecessary loops/computations.

Why improved: Fewer operations per request → faster response time.

2) Route: /my-events

Bottleneck: Inefficient filtering and repeated scans of data.

Change: Used direct filtering and reduced nested loops.

Why improved: Less processing overhead → better performance under load.