

# Cloud Computing Lab Monolith Lab – 2

Name: Manas R

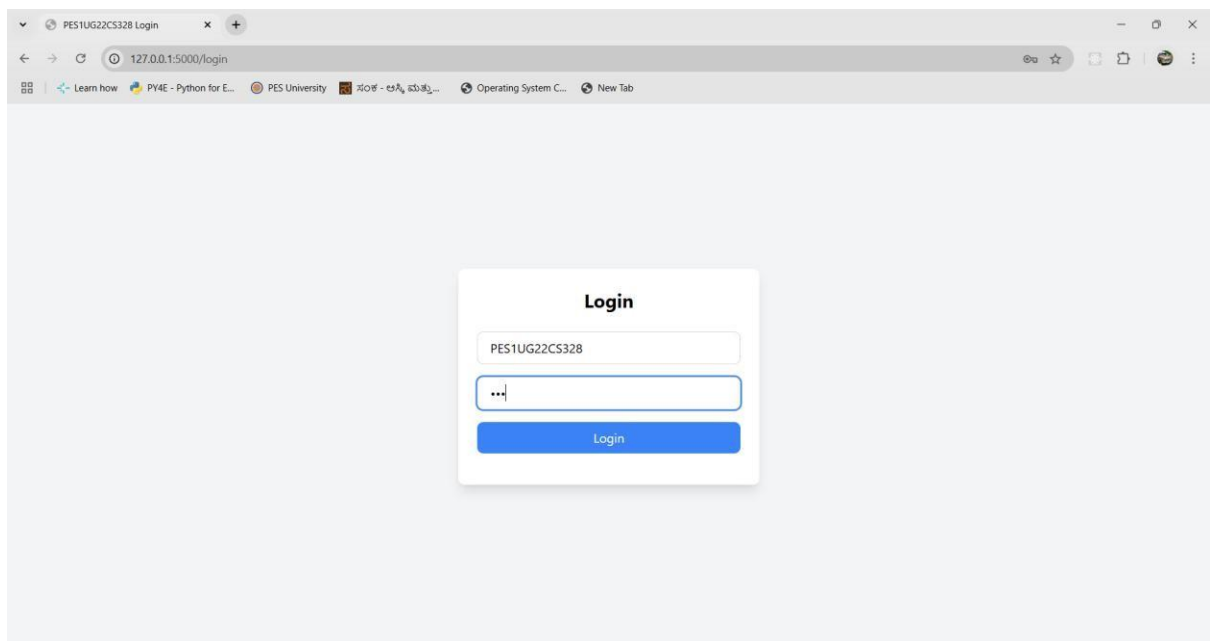
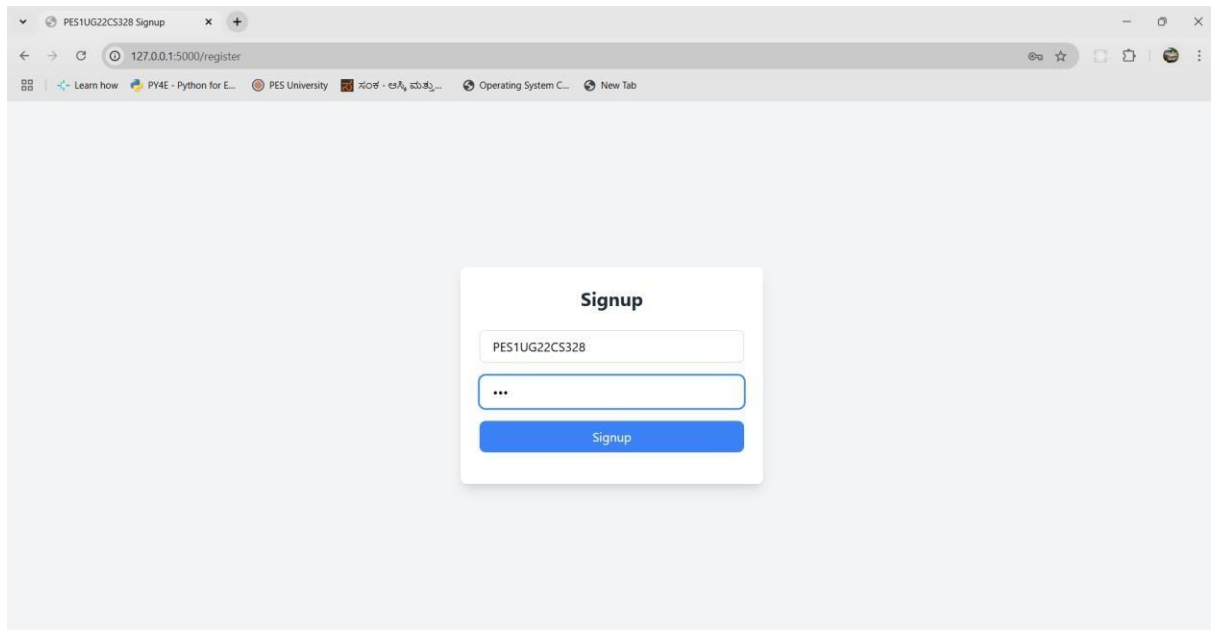
SRN: PES1UG22CS328

Section: F



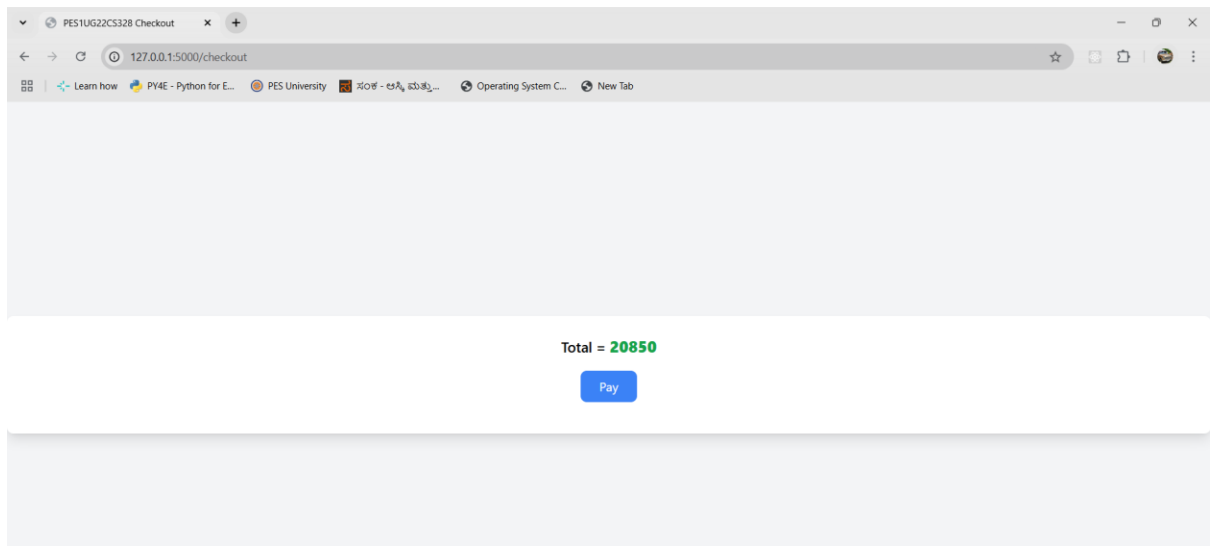
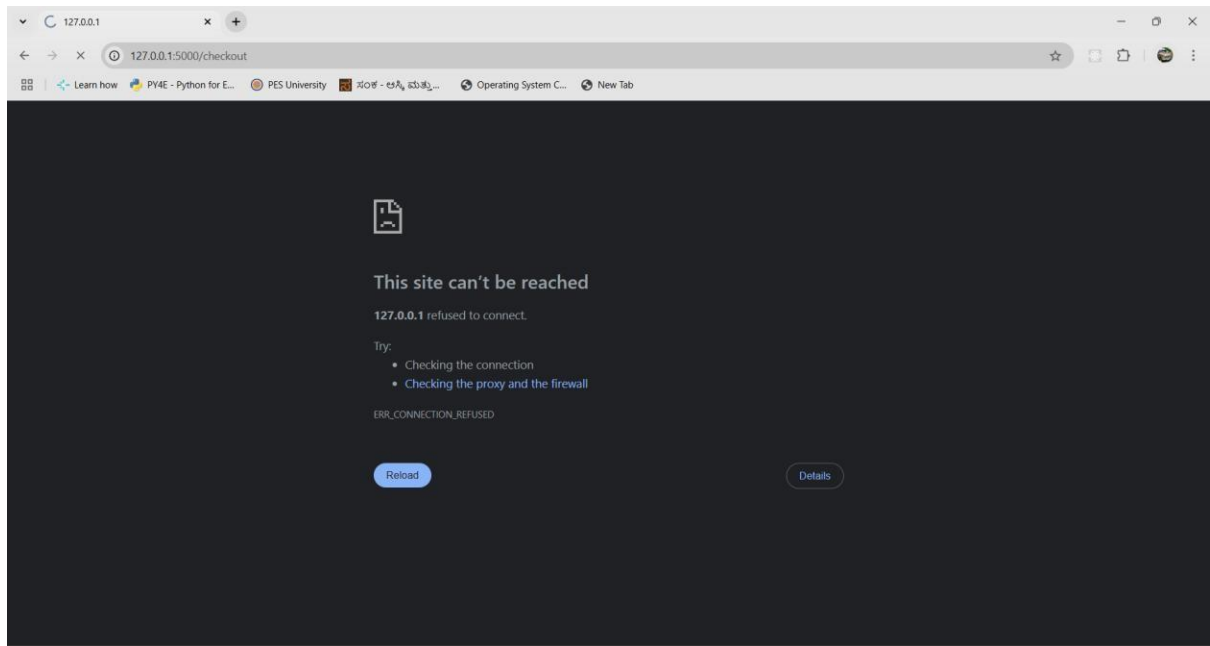
## Product List

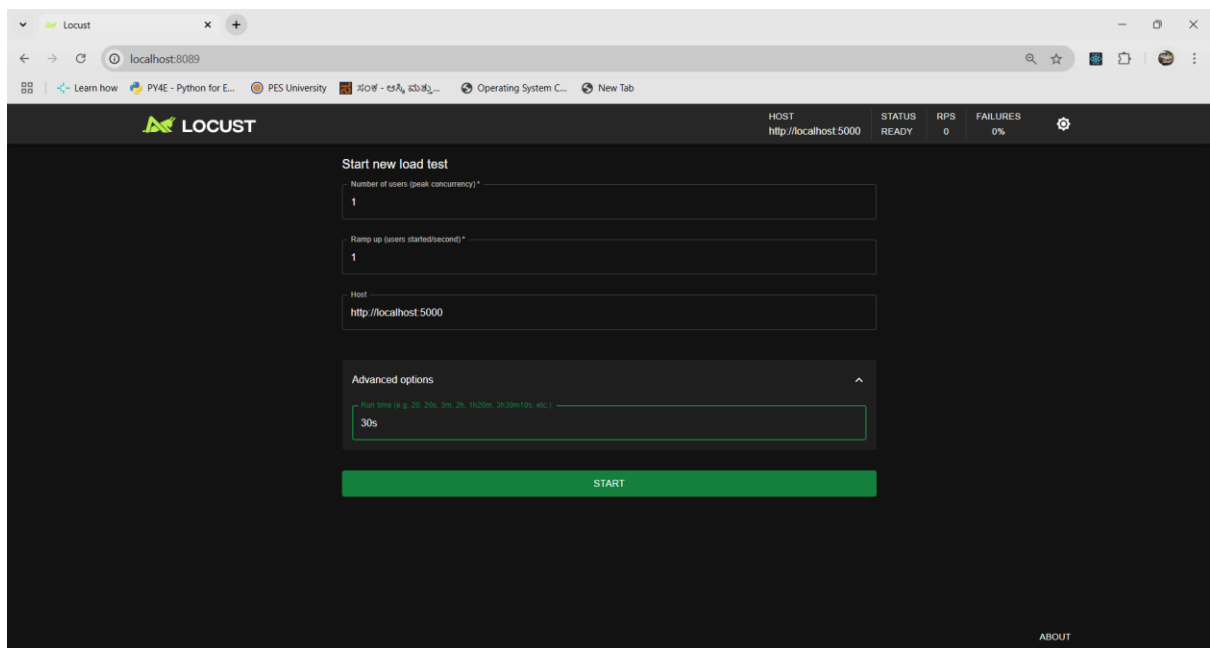
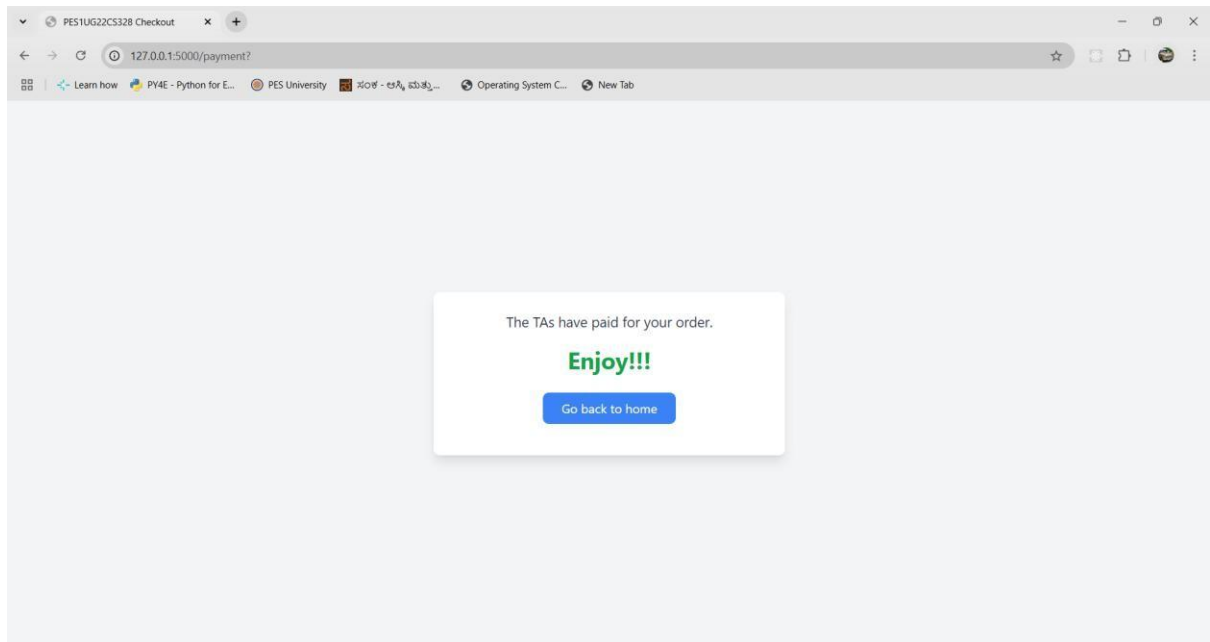
Name	Description	Quantity
<a href="#">Backpack</a>	A durable and stylish backpack for daily use.	10
<a href="#">Wireless Mouse</a>	A sleek and ergonomic wireless mouse with a long battery life.	20
<a href="#">Bluetooth Speaker</a>	A portable Bluetooth speaker with high-quality sound and deep bass.	30
<a href="#">Laptop Stand</a>	An adjustable laptop stand for better posture and cooling.	15
<a href="#">Notebook</a>	A premium notebook with thick, high-quality paper.	50
<a href="#">Smartphone Case</a>	A durable and stylish case for protecting your smartphone.	25
<a href="#">Power Bank</a>	A high-capacity power bank with fast charging support.	20
<a href="#">Headphones</a>	Over-ear headphones with noise cancellation and deep bass.	10
<a href="#">Gaming Keyboard</a>	A mechanical gaming keyboard with RGB lighting.	10
<a href="#">USB-C Hub</a>	A multi-port USB-C hub for all your connectivity needs.	25
<a href="#">Fitness Tracker</a>	A sleek fitness tracker with heart rate monitoring.	20
<a href="#">Travel Mug</a>	An insulated travel mug that keeps your drinks hot or cold.	30
<a href="#">Desk Organizer</a>	A compact desk organizer for keeping your workspace tidy.	40
<a href="#">External Hard Drive</a>	A portable external hard drive with 1TB of storage.	15
<a href="#">Wireless Charger</a>	A fast wireless charger compatible with most devices.	30

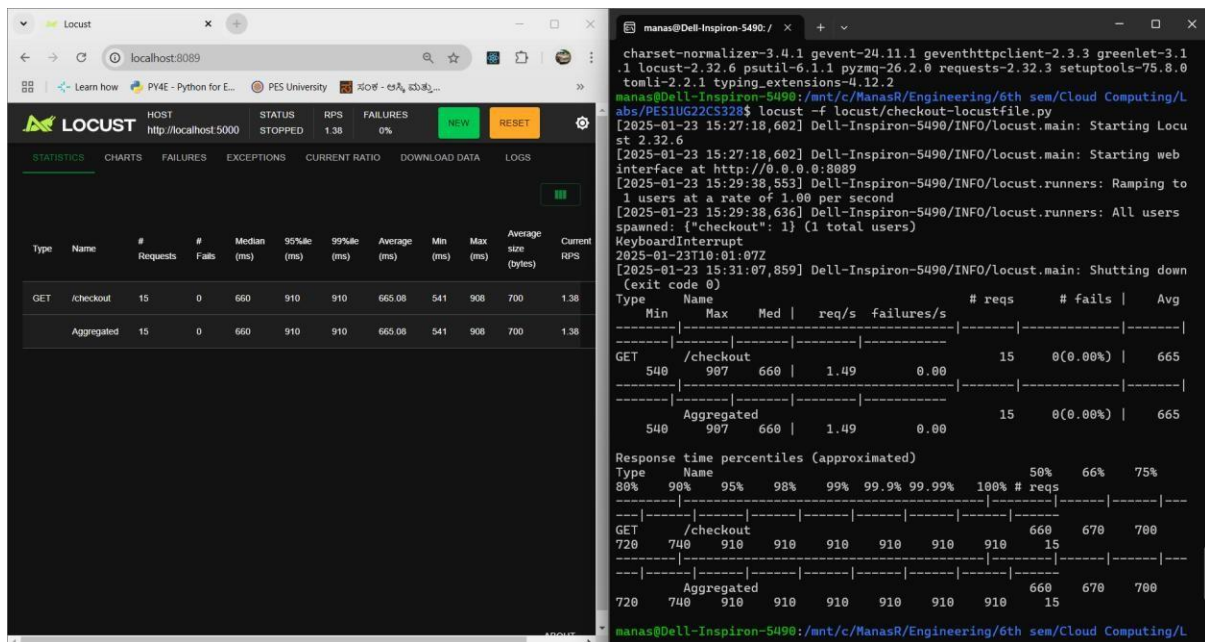
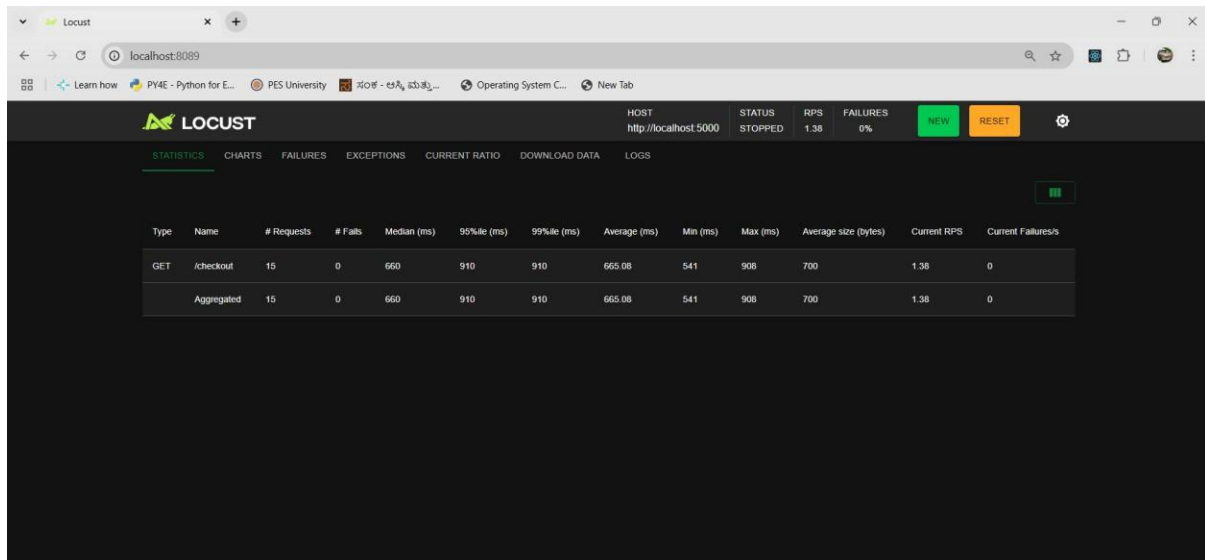


Product List		
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Cart		
Product	Price	
Backpack	800.0	<button>Remove</button>
Notebook	50.0	<button>Remove</button>
Digital Camera	20000.0	<button>Remove</button>
<div><button>Checkout</button><button>Clear Cart</button><button>Refresh</button><button>Back to Products</button></div>		







## After Optimization of the code

The screenshot displays the Locust web interface on the left and a terminal window on the right. The Locust interface shows the test results for the `/checkout` endpoint. The terminal window shows the execution of the Locust test script, including the start of the web interface, the ramping up of users, and the final statistics.

**Locust Web Interface Statistics:**

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS
GET	/checkout	34	0	900	1100	1300	878.08	586	1301	704	1
Aggregated											
34 0 900 1100 1300 878.08 586 1301 704 1											

**Terminal Output:**

```
manas@Dell-Inspiron-5490: /mnt/c/ManasR/Engineering/6th sem/Cloud Computing/L
manas@Dell-Inspiron-5490: /mnt/c/ManasR/Engineering/6th sem/Cloud Computing/L
abs/PES1UG22CS328$ locust -f locust/checkout-locustfile.py
[2025-01-23 15:32:34,215] Dell-Inspiron-5490/INFO/locust.main: Starting Locu
st 2.32.6
[2025-01-23 15:32:34,215] Dell-Inspiron-5490/INFO/locust.main: Starting web
interface at http://0.0.0.0:8089
[2025-01-23 15:33:23,579] Dell-Inspiron-5490/INFO/locust.runners: Ramping to
1 users at a rate of 1.00 per second
[2025-01-23 15:33:23,634] Dell-Inspiron-5490/INFO/locust.runners: All users
spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-23T10:04:43Z
[2025-01-23 15:34:43,096] Dell-Inspiron-5490/INFO/locust.main: Shutting down
(exit code 0)
Type Name # reqs # fails | Avg Min Max Med | req/s
failures/s
-----|-----|-----|-----|-----|-----|-----|-----|
GET /checkout 34 0(0.00%) | 878 586 1301 900 |
1.14 0.00
-----|-----|-----|-----|-----|-----|-----|
Aggregated 34 0(0.00%) | 878 586 1301 900 |
1.14 0.00
-----|-----|-----|-----|-----|-----|-----|
Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98% 99% 99.
9% 99.9% 100% # reqs
-----|-----|-----|-----|-----|-----|-----|-----|
GET /checkout 920 940 970 990 1100 1100 1300 1300
1300 1300 1300 34
-----|-----|-----|-----|-----|-----|-----|
Aggregated 920 940 970 990 1100 1100 1300 130
0 1300 1300 1300 34
```

## After optimizing get-cart-locustfile.py(/cart directory)

The screenshot displays the Locust web interface on the left and a terminal window on the right. The Locust interface shows the test results for the `/cart` endpoint. The terminal window shows the execution of the Locust test script, including the start of the web interface, the ramping up of users, and the final statistics.

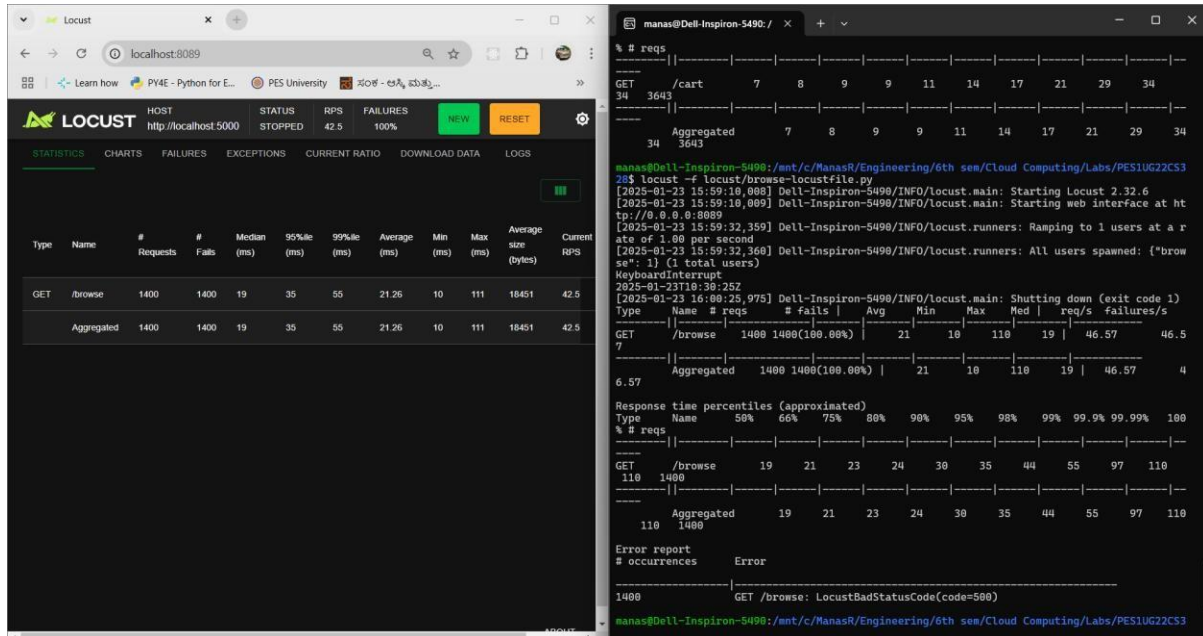
**Locust Web Interface Statistics:**

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS
GET	/cart	3643	0	7	14	21	8.08	4	34	1467	114.7
Aggregated											
3643 0 7 14 21 8.08 4 34 1467 114.7											

**Terminal Output:**

```
manas@Dell-Inspiron-5490: /mnt/c/ManasR/Engineering/6th sem/Cloud Computing/L
manas@Dell-Inspiron-5490: /mnt/c/ManasR/Engineering/6th sem/Cloud Computing/L
abs/PES1UG22CS328$ locust -f locust/get-cart-locustfile.py
[2025-01-23 15:52:25,742] Dell-Inspiron-5490/INFO/locust.main: Starting Locu
st 2.32.6
[2025-01-23 15:52:25,742] Dell-Inspiron-5490/INFO/locust.main: Starting web
interface at http://0.0.0.0:8089
[2025-01-23 15:52:58,206] Dell-Inspiron-5490/INFO/locust.runners: Ramping to
1 users at a rate of 1.00 per second
[2025-01-23 15:52:58,279] Dell-Inspiron-5490/INFO/locust.runners: All users
spawned: {"add_to_cart": 1} (1 total users)
KeyboardInterrupt
2025-01-23T10:24:03Z
[2025-01-23 15:54:03,300] Dell-Inspiron-5490/INFO/locust.main: Shutting down
(exit code 0)
Type Name # reqs # fails | Avg Min Max Med | req/s
failures/s
-----|-----|-----|-----|-----|-----|-----|-----|
GET /cart 3643 0(0.00%) | 8 4 33 7 | 121.4
6 0.00
-----|-----|-----|-----|-----|-----|-----|
Aggregated 3643 0(0.00%) | 8 4 33 7 |
121.46 0.00
-----|-----|-----|-----|-----|-----|-----|
Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98% 99% 99.
9% 99.9% 100% # reqs
-----|-----|-----|-----|-----|-----|-----|-----|
GET /cart 7 8 9 9 11 14 17 21
29 34 34 3643
-----|-----|-----|-----|-----|-----|-----|
Aggregated 7 8 9 9 11 14 17 2
1 29 34 34 3643
```

## After optimizing browse-locustfile.py (/products directory)



**GitHub Link:** <https://github.com/manas1331/CC-Lab-3-Monolith/tree/main>