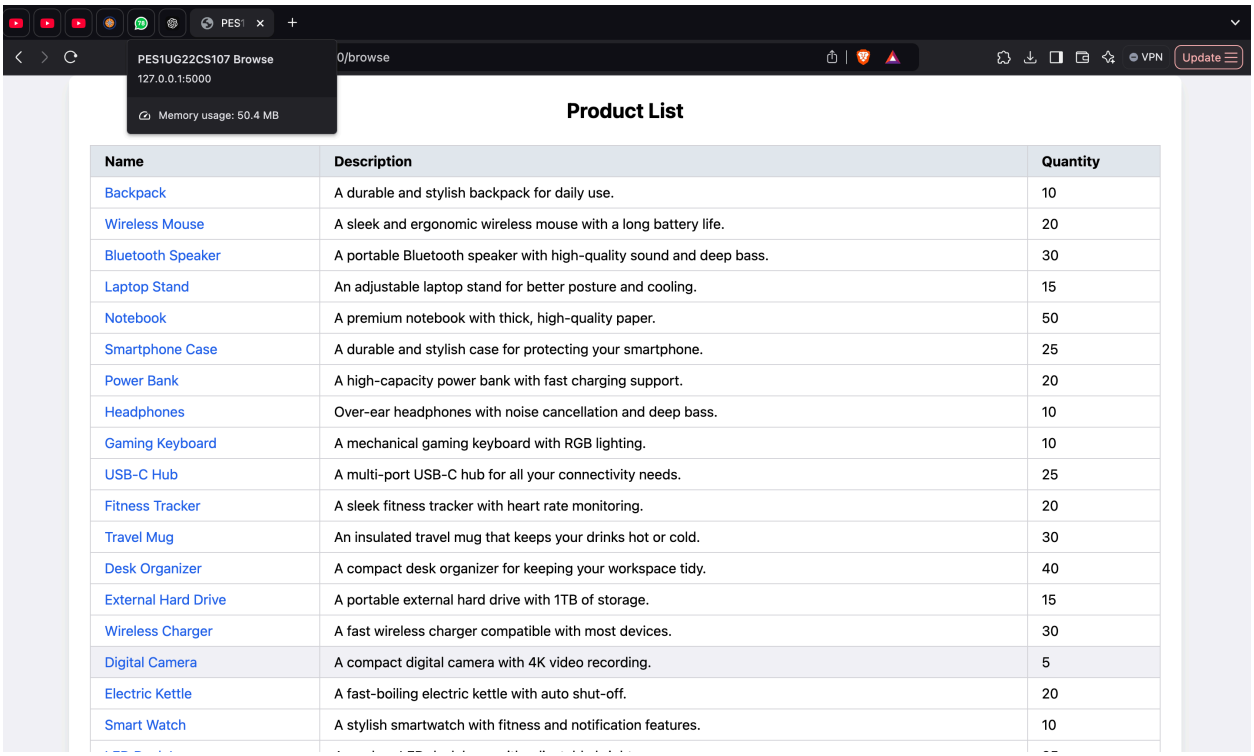
UE22CS351B CLOUD COMPUTING LABORATORY 3

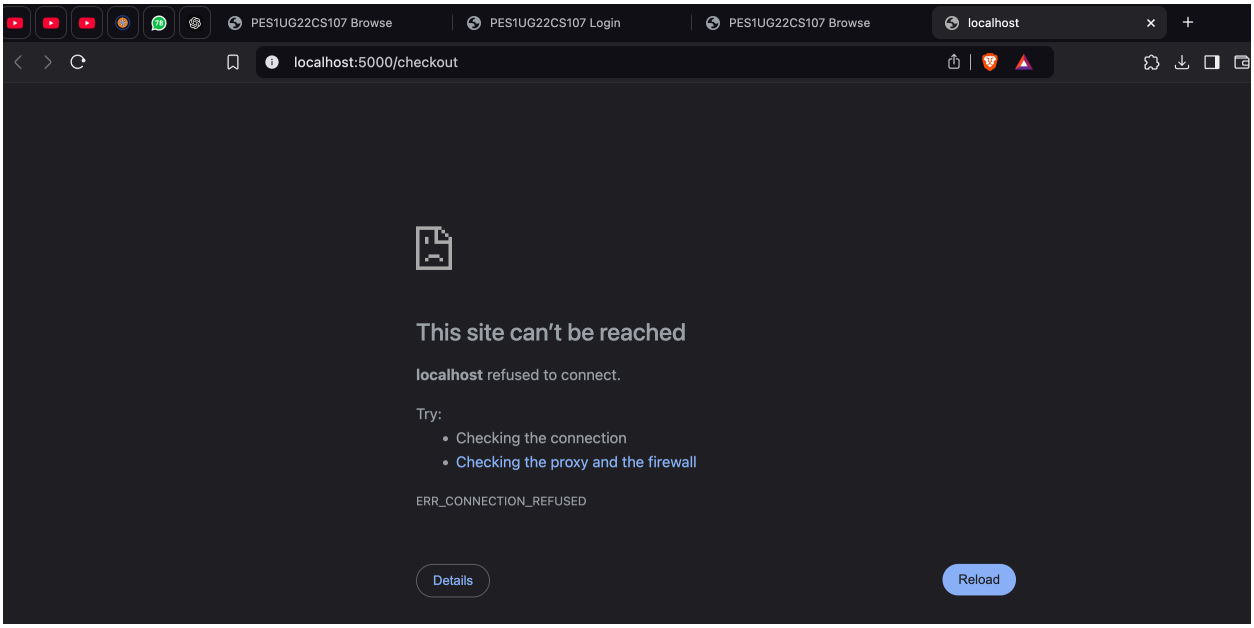
NAME : ARNAV SATISH
SRN : PES1UG22CS107

SS1:

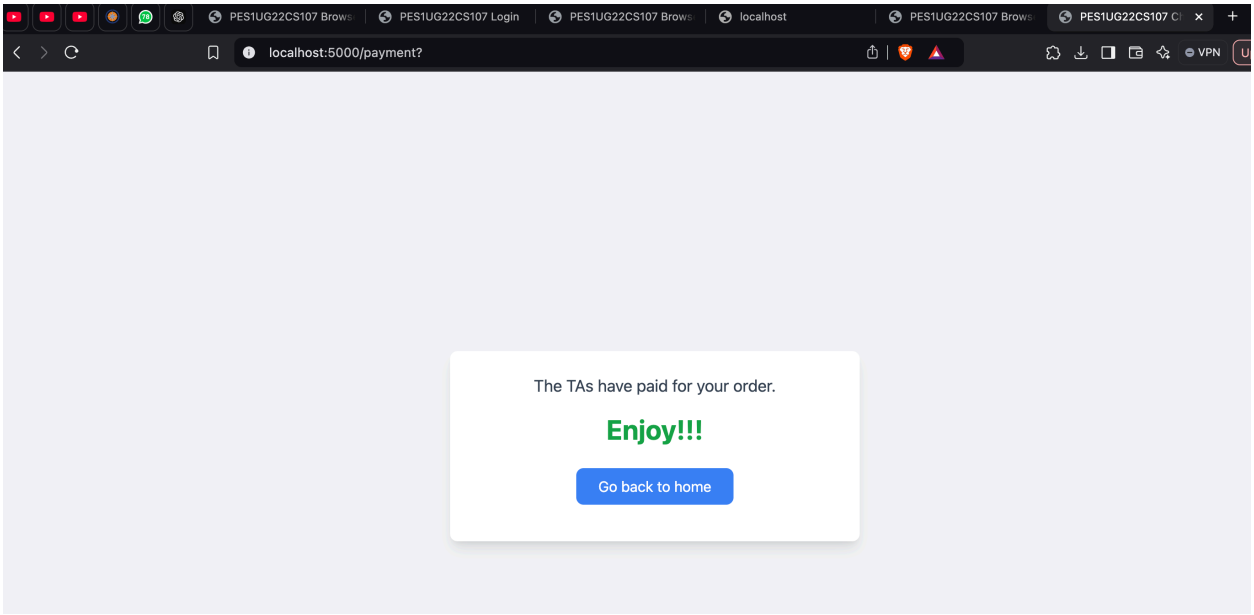


Name	Description	Quantity
Backpack	A durable and stylish backpack for daily use.	10
Wireless Mouse	A sleek and ergonomic wireless mouse with a long battery life.	20
Bluetooth Speaker	A portable Bluetooth speaker with high-quality sound and deep bass.	30
Laptop Stand	An adjustable laptop stand for better posture and cooling.	15
Notebook	A premium notebook with thick, high-quality paper.	50
Smartphone Case	A durable and stylish case for protecting your smartphone.	25
Power Bank	A high-capacity power bank with fast charging support.	20
Headphones	Over-ear headphones with noise cancellation and deep bass.	10
Gaming Keyboard	A mechanical gaming keyboard with RGB lighting.	10
USB-C Hub	A multi-port USB-C hub for all your connectivity needs.	25
Fitness Tracker	A sleek fitness tracker with heart rate monitoring.	20
Travel Mug	An insulated travel mug that keeps your drinks hot or cold.	30
Desk Organizer	A compact desk organizer for keeping your workspace tidy.	40
External Hard Drive	A portable external hard drive with 1TB of storage.	15
Wireless Charger	A fast wireless charger compatible with most devices.	30
Digital Camera	A compact digital camera with 4K video recording.	5
Electric Kettle	A fast-boiling electric kettle with auto shut-off.	20
Smart Watch	A stylish smartwatch with fitness and notification features.	10

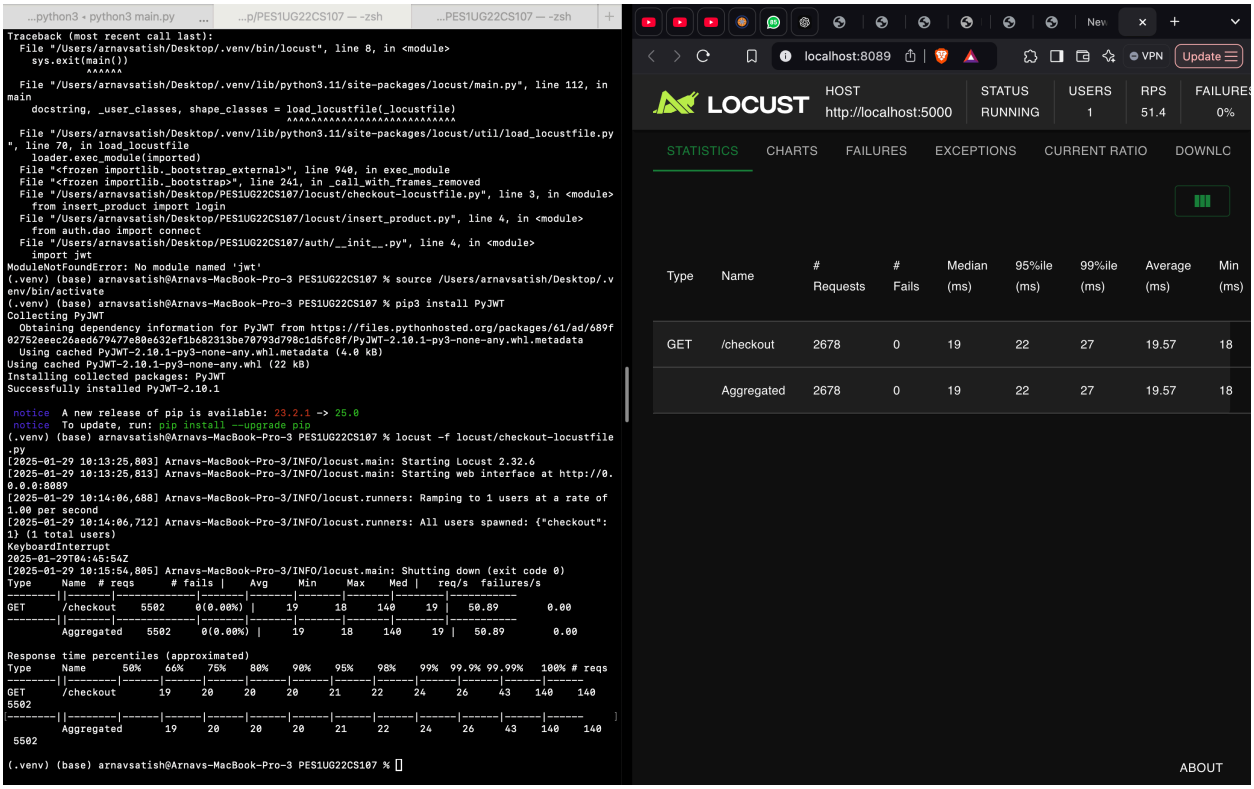
SS2:



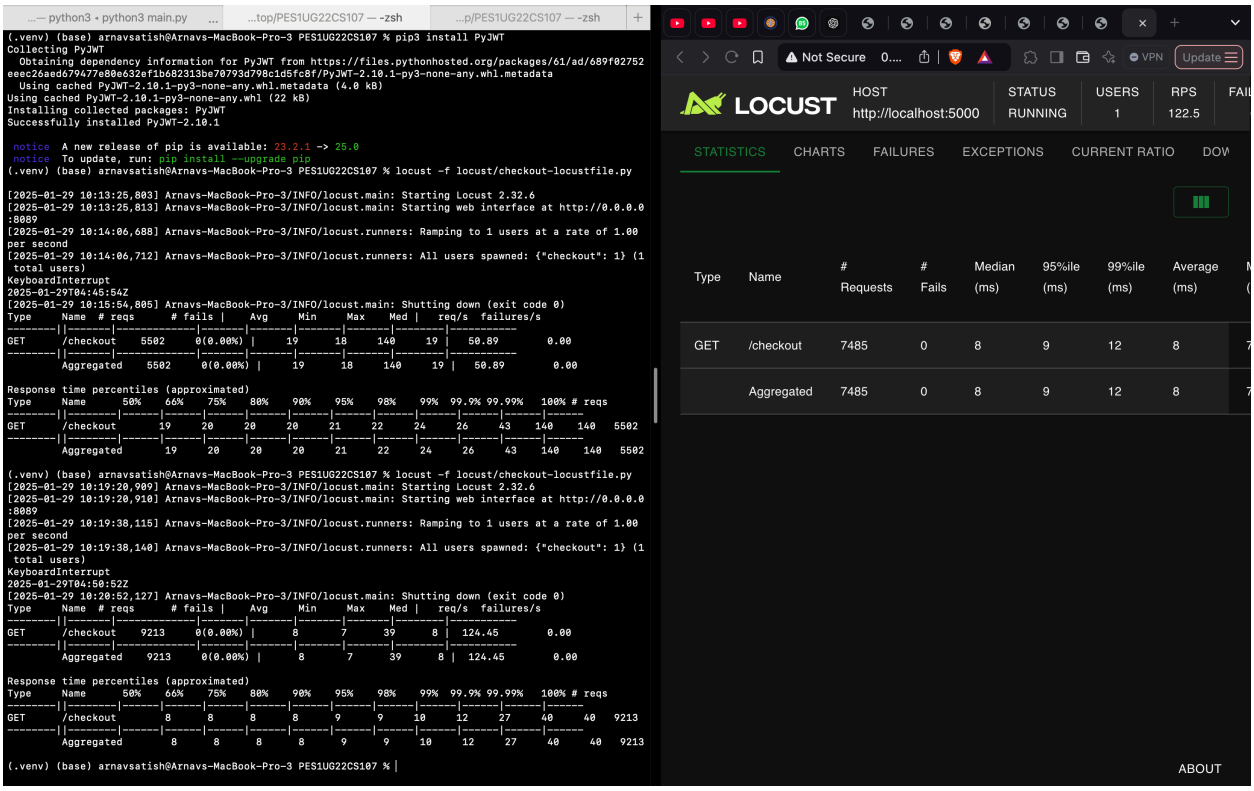
SS3:


PES1UG22CS107 Brows
PES1UG22CS107 Login
PES1UG22CS107 Brows
localhost
PES1UG22CS107 Brows
PES1UG22CS107 Cl
localhost:5000/payment?
VPN
The TAs have paid for your order.
Enjoy!!!
Go back to home

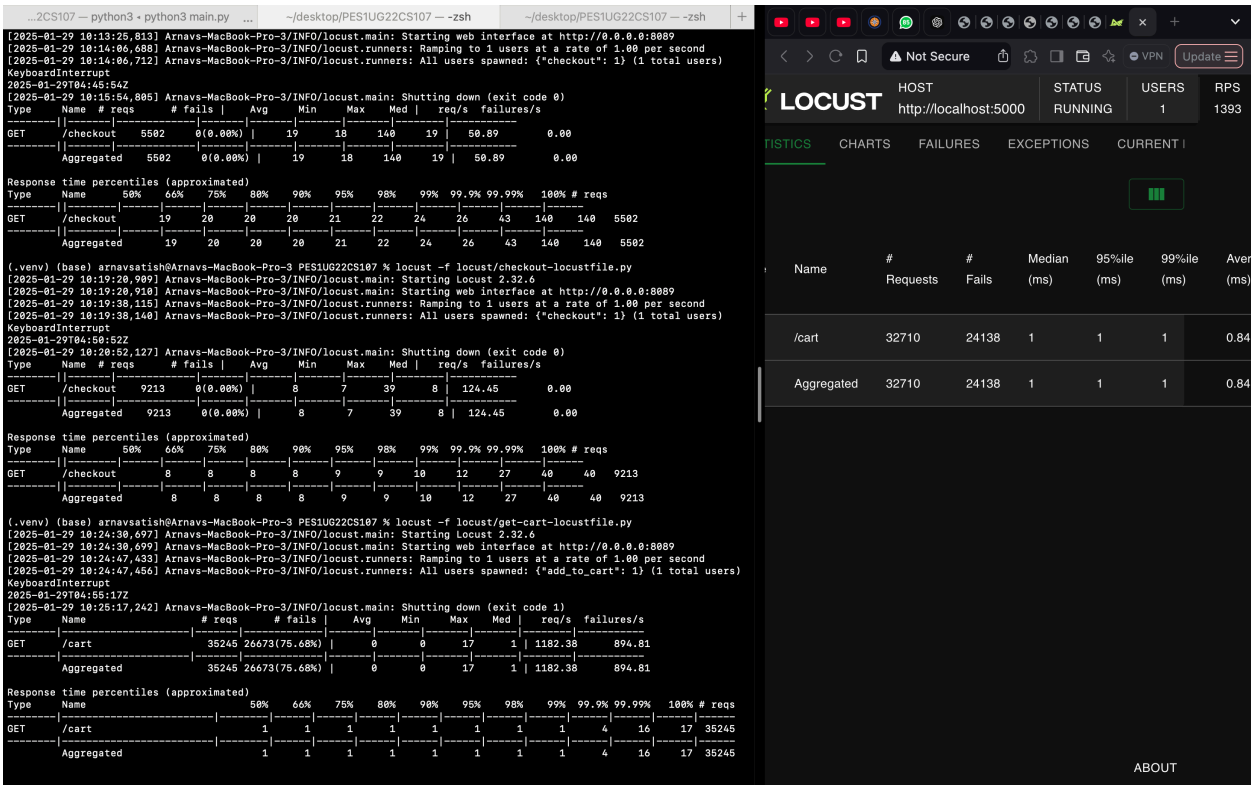
SS4:


...python3 • python3 main.py
...p/PES1UG22CS107 — -zsh
...PES1UG22CS107 — -zsh
Traceback (most recent call last):
File "/Users/arnavsatish/Desktop/.venv/bin/locust", line 8, in <module>
sys.exit(main())
File "/Users/arnavsatish/Desktop/.venv/lib/python3.11/site-packages/locust/main.py", line 112, in main
docstring, _user_classes, shape_classes = load_locustfile(_locustfile)
File "/Users/arnavsatish/Desktop/.venv/lib/python3.11/site-packages/locust/util/load_locustfile.py", line 70, in load_locustfile
loader.exec_module(imported)
File "<frozen importlib._bootstrap_external>", line 940, in exec_module
File "<frozen importlib._bootstrap>", line 241, in _call_with_frames_removed
File "/Users/arnavsatish/Desktop/PES1UG22CS107/locust/checkout-locustfile.py", line 3, in <module>
from insert_product import login
File "/Users/arnavsatish/Desktop/PES1UG22CS107/locust/insert_product.py", line 4, in <module>
from auth.dao import connect
File "/Users/arnavsatish/Desktop/PES1UG22CS107/auth/__init__.py", line 4, in <module>
import jwt
ModuleNotFoundError: No module named 'jwt'
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % source /Users/arnavsatish/Desktop/.venv/bin/activate
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % pip3 install PyJWT
Collecting PyJWT
Obtaining dependency information for PyJWT from https://files.pythonhosted.org/packages/61/ad/689f02752eeec26aed679477e80e632ef1b682313be70793d798c1d5fc8f/PyJWT-2.10.1-py3-none-any.whl.metadata
Using cached PyJWT-2.10.1-py3-none-any.whl.metadata (4.0 kB)
Using cached PyJWT-2.10.1-py3-none-any.whl (22 kB)
Installing collected packages: PyJWT
Successfully installed PyJWT-2.10.1
notice A new release of pip is available: 23.2.1 -> 25.0
notice To update, run: pip install --upgrade pip
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % locust -f locust/checkout-locustfile.py
[2025-01-29 10:13:25,803] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting Locust 2.32.6
[2025-01-29 10:13:25,813] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:14:06,688] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:14:06,712] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:45:54Z
[2025-01-29 10:15:54,805] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 0)
Type Name # reqs # fails | Avg Min Max Med | req/s failures/s
GET /checkout 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
Aggregated 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98% 99% 99.9% 99.99% 100% # reqs
GET /checkout 19 20 20 20 21 22 24 26 43 140 140 5502
Aggregated 19 20 20 20 21 22 24 26 43 140 140 5502
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 %
localhost:8089
VPN
Update
LOCUST
HOST
http://localhost:5000
STATUS
RUNNING
USERS
1
RPS
51.4
FAILURES
0%
STATISTICS
CHARTS
FAILURES
EXCEPTIONS
CURRENT RATIO
DOWNLC
Type
Name
Requests
Fails
Median (ms)
95%ile (ms)
99%ile (ms)
Average (ms)
Min (ms)
GET
/checkout
2678
0
19
22
27
19.57
18
Aggregated
2678
0
19
22
27
19.57
18
ABOUT

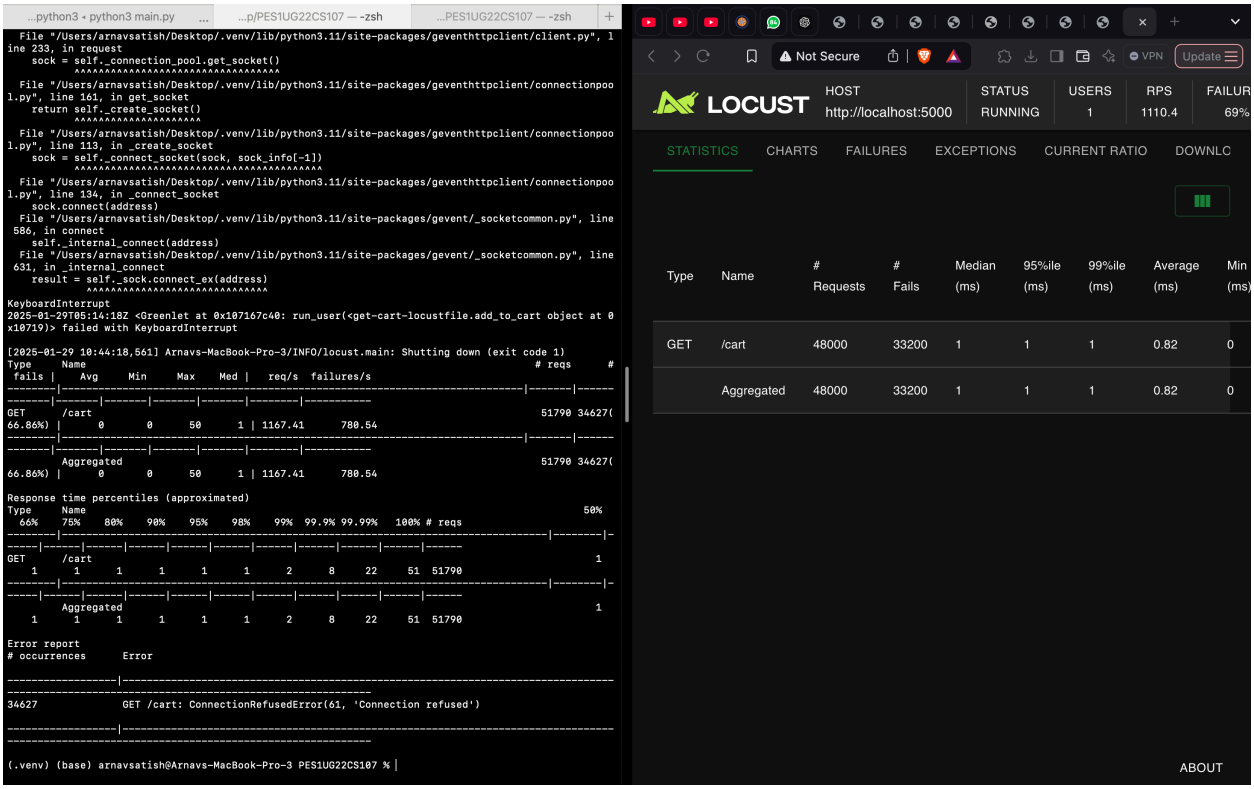
SS5:


...— python3 • python3 main.py
...top/PES1UG22CS107 — -zsh
...p/PES1UG22CS107 — -zsh
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % pip3 install PyJWT
Collecting PyJWT
Obtaining dependency information for PyJWT from https://files.pythonhosted.org/packages/61/ad/689f02752eeec26aed679477e80e632ef1b682313be70793d798c1d5fc8f/PyJWT-2.10.1-py3-none-any.whl.metadata
Using cached PyJWT-2.10.1-py3-none-any.whl.metadata (4.0 kB)
Using cached PyJWT-2.10.1-py3-none-any.whl (22 kB)
Installing collected packages: PyJWT
Successfully installed PyJWT-2.10.1
notice A new release of pip is available: 23.2.1 -> 25.0
notice To update, run: pip install --upgrade pip
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % locust -f locust/checkout-locustfile.py
[2025-01-29 10:13:25,803] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting Locust 2.32.6
[2025-01-29 10:13:25,813] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:14:06,688] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:14:06,712] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:45:54Z
[2025-01-29 10:15:54,805] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 0)
Type Name # reqs # fails | Avg Min Max Med | req/s failures/s
GET /checkout 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
Aggregated 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98% 99% 99.9% 99.99% 100% # reqs
GET /checkout 19 20 20 20 21 22 24 26 43 140 140 5502
Aggregated 19 20 20 20 21 22 24 26 43 140 140 5502
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % locust -f locust/checkout-locustfile.py
[2025-01-29 10:19:20,909] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting Locust 2.32.6
[2025-01-29 10:19:20,910] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:19:38,115] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:19:38,140] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:50:52Z
[2025-01-29 10:20:52,127] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 0)
Type Name # reqs # fails | Avg Min Max Med | req/s failures/s
GET /checkout 9213 0(0.00%) | 8 7 39 8 | 124.45 0.00
Aggregated 9213 0(0.00%) | 8 7 39 8 | 124.45 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 8 8 8 9 9 10 12 27 40 40 9213
Aggregated 8 8 8 8 9 9 10 12 27 40 40 9213
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 %
Not Secure 0....
VPN
Update
LOCUST
HOST http://localhost:5000
STATUS RUNNING
USERS 1
RPS 122.5
STATISTICS
CHARTS
FAILURES
EXCEPTIONS
CURRENT RATIO
Type Name # Requests # Fails Median (ms) 95%ile (ms) 99%ile (ms) Average (ms)
GET /checkout 7485 0 8 9 12 8
Aggregated 7485 0 8 9 12 8
ABOUT

SS6:


...2CS107 — python3 • python3 main.py
~/desktop/PES1UG22CS107 — -zsh
~/desktop/PES1UG22CS107 — -zsh
[2025-01-29 10:13:25,813] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:14:06,688] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:14:06,712] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:45:54Z
[2025-01-29 10:15:54,805] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 0)
GET /checkout 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
Aggregated 5502 0(0.00%) | 19 18 140 19 | 50.89 0.00
GET /checkout 19 20 20 20 21 22 24 26 43 140 140 5502
Aggregated 19 20 20 20 21 22 24 26 43 140 140 5502
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % locust -f locust/checkout-locustfile.py
[2025-01-29 10:19:20,909] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting Locust 2.32.6
[2025-01-29 10:19:20,910] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:19:38,115] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:19:38,140] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"checkout": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:50:52Z
[2025-01-29 10:20:52,127] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 0)
GET /checkout 9213 0(0.00%) | 8 7 39 8 | 124.45 0.00
Aggregated 9213 0(0.00%) | 8 7 39 8 | 124.45 0.00
GET /checkout 8 8 8 8 9 9 10 12 27 40 40 9213
Aggregated 8 8 8 8 9 9 10 12 27 40 40 9213
(.venv) (base) arnavsatish@Arnavs-MacBook-Pro-3 PES1UG22CS107 % locust -f locust/get-cart-locustfile.py
[2025-01-29 10:24:30,697] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting Locust 2.32.6
[2025-01-29 10:24:30,699] Arnavs-MacBook-Pro-3/INFO/locust.main: Starting web interface at http://0.0.0.0:8089
[2025-01-29 10:24:47,433] Arnavs-MacBook-Pro-3/INFO/locust.runners: Ramping to 1 users at a rate of 1.00 per second
[2025-01-29 10:24:47,456] Arnavs-MacBook-Pro-3/INFO/locust.runners: All users spawned: {"add_to_cart": 1} (1 total users)
KeyboardInterrupt
2025-01-29T04:55:17Z
[2025-01-29 10:25:17,242] Arnavs-MacBook-Pro-3/INFO/locust.main: Shutting down (exit code 1)
Type Name # reqs # fails | Avg Min Max Med | req/s failures/s
GET /cart 35245 26673(75.68%) | 0 0 17 1 | 1182.38 894.81
Aggregated 35245 26673(75.68%) | 0 0 17 1 | 1182.38 894.81
Response time percentiles (approximated)
Type Name 50% 66% 75% 80% 90% 95% 98% 99% 99.9% 99.99% 100% # reqs
GET /cart 1 1 1 1 1 1 1 1 4 16 17 35245
Aggregated 1 1 1 1 1 1 1 1 4 16 17 35245
Not Secure
VPN
Update
LOCUST
HOST http://localhost:5000
STATUS RUNNING
USERS 1
RPS 1393
CHARTS
FAILURES
EXCEPTIONS
Name # Requests # Fails Median (ms) 95%ile (ms) 99%ile (ms)
/cart 32710 24138 1 1 1
Aggregated 32710 24138 1 1 1
ABOUT

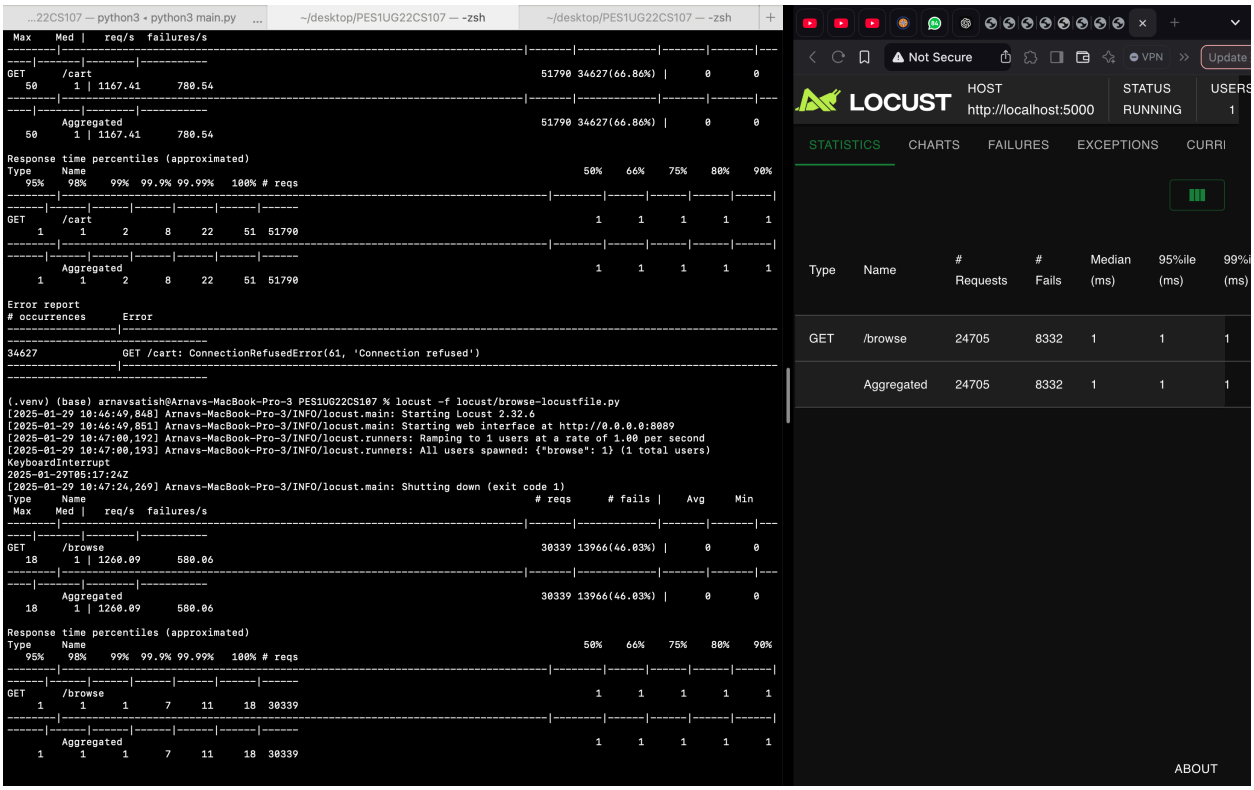
SS7:



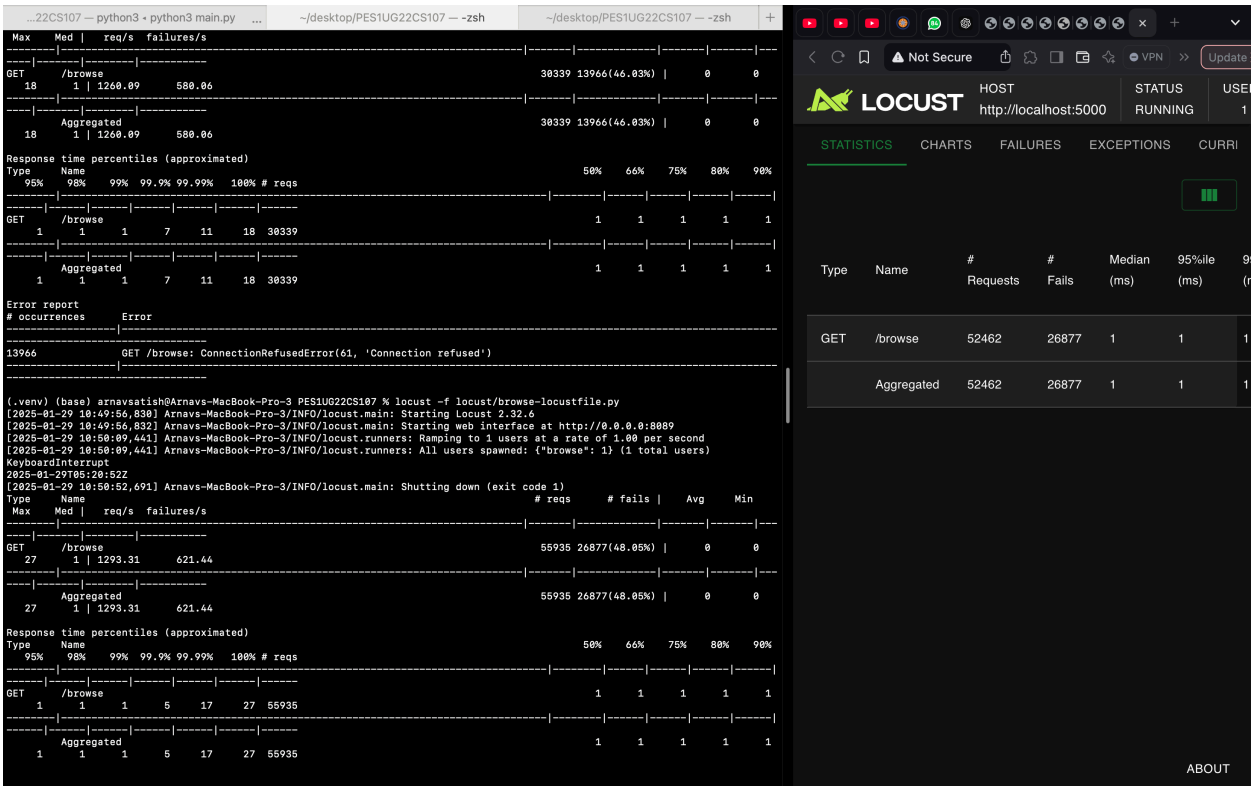

```python
def get_cart(username: str) -> list:
    conn = connect('carts.db')
    cursor = conn.cursor()
    if cursor:
        cursor.execute('SELECT * FROM carts WHERE username = ?', (username,))
    else:
        return []

    '''cart = cursor.fetchall()
    temp_cart = []
    for row in cart:
        temp_cart.append(row)

    final_cart = []
    for item in temp_cart:
        final_cart.append(item)'''
    final_cart=cursor.fetchall()

    cursor.close()
    conn.close()
    return final_cart
```

The provided code has unwanted for loop. This was optimized by using line of code “final_cart=cursor.fetchall()”

SS8:



SS9:




```python
def list_products():
    conn = connect('products.db')
    cursor = conn.cursor()

    cursor.execute('SELECT * FROM products')

    '''products = []
    rows = cursor.fetchall()

    for i in range(len(rows)):
        temp = rows[i]
        products.append(temp)'''
    products=cursor.fetchall()

    cursor.close()
    conn.close()
    if len(products) > 0:
        products.sort(key=lambda x: 0)
    return products
```

The provided code has unwanted for loop. This was optimized by using line of code “products=cursor.fetchall()”