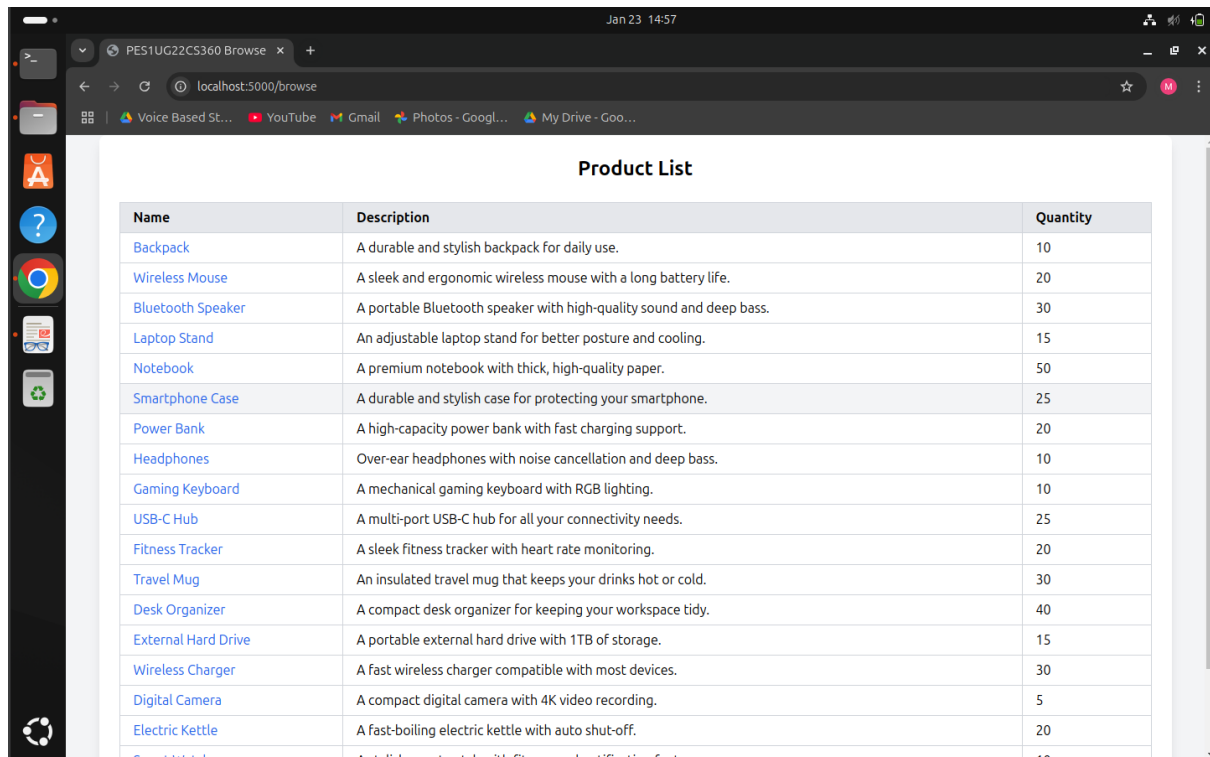


CC LAB 3

Name : Mohul Y P

SRN : PES1UG22CS360

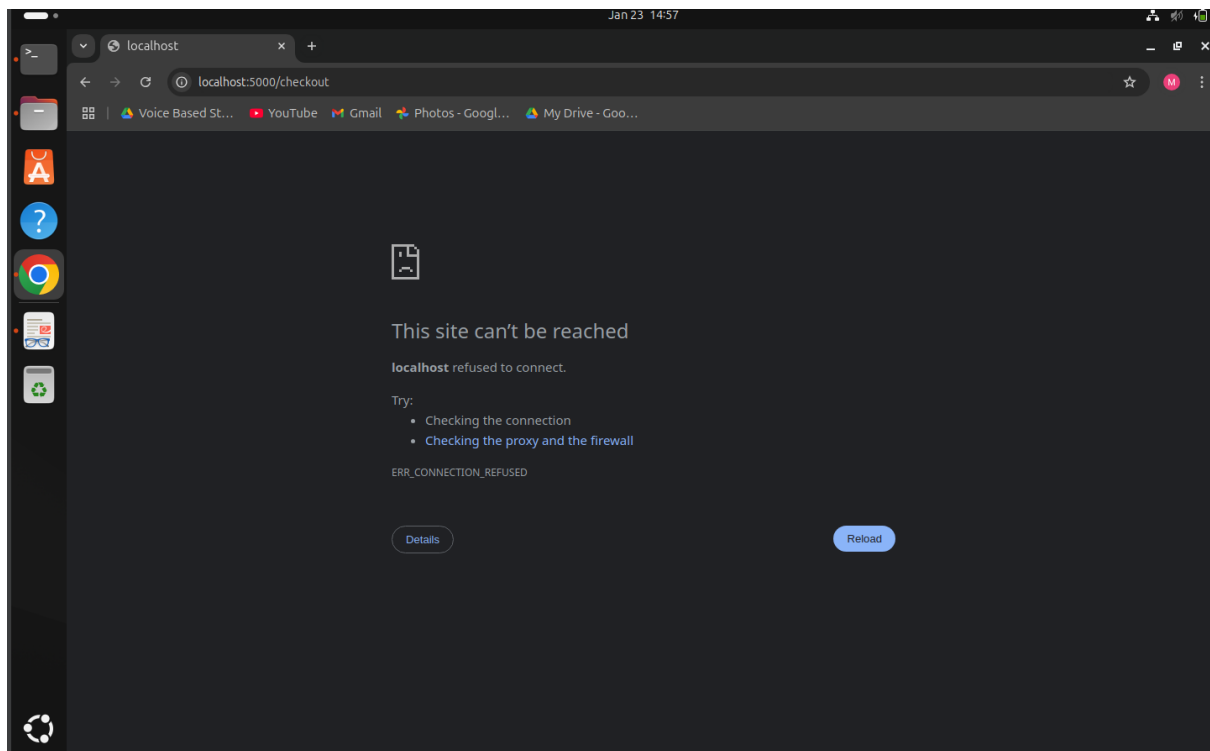
SS1



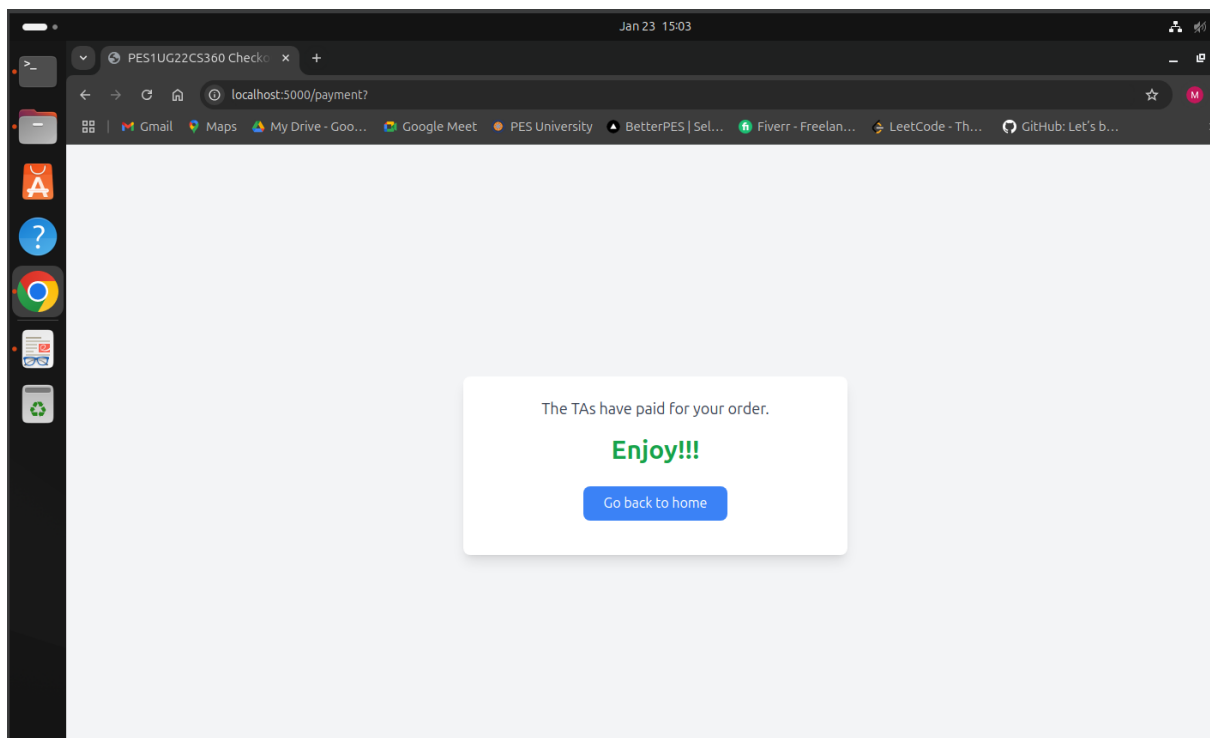
The screenshot shows a web browser window with a single tab titled 'PES1UG22CS360 Browse'. The address bar shows 'localhost:5000/browse'. The page content is a table titled 'Product List' with three columns: 'Name', 'Description', and 'Quantity'. The table lists 15 products, each with a blue link for its name. The browser's sidebar on the left shows various application icons, and the top status bar indicates the date and time as 'Jan 23 14:57'.

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



SS4

Jan 23 15:12

galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith

galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith

```

Type Name # re
qs # fails | Avg Min Max Med | req/s failures
/s -----
GET /checkout 16
16 0(0.00%) | 40 28 105 39 | 24.45 0.
00
Aggregated 16
0(0.00%) | 40 28 105 39 | 24.45 0.
00
Response time percentiles (approximated)
Type Name
50% 66% 75% 80% 90% 95% 98% 99% 99.9% 99.
99% 100% # reqs
GET /checkout
110 39 41 43 45 51 57 65 73 100
110 110 1616
Aggregated
110 39 41 43 45 51 57 65 73 100
110 110 1616
(.venv) galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith$

```

module.

localhost:8089/?tab=stats

LOCUST HOST http://localhost:5000 STATUS STOPPED RPS 25.6 FAILURES 0%

STATISTICS CHARTS FAILURES EXCEPTIONS CURRENT RATIO DO

Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)
GET	/checkout	1616	0	39	57	73	40.73
	Aggregated	1616	0	39	57	73	40.73

ABOUT

SS5

Jan 23 15:18

galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith

galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith

```

Type Name # re
qs # fails | Avg Min Max Med | req/s failures
/s -----
GET /checkout 96
96 0(0.00%) | 22 11 770 16 | 44.54 0.
00
Aggregated 32
0(0.00%) | 22 11 770 16 | 44.54 0.
00
Response time percentiles (approximated)
Type Name
50% 66% 75% 80% 90% 95% 98% 99% 99.9% 99.
99% 100% # reqs
GET /checkout
770 16 18 19 20 25 34 120 210 460
770 770 3296
Aggregated
770 16 18 19 20 25 34 120 210 460
770 770 3296
(.venv) galva@galva: ~/Desktop/PES1UG22CS360/CC_Monolith$

```

localhost:8089

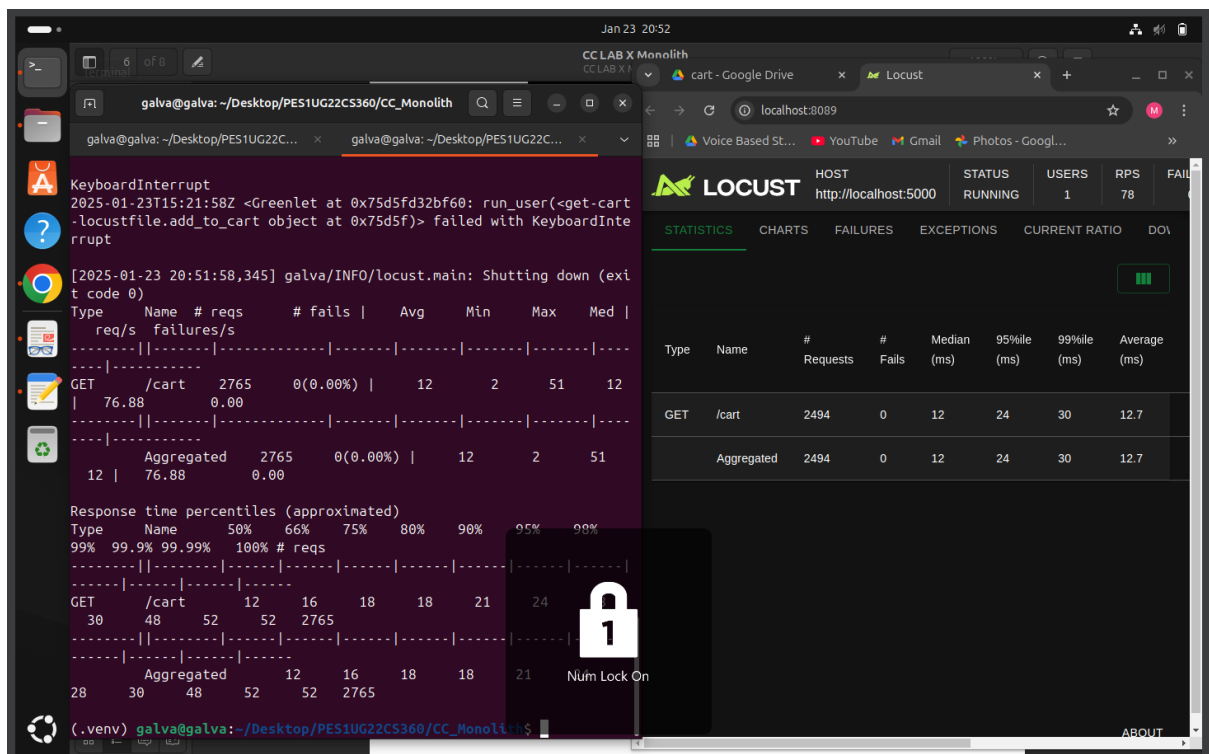
LOCUST HOST http://localhost:5000 STATUS STOPPED RPS 6.8 FAILURES 0%

STATISTICS CHARTS FAILURES EXCEPTIONS CURRENT RATIO DO

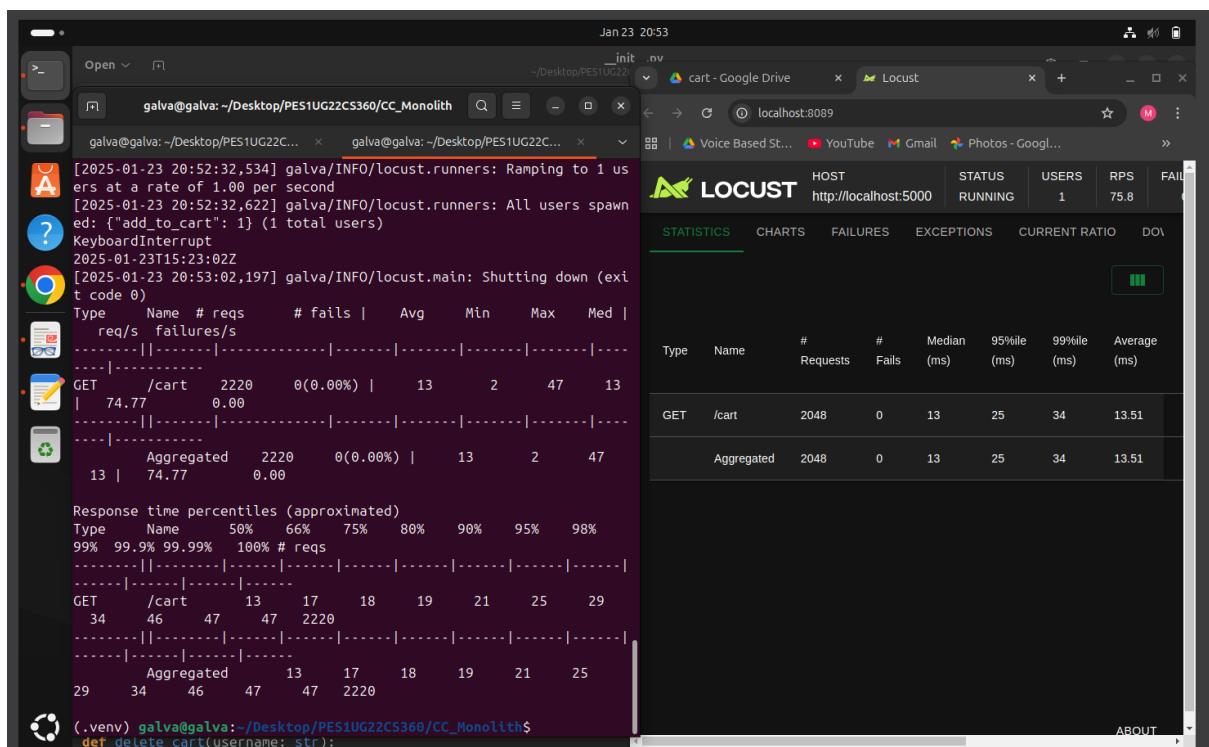
Type	Name	# Requests	# Fails	Median (ms)	95%ile (ms)	99%ile (ms)	Average (ms)
GET	/checkout	3296	0	16	34	210	22.28
	Aggregated	3296	0	16	34	210	22.28

ABOUT

SS6



SS7



for cart_detail in cart_details:

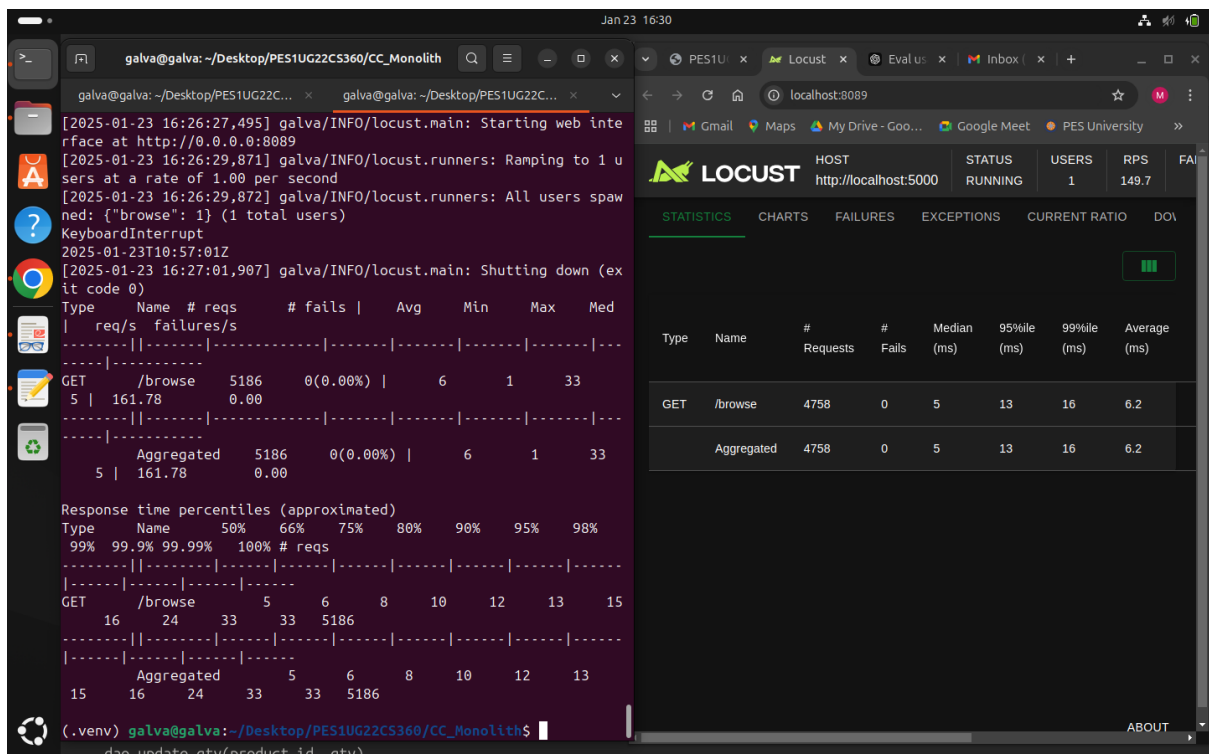
```
contents = cart_detail['contents']
evaluated_contents = eval(contents)
for content in evaluated_contents:
    items.append(content)

i2 = []
for i in items:
    temp_product = products.get_product(i)
    i2.append(temp_product)
return i2
```

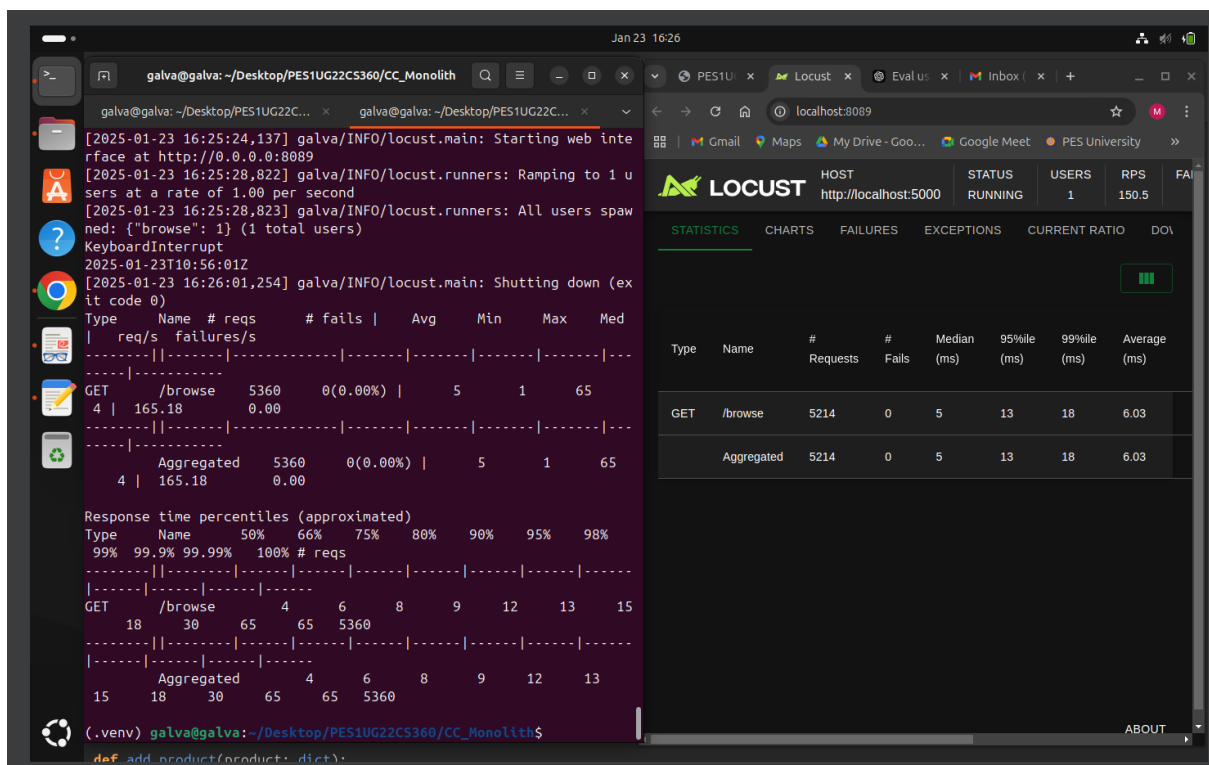
in /cart/__init__.py replaced by

```
for cart_detail in cart_details:
    contents = cart_detail['contents']
    evaluated_contents = eval(contents)
    for content in evaluated_contents:
        temp_product = products.get_product(i)
        i2.append(temp_product)
return i2
```

Optimization : By skipping the intermediary list, the new code reduces the number of iterations and variable management. This results in slightly faster execution, especially for large datasets.



SS9



```
def list_products() -> list[Product]:
    products = dao.list_products()
```

```
result = []
for product in products:
    result.append(Product.load(product))

return result
```

from products/__init__.py replaced by

```
def list_products() -> list[Product]:
    # Use list comprehension to create and return the list in one step
    return [Product.load(product) for product in dao.list_products()]
```

Optimization: If the result of the list comprehension is the final list, there's no need to store it in a temporary variable. We can directly return the list from the comprehension which computes faster.

Github repo link : https://github.com/galva2174/cc_lab_3