Test Output Doc

1. Catalog service lookup:

```
(venv) (base) rajatgade@Rajats-Macbook-Pro test % python catalogService_lookup_test.py "0.0.0.0" "6000"
valid stock test :   error: NO_ERROR
stockname: "FishCo"
price: 23.34
quantity: 884

Invalid stock test:  error: INVALID_STOCKNAME

(venv) (base) rajatgade@Rajats-Macbook-Pro test %
```

2. Catalog service buy_or_sell:

```
(venv) (base) rajatgade@Rajats-Macbook-Pro test % python catalogService_buyorsell_method_test.py
Valid trade request:  error: NO_ERROR

Test by sending excessive quantity:  error: INSUFFICIENT_QUANTITY

Test sending incorrect stock trade request:  error: INTERNAL_ERROR

Test sending invalid trade type:  error: INTERNAL_ERROR

(venv) (base) rajatgade@Rajats-Macbook-Pro test %
```

3. Order Service trade:

```
-zsh
(venv) (base) rajatgade@Rajats-Macbook-Pro test % python orderService_trade_lookup.py  "0.0.0.0" "6001"
Test sending correct order:  error: NO_ERROR
transaction_number: 19683

Test sending excessive quantity:  error: INSUFFICIENT_QUANTITY

Test sending invalid stockname:  error: INVALID_STOCKNAME

Test sending invalid order type:  error: INVALID_REQUEST

(venv) (base) rajatgade@Rajats-Macbook-Pro test %
```
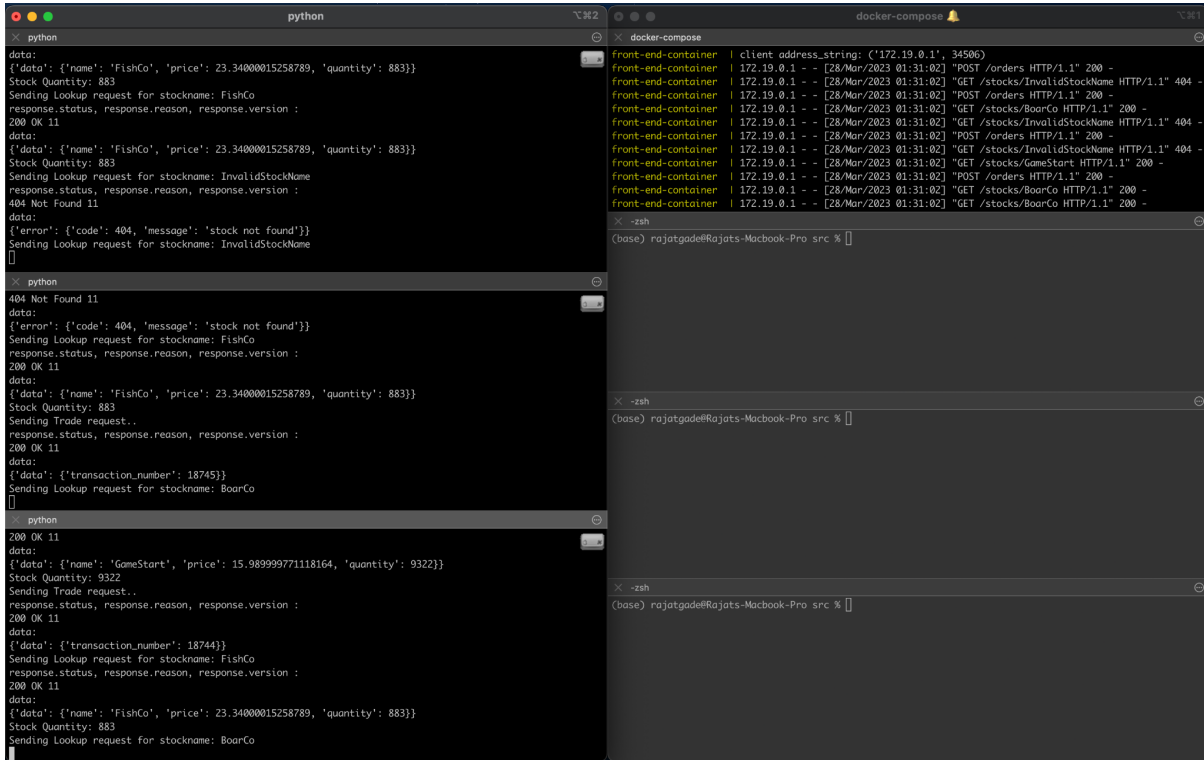
4. Front end server test:

```
-zsh
(venv) (base) rajatgade@Rajats-Macbook-Pro test % python front-end-server-test.py
Sending Lookup request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'FishCo', 'price': 23.34000015258789, 'quantity': 886}}
Stock Quantity: 886
Sending Trade request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'transaction_number': 19688}}
Sending Trade request..
response.status, response.reason, response.version :
400 Bad Request 11
data:
{'error': {'code': 400, 'message': 'Order type is invalid, only buy/sell are accepted'}}
Sending Invalid Lookup request..
response.status, response.reason, response.version :
404 Not Found 11
data:
{'error': {'code': 404, 'message': 'stock not found'}}
Sending request via an invalid url ..
response.status, response.reason, response.version :
400 Bad Request 11
data:
{'error': {'code': 400, 'message': 'Invalid POST request/URL'}}
(venv) (base) rajatgade@Rajats-Macbook-Pro test %
```

5. **Load test (client on host and servers in respective docker containers):**

python

data:
{'data': {'name': 'FishCo', 'price': 23.34000015258789, 'quantity': 883}}
Stock Quantity: 883
Sending Lookup request for stockname: FishCo
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'FishCo', 'price': 23.34000015258789, 'quantity': 883}}
Stock Quantity: 883
Sending Lookup request for stockname: InvalidStockName
response.status, response.reason, response.version :
404 Not Found 11
data:
{'error': {'code': 404, 'message': 'stock not found'}}
Sending Lookup request for stockname: InvalidStockName

python
404 Not Found 11
data:
{'error': {'code': 404, 'message': 'stock not found'}}
Sending Lookup request for stockname: FishCo
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'FishCo', 'price': 23.34000015258789, 'quantity': 883}}
Stock Quantity: 883
Sending Trade request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'transaction_number': 18745}}
Sending Lookup request for stockname: BoarCo

python
200 OK 11
data:
{'data': {'name': 'GameStart', 'price': 15.989999771118164, 'quantity': 9322}}
Stock Quantity: 9322
Sending Trade request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'transaction_number': 18744}}
Sending Lookup request for stockname: FishCo
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'FishCo', 'price': 23.34000015258789, 'quantity': 883}}
Stock Quantity: 883
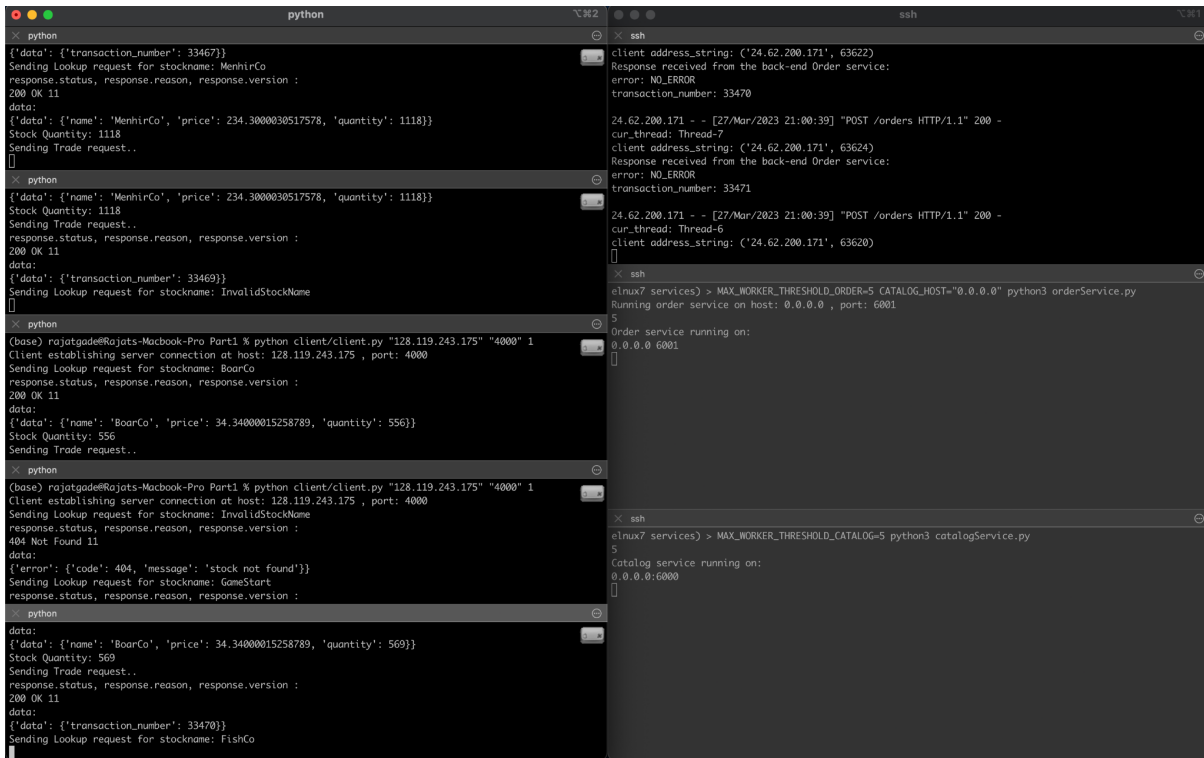Sending Lookup request for stockname: BoarCo

docker-compose
front-end-container | client address_string: ('172.19.0.1', 34506)
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "POST /orders HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/InvalidStockName HTTP/1.1" 404 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "POST /orders HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/BoarCo HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/InvalidStockName HTTP/1.1" 404 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "POST /orders HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/InvalidStockName HTTP/1.1" 404 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/GameStart HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "POST /orders HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/BoarCo HTTP/1.1" 200 -
front-end-container | 172.19.0.1 - - [28/Mar/2023 01:31:02] "GET /stocks/BoarCo HTTP/1.1" 200 -

-zsh
(base) rajatgade@Rajats-Macbook-Pro src %

-zsh
(base) rajatgade@Rajats-Macbook-Pro src %

-zsh
(base) rajatgade@Rajats-Macbook-Pro src %

6. **Load test (client on local and servers running on edlab):**

python
{'data': {'transaction_number': 33467}}
Sending Lookup request for stockname: MenhirCo
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'MenhirCo', 'price': 234.3000030517578, 'quantity': 1118}}
Stock Quantity: 1118
Sending Trade request..

python
{'data': {'name': 'MenhirCo', 'price': 234.3000030517578, 'quantity': 1118}}
Stock Quantity: 1118
Sending Trade request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'transaction_number': 33469}}
Sending Lookup request for stockname: InvalidStockName

python
(base) rajatgade@Rajats-Macbook-Pro Part1 % python client/client.py "128.119.243.175" "4000" 1
Client establishing server connection at host: 128.119.243.175 , port: 4000
Sending Lookup request for stockname: BoarCo
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'name': 'BoarCo', 'price': 34.34000015258789, 'quantity': 556}}
Stock Quantity: 556
Sending Trade request..

python
(base) rajatgade@Rajats-Macbook-Pro Part1 % python client/client.py "128.119.243.175" "4000" 1
Client establishing server connection at host: 128.119.243.175 , port: 4000
Sending Lookup request for stockname: InvalidStockName
response.status, response.reason, response.version :
404 Not Found 11
data:
{'error': {'code': 404, 'message': 'stock not found'}}
Sending Lookup request for stockname: GameStart
response.status, response.reason, response.version :

python
data:
{'data': {'name': 'BoarCo', 'price': 34.34000015258789, 'quantity': 569}}
Stock Quantity: 569
Sending Trade request..
response.status, response.reason, response.version :
200 OK 11
data:
{'data': {'transaction_number': 33470}}
Sending Lookup request for stockname: FishCo

ssh
client address_string: ('24.62.200.171', 63622)
Response received from the back-end Order service:
error: NO_ERROR
transaction_number: 33470

24.62.200.171 - - [27/Mar/2023 21:00:39] "POST /orders HTTP/1.1" 200 -
cur_thread: Thread-7
client address_string: ('24.62.200.171', 63624)
Response received from the back-end Order service:
error: NO_ERROR
transaction_number: 33471

24.62.200.171 - - [27/Mar/2023 21:00:39] "POST /orders HTTP/1.1" 200 -
cur_thread: Thread-6
client address_string: ('24.62.200.171', 63620)

ssh
elnux7 services) > MAX_WORKER_THRESHOLD_ORDER=5 CATALOG_HOST="0.0.0.0" python3 orderService.py
Running order service on host: 0.0.0.0 , port: 6001
5
Order service running on:
0.0.0.0 6001

ssh
elnux7 services) > MAX_WORKER_THRESHOLD_CATALOG=5 python3 catalogService.py
5
Catalog service running on:
0.0.0.0:6000