677 LAB 2 TESTS

We tested the system on the following test cases and we have reported the observed results below.

The test cases were designed as -

1. Test Case 1 - Search query on topic 'Graduate School'
   Tests if it is able to return all books with given topic
   curl "http://localhost:8000/search?topic=Distributed%20Systems"

2. Test Case 2 - Search query on topic 'Umass'
   Tests if it returns an empty array as there are no books with given topic
   curl "http://localhost:8000/search?topic=Umass"

3. Test Case 3 - Lookup for book with bookId = 1
   Tests if it is able to retrieve information for the particular book id
   curl "http://localhost:8000/lookup?id=1"

4. Test Case 4 - Lookup for book with bookId = 5
   Tests if it returns and empty array as there is no book with given id
   curl "http://localhost:8000/lookup?id=1"

5. Buy book with bookId = 4
   Tests if it is able to buy the book with the given id
   curl -X POST -H 'Content-Type: application/json' "http://localhost:8000/buy" -d '{"id": 4}'

6. Buy book with bookId = 5
   Tests if it returns a proper error to user stating that given book is not present in database
   curl -X POST -H 'Content-Type: application/json' "http://localhost:8000/buy" -d '{"id": 5}'

The results of the test cases are shown below - (on AWS)

```
×  ubuntu@ip-172-31-62-8: ~/BookStore_Pygmy_Microservices (-zsh)
ubuntu@ip-172-31-62-8:~/BookStore_Pygmy_Microservices$ hostname
ip-172-31-62-8
ubuntu@ip-172-31-62-8:~/BookStore_Pygmy_Microservices$ sudo docker ps
CONTAINER ID   IMAGE                                  COMMAND            CREATED         STATUS          PORTS       NAMES
148605f0da7f   bookstore_pygmy_microservices_frontend "uwsgi app.ini"    49 minutes ago  Up 49 minutes               frontend
ubuntu@ip-172-31-62-8:~/BookStore_Pygmy_Microservices$ □
```

```
×  ubuntu@ip-172-31-59-83: ~/BookStore_Pygmy_Microservices (-zsh)
ubuntu@ip-172-31-59-83:~/BookStore_Pygmy_Microservices$ hostname
ip-172-31-59-83
ubuntu@ip-172-31-59-83:~/BookStore_Pygmy_Microservices$ sudo docker ps
CONTAINER ID   IMAGE                               COMMAND         CREATED         STATUS          PORTS       NAMES
bcbc6182604a   bookstore_pygmy_microservices_order "uwsgi app.ini"  50 minutes ago  Up 50 minutes               order
ubuntu@ip-172-31-59-83:~/BookStore_Pygmy_Microservices$ □
```

```
×  ubuntu@ip-172-31-49-132: ~/BookStore_Pygmy_Microservices (-zsh)
ubuntu@ip-172-31-49-132:~/BookStore_Pygmy_Microservices$ hostname
ip-172-31-49-132
ubuntu@ip-172-31-49-132:~/BookStore_Pygmy_Microservices$ sudo docker ps
CONTAINER ID   IMAGE                                 COMMAND               CREATED         STATUS          PORTS       NAMES
bbc5aa5ee3d1   bookstore_pygmy_microservices_catalog "uwsgi app.ini"       49 minutes ago  Up 49 minutes               catalog
dec628815ffc   bookstore_pygmy_microservices_sqlite  "/docker-entrypoint…" 49 minutes ago  Up 49 minutes               sqlite
ubuntu@ip-172-31-49-132:~/BookStore_Pygmy_Microservices$ □
```

```
×  ubuntu@ip-172-31-83-6: ~/BookStore_Pygmy_Microservices (-zsh)
ubuntu@ip-172-31-83-6:~/BookStore_Pygmy_Microservices$ hostname
ip-172-31-83-6
ubuntu@ip-172-31-83-6:~/BookStore_Pygmy_Microservices$ python3 run_api_tests.py –h 172.31.62.8 –p 8080
Starting Client Testing Script

Searching for topic: Graduate School
Response: [{'id': 3, 'name': 'Xen and the Art of Surviving Graduate School'}, {'id': 4, 'name': 'Cooking for the Impatient Graduate Student'}]
Response matches expected output
Test case 1 ....... Passed

Searching for topic: Umass
Response: []
Response matches expected output
Test case 2 ....... Passed

Performing lookup for book with bookId: 1
Response: [{'cost': 200, 'id': 1, 'name': 'How to get a good grade in 677 in 20 minutes a day', 'stock': 200, 'topic': 'Distributed Systems'}]
Response matches expected output
Test case 3 ....... Passed

Performing lookup for book with bookId: 5
Response: []
Response matches expected output
Test case 4 ....... Passed

Buying book with bookId: 4
Response: {"buy":true}
Response matches expected output
Test case 5 ....... Passed
```

The results of the test cases are shown below - (on local machine):

```
❯ docker ps
CONTAINER ID   IMAGE                                  COMMAND               CREATED       STATUS        PORTS                    NAMES
1ca1fcced8ea   bookstore_pygmy_microservices_frontend "uwsgi app.ini"       42 hours ago  Up 42 hours   0.0.0.0:8000->8080/tcp   frontend
23c2a5d5f37e   bookstore_pygmy_microservices_order    "uwsgi app.ini"       42 hours ago  Up 42 hours   0.0.0.0:8002->8080/tcp   order
d766e4ad8862   bookstore_pygmy_microservices_catalog  "uwsgi app.ini"       42 hours ago  Up 42 hours   0.0.0.0:8001->8080/tcp   catalog
60fe1f3d11a2   bookstore_pygmy_microservices_sqlite   "/docker-entrypoint…" 42 hours ago  Up 42 hours                            sqlite

~/masters/courses/677/assignments/lab2/BookStore_Pygmy_Microservices main*
❯ python3 run_api_tests.py
Starting Client Testing Script

Searching for topic: Graduate School
Response: [{'id': 3, 'name': 'Xen and the Art of Surviving Graduate School'}, {'id': 4, 'name': 'Cooking for the Impatient Graduate Student'}]
Response matches expected output
Test case 1 ....... Passed

Searching for topic: Umass
Response: []
Response matches expected output
Test case 2 ....... Passed

Performing lookup for book with bookId: 1
Response: [{'cost': 200, 'id': 1, 'name': 'How to get a good grade in 677 in 20 minutes a day', 'stock': 200, 'topic': 'Distributed Systems'}]
Response matches expected output
Test case 3 ....... Passed

Performing lookup for book with bookId: 5
Response: []
Response matches expected output
Test case 4 ....... Passed

Buying book with bookId: 4
Response: {"buy":true}
Response matches expected output
Test case 5 ....... Passed

Buying book with bookId: 5
Response: {"buy":false,"error":"Product doesn't exist"}
Response matches expected output
Test case 6 ....... Passed
```