677-Lab2-Tests

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Tests

Test 1 and Test 2

These are simple tests. This makes search requests through the front-end. Test 1 specifies a topic and Test 2 specifies an item number. The output is the list of matching books and the unique book with the item number repsectively. The code for these tests are in test1.py and test2.py respectively.

Test 3

Here we try to see if we maintain data consistency when we make concurrent buy requests. The RPCs for Dummies stock is set to 1 in the inventory and we allow to clients to concurrently make buy requests. As we would expect, the first client to complete the buy succesfully receives the book and the second gets a message saying that the book is out of stock. We directly interact with the backend for this test. The code is in test3.py.

Test 4

This test is another test of data consistency. Here, two clients make two attempts to buy each book. Each book has a stock of 3. The result shows, as expected that, for each book that one of the clients is able to buy it twice but the other only has 1 succesful purchase. At this point, that client receives an out of stock message. The code is in test4.py.