## 11/8/21 Test cases by Tina Martin

Depending on test case mgmt tool, you can write prerequisites to running test cases and then specify to review prereq.

## Prereq:

- 1. PORT set to 8088 in system environment variables
- 2. Launch .exe app
- 3. Open command prompt

## Test cases:

- 1. Verify after launch DOES not wait for https connection
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl https://127.0.0.1:8088/stats
    - iii. Expected result: Should not return stats
- 2. Verify after launch waits for http connection
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl <a href="http://127.0.0.1:8088/stats">http://127.0.0.1:8088/stats</a>
    - iii. Expected result: Should return stats with 0 for TotalRequests and AverageTime
- 3. Verify incorrect port does not grant access
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl <a href="http://127.0.0.1:8089/stats">http://127.0.0.1:8089/stats</a>
    - iii. Expected result: Should return connection refused message
- 4. Verify valid port grants access
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl <a href="http://127.0.0.1:8088/stats">http://127.0.0.1:8088/stats</a>
    - iii. Expected result: Should return stats with 0 for TotalRequests and AverageTime
- 5. Verify post to /hash accepts password with special characters.
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" http://127.0.0.1:8088/hash
    - iii. Expected results: Should return job identifier NOTE: Write down job identifier as it will be used in next test case
- 6. Verify get DOES NOT return plain text password
  - a. Steps:

- i. Launch .exe app
- ii. From command prompt type: curl -H "application/json" http://127.0.0.1:8088/hash/x where x is the identifier
- iii. Expected results:
  - 1. Should not return plain text password
  - Should return base64 encoded password (NOTE: Go to <a href="https://www.base64decode.org/">https://www.base64decode.org/</a>>select decode button>copy in the returned encrypted password. After converting it should match password.
- 7. Verify stats match requests sent in milliseconds
  - a. Steps:
    - i. Launch .exe app
    - ii. From command prompt type: curl http://127.0.0.18088/stats
    - iii. Expected result:
      - Should return TotalRequests that match how many POSTS you did
      - 2. Should return AverageTime in milliseconds
- 8. Verify app can handle multiple connections
  - a. Launch .exe app
  - b. Launch 2 command windows and in each one change the password in this line: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" http://127.0.0.1:8088/hash
  - c. Hit enter in both
  - d. Expected results: Each command should process and increment the identifier by number of requests
- 9. Verify number of requests is reset with server restart
  - a. Launch .exe app
  - b. From command prompt type: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" <a href="http://127.0.0.1:8088/hash">http://127.0.0.1:8088/hash</a>
  - c. From command prompt type: curl <a href="http://127.0.0.1:8088/stats">http://127.0.0.1:8088/stats</a>
  - d. Close .exe app
  - e. Retype your curl http://127.0.0.1:8088/stats
  - f. Expected results: Stats should return back to 0 for TotalRequests & AverageTime
- 10. Verify post is processed before ungraceful shutdown is completed.
  - a. Steps:
    - i. From command prompt type: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" <a href="http://127.0.0.1:8088/hash">http://127.0.0.1:8088/hash</a>
    - ii. Close .exe app
    - iii. Expected results: Should process the request and not error out
- 11. Verify post is processed before shutdown is completed.
  - a. Open 2 command prompts
  - b. Command prompt 1: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" http://127.0.0.1:8088/hash

- c. Command prompt 2: curl -X POST -d "shutdown" http://127.0.0.1:8088/hash
- d. Expected result:
  - i. Command 1: Should return identifier code
  - ii. Should close .exe open app
- 12. Verify shutdown returns 200 code
  - a. Steps:
    - i. From command prompt type: curl -X POST -d "shutdown" http://127.0.0.1:8088/hash
    - ii. Expected results:
      - 1. Should return 200 code
      - 2. Should close .exe open app
- 13. Verify no password requests when app is shutdown
  - a. Open 2 command prompts
  - b. Command prompt 1: curl -X POST -d "shutdown" <a href="http://127.0.0.1:8088/hash">http://127.0.0.1:8088/hash</a>
  - c. Command prompt 2: curl -X POST -H "application/json" -d "{\"password\":\"angrymonkey\"}" <a href="http://127.0.0.1:8088/hash">http://127.0.0.1:8088/hash</a>
  - d. Expected result: On command prompt 2 should connection refused error msg
- 14. Verify GET is rejected when server is shutdown
  - a. Make sure .exe is closed
  - b. From command prompt type: curl -H "application/json" <a href="http://127.0.0.1:8088/hash/x">http://127.0.0.1:8088/hash/x</a> where x is the identifier
  - c. Expected result: Should receive connection refused msg