# Test Objective:

To achieve the overall purpose of certifying the application’s performance, the following objective must be met:

* Verify that 90th Percentile transaction response time for existing application functionality is within SLA (3 sec)
* Verify average resource utilization on each component (Web, app, database) ios within acceptable limit under load.

# Test Duration:

Performance Test executed with 10 users with 5 sec of Ramp up.

Duration of test was 30 mins.

Test executed on 25th May 2:38PM to 3:08PM IST

# Performance Testing tool used:

Executed this performance test using Jmeter tool. As this is Open-source tool and easily available in market to perform execution. Except Jmeter, other tools are licensed tool. So, I have preferred Jmeter tool for execution.

# Module name:

* Login to <https://petstore.octoperf.com/actions/Catalog.action>
* Module 1: Select pet from Options (Fish, Dogs, Cats, Reptiles, Birds)-> We selected Fish
* Module 2: Select Pet Types-> In our case we selected Angelfish, Tiger shark, Koi, Goldfish
* Module 3: Selected fish we need to **Add to Cart**.
* Module 4: From Shopping Cart, we need to **Proceed to checkout.**
* Module 5: Confirm our order.
* Module 6: Get the confirmation for our order.
* Sign out from application.

# Test data & Parameters:

* We selected Fish as Pet and parameterize Fish Types (Angelfish, Tiger shark, Koi, Goldfish)
* Added assertions for each transaction name.
* Added think time of 5 sec for every page.

# Test Execution Steps:

|  |
| --- |
| Launch Page |
| Enter Credentials |
| Click on Login Page |
| Module 1 - Click On Fish |
| Module 2 - Select Fish Type |
| Module 3 - Shopping Cart |
| Module 4 - Payment Details |
| Module 5 - Confirmation for the order |
| Module 6 - Get the confirmation on submitted order |
| Sign-out Page |

# Expected Results:

* All Transaction response time should be less than 3 sec.
* Through out the runs Pass percentage should be more than 99%

# Performance Metrics to be measured:

## Response Time Metrics:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Transaction Names** | **Average** | **Min** | **Max** | **90th pct** |
| Launch Page | 5.70 | 0.14 | 12.60 | 11.60 |
| Enter Credentials | 0.41 | 0.00 | 6.47 | 0.24 |
| Click on Login Page | 1.04 | 0.00 | 21.93 | 1.06 |
| Module 1 - Click On Fish | 0.44 | 0.00 | 6.36 | 0.23 |
| Module 2 - Select Fish Type | 0.32 | 0.00 | 6.28 | 0.24 |
| Module 3 - Shopping Cart | 0.29 | 0.14 | 6.56 | 0.21 |
| Module 4 - Payment Details | 0.30 | 0.15 | 6.47 | 0.22 |
| Module 5 - Confirmation for the order | 0.86 | 0.15 | 11.67 | 0.24 |
| Module 6 - Get the confirmation on submitted order | 0.47 | 0.15 | 11.47 | 0.23 |
| Sign-out Page | 0.52 | 0.38 | 11.98 | 0.57 |

## Pass Fail Metrics:

|  |  |  |  |
| --- | --- | --- | --- |
| **Transaction Names** | **Pass** | **Fail** | **TPH** |
| Launch Page | 302 | 0 | 604 |
| Enter Credentials | 302 | 0 | 604 |
| Click on Login Page | 300 | 1 | 600 |
| Module 1 - Click On Fish | 299 | 0 | 598 |
| Module 2 - Select Fish Type | 297 | 0 | 594 |
| Module 3 - Shopping Cart | 294 | 0 | 588 |
| Module 4 - Payment Details | 294 | 0 | 588 |
| Module 5 - Confirmation for the order | 294 | 0 | 588 |
| Module 6 - Get the confirmation on submitted order | 294 | 3 | 588 |
| Sign-out Page | 292 | 0 | 584 |

## Error Metrics:

|  |  |  |
| --- | --- | --- |
| **Transaction Name** | **Error Count** | **Error description** |
| Click on Login Page | 1 | Connect to petstore.octoperf.com:443 [petstore.octoperf.com/49.12.128.248] failed |
| Module 6 - Get the confirmation on submitted order | 3 | 500- Internal Server Error |

# Test Observation:

* Observed all page response time under 2 sec except Launch page.
* Observed Launch Page response time in the range of 11-12 sec.
* Out of 301 transaction, 1 transaction failed due to connection time out in login page.
* Out of 297 transaction, 3 transactions failed due to 500-Internal Server error.
* Response time for Module 1 to Module 6 observed to be less than 1 sec.