**Step #1 Identify performance acceptance criteria and metrics**

**Latency**: product search should not take more than 3 seconds, product browse - no more than 5 second.

**Throughput:** eShop should have the capacity of entertaining 200 transactions per second.

**Step #2 Identify key scenarios**

1. All possible scenarios:

* Browse catalog.
* Search for a product.

1. User activities for this scenarios:

* Browse the product catalog.
* Search for a specific product.

**Step #3 Workload model**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Scenario** | **Action** | **Input Data** | **Output Data** | **Think Time** |
| **Browsing the product catalog** | Browse | * Catalog Tree | * Product description * Title * Category * Rating | 4-30 seconds |
| **Search for a specific product** | Search | ??? | * Product description * Title * Category * Rating | 2-15 seconds |

**Step #5 Identify type of testing**

Performance testing.

* Verify response time, throughput, resource utilization of the application under low (100 user actions per second), normal (200 user actions per second), moderate (400 user actions per second).

How to emulate 200 user actions per second use is the main question here

Load testing.

* Verify response time, throughput, resource utilization of the application under heavy 600 user actions per second) load conditions.

Stress test.

* Check the maximum number of requests per seconds that the application can handle before it crashes.