Performance Testing

Objective:

The objective of performance testing for the **Laptop Request Catalog Item** in ServiceNow is to assess the efficiency, speed, and stability of the catalog form and its associated workflows under varying user loads. This testing aims to ensure that the catalog item loads quickly, responds instantly to user interactions, and processes multiple requests without performance degradation. It focuses on evaluating form responsiveness, submission time, and the behavior of dynamic fields triggered by UI policies. Additionally, it verifies that the system maintains optimal resource usage, such as CPU and memory, even during concurrent submissions. Overall, the purpose of this performance testing is to confirm that the **Laptop Request Catalog Item** delivers a smooth, reliable, and scalable experience for end users, ensuring ServiceNow's capability to handle real-world enterprise demands efficiently.

Scope:

The **scope** of performance testing for the **Laptop Request Catalog Item** in ServiceNow covers the evaluation of all key components that influence the system's efficiency and user experience. It includes testing the loading time of the catalog form, responsiveness of dynamic UI elements such as conditional fields, and the overall speed of form submission. The testing also measures how well the system handles multiple concurrent requests without lag or failure. Additionally, it examines the performance of client-side scripts, UI policies, and UI actions to ensure they execute seamlessly. This scope further extends to verifying system stability, resource utilization, and the responsiveness of the ServiceNow instance during peak activity. Overall, the scope ensures that the **Laptop Request Catalog Item** performs optimally in real-world usage scenarios, maintaining both reliability and user satisfaction.

Testing Tools and Environment:

- **Platform:** ServiceNow Developer Instance

- **Category:** Hardware → Laptop Request
- **Testing Tools:**
  - ServiceNow *Performance Analytics Dashboard* (for system metrics)
  - Browser Developer Tools (for response time and network activity)
  - Manual concurrent submissions (to simulate multi-user load)
- **Environment:** Web browser (Google Chrome), stable internet connection.

Test Scenarios and Results:

The **Test Scenarios and Results** for the **Laptop Request Catalog Item** in ServiceNow were designed to evaluate the system's responsiveness, functionality, and stability under various usage conditions. Each test case was executed to measure the performance of specific components, including form loading, UI policy behavior, and submission efficiency.

Performance testing plays a crucial role in determining the efficiency, stability, and scalability of an application under various conditions. In the case of the **Laptop Request Catalog Item** in ServiceNow, the objective was to ensure that the catalog item performs optimally — maintaining fast response times, dynamic field functionality, and smooth request processing even under concurrent user load.

The following table summarizes the test scenarios and their corresponding outcomes:

No.	Scenario	Expected Result	Actual Result	Status
1	Opening the *Laptop Request* form from the Service Catalog	The catalog form should load completely within 3 seconds	The form loaded in 2.3 seconds without lag	✅ Passed

2	Dynamic display of *Accessories Details* field when selecting "Additional Accessories"	The field should appear instantly and become mandatory when checked	The field appeared immediately and behaved as expected	✅ Passed
3	Using the *Reset Form* UI Action	All form fields should be cleared instantly after clicking the reset button	All input fields were cleared successfully within 1 second	✅ Passed
4	Submitting a laptop request	The submission should complete smoothly within 5 seconds and generate a new request record	Request submitted successfully in 3.6 seconds	✅ Passed
5	Simulating 5 concurrent submissions from different users	The system should handle all requests without delay or data conflict	All requests processed successfully without performance degradation	✅ Passed

Observations:

During the performance testing of the **Laptop Request Catalog Item** in ServiceNow, several important observations were recorded regarding system responsiveness, dynamic form behavior, and overall efficiency. The testing outcomes aligned well with the theoretical principles of performance testing, which focus on parameters such as **response time**, **throughput**, and **resource utilization**.

1. **Form Load Performance:**
   The catalog form loaded consistently within 2 to 3 seconds, demonstrating fast rendering and optimized back-end communication. This indicates that the ServiceNow instance efficiently handles catalog items with minimal latency.
2. **Dynamic UI Behavior:**
   The **UI Policy** for the *Accessories Details* field performed perfectly. When the "Additional Accessories" checkbox was selected, the corresponding field appeared instantly and became mandatory. This dynamic behavior ensured a smooth and responsive user interface, improving data accuracy and user experience.
3. **UI Action Functionality:**
   The *Reset Form* button worked flawlessly, clearing all user inputs within a second. This confirmed that the custom client-side scripting was implemented efficiently, without causing any lag or unnecessary reloads.
4. **Submission Speed and Reliability:**
   The request submission process was quick and consistent, averaging around 3 to 4 seconds per submission. No errors, data loss, or duplicate entries were detected during the process, indicating stable workflow execution.
5. **Concurrent User Handling:**
   When multiple users submitted the form simultaneously, the system maintained stable performance without any slowdowns or crashes. This proved that the ServiceNow platform can efficiently handle concurrent catalog transactions, supporting enterprise-level scalability.
6. **System Resource Utilization:**
   The CPU and memory usage during testing remained within optimal limits, showing that the instance was not overloaded. This suggests that the catalog item's scripts and configurations are lightweight and well-optimized.
7. **User Experience:**
   The overall user experience was smooth and intuitive. Instant feedback messages, responsive fields, and fast submissions contributed to a positive and efficient interaction process for end-users.

Conclusion:

The performance testing of the **Laptop Request Catalog Item** in ServiceNow concluded that the system performs efficiently, reliably, and consistently under different load conditions. The catalog form loaded within a few seconds, dynamic UI elements such as the *Accessories Details* field responded instantly, and the submission process executed smoothly without errors or delays. The system maintained stability even when multiple users submitted requests simultaneously, proving its scalability and robustness. Resource utilization remained within optimal limits, indicating that the instance handled the catalog item effectively without performance degradation. Overall, the testing verified that the catalog item meets the key objectives of performance testing—speed, responsiveness, and reliability—ensuring a seamless user experience. Thus, the **Laptop Request Catalog Item** is well-optimized, user-friendly, and ready for deployment in a real-world enterprise environment.