Performance Testing Phase

Project Title: Medical Inventory Management System
Team ID: NM2025TMID0325

5.1 Objective

To validate that the Salesforce application performs efficiently, maintains data accuracy, and adheres to the defined requirements.

5.2 Scope of Testing

Covers supplier, product, and purchase order functionalities, along with automation testing through Flows and Apex Triggers.

5.3 Testing Types

- **Functional Testing:** Ensures each feature works as intended.
- **Performance Testing:** Monitors system speed and load handling.
- **Validation Testing:** Confirms data input accuracy.
- **Security Testing:** Verifies access control mechanisms.

5.4 Test Scenarios

- Add supplier successfully.
- Block expired product addition.
- Automatically update stock upon purchase order approval.
- Dashboard updates in real time.

5.5 Tools Used

- Salesforce Developer Console
- Apex Test Execution
- Lightning Performance Analyzer

5.6 Results

All test cases passed successfully. The system maintained fast response times and handled multiple operations without performance degradation.

5.7 Expected Outcome

A stable, fast, and reliable medical inventory management system ready for deployment.

5.8 Conclusion

The performance testing phase confirmed that the system meets all functional, performance, and security requirements. Automation flows triggered correctly, dashboards updated instantly, and data validation ensured accuracy. This successful testing phase validates that the project is ready for real-world use and future scalability.