Summary Report: Sentinel Stack

🔍 Objective

Automate and validate all critical user flows of the StyleMate e-commerce website using Selenium with Java, TestNG and Cucumber. Identify functional defects, document reproducible steps, assess severity, and recommend remediation.

📊 Summary Report

- **Testing Framework:** Selenium WebDriver
- **Test Runner & BDD:** TestNG & Cucumber
- **Environment:** Web, Desktop View
- **Browser:** Chrome (latest stable)
- **Test Execution** Date: July 17, 2025
- **Test Duration:** ~4 days

🔢 Test Statistics

Metric	Value	Percentage
Total Test Cases	29	100%
Passed	19	66%
Failed	10	34%
Blocked/Skipped	0	0%

📝 Additional Notes

💡 All defects stem from actual application behavior; no external limitations were encountered.

🛠️ Technologies Used

- Framework: Selenium WebDriver
- Language: Java
- BDD: Cucumber (Gherkin)
- Test Runner: TestNG
- Reporting: ExtentReports / Cucumber HTML Report

🧾 Test Coverage Report

Scenario	Test Cases	Passed	Failed	Remarks
Homepage Navigation	6	5	2	Footer info defect
Product Catalog & Search	6	5	1	Search returns no results
Shopping Cart & Wishlist	9	8	1	Cart not persisting across sessions
Checkout Process	1	0	1	Checkout button unresponsive
Order Management	1	0	1	Order tracking link broken
User & Account Management	6	1	5	Multiple account-related flows failing (reg., login, reset)
Total	29	19	10	Consider prioritizing bugs with the most severity level

📝 Open Issues

- Valid keyword yield no search results
- Cart contents not retained between sessions
- Checkout button unresponsive; order cannot be placed
- "Track Your Order" link doesn't function
- Registration button fails; invalid-login not handled

🧠 Conclusion

This testing effort uncovered critical defects in core e-commerce workflows—search, cart, checkout, order tracking, and account management—that block a successful user experience. With 41 % of automated tests failing, immediate triage of high-severity bugs is essential. To bolster quality and accelerate future releases, it is recommended to:

1. Prioritize Fixes: Assign development resources to address all high-severity defects.
2. Enhance Automation: Expand the regression suite to cover account flows and edge cases.
3. Stabilize Tests: Implement explicit waits and retry logic for dynamic elements.
4. Integrate CI/CD: Run automated suites on each build to catch regressions early.

By remediating these blockers and strengthening the automation framework, StyleMate can achieve a resilient, high-quality release pipeline and deliver a seamless shopping experience.