1. Project Overview

This report summarizes the testing activities conducted for a multi-platform e-commerce application (Web, Android, iOS). As an Automation Engineer, I performed manual, automated, API, and performance testing across critical features, including user registration, item search, cart management, and order placement.

2. Tools Used

List of the tools used for each testing type:

Type	Tool
Manual Testing	Google Sheets
Web Automation	Selenium (Java), Eclipse
Mobile Automation	Appium, Android virtual device, VS Code
API Testing	Postman
Performance Testing	Apaceh JMeter
Reporting	Google Doc

3. Test Coverage

Summarize which features were tested and how.

Feature	Test Type	Covered
User Registration	Manual, API	Yes
User LogIn	Automation	Yes
Item Search & Filtering	Manual, Automation	Yes
Page Scrolling	Automation	Yes
Cart Management	Manual, Automation	Yes
Order Placement	Manual, API, Automation	Yes

| Push Notification | Manual | Yes |
| Create Draft Message | Automation | Yes |

Defect Summary

Manual Testing – Critical Defects

ID	Title	Severity	Priority	Status
BUG-0 01	Application crashes when adding more than 99 items of the same product to the cart	Critical	High	Open
BUG-0 02	Payment processing timeout results in a double charge	Critical	High	Open
BUG-0 03	User session not invalidated after password change	Major	High	Open
BUG-0 04	Search results show out-of-stock items with no indication	Major	Medium	Open
BUG-0 05	Push notifications not delivered on iOS after app is in the background for more than one hour	Major	High	Open

Performance Testing – Top 5 Errors by Sampler

These issues were identified using Apache JMeter with 100 concurrent virtual users simulating traffic:

Sampler Endpoint	Total Requests	Error Count	Error Type	Error %
Total (All)	300	155	400 / Bad Request	51.67%
/login-13	100	5	400 / Bad Request	5%

`/orders-14`	100	71	400 / Bad Request	71%
`Test/products`	100	79	400 / Bad Request	79%

Observation:

- High error rates were found in `/orders-14` and `Test/products` endpoints, suggesting potential issues in input validation or backend logic under load.

- These need to be addressed to ensure stability during high user traffic.

5. Test Execution Summary

Summarize the outcome of test execution: how many test cases were executed, passed, failed, blocked, etc.

Test Area	Total Test Cases	Passed	Failed
Manual Testing	30	25	5
Web Automation	3	3	0
Mobile Automation	2	3	0
Performance Test	300	145	155
API Testing	4	4	0

6. Conclusion & Recommendations

Overall, the core functionalities were successfully tested across web and mobile platforms. Automation was implemented effectively for repeatable test cases. API and performance testing provided insights into system reliability and responsiveness. Recommended to fix critical defects before release.