Sprint 4: Test Completion & Execution

Objective: Refine, finalize, and deploy the automated testing framework for OpenCart.

1. Framework Optimization

Refactor the framework using Page Object Model (POM) and utility functions for reusability. Sample POM structure created for LoginPage, which can be extended to other pages.

2. Execute Full Test Suite

UI Tests: login, add to cart, search, register API Tests: Postman collection executed with all requests passing DB Tests: MySQL queries executed to validate product and user data Performance Tests: JMeter test plan executed to verify homepage and product load times

3. Analyze & Report Results

Results consolidated in a table format:

Test Type	Feature	Status	Notes
UI	Login	Passed	Dashboard visible
UI	Add to Cart	Passed	Cart updates correctly
UI	Search	Passed	Correct results
UI	Register	Passed	Success message displayed
API	Login Endpoint	Passed	200 OK
DB	Products Query	Passed	Expected rows returned
Performance	Homepage Load	Passed	Avg 2s response

4. Documentation

Full user guide prepared in docs/UserGuide.md detailing framework usage, adding new test cases, and executing tests.

5. CI/CD Pipeline

Sample Jenkinsfile included to automate test execution for UI, API, and performance tests.

6. Test Completion Activities

All planned tests executed successfully. Exit criteria verified. Test completion report prepared with results summarized.