**Tutorial Ninja – Test Plan (Selenium E2E)**

Application URL:<https://tutorialsninja.com/demo/index.php?route=common/home> Prepared by: Keval Rathod

### **1. Purpose**

Ensure that every core feature of the demo e‑commerce site works correctly, meets user expectations, and is stable across browsers by combining manual checks with Selenium automation. Basic security and performance checks will also be performed.

### **2. Scope**

**Included**

* Functional and UI testing of all customer‑facing pages
* Selenium automation for the most important flows (login, registration, search, cart, checkout, contact form)
* Smoke and regression runs, cross‑browser runs (Chrome and Firefox)
* Light security probing (SQLi, XSS) with Burp Suite
* Load test of main flows with JMeter

**Excluded**

* Direct database validation
* Real payment‑gateway transactions
* Extensive API testing (demo site exposes none publicly)

### **3. Objectives**

1. Catch functional and visual defects before demo day.
2. Provide repeatable automated tests for critical paths.
3. Deliver clean evidence (reports, logs, screenshots) for reviewers.

### **4. Test Strategy**

* **Manual functional checks**: first pass on each module to discover defects and write clear steps.
* **Automation**: Java + Selenium + TestNG using Page Object Model and ExtentReports. Data‑driven tests via TestNG @DataProvider.
* **Security**: run quick OWASP test set in Burp Suite Community (SQL injection, XSS, insecure cookies, CSRF token presence).
* **Performance**: JMeter script simulating 100, 200, then 500 virtual users through home → product page → add‑to‑cart → checkout.

All high‑priority tests run in Chrome; critical smoke pack also executed in Firefox.

### **5. Test Environment**

* Windows 10/11 laptop
* Latest Chrome and Firefox browsers
* IntelliJ (or Eclipse), Maven, Git + GitHub
* Burp Suite Community Edition
* Apache JMeter 5.x

### **6. Deliverables**

1. This test plan (markdown or doc).
2. Manual test‑case sheet (spreadsheet or Google Sheet).
3. Selenium framework repository with source code and README.
4. ExtentReports HTML output from final run.
5. Security findings document (brief description, reproduction, severity).
6. JMeter HTML report and summary notes.
7. Consolidated bug list with status.

### **7. Test Modules and Key Scenarios**

* **Home page** – banners, navigation links, search bar.
* **Registration** – successful signup, invalid email, existing user, blank mandatory fields.
* **Login** – valid creds, wrong password, empty fields.
* **Search** – existing product, nonexistent product, empty query.
* **Product detail** – images, price, add‑to‑cart button.
* **Cart** – add, remove, quantity update, price recalculation.
* **Checkout** – guest flow, logged‑in flow, field validation.
* **Contact Us** – submit with valid data, invalid email, blank message.