

Test Plan

Project Name: Swag Labs

Team Leader: Ahmed Ibrahim Meatmed AbdElmotaleb

Team Members:

-Zeyad lofty

- Saif Wael Abdelaleem Sharaf Eldin

-Mariam Saeed Awad

-Malak Said Hamouda

-Shimaa Emad Hassan

Acceptance Criteria

User Stories & Responsibilities (6 user stories)

- Login: Assigned to Shimaa
- Cart: Assigned to Malak
- Checkout: Assigned to Ziad
- Sidebar (includes Logout): Assigned to Ahmed
- Home page: Assigned to Mariam
- Item's Page (6 items): Assigned to Saif

1. Item Details Display

o Each item page shows:

- Item Name
- Description
- Price
- Product Image

o These details must match the values shown on the Home Page.

2. Cart Interaction

- o Each item page contains an **“Add to Cart”** button.
- o When clicked, the button changes to **“Remove”**, and the item is added to the cart.
- o When **“Remove”** is clicked, the item is removed from the cart, and the button returns to **“Add to Cart.”**

3. Navigation

- o Each item page has a **“Back”** button.
- o When clicked, the user is redirected to the Inventory Page.
- o The cart state remains unchanged (items remain in the cart if added).

-Expected Results

- **Item details are displayed correctly and consistently with the Inventory Page.**
- **User can add/remove items, but only 1 quantity per item.**
- **The cart can contain up to 6 unique items maximum.**
- **Back button navigates correctly without affecting the cart state.**
- **Locked-out users are blocked at login and never reach the site.**
- **Other account types behave according to design.**

-Prerequisites

- Stable internet connection.
- Valid Swag Labs account credentials.
- Application server and database are online and functional.
- User is successfully logged in and navigated to the Inventory Page.

-Dependencies

- **It will depend only on the Cart functionality as it is the only thing that is going to be affected .**

Deliverables & Approvals

What will be Delivered at the end of this task ?

For each Member each will assign the following

-Test Case file , Bug report and lastly Test summary

The leader will be responsible for validation each of them if not enough time each member will review one of other members when it's done leader will arrange data and assign the Task

Types of Testing

1. Manual Testing

- Verify login with valid/invalid credentials.
- Add/remove item/s from cart.
- Logout works
- Complete checkout with valid data.
- Item details page (images, price, description).

2. Static Testing

- Review requirements, design documents, and test cases.
- Ensure UI elements match specifications.
- Check error messages.

3. API Testing

- Test login API (status codes, error handling).
- Cart API (add, remove, update items).
- Checkout API (order creation, payment validation).
- Home page API (fetch, filter, sort items).

4. Automation Testing

- Automate login, add-to-cart, checkout workflows.
- Use Selenium for UI regression tests.
- Automate API tests using Postman/Newman or Rest Assured.
- Schedule nightly regression runs for stability.

5. Risks

- **Human Risks**
 - Miscommunication among team members.
 - Lack of experience with automation tools (e.g., Selenium, Postman).
 - Limited time availability due to academic/workload pressures.
 - **Leader Absence:** In case the team leader is unavailable, responsibilities will be delegated to the most senior/experienced member until the leader returns. Documentation will ensure smooth continuation.
 - **Member Absence:** If a member is absent, their tasks will be redistributed temporarily among other members with similar skills. Regular progress updates will minimize delays.
 - **Lack of Time:** If deadlines are at risk, the team will prioritize critical test cases with higher-priority over lower-priority ones and may extend working hours or redistribute workload to ensure core features are tested.
- **Project Risks**
 - Changes in project requirements late in the development cycle.
 - Delays in integration between frontend and backend.
 - Environment instability (server downtime, database connectivity issues).
 - Incomplete or outdated documentation impacting static testing.

6. Environment

To ensure consistent and reliable testing, the following environment setup will be used:

- Hardware

- **Client Devices:** Laptops and desktops with minimum 8 GB RAM, i5 processor or higher

- Software

- **Operating Systems:** Windows 10/11 , Mainly focused more on 11
- **Browsers:** Chrome (latest), Firefox (latest).
- **Automation Tools:** Selenium WebDriver, Postman/Newman, Rest Assured
- **Version Control:** GitHub for code and test case management
- **Test Management:** Google Excel Sheets

- **Test Environment**

- **Staging Server:** A dedicated Swag Labs staging environment with test data
- **API Gateway:** Accessible endpoints for login, cart, checkout, and inventory
- **Network:** Stable internet connection with minimum 10 Mbps speed

- **Access & Credentials**

- Valid test accounts:
 - Standard user
 - Locked-out user
 - Problem user
 - Performance glitch user

- **Data Reset**

- Cart and user session data will be reset before each test cycle to ensure consistency.