

Testing Scope - SauceDemo & Restful Booker

1. Project Overview

The purpose of this document is to define the **Test Scope** for the project covering both a **web application** (SauceDemo) and an **API service** (Restful Booker). It outlines all features to be tested, types of testing, tools used, test data, entry/exit criteria, and expected deliverables.

2. In-Scope

- Functional testing (manual & automation) of all core flows in SauceDemo.
- API testing (manual & automation) for all endpoints of Restful Booker.
- Regression testing after fixes and changes.
- Smoke testing before running the full automation suite.
- Basic cross-browser verification (Chrome / Firefox / Edge).

- Basic responsive checks (mobile view verification).
 - Integration of automated tests into CI pipelines (e.g., GitHub Actions / Jenkins).
 - Test reporting and defect logging.
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3. Objectives

- Design and establish a test framework covering both UI and API.
 - Execute a comprehensive set of manual test cases for functional validation.
 - Automate critical scenarios to accelerate regression cycles.
 - Provide automated execution reports and quality metrics (pass/fail, coverage, defect counts).
 - Deliver a practical demonstration of how to execute and maintain tests.
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4. Applications Under Test

4.1 SauceDemo (Web Application):

- **URL:**

<https://www.saucedemo.com/inventory.html>

- **Type:** Demo e-commerce application for testing purposes.

Features to be tested :

1. Login Functionality

- Verify login with valid and invalid credentials.
- Validate behavior for locked out user.
- Confirm error messages are displayed correctly.

2. Product Inventory Page

- Validate that all products are displayed with name, description, image, and price.
- Check sorting options (A-Z, Z-A, Price low-high, Price high-low).

3. Cart Management (Add/Remove Products)

- Add single/multiple products to the cart.
- Remove products from the cart.
- Validate that cart count updates correctly.

4. Checkout Process

- Step 1: Enter customer information (first name, last name, postal code).
- Step 2: Verify order summary (products, total, tax, final price).
- Step 3: Complete order and verify confirmation message.

● Test Data:

- Demo accounts provided by SauceDemo
(`standard_user`, `locked_out_user`,
`problem_user`, `performance_glitch_user`).
- Default password: `secret_sauce`.

4.2 Restful Booker (API Service):

- **URL:**

<https://restful-booker.herokuapp.com/apidoc/index.html>

- **Type:** Booking management API (CRUD).

Features to be tested :

1. Create Booking (POST /booking)

- Validate successful booking creation with valid data.
- Test missing or invalid input (negative testing).
- Verify response contains booking details with a valid booking ID.

2. Retrieve Bookings (GET /booking, GET /booking/{id})

- Retrieve all bookings without filters.
- Retrieve bookings using specific filters (e.g., name or date).

- Validate booking details match the created data.

3. Update Booking (PUT /booking/{id}, PATCH /booking/{id})

- Update full booking data.
- Partially update specific fields (e.g., check-in date).
- Verify changes are persisted and visible on retrieval.

4. Delete Booking (DELETE /booking/{id})

- Delete a booking using booking ID.
- Confirm that deleted booking cannot be retrieved.
- Validate correct response codes.

5. Authentication (POST /auth)

- Generate valid authentication token.
- Test with invalid credentials.
- Verify token is required for protected operations (update/delete).

- **Validation Points:**

- Response codes (200, 201, 400, 404, 403, etc.).
- Response time (performance check).
- Headers and payload structure correctness.
- Data consistency across requests.

5. Tools & Technologies

- **Manual Testing:** Excel/Google Sheets for documentation, Postman for API testing.
 - **Automation (UI):** Selenium WebDriver
 - **Automation (API):** Rest Assured (Java) / Newman (Postman CLI).
 - **CI/CD Integration:** GitHub Actions.
 - **Defect Tracking & Reporting:** Jira / Excel defect log.
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6. Deliverables

- Test Plan + Test Scope document.
 - Detailed manual test cases (for SauceDemo & Restful Booker).
 - Automated test scripts (UI & API).
 - Test execution reports (manual + automation).
 - Defect reports with evidence and logs.
 - Final project documentation/presentation.
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7. Entry & Exit Criteria

Entry Criteria

- Application access is stable and available.
- Test environment and tools are ready.
- Test data is prepared.

Exit Criteria

- All in-scope test cases executed.
 - All critical/high defects fixed or documented.
 - Automation suite executed with acceptable pass rate.
 - Summary test report delivered.
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8. Expected Outcomes

- Validation of both frontend (SauceDemo) and backend (Restful Booker).
- Automated regression suite for UI and API.
- Clear defect reports and improvement recommendations.
- Demonstration of standard testing practices (manual + automation).