

Introduction

This document serves as a comprehensive **Software Requirements Specification (SRS)** for testing **AutomationExercise.com**, including manual testing, automation testing, and API testing. The primary goal is to ensure software reliability, performance, and security.

Purpose:

Ensuring all functionalities of the **Automation Exercise** website are tested thoroughly using **Manual, Automation, and API Testing** approaches.

Pages to Be Tested:

Home Page:

- **Manual Testing:** Check UI elements, responsiveness, and navigation.
- **Automation Testing:** Automate banner display, navigation clicks, and layout validation.
- **API Testing:** No API testing required.

Products Page:

- **Manual Testing:** Verify product display, search, filter, and sorting.
- **Automation Testing:** Automate search functionality, filter selection, and sorting verification.
- **API Testing:** Validate API response for product listing, ensuring correct data retrieval.

Product Details Page:

- **Manual Testing:** Ensure product details (name, price, images, description) display correctly.
- **Automation Testing:** Automate adding products to cart and posting reviews.
- **API Testing:** Validate API response for fetching product details and submitting reviews.

Cart Page:

- **Manual Testing:** Verify cart updates, product removals, and total price calculations.
- **Automation Testing:** Automate adding, updating, and removing items from the cart.
- **API Testing:** Check API response for cart operations, ensuring data updates correctly.

Checkout Page:

- **Manual Testing:** Validate order placement, form field requirements, and confirmation messages.
- **Automation Testing:** Automate the checkout process, including form filling and order submission.
- **API Testing:** Validate API response for order creation and payment processing.

Login & Signup Page:

- **Manual Testing:** Test valid and invalid login/signup scenarios.
- **Automation Testing:** Automate login and signup flows.
- **API Testing:** Validate API response for authentication, ensuring secure login/signup.

Enter Account Information Page:

- **Manual Testing:** Verify account information fields and form submission.
- **Automation Testing:** Automate form validation and submission.
- **API Testing:** Check API response for storing and updating account information.

Logout Functionality:

- **Manual Testing:** Ensure logout works and users cannot access restricted pages.
- **Automation Testing:** Automate logout checks and session expiration tests.
- **API Testing:** Validate API response for session termination.

Delete Account:

- **Manual Testing:** Verify account deletion, confirmation, and data removal.
- **Automation Testing:** Automate account deletion functionality.
- **API Testing:** Ensure API response correctly removes user data.

Contact Us Page:

- **Manual Testing:** Verify form submission, validation, and response messages.
- **Automation Testing:** Automate form submission and validation tests.
- **API Testing:** Validate API response for contact form submission.

Payment Page:

- **Manual Testing:** Test different payment methods, success/failure scenarios, and security validations.
 - **Automation Testing:** Automate payment flow and order completion verification.
 - **API Testing:** Validate API response for payment transactions and order status.
-

Testing Scope – What Features/Pages Will Be Tested?

Features to Be Tested:

Home Page: Verify homepage loads without errors, check navigation links, ensure banners and carousels display correctly, and test responsiveness.

Products Page: Ensure products are displayed with correct images, names, and prices; verify search functionality, test filtering and sorting, and check product redirection. (Also, verify category and brand filters, and check for any errors when selecting them.)

Product Details Page: Verify product details (name, price, description, images), check quantity selection, and ensure "Add to Cart" works. (Additionally, verify the ability to add comments/reviews on the product and check if they display correctly.)

Cart Page: Verify products in the cart display correctly, allow updates/removals, check total price calculations, and test cart persistence after reload.

Checkout Page: Ensure the checkout process works, validate required fields, verify order summary accuracy, and confirm order completion.

Login & Signup: Test login with valid/invalid credentials, signup validation, and error handling. (The "Forgot Password" functionality is missing, verify if it's available or if it's an issue.)

Enter Account Information Page: Ensure correct redirection after signup, validate all fields (name, email, address, password), test gender/birthday/newsletter selection, and check account creation.

Logout Functionality: Ensure users can log out, verify redirection to the homepage, and test access restrictions after logout.

Delete Account: Verify users can delete their account after logging in. Ensure proper confirmation before deletion, and check if account data is removed successfully.

Payment Page: Verify different payment methods (credit card, PayPal, etc.), Ensure correct redirection to payment gateway, Validate payment success and failure scenarios, Test security measures (e.g., encryption, authentication), Confirm order is placed only after successful payment

Page	Testers	Testing Type
Home	(Abdlrahman Ibrahim & Omar Mostafa)	Manual, API, Automation
Products	(Ahmed Maher & Omar Mostafa)	Manual, Automation
Products Details	(Ahmed Maher & Ammar)	Manual, Automation
Cart	(Malak Ismail & George)	Manual, Automation
Checkout	(GEROGE & Ammar)	Manual, API, Automation
Login & Signup	(Malak Ismail & Apdelmasehromany)	Manual, API, Automation
Enter Account Information	(Abdlrahman Ibrahim & apdelmasehromany)	Manual, API, Automation
Contact Us Page	(Omar Mostafa & George)	Manual, API, Automation
Logout Functionality	All Team	Manual, Automation
Delete Account	All Team	Manual, Automation

Risks in Testing

- Browser Compatibility Issues
- Device & Screen Responsiveness
- API Reliability & Response Time
- Data Integrity Issues

Key Performance Indicators (KPIs) for Testing

- **Test Execution KPIs:** Test Case Execution Rate, Test Coverage Percentage, Automation Coverage
- **Defect Tracking KPIs:** Bug Detection Rate, Defect Severity Distribution, Bug Fix Rate, Defect Reopen Rate
- **Performance & Security KPIs:** Page Load Time, API Response Time, Security Vulnerability Detection Rate
- **User Experience & Usability KPIs:** Bug Leakage Rate, User Acceptance Test (UAT) Pass Rate, Customer Reported Defects

Requirements Document for AutomationExercise.com

AutomationExercise.com is a practice platform designed for testers and automation engineers to sharpen their skills in web and API automation. This document outlines the key features of the website, how users interact with it, and what makes it work smoothly.

Functional Requirements (What the website does)

1. User Accounts

- **Sign Up & Log In:** Users should be able to create an account and log in to access their personalized features.
- **Logout:** Users can log out whenever they want to secure their session.

2. Product Browsing & Shopping

- **View Products:** Users can explore products organized into categories like Men, Women, and Kids.
- **Search for Products:** A search bar allows users to find products quickly.
- **Product Details Page:** Clicking on a product should take the user to a page with full details, including images, descriptions, and pricing.

3. Shopping Cart & Checkout

- **Add to Cart:** Users can add items to their shopping cart.
- **View & Edit Cart:** Users should be able to see what they've added, update quantities, or remove items.
- **Checkout & Purchase:** The site should guide users through the process of placing an order.

4. Learning & Testing Features

- **Test Cases Section:** Users can access a list of predefined test cases for practice.
- **API Testing:** The website provides an API playground where users can test various API endpoints.
- **Video Tutorials:** Users can access educational videos for learning automation testing.

5. Contact & Support

- **Contact Form:** Users should be able to fill out a form to ask questions or get support.

Non-Functional Requirements (How the website should perform)

1. Performance

- Pages should be loaded within 2 seconds for a smooth experience.**
- The website should handle multiple users without slowing down.**

2. Security

- User data should be securely stored and encrypted.**
- The system should prevent SQL injection, XSS attacks, and other vulnerabilities.**

3. Usability

- The website should have a clean and intuitive design, making it easy for users to navigate.**
- It should be responsive, meaning it works well on desktops, tablets, and mobile phones.**

User Stories & Use Cases (How people interact with the website)

1. New User Registration

- As a new user, I want to sign up so I can access all features.**

2. Logging In

- As a returning user, I want to log in so I can continue where I left off.**

3. Browsing Products

- As a shopper, I want to browse products so I can find what I need.**

4. Shopping Cart & Checkout

- As a shopper, I want to add products to my cart so I can buy them later.**

5. Learning Automation Testing

- As a learner, I want to access test cases so I can practice automation testing.**
- As a tester, I want to test APIs so I can improve my API testing skills.**

6. Contacting Support

- As a user, I want to reach out for help so I can get assistance when needed.**