

3. Functional Requirements

3.1 User Registration & Authentication

- The system shall allow users to register using their email and password.
- The system shall authenticate users during login.
- The system shall provide a password reset feature.
- The system shall allow users to update their profile information.

3.2 Product Catalog

- The system shall allow users to browse products categorized under **Men, Women, and Kids**.
- The system shall allow users to filter products by brand.
- The system shall provide product details, including price and description.

3.3 Shopping Cart

- The system shall allow users to add/remove products to/from the shopping cart.
- The system shall display a summary of selected items.
- The system shall allow users to proceed to checkout.
- The system shall validate stock availability before checkout.

3.4 Test Cases

- The system shall provide predefined **test cases** for various automation scenarios.
- The system shall allow users to navigate through different test case categories.
- The system shall allow users to mark test cases as completed.

3.5 API Testing

- The system shall provide API endpoints for testing purposes.
- The system shall allow users to send HTTP requests (GET, POST, PUT, DELETE) to validate responses.
- The system shall provide authentication mechanisms for API access.

3.6 Video Tutorials

- The system shall provide video tutorials explaining different automation testing techniques.
- The system shall allow users to filter and search tutorials by topic.
- The system shall track watched tutorials for registered users.

3.7 User Feedback and Support

- The system shall provide a feedback form for users to report issues or suggest improvements.
- The system shall allow users to contact customer support through a web form.

3.8 Reports and Logs

- The system shall generate reports on user activities, such as completed test cases.
- The system shall log errors and system events for debugging purposes.

4. Non-Functional Requirements

4.1 Performance Requirements

- The system shall respond to user requests within **3 seconds** under normal load.
- The system shall handle up to **100 concurrent users**.

4.2 Security Requirements

- The system shall store passwords securely using **hashed encryption**.
- The system shall prevent unauthorized API access using **authentication tokens**.

4.3 Usability Requirements

- The system shall provide an intuitive UI with clear navigation.
- The system shall be responsive across multiple devices.

User Stories:

As a new user, I want to create an account on the Automation Exercise website so that I can save my details and place orders

As a returning user, I want to log in with my credentials so that I can access my account and track my purchases

As a user, I want to browse products by category and brand so that I can easily find the items I need

As a user, I want to add items to my shopping cart and review them before checkout so that I can confirm my order

As a user, I want to complete the checkout process and place an order so that I can purchase the products in my cart

As a user, I want to search for products using keywords so that I can quickly find specific items

As a user, I want to subscribe to the newsletter so that I can receive updates about new products and offers

As a user, I want to contact customer support through the contact form so that I can ask questions or report issues

As a user, I want to leave reviews on products I have purchased so that I can share my experience with other shoppers

As a user, I want to download an invoice for my purchase so that I can keep a record of my transactions

As a user, I want the website to allow smooth scrolling up and down so that I can easily navigate different sections

Use Cases:

1)User Registration

Actors: New user

Inputs: Name, email, password

Steps:

- 1.The user navigates to the Signup/Login page .
- 2.They enter their name and email under the "New User Signup!" section .
- 3.They click "Signup" and are redirected to the account creation form .
- 4.They fill in details like password, address, and phone number .
- 5."They click "Create Account .

6.A confirmation message appears, and the user is now registered .

.Outcome: The account is successfully created, and the user can log in

2)User Login .

Actors: Registered user

Inputs: Email, password

Steps:

1.The user opens the Signup/Login page .

2."They enter their email and password under "Login to your account .

3."They click "Login

4.If credentials are correct, they are redirected to their account dashboard .

.Outcome: The user is successfully logged in

3)Browsing Products by Category or Brand .

Actors: Any user

Inputs: Selected category or brand

Steps:

1.The user clicks on Products in the navigation menu

2.They select a category from the sidebar or choose a brand .

3.The website displays products matching the selection .

.Outcome: The user finds products related to their preference

4)Searching for a Product .

Actors: Any user

Inputs: Product name or keyword

Steps:

1.The user types a keyword in the search bar .

2.They click the Search button .

3.The site displays a list of matching products .

.Outcome: The user finds the desired product quickly

5)Adding a Product to the Shopping Cart

Actors: Any user

Inputs: Selected product, quantity

Steps:

1.The user opens a product page .

2.They choose the quantity

3.They click Add to Cart .

4.The website updates the shopping cart .

.Outcome: The product is successfully added to the cart

6)Completing a Purchase .

Actors: Any user

Inputs: Payment and shipping details

Steps:

- 1.The user clicks on Cart and reviews their selected items .
- 2.They click Proceed to Checkout
- 3.They enter their billing and shipping information .
- 4.They select a payment method and confirm the order .
- 5.The system processes the order and displays a confirmation message .
- .Outcome: The order is successfully placed

7)Subscribing to the Newsletter .

Actors: Any user

Inputs: Email address

Steps:

- 1.The user enters their email into the Newsletter Subscription field at the bottom of the page

2.They click Subscribe .

3.A confirmation message appears .

.Outcome: The user is subscribed and will receive email updates

8)Contacting Customer Support

Actors: Any user needing assistance

Inputs: Name, email, message

Steps:

1.The user clicks on Contact Us .

2.They fill in their details and type a message in the provided fields .

3.They click Submit .

4.A confirmation appears, and the request is sent to the support team .4

.Outcome: The support team receives the inquiry and can respond accordingly

9)Writing a Product Review .

Actors: Users who have purchased a product

Inputs: Star rating, written review

Steps:

1.The user navigates to a product page .

2.They scroll down to the review section .

3.They enter a rating, write a comment, and click Submit .

4.The review appears under the product listing .

.Outcome: The review is posted for other customers to see

10)Downloading an Invoice .

Actors: Users who have made a purchase

Inputs: Order details

Step:

1.The user goes to the Orders section in their account .

2.They select a completed order .

3.They click Download Invoice .

.Outcome: The invoice is downloaded as a PDF file