# Assignment

Title:

Cypress Automation Testing

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Position:

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Mentor:

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Course:

QA1001

Date:

13th December, 2024

# Cypress Automation Testing Report

**Test Coverage:**

Here's a summary of what I achieved in my Cypress Automation testing assignment:

1. Test Suite Setup:

* I created a test suite named "Assignment test suite".
* I used the beforeEach hook to visit the /inventory.html page before each test to ensure a consistent starting point for all tests.

2. Successful Sign-In Test:

* I tested the login functionality by navigating to the login page, entering valid credentials, and verifying that the product page loaded correctly by checking the presence of the Products header and confirming the correct number of items.

3. Add/Remove Items from Products Page:

* I tested adding items to the cart directly from the product page, verified the cart badge count, and confirmed that items could be removed successfully, with the UI updating correctly to reflect the changes.

4. Add/Remove Items from the Cart Page:

* I added items to the cart, navigated to the cart page, and tested removing all items from there.
* I verified that the cart was empty afterward.

5. Add/Remove Items from the Product Details Page:

* I added items to the cart, navigated to the product details pages, and tested removing items directly from those pages.
* I also verified that the buttons updated back to ADD TO CART after removing the items.

6. Buying Items:

* I tested the full purchase flow: adding items to the cart, navigating to the checkout page, entering user details, and completing the order.
* I verified that the order confirmation message (THANK YOU FOR YOUR ORDER) appeared after completing the purchase.

7. Cart Persistence After Logout/Login:

* I tested adding items to the cart, logging out, and then logging back in to ensure that the cart state was preserved across sessions.

8. Verify Sorting Options:

* I tested all sorting options on the products page, including sorting by Name (A-Z and Z-A) and Price (Low-High and High-Low).
* I implemented checks to ensure that the displayed items were sorted correctly based on the selected option.

**Challenges faced during Automation:**

1. Reload Timeout Errors:

* The first website I worked on did not allow Cypress to reload after the cy.visit command, causing timeout errors. I had to switch to another website to overcome this issue.

2. Building the CI Pipeline:

* Setting up the CI pipeline was challenging because there were limited resources available to explain .yml coding in detail.
* Additionally, I could not run the pipeline locally without pushing my repository to GitHub, but I wanted to ensure my commit history was neat before doing so.

3. Centering an Image in README.md:

* I wanted to center an image in my README.md file, but .md files don’t natively support alignment. I had to use inline CSS code to achieve the desired effect.

4. Cypress Recording:

* I was unable to record test results without specifying my Cypress record key. However, this key is private, and I didn’t want to expose it.

This assignment helped me gain valuable hands-on experience with Cypress Automation and web application testing. Despite the challenges, I was able to deliver a robust and efficient test suite while overcoming technical hurdles and learning new skills.

**Key Accomplishments:**

* I achieved comprehensive test coverage by covering login functionality, adding/removing items, the purchase flow, sorting options, and cart persistence.
* I used assertions (should and expect) to validate the application’s behavior and ensure it met expectations.
* By using beforeEach and modular test practices, I made my tests efficient and easy to maintain.