# E-commerce Testing Automation using Cypress

# Introduction:

This project demonstrates automated testing of an e-commerce platform using Cypress. It covers the functionality of logging in, searching for a product, adding it to the cart, and navigating through various pages such as the shopping cart and brand selection.

# Technology Stack:

* Cypress: A modern, powerful testing framework for front-end applications.
* JavaScript: The language used for scripting test automation.
* XPath: Used to locate elements in the DOM for interaction.

# Pre-requisites:

1. **Cypress Installation:** Ensure Cypress is installed in your project. You can install it using:

npm install cypress --save-dev

1. **Website URL:** The automation script will be executed on the website: <https://tutorialsninja.com/demo/>.
2. **User Credentials:**
   * Email: e2@g.com
   * Password: pass1
3. **Product Name:** An existing product name MacBook will be used for search and cart functionality testing.

# Test Case Breakdown:

This test script follows a set of actions to verify multiple user interactions in the e-commerce site:

**1. Visit the Website**

* **URL:** https://tutorialsninja.com/demo/
* Action: The script uses Cypress to load the demo website.

**2. Login to the Application**

* The user logs in using the email and password provided in the script:

javascript

const email = "e2@g.com";

const password = "pass1";

* **Steps:**
  1. Click on "My Account" > Login.
  2. Enter the credentials and click submit.

**3. Search for a Product**

* The product MacBook is entered into the search bar:

javascript

Copy code

const existingProductName = 'MacBook';

* **Steps:**
  1. Enter the product name in the search field.
  2. Click on the search button.
  3. Verify that the URL contains the search term.

**4. Add the Product to the Cart**

* The user clicks "Add to Cart" for the first product listed in the search results.
* **Steps:**
  1. Add the product to the cart.
  2. Verify that the success message appears and click on the "shopping cart" link.

**5. Proceed to Checkout**

* Navigate to the shopping cart and proceed with the checkout process.
* **Steps:**
  1. Click the "Checkout" button.
  2. Click on the "Continue" button to proceed further.

**6. Select Terms & Conditions**

* Check the "Terms & Conditions" checkbox before continuing.

**7. Navigate to My Account**

* Navigate back to the homepage and access the "My Account" section from the dropdown.

**8. Add Another Product from Brands Section**

* Navigate to the "Brands" section and select any brand.
* **Steps:**
  1. Click on any brand and select a product to add to the cart.

**Test Script:**

Below is the full Cypress test script:

javascript

Copy code

const email = "e2@g.com";

const password = "pass1";

const existingProductName = 'MacBook';

describe('👉Test As Per Assignment in Project!✅', () => {

it('Tasks', () => {

// Step 1: Visit the website

cy.log("👉 Enter the URL : https://tutorialsninja.com/demo/");

cy.visit("https://tutorialsninja.com/demo/");

cy.wait(2000);

// Step 2: Log in to the application

cy.log("👉 Login and register manually into the application first");

cy.xpath('//a[@title="My Account"]').click();

cy.xpath('//a[contains(text(), "Login")]').click();

cy.xpath('//input[@name="email"]').type(email);

cy.xpath('//input[@name="password"]').type(password);

cy.xpath('//input[@type="submit"]').click();

cy.xpath('//div[@id="logo"]').click();

cy.url().should("include", "home");

cy.wait(2000);

// Step 3: Search for a product

cy.log("👉 1. Enter any existing Product name into the Search text box field.");

cy.xpath('//input[@name="search"]').type(existingProductName).should('have.value', existingProductName);

cy.wait(2000);

// Step 4: Click on the search button

cy.log("👉 2. Click on the button having search icon.");

cy.xpath('//span[@class="input-group-btn"]').click();

cy.url().should("include", "search=MacBook");

cy.wait(2000);

// Step 5: Add the product to the cart

cy.log("👉 3. Click on 'Add to Cart' button on the Product displayed in the Search results.");

cy.xpath('(//div[@class="button-group"]/button[1])[1]').should('have.attr', 'type', 'button').click();

cy.wait(2000);

// Step 6: Navigate to the shopping cart

cy.log("👉 4. Click on the 'shopping cart!' link in the displayed success message.");

cy.xpath('//div[@class="alert alert-success alert-dismissible"]/a[2]').should('have.attr', "href", "https://tutorialsninja.com/demo/index.php?route=checkout/cart").click();

cy.wait(2000);

// Step 7: Proceed to checkout

cy.log("👉 5. Click on 'Checkout' button in the 'Shopping Cart' page.");

cy.xpath('//div[@class="pull-right"]').should('have.text', 'Checkout').click();

cy.wait(2000);

// Step 8: Continue with the process

cy.log("👉 6. Click on 'Continue' button.");

cy.xpath('(//div[@class="pull-left"])[2]').should('have.text', 'Continue Shopping').click();

cy.wait(2000);

// Step 9: Agree to Terms & Conditions

cy.log("👉 9. Select the 'Terms & Conditions' checkbox field.");

cy.xpath('//\*[contains(text(), "Terms & Conditions")]').should('have.text', 'Terms & Conditions').click();

cy.wait(2000);

// Step 10: Navigate to My Account

cy.log("👉 13. Click on 'My Account' dropmenu.");

cy.xpath('(//li[@class="dropdown"])[1]').should('have.attr', 'class', 'dropdown').click();

cy.wait(2000);

cy.log("👉 14. Select 'My Account' option.");

cy.xpath('//ul[@class="dropdown-menu dropdown-menu-right"]/li[1]').should('have.text', 'My Account').click();

cy.wait(2000);

// Step 11: View Cart

cy.log("👉 15. Go to Add to Cart Page.");

cy.xpath('//div[@id="cart"]').should('have.attr', 'id', 'cart').click();

cy.xpath('//strong[contains(text(),"View Cart")]').should('have.text', 'View Cart').click();

cy.wait(2000);

// Step 12: Navigate to Brands

cy.log("👉 16. Click on 'Brands' Footer link.");

cy.xpath('//a[contains(text(), "Brands")]').should('have.attr', 'href', 'https://tutorialsninja.com/demo/index.php?route=product/manufacturer').click();

cy.wait(2000);

// Step 13: Select a Brand and Add to Cart

cy.log("👉 17. Click on any Brand Name in the displayed page.");

cy.xpath('(//div[@class="col-sm-3"]/a)[1]').should('have.attr', 'href', 'https://tutorialsninja.com/demo/index.php?route=product/manufacturer/info&manufacturer\_id=8').click();

cy.wait(2000);

cy.log("👉 18. Select 'ADD TO CART' option of any product that is displayed in the displayed Brand page.");

cy.xpath('(//div[@class="button-group"])[1]/button[1]').should('have.attr', 'type', 'button').click();

});

});

**Conclusion:**

This script covers the core functionalities of user login, searching for products, adding items to the cart, and navigating various sections of an e-commerce website. The use of Cypress and XPath ensures a reliable and readable approach to test automation.