

03. Test Automation Basics

Approach to Creating a Test Automation Framework:

First, need to identify the supported browsers and devices.

Then select a test runner like TestNG or Junit.

Use a Design pattern like a Page Object Model (POM) which creates individual classes representing each page of the application (User Login, Registration, Product Search, Add to Cart, Checkout, and Order History)

Then select tools for Web Automation, Selenium.

Framework Components:

Base class to contain reusable code for browser setup (@Before), configuration, and teardown (@After).

For Page Object create a class for each page (User Login, Registration, Product Search, Add to Cart, Checkout, and Order History) For each test case start with @Test.

Then write test automation for each test case. Below are some test Scenarios.

User Login:

Verify the login with valid and invalid credentials.

User Registration:

Verify the registration process with valid/invalid inputs.

Product Search:

Verify the search functionality with valid product names, categories, and invalid inputs.

Add to cart:

Verify adding items to the cart functionality for one or more products.

Validate product quantity (Increase or decrease product quantity) and price calculations.

Verify cart updates correctly when products are added or removed, and quantity increases and decreases.

Checkout:

Verify successful checkout with different payment methods.

Validate discounts and promotions available.

Check for invalid and valid payment details.

Order History:

Check the functionality to reorder from past orders.

Verify all past order details are available.