**PROJECT OVERVIEW**

**Background:**

You have been assigned to test a web application called “AdNabuTestStore" (<https://adnabu-arjun.myshopify.com>), an online e-commerce platform. Your goal is to create an automated testing suite to ensure the application's functionality, reliability, and performance. You will use the Selenium WebDriver with a programming language of your choice (e.g., Java, Python) to automate the tests.

**Task 1: Test Scenarios**

Create a comprehensive list of test scenarios and test cases that cover the following aspects of the MyWebApp:

* Product Search and Filtering
* Adding and Removing Items from the Shopping Cart

Please provide clear and concise descriptions for each test case, including the expected outcomes. (Ideally an Excel or google sheet)

Task 2: Test Automation

Write automated test scripts using Selenium WebDriver to execute the test cases you've defined in Task 1. Organize your code into a well-structured framework. Ensure that your tests are maintainable and easy to run on different browsers.

Task 3: Test Reporting

Generate detailed test reports that include information on test execution results, including pass/fail status, test execution time, and any relevant screenshots. Use a reporting tool or framework you choose (e.g., TestNG, Extent Reports) to create these reports.

**HYBRID AUTOMATION FRAMEWORK**

The project is developed using Hybrid Automation Framework, which includes **Java, Selenium, TestNG, Maven & Page Object Model.**

**I have created the project in Eclipse Maven Project and implemented TestNG features with Selenium.**

**I have used following Java OOPs concept while implementing the project.**

**Data Abstraction**: I initialized the Different Browser using Selenium Webdriver. It means creating a reference variable (driver) of the interface (WebDriver) and creating an Object. Here WebDriver is an Interface and ChromeDriver is a class.

**Encapsulation**: I have used **Page Object Model (BasePage, CartPage, SearchResultPage, HomePage)** classes, where I declared the data members using @FindBy and initialization of data members is done using Constructor of BasePage class. I have declared various methods to utilized the webelement methods.

**Inheritance**: I have used BaseClass and BasePage to initialize the WebDriver interface, browsers, waits, reports, etc.

**Polymorphism**: I used Method Overriding by using different WebDriver methods and Method Overloading by using Assertion and Waits.

I have used **Properties** (config.properites) file to provides data like url, browser name, search product and filterby.

I have implemented **Reports** using ExtendReportUtility using **ITestListener** interface.

All the **Dependencies** and **Plugins** are included in **pom.xml**

**TestNG.xml** file includes all the test cases and setup of the execution.

**Test Case Details:**

**Provided in Excel sheet**

**How to run project**

**Using Eclipse**

Open Project -> TestNG.xml -> Run as TestNG Suite

**Using Maven**

Open Project -> pom.xml -> Run as Maven Test

If Maven is setup in local system

Open command prompt where is project is located -> mvn test

**Using Jenkins**

Create new Item as Maven Project, mentioned the Java Path, Git Path and Maven

**Github link:**

<https://github.com/Premdevi9091/AdNabuTestStore.git>