**Amazon Shopping Website Automation Using Selenium and Cucumber BDD Framework**

**Q. What is the project about?**

Ans. This project is based on the **Amazon Shopping Website automation testing** through building a Behaviour Driven/**BDD Framework** from scratch and generate test reports based on the execution for different workflows and test scenarios including:

1. Valid and Invalid Account Logins.
2. Performing Data-driven Product Searches
3. Editing the items Shopping Cart.
4. Place and Cancelling orders.
5. Complete End-to-End flow from user login to order purchase to cancel.

**Q. What are the tools and technologies used to develop the framework?**

Ans. The framework is built primarily on **Java, Selenium WebDriver, and Cucumber BDD libraries**. These are the components of the framework:

i. **Page Object Model:** These are the reusable web page components designed using **OOP** concept, where every class represents a particular web page like Account Sign-in Page, Account Home Page, Orders Page etc. along with all the page objects/elements and action methods corresponding those elements.

ii. **Feature Files:** For features to be tested out, multiple feature files like Login Feature, Product Search, Place Order etc. containing different test scenarios were developed using **Gherkin Syntax** using **Given-When-And-Then** templates.

iii. **Step Definitions Classes:** These classes implement each and every line of the Gherkin Scenarios as automated scripts through test methods for execution written in Java, Selenium.

iv. **Test Runner:** This file uses J-unit and Cucumber Libraries along with some options to parameterize and configure the run the tests.

v. **Test Reporting:** The reports were generated using maven cucumber plugins for advanced reports, and for the simple reports using the in-built cucumber reporting functionality.

vi. **Project Dependencies and Plugins:** To maintain the jar files required for the project, **Maven POM.xml file** was utilized.

**Q. What is the use of this project? Can one use this framework to apply for their own use case?**

* This project is very helpful for anyone who wants to perform **web automation testing** through **BDD approach.**
* Definitely! This is a **highly reusable** **test** **framework** that uses flexible POM design pattern whose components can be reused or replaced based on the use-case and requirement.
* The test scenarios can be developed easily using the Gherkin Templates. For execution, the test runner just needs to be configured according to the feature files and step definition classes.