Project Description

Project Idea

The purpose of this project is to design and implement an **automated UI testing framework** for a live e-commerce website using **Selenium WebDriver**. The focus is on building a clean, maintainable suite of automated tests that validate key user journeys such as **login, product search and cart addition, and checkout flow**. This project demonstrates practical QA and test automation skills, including test case development, assertions, synchronization, and code structuring for reusability.

Brief Description

This project involves creating an **end-to-end automated testing solution** that simulates real user interactions on a public e-commerce platform. The testing will be conducted using **Selenium WebDriver** with **Java**, following best practices such as the **Page Object Model (POM)** to enhance scalability and maintainability.

The project is divided into four main phases:

- **Week 1 – Environment Setup:** Configure the testing environment and write a simple test to verify website accessibility.
- **Week 2 – Core User Journeys:** Automate essential flows such as **user login** and **searching for a product and adding it to the cart**.
- **Week 3 – Checkout & Assertions:** Extend automation to the **checkout process**, introduce **detailed assertions**, and manage **test data** within scripts.
- **Week 4 – Refactoring & Reporting:** Refactor tests using **POM**, group them into a single test suite, execute the full suite, and compile a **final summary report**.

The outcome will be a **clean, reliable, and well-structured automated test suite** that can validate core functionalities of an e-commerce website and serve as a portfolio-ready example of professional test automation work.