1. Introduction

This document outlines the plan for validating the functionalities of the SauceDemo application through automated testing. The objective is to ensure that the checkout process meets the specified functional requirements.

2. Testing Objectives

Develop and execute automated tests for two key scenarios:
1. Test 1: Checkout Step One Error Validation
    ● Ensure users cannot proceed to the checkout overview page if mandatory fields are missing during the checkout process.
2. Test 2: Checkout Overview Validation
    ● Verify the accuracy of product details and prices displayed on the checkout overview page after completing the checkout process.

3. Testing Strategy

Automation Framework and Tools:
● Programming Language: Java 17
● Automation Framework: Selenium WebDriver, ChromeDriver.
● Testing Framework: TestNG
● Monitoring Tool: Monte Screen Recorder
● Logging Tool: Log4j
● Result visualisation: Used the extentreports library to generate reports in .html files.

Reasons of choosing the tools:

● Java: Chosen for having the most experience with this programming language.
● Selenium WebDriver: Chosen for having experience with the framework at my current company. It also has the most robust support for web automation across different browsers and platforms.
● TestNG: It is almost like JUnit, but it's more flexible and easier.
● Monte Screen Recorder: No reason at all, it's the first I found on the internet.
● Log4j: Most popular logging framework which I used for previews projects.
● Extentreports: Beautiful reports on your browser

4. Test Scenarios

Test 1: Checkout Step One Error Validation
1. Navigate to https://www.saucedemo.com/.
2. Log in using valid credentials.
3. Add a product to the cart.
4. Go to the cart.
5. Click on Checkout without entering mandatory fields.
6. Expected Outcome: User should get an error preventing them from proceeding.

Test 2: Checkout Overview Validation
1. Navigate to https://www.saucedemo.com/.
2. Log in using valid credentials.
3. Add two random products to the cart.
4. Go to the cart.
5. Click on Checkout.
6. Complete the checkout form.
7. Navigate to the checkout overview page.
8. Validations:
   ○ Products: Verify the correctness of products displayed on the overview page.
   ○ Prices: Validate that the prices shown match those selected during checkout.

5. Test Execution

Ensure the test environment is set up, including Java, Maven, and ChromeDriver (C:\tools\chromedriver).

Execution Steps:
1. Clone the project repository and navigate to the project directory.
2. Open a terminal/bash
3. Run cmd: *mvn clean test*
4. Monitor the execution in the console
5. Check the results by opening the .html in \SauceTest\test-output\
6. Verify results and the test using the generated video recordings