Name: Piyush Kasture

Module Name: Latest Industry Trends

PRN: 2509401147003

Assignment No. 2

File name: BrowserStack.java

```
package cloudTesting;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Parameters;
import org.testng.annotations.Test;

import java.net.MalformedURLException;
import java.net.URL;
import java.time.Duration;
import java.util.HashMap;
import org.openqa.selenium.remote.RemoteWebDriver;

public class BrowserStack {
    WebDriver driver;
    public static final String USERNAME = "piyushkasture_bWr9G1";
    public static final String ACCESS_KEY = "TyeP4XA7cCsTzEQ2C2gq";
```

```
    public static final String BROWSERSTACK_URL = "https://" + USERNAME + ":" + ACCESS_KEY +
    "@hub-cloud.browserstack.com/wd/hub";

    WebDriverWait wait;

    public void markTestStatus(String status, String reason, WebDriver driver) {
        JavascriptExecutor jse = (JavascriptExecutor) driver;
        jse.executeScript("browserstack_executor: {\"action\":\"setSessionStatus\", \"arguments\":
{\"status\":\""
            + status + "\", \"reason\": \"" + reason + "\"}}");
    }

    @Parameters({"os", "osVersion", "browserName", "browserVersion"})
    @BeforeMethod
    public void setUp(String os, String osVersion, String browserName, String browserVersion) throws
MalformedURLException {
        DesiredCapabilities caps = new DesiredCapabilities();
        HashMap<String, Object> bstackOptions = new HashMap<>();
        bstackOptions.put("os", os);
        bstackOptions.put("osVersion", osVersion);
        bstackOptions.put("projectName", "My TestNG Project");
        bstackOptions.put("buildName", "TestNG Build 1.0");
        bstackOptions.put("sessionName", "My Test Case");

        caps.setCapability("bstack:options", bstackOptions);
        caps.setCapability("browserName", browserName);
        caps.setCapability("browserVersion", browserVersion);

        driver = new RemoteWebDriver(new URL(BROWSERSTACK_URL), caps);

        wait = new WebDriverWait(driver, Duration.ofSeconds(10));
        driver.manage().window().maximize();
```

```
    }


    @Test(priority = 1)
    public void testproductLoginSauceDemo() {
        driver.get("https://www.saucedemo.com");
        try {
            WebElement username =
wait.until(ExpectedConditions.visibilityOfElementLocated(By.id("user-name")));
            WebElement password = driver.findElement(By.id("password"));
            WebElement loginButton = driver.findElement(By.id("login-button"));

            username.sendKeys("standard_user");
            password.sendKeys("secret_sauce");
            loginButton.click();

            driver.findElement(By.xpath("//div[normalize-space()='Sauce Labs Backpack']")).click();
            driver.findElement(By.xpath("//button[@id='add-to-cart']")).click();
            driver.findElement(By.xpath("//button[@id='back-to-products']")).click();
            driver.findElement(By.xpath("//a[@class='shopping_cart_link']")).click();

            WebElement removeButton =
wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//button[@id='remove-sauce-
labs-backpack']")));
            Assert.assertTrue(removeButton.isDisplayed(), "Remove button not visible, login/cart flow
failed.");

            markTestStatus("passed", "Item successfully added to cart.", driver);

            System.out.println("Item successfully added to cart");
        } catch (Exception e) {
            markTestStatus("failed", "Item not added in cart: " + e.getMessage(), driver);
```

```
            Assert.fail("Test failed: " + e.getMessage());
        }
    }

    @AfterMethod
    public void tearDown() {
        if (driver != null) {
            driver.quit();
        }
    }

}
```

XML File name: BrowserStack.xml

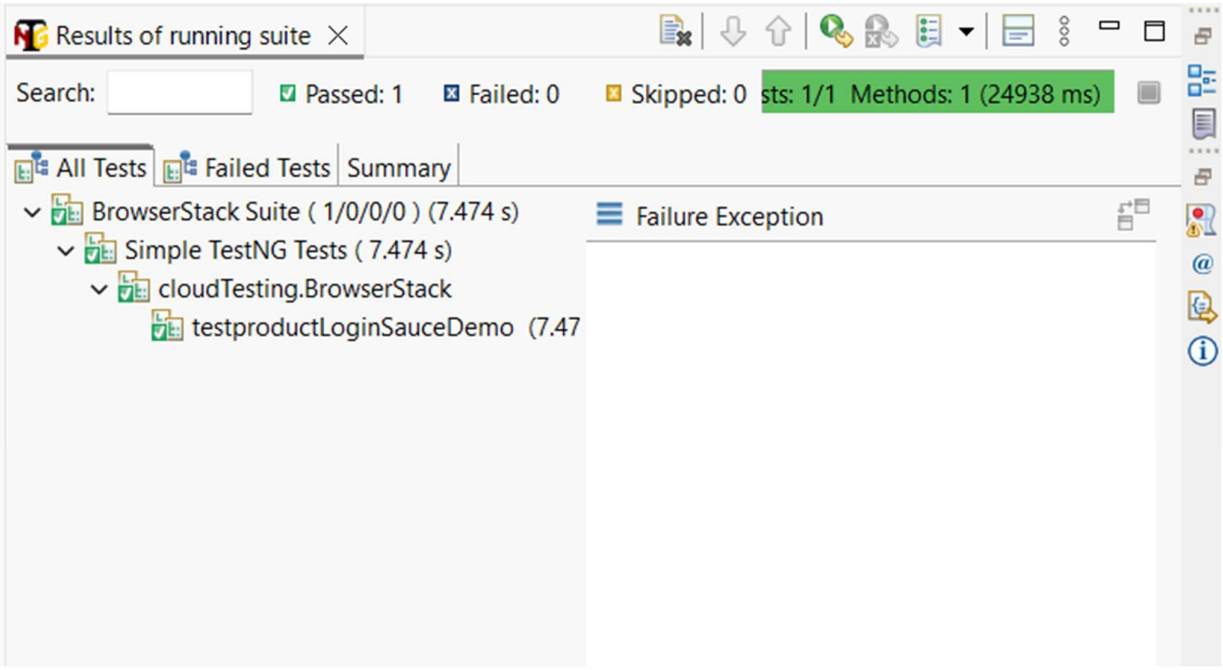
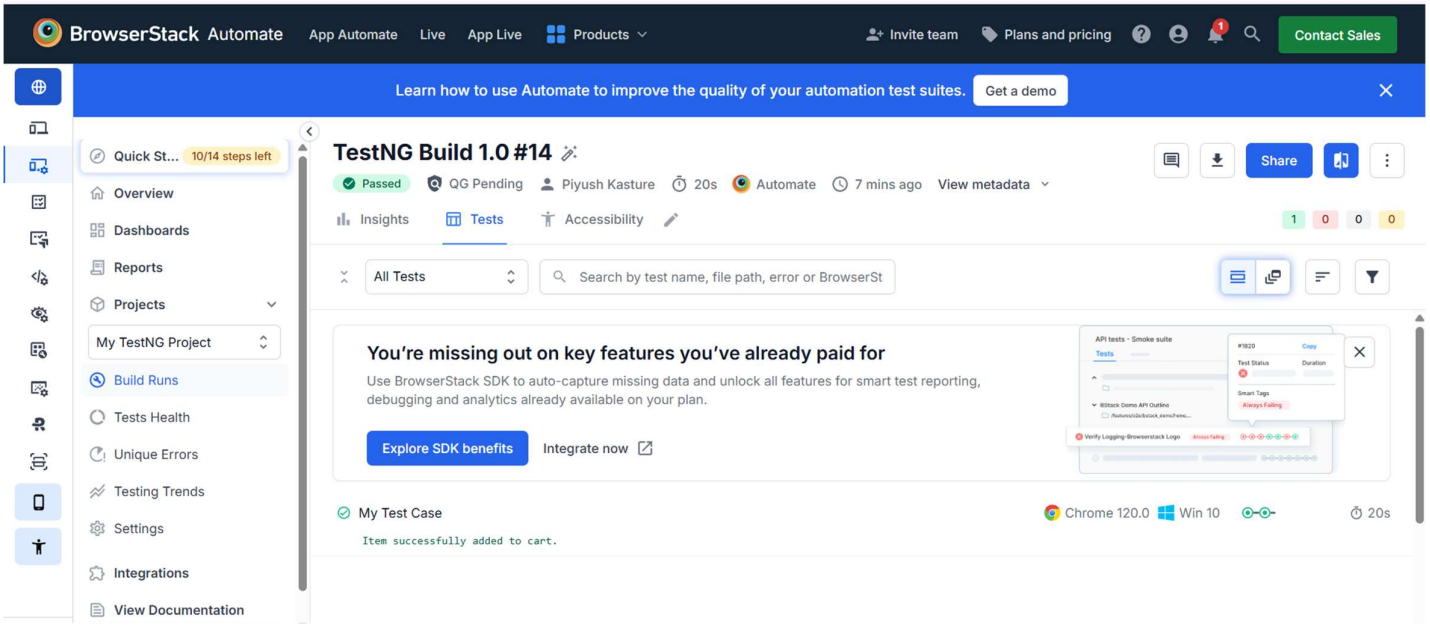
```
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd" >
<suite name="BrowserStack Suite">
     <test name="Simple TestNG Tests">
     <parameter name="os" value="Windows"></parameter>
     <parameter name="osVersion" value="10"></parameter>
     <parameter name="browserName" value="Chrome"></parameter>
     <parameter name="browserVersion" value="120"></parameter>
      <classes>
          <class name="cloudTesting.BrowserStack"/>
      </classes>
     </test>

</suite>
```

Output:

```
Console
<terminated> BrowserStack_BrowserStack.xml [TestNG] C:\Users\Piyush Kasture\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_23
[RemoteTestNG] detected TestNG version 7.9.0
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Nov 30, 2025 7:29:40 PM org.openqa.selenium.remote.tracing.opentelemetry.OpenTelemetryTracer createTracer
INFO: Using OpenTelemetry for tracing
Item successfully added to cart

===============================================
BrowserStack Suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
===============================================
```



BrowserStack Output: