Automation Script

import org.openqa.selenium.By;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

public class AmazonPage {

private WebDriver driver;

public AmazonPage(WebDriver driver) {

this.driver = driver;

}

public void navigateToHomePage(String url) {

driver.get(url);

}

public void clickSignIn() {

WebElement signInButton = driver.findElement(By.id("nav-link-accountList"));

signInButton.click();

}

public void scrollDown() {

JavascriptExecutor js = (JavascriptExecutor) driver;

js.executeScript("window.scrollTo(0, document.body.scrollHeight);");

}

public void searchForProduct(String productName) {

WebElement searchBox = driver.findElement(By.id("twotabsearchtextbox"));

searchBox.sendKeys(productName);

searchBox.sendKeys(Keys.RETURN);

}

public void applyCategoryFilter() {

WebElement mobileCategory = driver.findElement(By.xpath("//span[text()='Mobiles']"));

mobileCategory.click();

}

public void addToWishlist() {

WebElement wishlistButton = driver.findElement(By.id("add-to-wishlist-button-submit"));

wishlistButton.click();

}

public boolean isConfirmationBoxDisplayed() {

WebElement confirmationBox = driver.findElement(By.xpath("//div[@class='a-box a-alert a-alert-success']"));

return confirmationBox.isDisplayed();

}

}

TestAmazonAutomation

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.Assert;

import org.testng.annotations.AfterMethod;

import org.testng.annotations.BeforeMethod;

import org.testng.annotations.Test;

public class TestAmazonAutomation {

private WebDriver driver;

private AmazonPage amazonPage;

@BeforeMethod

public void setUp() {

System.setProperty("webdriver.chrome.driver", "path/to/chromedriver");

driver = new ChromeDriver();

amazonPage = new AmazonPage(driver);

}

@Test

public void testAmazonAutomation() {

amazonPage.navigateToHomePage("https://www.amazon.in");

amazonPage.clickSignIn();

// Add assertions to verify sign-in

amazonPage.scrollDown();

// Add assertions to verify scrolling

amazonPage.searchForProduct("iPhone 13");

// Add assertions to verify search results

amazonPage.applyCategoryFilter();

// Add assertions to verify category filtering

amazonPage.addToWishlist();

// Add assertions to verify product added to wishlist

boolean confirmationBoxDisplayed = amazonPage.isConfirmationBoxDisplayed();

Assert.assertTrue(confirmationBoxDisplayed, "Confirmation box is not displayed");

}

@AfterMethod

public void tearDown() {

driver.quit();

}

}