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package com.realpay;

import java.time.Duration;
import java.util.List;
import java.util.Scanner;

import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.Select;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.annotations.Test;

public class AmazonLazyLoadingTest {

    ChromeDriver driver = new ChromeDriver();
    String url = "https://amazon.in";

    @Test
    public void openWebpage() {

        driver.manage().window().maximize();
        driver.manage().deleteAllCookies();
        driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(30));
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

    }

    @Test
    public void testLazyLoading() {
        driver.get(url);

        // getting the webElements

        WebElement category =
driver.findElement(By.xpath("//select[@id='searchDropDownBox']"));
        WebElement searchBox =
driver.findElement(By.xpath("//input[@id='twotabsearchtextbox']"));
        WebElement searchBtn = driver.findElement(By.xpath("//input[@id='nav-search-submit-button']"));

        Select selCategory = new Select(category);

        try {
            Thread.sleep(1000);

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        } catch (Exception e) {
            e.printStackTrace();
        }
        selCategory.selectByVisibleText("Electronics");

        searchBox.sendKeys("iPhone 13");
        searchBtn.click();
    }

    @Test
    public void getNthProdDetails() {

        int nthProd;

        Scanner getProduct = new Scanner(System.in);
        System.out.println("Please select a number between 1 - 26 of product to get
Details: ");

        nthProd = getProduct.nextInt();

        System.out.println();

        driver.get(url);

        // getting the webElements

        WebElement category =
driver.findElement(By.xpath("//select[@id='searchDropDownBox']"));
        WebElement searchBox =
driver.findElement(By.xpath("//input[@id='twotabsearchtextbox']"));
        WebElement searchBtn = driver.findElement(By.xpath("//input[@id='nav-
search-submit-button']"));

        Select selCategory = new Select(category);

        try {
            Thread.sleep(1000);
        } catch (Exception e) {
            e.printStackTrace();
        }
        selCategory.selectByVisibleText("Electronics");

        searchBox.sendKeys("iPhone 13");
        searchBtn.click();

        WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(4));

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        WebElement nthItem = driver
            .findElement(By.xpath("//div[@data-component-type='s-
search-result'][" + nthProd + "]));
        try {
            wait.until(ExpectedConditions.visibilityOf(nthItem));
        } catch (Exception e) {
            e.printStackTrace();
        }

        WebElement nthItemTitle = driver.findElement(By.xpath("//div[@data-
component-type='s-search-result'][" + nthProd
            + "]" + "//span[contains(@class, 'a-size')]"));

        WebElement nthItemPrice = driver.findElement(By.xpath("//div[@data-
component-type='s-search-result'][" + nthProd
            + "]" + "//span[contains(@class, 'a-price-whole')]"));

        System.out.println("Nth Product Located With The Following Details:");

        System.out.println("=====");
        System.out.println("Product " + nthProd + " Title: " + nthItemTitle.getText());
        System.out.println("Product " + nthProd + " Price: " + nthItemPrice.getText());

        getProduct.close();
    }

    @Test
    public void getAllDisplayedProducts() {
        List<WebElement> products = driver.findElements(By.xpath("//div[@data-
component-type='s-search-result']"));

        System.out.println("List of all Displayed Products:");

        for (int i = 1; i <= products.size(); i++) {
            try {
                WebElement nthItemTitle =
driver.findElement(By.xpath("//div[@data-component-type='s-search-result']["
                    + i + "]" + "//span[contains(@class, 'a-size')]"));

                System.out.println("=====");
                System.out.println(i + ". Product Title: " +
nthItemTitle.getText());
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    }

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    }

}

@Test
public void scrollDownProducts() {
    driver.navigate().back();

    // getting the webElements

    WebElement category =
driver.findElement(By.xpath("//select[@id='searchDropDownBox']"));
    WebElement searchBox =
driver.findElement(By.xpath("//input[@id='twotabsearchtextbox']"));
    WebElement searchBtn = driver.findElement(By.xpath("//input[@id='nav-
search-submit-button']"));

    Select selCategory = new Select(category);

    try {
        Thread.sleep(1000);
    } catch (Exception e) {
        e.printStackTrace();
    }
    selCategory.selectByVisibleText("Electronics");

    searchBox.sendKeys("iPhone 13");
    searchBtn.click();

    List<WebElement> products = driver.findElements(By.xpath("//div[@data-
component-type='s-search-result']"));

    int lastElement = (products.size() - 1);
    WebElement lastProd = driver
        .findElement(By.xpath("//div[@data-component-type='s-
search-result'][" + lastElement + "]"));
    JavascriptExecutor js = driver;
    // js.executeScript("window.scrollTo(0, 350)", "");
    js.executeScript("arguments[0].scrollIntoView();", lastProd);
}

public void closeWebpage() {
    // driver.close();
}

}

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