Phase-End Project 5

Automate an E-Commerce Web Application

Here automated e-commerce web application like flipkart.com. By using testing selenium ide.
If we executed code, it would redirect that page in chrome. here I have used two different web browsers like chrome and Firefox.

Tools Required:

1. Selenium Library
2. Eclipse IDE
3. TestNG Library
4. Maven

Detailed Scenario:

Navigate to the Flipkart homepage (https://www.flipkart.com/)

Determine a page load time with a performance test

Search for a product, say, “iPhone 13” under the “Mobile” category

Check if the images are loaded and visible till the screen height only

Check if the page has a scroll feature

Check the frequency at which the content will be refreshed while scrolling

Verify that the image is downloaded just before the user scrolls to its position and gets displayed in time

Verify that it navigates to the bottom of the page

Check whether different browsers and screen resolutions render it the same way

Automation.java:

```
package ecommerce;
```

```
import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.testng.annotations.Test;

public class Automation {
	WebDriver driver;

	@Test(groups = "Chrome")
	public void LaunchChrome() {
		System.setProperty("webdriver.chrome.driver",
				"C:\\\\Users\\\\Hp\\\\Downloads\\\\chromedriver.exe");
		try {
			Thread.sleep(2000);
		} catch (Exception e) {
			e.printStackTrace();
		}
	}

	@Test(groups = "Chrome", dependsOnMethods = "LaunchChrome")
	public void f() {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
```

```
		driver.get("https://www.flipkart.com/");

//		To find the load time and print on console

		Long loadtime = (Long) ((JavascriptExecutor) driver)
				.executeScript("return performance.timing.loadEventEnd - performance.timing.navigationStart;");
		System.out.println("Load time of the website is :- " + loadtime);

//		To search the given text in search bar

		driver.findElement(By.className("_3704LK")).sendKeys("iphone 13");
		driver.findElement(By.className("L0Z3Pu")).click();

		WebElement i = driver.findElement(By.xpath("//img[@class='_396cs4 _3exPp9']"));
		Boolean p = (Boolean) ((JavascriptExecutor) driver).executeScript("return arguments[0].complete "
				+ "&& typeof arguments[0].naturalWidth != \"undefined\" " + "&& arguments[0].naturalWidth > 0", i);

		if (p) {
			System.out.println("Image is loaded");
		} else {
			System.out.println("Image not loaded");
		}

		try {
```

```
                long lastHeight = (long) ((JavascriptExecutor)
driver).executeScript("return document.body.scrollHeight");


                while (true) {
                        ((JavascriptExecutor) driver).executeScript("window.scrollTo(0,
document.body.scrollHeight);");
                        Thread.sleep(2000);


                        long newHeight = (long) ((JavascriptExecutor) driver)
                                        .executeScript("return
document.body.scrollHeight");
                        if (newHeight == lastHeight) {
                                break;
                        }
                        lastHeight = newHeight;
                }
        } catch (InterruptedException e) {
                e.printStackTrace();
        }
    }


    @Test(groups = "Firefox")
    public void LaunchFirefox() {
        System.setProperty("webdriver.gecko.driver",
                        "C:\\Users\\Hp\\Downloads/geckodriver.exe");
        try {
                Thread.sleep(4000);
        } catch (Exception e) {
```

```
                e.printStackTrace();
            }

        }

        @Test(groups="Firefox", dependsOnMethods="LaunchFirefox")
        public void firefox() {
            WebDriver driver = new FirefoxDriver();
            driver.manage().window().maximize();
            driver.get("https://www.flipkart.com/");

//          To find the load time and print on console

            Long loadtime = (Long) ((JavascriptExecutor) driver)
                    .executeScript("return performance.timing.loadEventEnd - performance.timing.navigationStart;");
            System.out.println("Load time of the website is :- " + loadtime);

//          To search the given text in search bar

            driver.findElement(By.className("_3704LK")).sendKeys("iphone 13");
            driver.findElement(By.className("L0Z3Pu")).click();

            WebElement i = driver.findElement(By.xpath("//img[@class='_396cs4 _3exPp9']"));
            Boolean p = (Boolean) ((JavascriptExecutor) driver).executeScript("return arguments[0].complete "
```

```
                + "&& typeof arguments[0].naturalWidth != \"undefined\" " +
"&& arguments[0].naturalWidth > 0", i);


        if (p) {
            System.out.println("Image is loaded");
        } else {
            System.out.println("Image not loaded");
        }


        try {
            long lastHeight = (long) ((JavascriptExecutor)
driver).executeScript("return document.body.scrollHeight");


            while (true) {
                ((JavascriptExecutor) driver).executeScript("window.scrollTo(0,
document.body.scrollHeight);");
                Thread.sleep(2000);


                long newHeight = (long) ((JavascriptExecutor) driver)
                        .executeScript("return
document.body.scrollHeight");
                if (newHeight == lastHeight) {
                    break;
                }
                lastHeight = newHeight;
            }
        } catch (InterruptedException e) {
            e.printStackTrace();
```

```
                }

            }


}
```