**SourceCode**

**SearchOnFlipkart.java**

package searchProduct;

import org.testng.annotations.Test;

import org.testng.annotations.BeforeTest;

import java.util.List;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.Keys;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.interactions.Actions;

import org.testng.annotations.AfterTest;

public class SearchOnFlipkart {

WebDriver driver;

@Test(groups = "Firefox")

public void firefoxTest() throws InterruptedException {

System.out.println("Performing testing through Firefox Browser..");

System.setProperty("webdriver.gecko.driver", "D:\\Testing\\geckodriver-v0.31.0-win64\\geckodriver.exe");

driver = new FirefoxDriver();

driver.manage().window().maximize();

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

System.out.println("Flipkart Page is Loaded..");

Thread.sleep(2000);

driver.findElement(By.xpath("//button[contains(.,'✕')]")).click();

System.out.println("Closed th singup activity..");

// search iPhone 13

driver.findElement(By.xpath("//input[@name='q']")).sendKeys("iPhone 13");

System.out.println("Inserted the keyword in Search Box..");

driver.findElement(By.cssSelector(".L0Z3Pu > svg")).click();

System.out.println("Clicked On Search Icon..");

// Image loading

String url = "https://www.flipkart.com/search?q=iphone%2013&otracker=search&otracker1=search&marketplace=FLIPKART&as-show=on&as=off";

driver.get(url);

// identify image

WebElement i = driver.findElement(By.xpath(

"//img[contains(@src,'https://rukminim1.flixcart.com/image/312/312/ktketu80/mobile/s/l/c/iphone-13-mlpf3hn-a-apple-original-imag6vzz5qvejz8z.jpeg?q=70')]"));

// Javascript executor to check image

Boolean p = (Boolean) ((JavascriptExecutor) driver).executeScript("return arguments[0].complete "

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

// verify if status is true

if (p) {

System.out.println("Image Loaded");

} else {

System.out.println("Image not Loaded");

}

// Load Time

System.out.println("The title of the page is :" + driver.getTitle());

Long loadtime = (Long) ((JavascriptExecutor) driver)

.executeScript("return performance.timing.loadEventEnd - performance.timing.navigationStart;");

System.out.println("Loading Time : " + loadtime);

// Scrolling

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;

}

// Page scroll to down

// object of Actions class to scroll up and down

// Actions at = new Actions(driver);

// at.sendKeys(Keys.PAGE\_DOWN).build().perform();

if (lastHeight > 0)

System.out.println("Scrolled & Height of Page : " + lastHeight);

else

System.out.println("Not Scrolled");

} catch (InterruptedException e) {

e.printStackTrace();

}

}

@Test(groups = "Chrome")

public void chromeTest() throws InterruptedException {

System.out.println("Performing testing through Chrome Browser..");

System.setProperty("webdriver.chrome.driver", "D:\\Testing\\chromedriver\_win32\\chromedriver.exe");

driver = new ChromeDriver();

driver.manage().window().maximize();

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

System.out.println("Flipkart Page is Loaded..");

Thread.sleep(2000);

driver.findElement(By.xpath("//button[contains(.,'✕')]")).click();

System.out.println("Closed th singup activity..");

// search iPhone 13

driver.findElement(By.xpath("//input[@name='q']")).sendKeys("iPhone 13");

System.out.println("Inserted the keyword in Search Box..");

driver.findElement(By.cssSelector(".L0Z3Pu > svg")).click();

System.out.println("Clicked On Search Icon..");

// Image loading

String url = "https://www.flipkart.com/search?q=iphone%2013&otracker=search&otracker1=search&marketplace=FLIPKART&as-show=on&as=off";

driver.get(url);

// identify image

WebElement i = driver.findElement(By.xpath(

"//img[contains(@src,'https://rukminim1.flixcart.com/image/312/312/ktketu80/mobile/s/l/c/iphone-13-mlpf3hn-a-apple-original-imag6vzz5qvejz8z.jpeg?q=70')]"));

// Javascript executor to check image

Boolean p = (Boolean) ((JavascriptExecutor) driver).executeScript("return arguments[0].complete "

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

// verify if status is true

if (p) {

System.out.println("Image Loaded");

} else {

System.out.println("Image not Loaded");

}

// Load Time

System.out.println("The title of the page is :" + driver.getTitle());

Long loadtime = (Long) ((JavascriptExecutor) driver)

.executeScript("return performance.timing.loadEventEnd - performance.timing.navigationStart;");

System.out.println("Loading Time : " + loadtime);

// Scrolling

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;

}

// Page scroll to down

// object of Actions class to scroll up and down

// Actions at = new Actions(driver);

// at.sendKeys(Keys.PAGE\_DOWN).build().perform();

if (lastHeight > 0)

System.out.println("Scrolled & Height of Page : " + lastHeight);

else

System.out.println("Not Scrolled");

} catch (InterruptedException e) {

e.printStackTrace();

}

}

@BeforeTest

public void beforeTest() {

System.out.println("Testing is Going to start..");

}

@AfterTest

public void afterTest() {

System.out.println("Testing is Done!");

}

}

**Testing.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Suite"* thread-count=*"2"*>

<test name=*"Test"*>

<classes>

<class name=*"searchProduct.SearchOnFlipkart"*/>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->