**Practical No. 6. Handling different types of alerts in Selenium**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Aim:**

To learn how to handle various types of alerts in Selenium.

**Theory:**

An Alert in Selenium is a small message box which appears on screen to give the user some information or notification. It notifies the user with some specific information or error, asks for permission to perform certain tasks and it also provides warning messages as well. Here are few alerts in Selenium:

**Simple Alert**

The simple alert class in Selenium displays some information or warning on the screen.

Graphical user interface, text, application

Description automatically generated

**Prompt Alert.**

This Prompt Alert asks some input from the user and Selenium webdriver can enter the text using sendkeys(” input…. “).

Graphical user interface, application

Description automatically generated

**Confirmation Alert.**

This confirmation alert asks permission to do some type of operation.

Graphical user interface, text, application

Description automatically generated

Apart from switching between windows and frames, you may have to handle various modal dialogs in a web application. For this, WebDriver provides an API to handle alert dialogs. The API for that is as follows:

**Alert alert()**The preceding method will switch to the currently active modal dialog on the web page. This returns an Alert instance where appropriate actions can be taken on that dialog. If there is no dialog currently present, and you invoke this API, it throws back a **NoAlertPresentException.**

The Alert interface contains a number of APIs to execute different actions. The following list discusses them one after the other:  
• **void accept():**

This is equivalent to the OK button action on the dialog. The corresponding OK button actions are invoked when the accept() action is taken on a dialog.  
• **void dismiss():**

This is equivalent to clicking on the CANCEL action button.  
• **java.lang.String getText():**

This will return the text that appears on the dialog. This can be used if you want to evaluate the text on the modal dialog.  
• **void sendKeys(java.lang.String keysToSend):**

This will allow the developer to type in some text into the alert if the alert has some provision  
for it.

**Implementation**

1. Write a selenium script to handle alert on <http://only-testing-blog.blogspot.com/2013/09/test.html>

| **Code** | **package pkg;**  **import org.openqa.selenium.Alert;**  **import org.openqa.selenium.By;**  **import org.openqa.selenium.WebDriver;**  **import org.openqa.selenium.WebElement;**  **import org.openqa.selenium.firefox.FirefoxDriver;**  **public class Alert\_Demonstration {**  **public static void main(String[] args) throws InterruptedException { System.setProperty("webdriver.gecko.driver","G:\\Selenium\_setup\\geckodriver.exe");**  **// Web driver for FireFox**  **WebDriver driver = new FirefoxDriver();**  **// open web page**  **driver.get("http://only-testing-blog.blogspot.com/2013/09/test.html");**  **// Click the button to trigger the alert**  **WebElement btnAlert1 = driver.findElement(By.cssSelector("input[value = 'Show Me Alert']"));**    **// Click on Alert 1**  **btnAlert1.click();**    **// Switch to the alert**  **Alert alert = driver.switchTo().alert();**    **// Wait**  **Thread.sleep(5000);**    **// Get and print the alert text**  **System.out.println("Alert text: " + alert.getText());**    **// Accept the alert (click OK)**  **alert.accept();**    **// Wait**  **Thread.sleep(5000);**  **// Close the browser**  **driver.quit();**  **}**  **}** |
| --- | --- |
| **Output** |  |

1. Write a selenium script to handle alerts on <https://demoqa.com/alerts>

| **Code** | **package pkg;**  **import org.openqa.selenium.Alert;**  **import org.openqa.selenium.By;**  **import org.openqa.selenium.WebDriver;**  **import org.openqa.selenium.WebElement;**  **import org.openqa.selenium.firefox.FirefoxDriver;**  **public class HandleAlertsDemo {**  **public static void main(String[] args) throws InterruptedException {**  **// TODO Auto-generated method stub**  **System.setProperty("webdriver.gecko.driver","G:\\Selenium\_setup\\geckodriver.exe");**    **// Web driver for FireFox**  **WebDriver driver = new FirefoxDriver();**    **driver.get("https://demoqa.com/alerts");**    **WebElement btn = driver.findElement(By.id("alertButton")); btn.click();**  **Thread.sleep(5000);**  **Alert simple\_alert = driver.switchTo().alert();**  **System.out.println("the alert message is "+ simple\_alert.getText());**  **simple\_alert.accept();**  **Thread.sleep(5000);**  **WebElement btn2 = driver.findElement(By.id("timerAlertButton"));**  **btn2.click();**  **Thread.sleep(5000);**    **Alert wait\_alert = driver.switchTo().alert();**  **System.out.println("the wait alert message is "+ wait\_alert.getText());**  **Thread.sleep(5000);**  **wait\_alert.accept();**    **WebElement btn3 = driver.findElement(By.id("confirmButton"));**  **btn3.click();**  **Thread.sleep(5000);**    **Alert confirm\_alert = driver.switchTo().alert();**  **System.out.println("the wait alert message is "+ confirm\_alert.getText());**  **Thread.sleep(5000);**  **confirm\_alert.accept();**    **WebElement promtBtn = driver.findElement(By.id("promtButton"));**  **promtBtn.click();**  **Alert promptAlert = driver.switchTo().alert();**    **promptAlert.sendKeys("Onkar");**  **Thread.sleep(5000);**    **promptAlert.accept();**  **Thread.sleep(5000);**  **}**  **}** |
| --- | --- |
| **Output** |  |

1. Write a selenium script to handle alert on <http://demo.guru99.com/test/simple_context_menu.html>

| **Code** | **package pkg;**  **import org.openqa.selenium.By;**  **import org.openqa.selenium.WebDriver;**  **import org.openqa.selenium.WebElement;**  **import org.openqa.selenium.firefox.FirefoxDriver;**  **import org.openqa.selenium.interactions.Actions;**  **public class AlertsSimpleContextDisplay {**  **public static void main(String[] args) {**  **// TODO Auto-generated method stub**  **System.setProperty("webdriver.gecko.driver","G:\\Selenium\_setup\\geckodriver.exe");**  **// Web driver for FireFox**  **WebDriver driver = new FirefoxDriver();**  **//locate web page**  **driver.get("https://demo.guru99.com/test/simple\_context\_menu.html");**  **//double click me too see alert**  **WebElement doubleClick = driver.findElement(By.xpath("//button[@ondblclick='myFunction()']"));**  **Actions dClick = new Actions(driver);**  **dClick.doubleClick(doubleClick).perform();**  **}**  **}** |
| --- | --- |
| **Output** |  |

1. Open “train\_reservation.html” page and handle the alerts on that page.

| **Code** | **package pkg;**  **import org.openqa.selenium.Alert;**  **import org.openqa.selenium.By;**  **import org.openqa.selenium.WebDriver;**  **import org.openqa.selenium.WebElement;**  **import org.openqa.selenium.firefox.FirefoxDriver;**  **public class trainReservationAlert {**  **public static void main(String[] args) throws InterruptedException {**  **// TODO Auto-generated method stub**  **System.setProperty("webdriver.gecko.driver","G:\\Selenium\_setup\\geckodriver.exe");**    **// Web driver for FireFox**  **WebDriver driver = new FirefoxDriver();**    **//locate web page**  **driver.get("file:///G:/Flight\_Reservation/train\_reservation.html");**    **//locate trains hyperlink**  **WebElement trains\_link = driver.findElement(By.linkText("Trains"));**  **//click on trains link**  **trains\_link.click();**  **//Alert window opens**  **//switch from main window to alert window**  **Alert simpleAlert = driver.switchTo().alert(); // simpleAlert**  **//print alert text**  **System.out.println("The Text inside alert window is: "+simpleAlert.getText());**  **//perform action on clicking on simple alert**  **Thread.sleep(2000);**  **simpleAlert.accept();**    **Thread.sleep(5000);**  **//locate confirm details button**  **WebElement confirmBtn = driver.findElement(By.cssSelector("input[value='Confirm Details']"));**  **confirmBtn.click();**  **//Alert window opens**  **//switch from main window to alert window**  **Alert promt\_Alert = driver.switchTo().alert();**  **//enter input**  **promt\_Alert.sendKeys("3");**  **Thread.sleep(2000);**  **promt\_Alert.accept();**  **Thread.sleep(5000);**  **WebElement book\_Ticket = driver.findElement(By.cssSelector("input[value='Book Tickets']"));**  **book\_Ticket.click();**  **//Alert window opens**  **//switch from main window to alert window**  **Alert Confimation\_alert = driver.switchTo().alert();**  **//text retrieve from confirmation Text**  **System.out.println("The Text inside window: "+Confimation\_alert.getText());**  **Thread.sleep(2000);**  **Confimation\_alert.accept();**  **Thread.sleep(5000);**  **WebElement book\_ticket\_cancel = driver.findElement(By.cssSelector("input[value='Book Tickets']"));**  **book\_ticket\_cancel.click();**  **Alert decline\_alert = driver.switchTo().alert();**  **Thread.sleep(2000);**  **decline\_alert.dismiss();**  **}**  **}** |
| --- | --- |
| **Output** |  |

**Conclusion:** Learnt to handle all types of alerts in Selenium

**After performing this Practical/lab, students are expected to answer following questions**

1. What are different types of alert()?
2. Which method is used to cancel or close alert window?