

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

Date: _____

Aim:

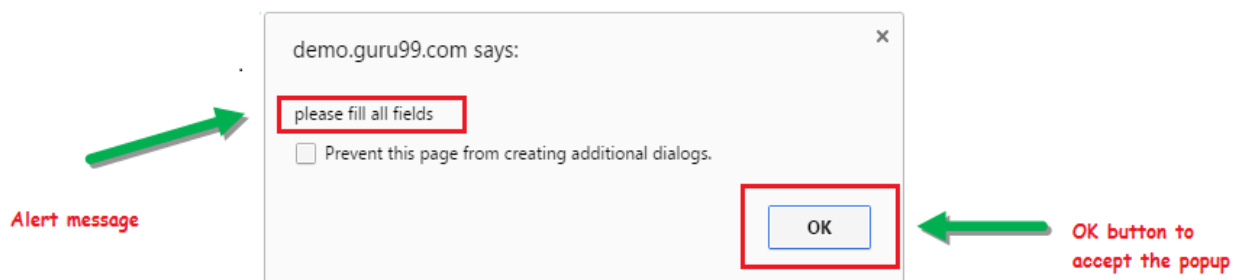
To learn how to handle various types of alerts in Selenium.

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:

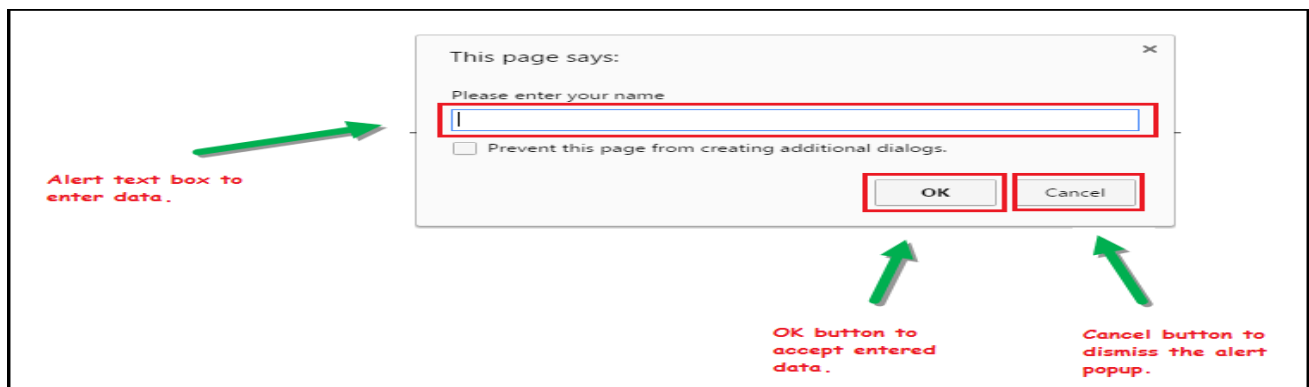
Simple Alert

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



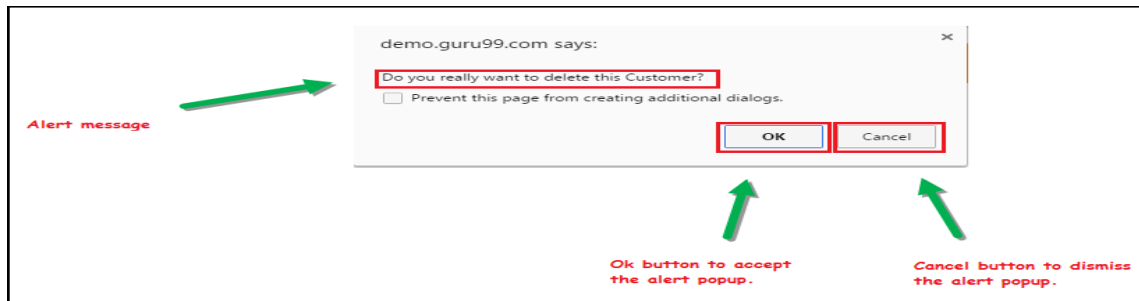
Prompt Alert.

This Prompt Alert asks some input from the user and Selenium webdriver can enter the text using `sendKeys("input....")`.



Confirmation Alert.

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



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	<pre>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();</pre>
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```
// 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

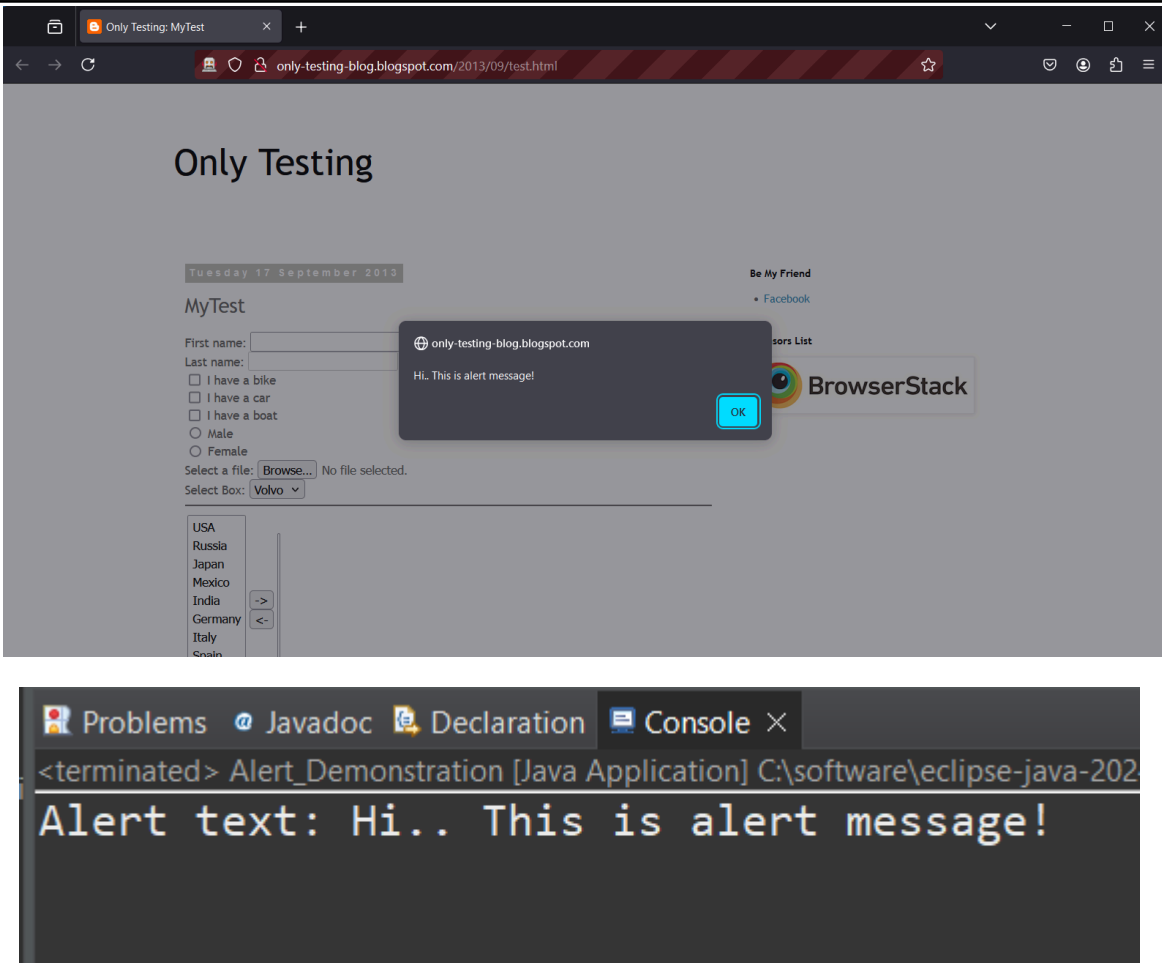
Thread.sleep(5000);


// Close the browser

driver.quit();

}

}
```

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

Code	<pre> 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 </pre>
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```
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();
```

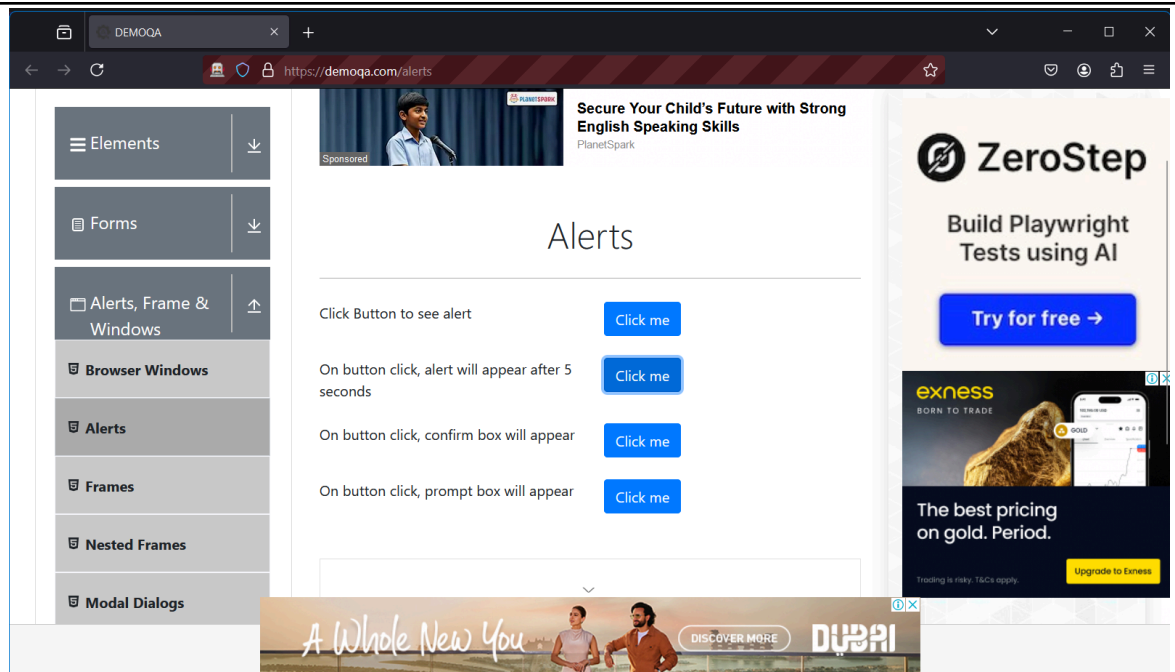
```
System.out.println("the wait alert message is "+
confirm_alert.getText());

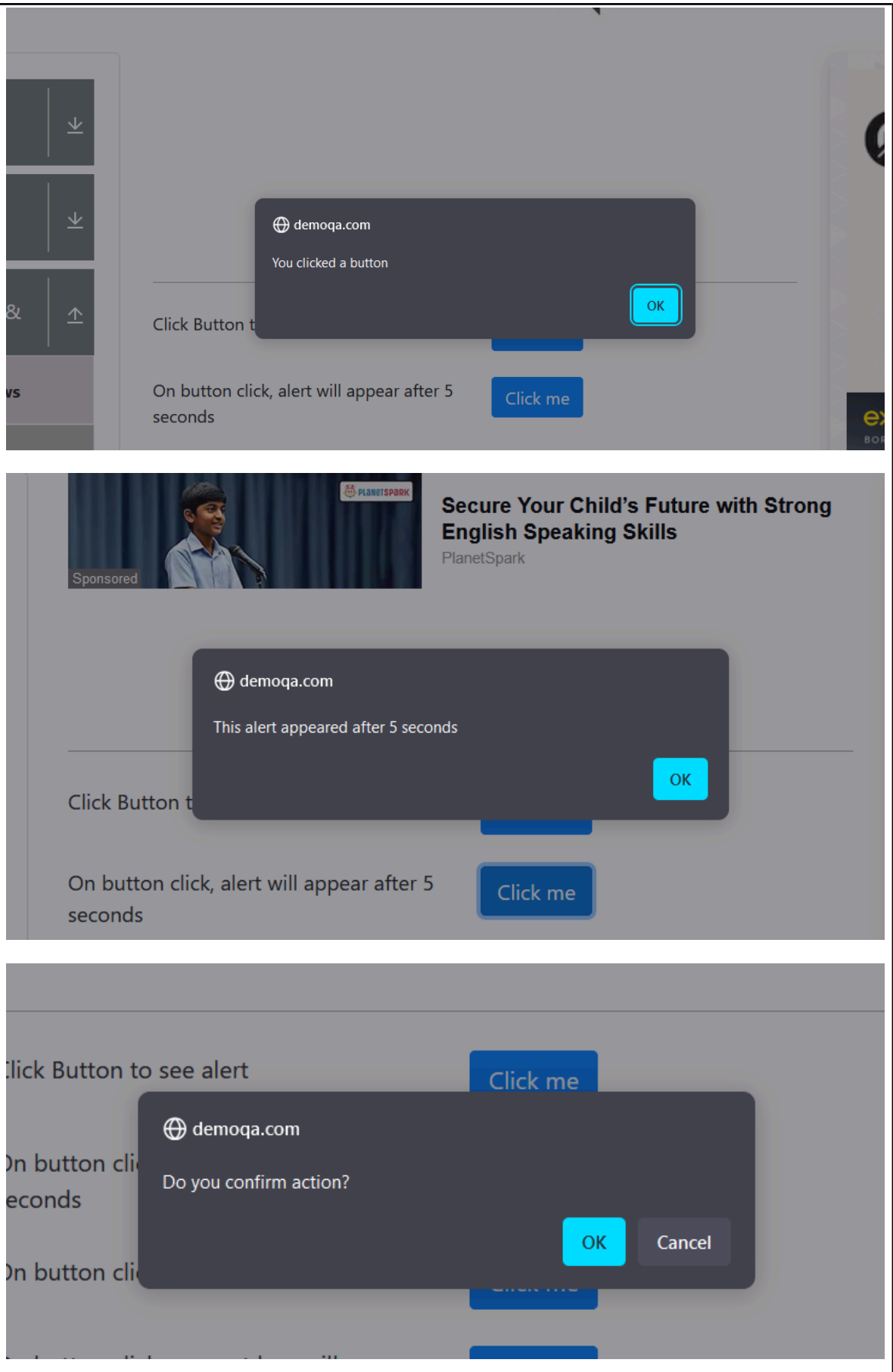
Thread.sleep(5000);
confirm_alert.accept();

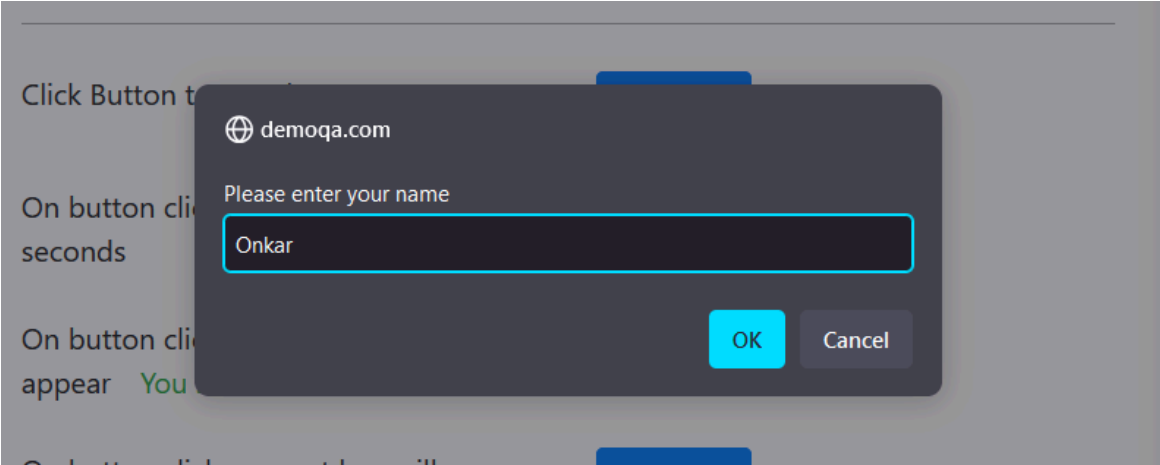
WebElement promptBtn = driver.findElement(By.id("promptButton"));
promptBtn.click();
Alert promptAlert = driver.switchTo().alert();

promptAlert.sendKeys("Onkar");
Thread.sleep(5000);

promptAlert.accept();
Thread.sleep(5000);
}
}
```

Output



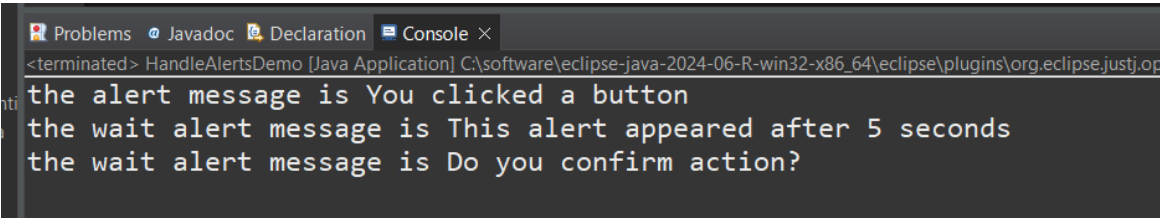


Click Button to see alert

On button click, alert will appear after 5 seconds

On button click, confirm box will appear You selected Ok

On button click, prompt box will appear You entered Onkar



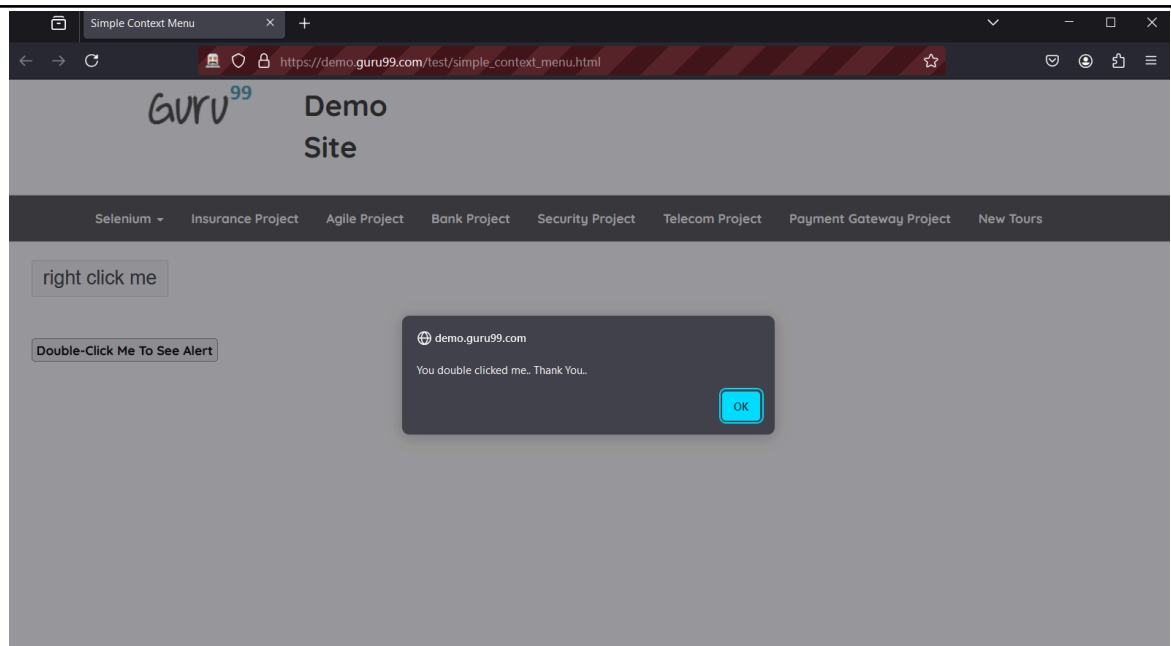
3. Write a selenium script to handle alert on http://demo.guru99.com/test/simple_context_menu.html

Code	<pre>package pkg; import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;</pre>
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```
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[@onclick='myFunction()']"));
        Actions dClick = new Actions(driver);
        dClick.doubleClick(doubleClick).perform();
    }
}
```

Output



4. Open "train_reservation.html" page and handle the alerts on that page.

Code	<pre>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(""); //locate trains hyperlink WebElement trains_link = driver.findElement(By.linkText("Trains")); //click on trains link trains_link.click(); //Alert window opens</pre>
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	<pre> //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 prompt_Alert = driver.switchTo().alert(); //enter input prompt_Alert.sendKeys("3"); Thread.sleep(2000); prompt_Alert.accept(); Thread.sleep(5000); WebElement book_Ticket = </pre>
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```
driver.findElement(By.cssSelector("input[value='Book Tickets']"));

    book_Ticket.click();
    //Alert window opens
    //switch from main window to alert window
    Alert Confirmation_alert = driver.switchTo().alert();

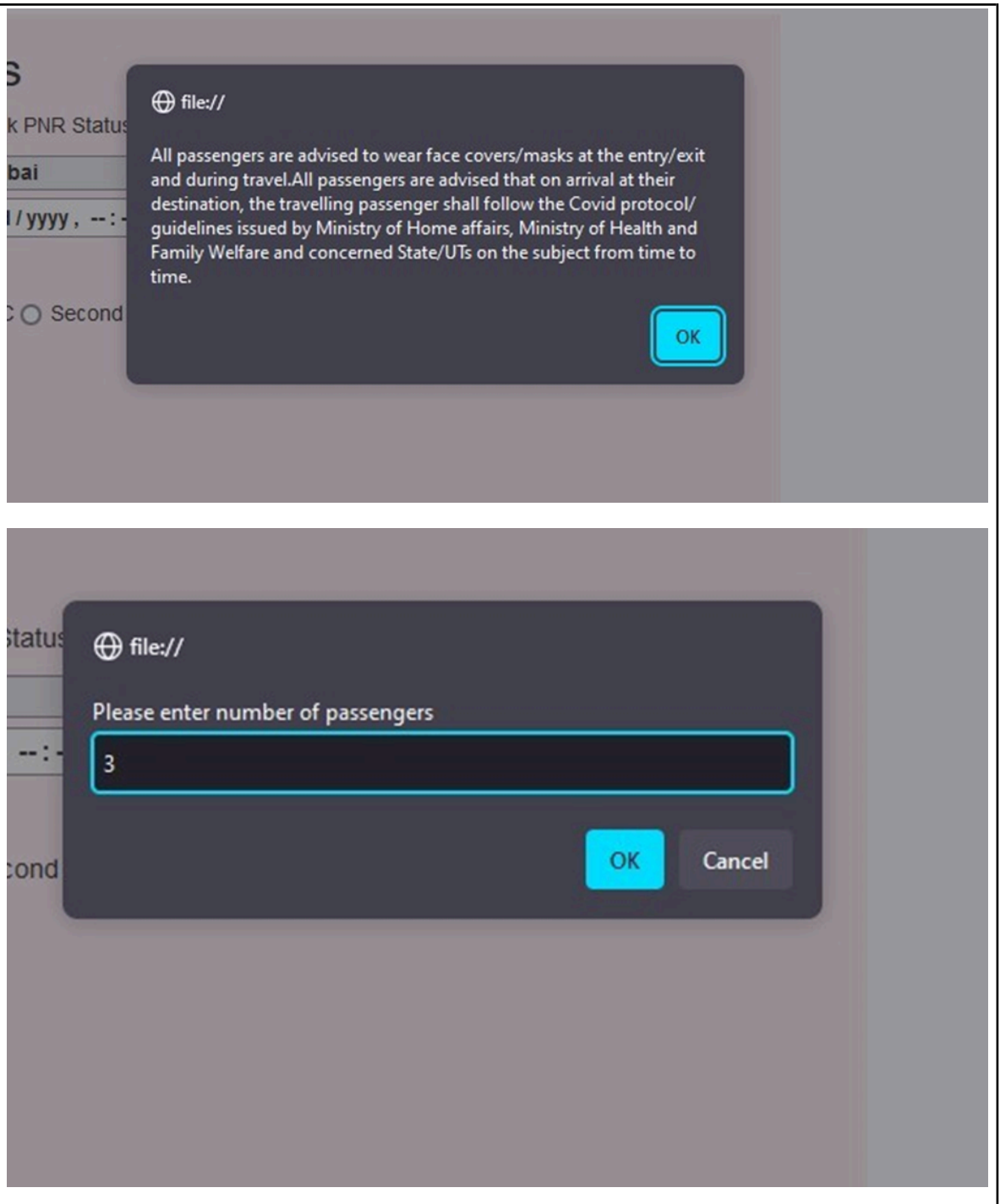
    //text retrieve from confirmation Text
    System.out.println("The      Text      inside      window:
"+Confirmation_alert.getText());
    Thread.sleep(2000);
    Confirmation_alert.accept();

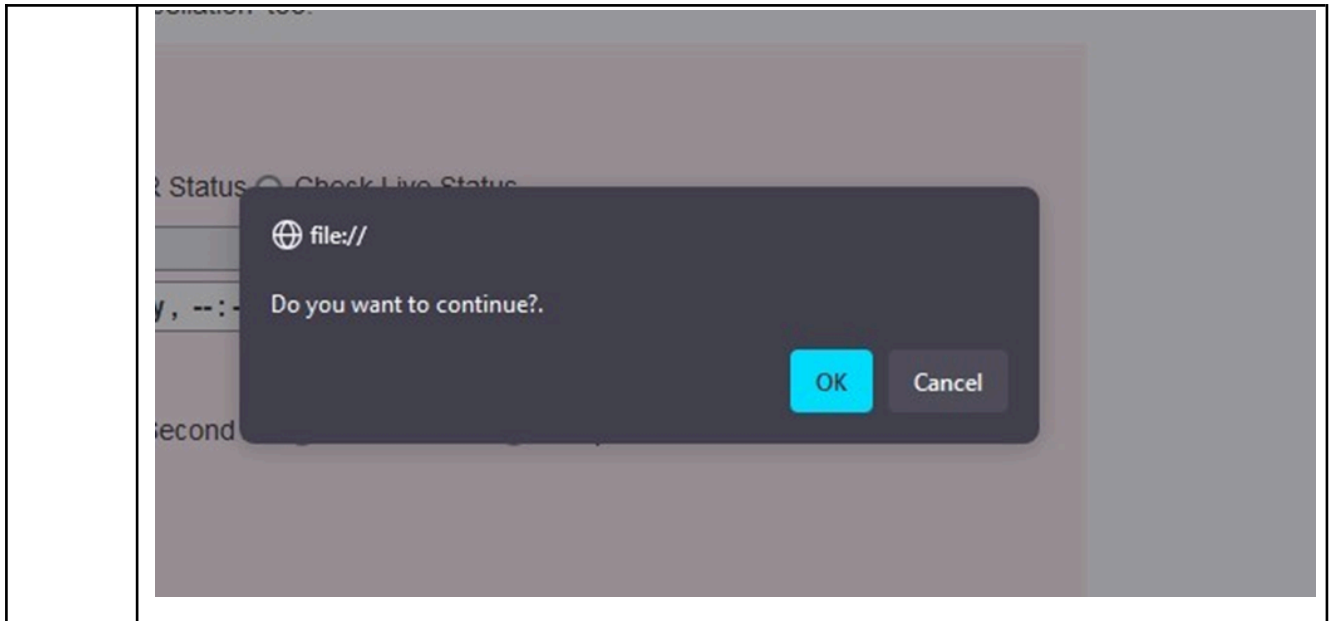
    Thread.sleep(5000);
    WebElement      book_ticket_cancel      =
driver.findElement(By.cssSelector("input[value='Book Tickets']"));
    book_ticket_cancel.click();

    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

Q.1 What are different types of alert()?

Q.2 Which method is used to cancel or close alert window?