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

Date: _____

Aim:

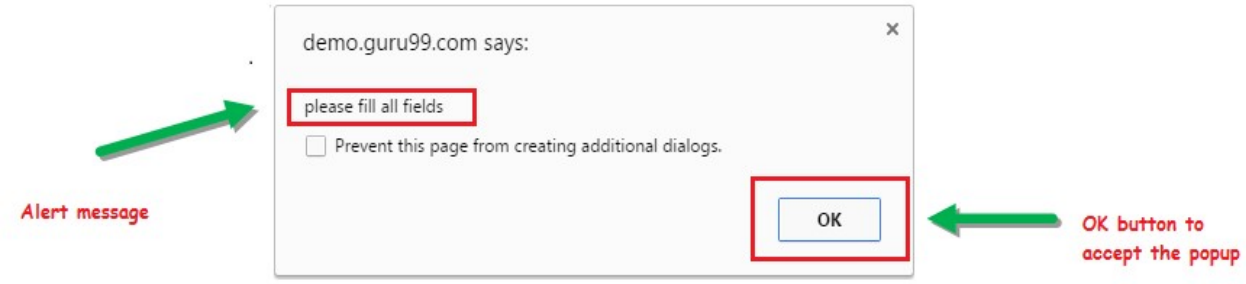
To learn how to handle various types of alerts in Selenium.

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):**

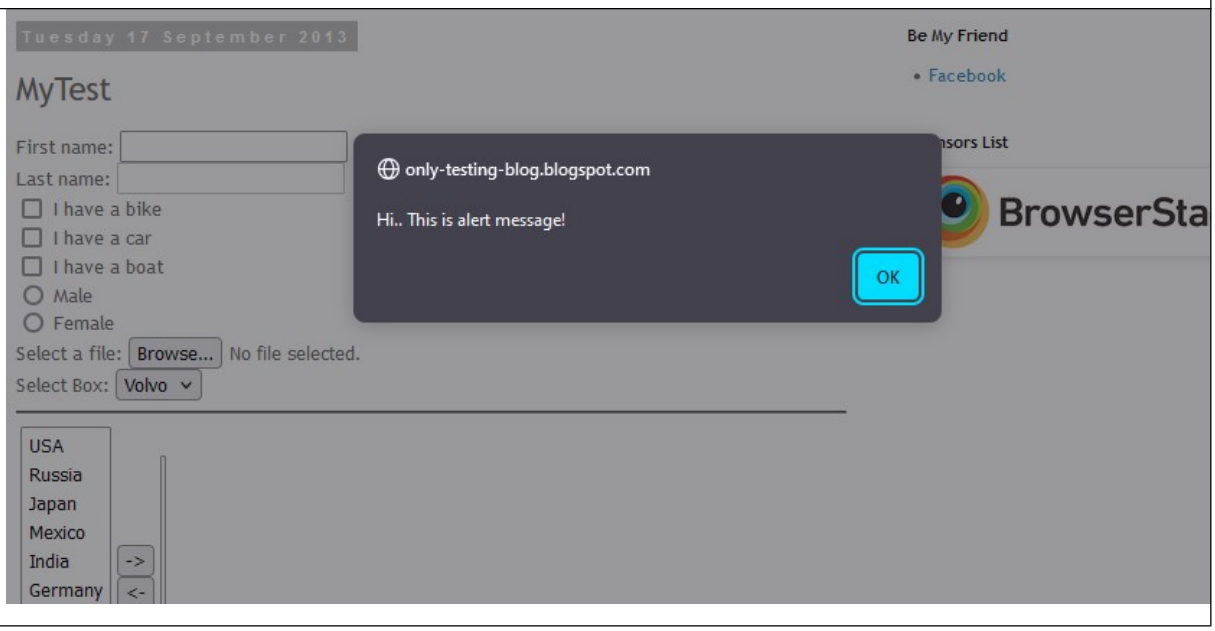
This will allow the developer to type in some text into the alert if the alert has some provision for it.

Implementation

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

Code

```
package prac;


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 HandleAlert {


	public static void main(String[] args) throws InterruptedException {
		// TODO Auto-generated method stub
		System.setProperty("webdriver.gecko.driver",
"D:\\Applications\\Selenium_Setup\\geckodriver.exe");


		// create web driver instance
		WebDriver driver = new FirefoxDriver();


		//open webpge
		driver.get("http://only-testing-blog.blogspot.com/2013/09/test.html");


		WebElement showAlert =
driver.findElement(By.cssSelector("input[value='Show Me Alert']"));
		showAlert.click();


		Alert simpleAlert = driver.switchTo().alert();
		Thread.sleep(2000);
		simpleAlert.accept();
```

	} }
Output	

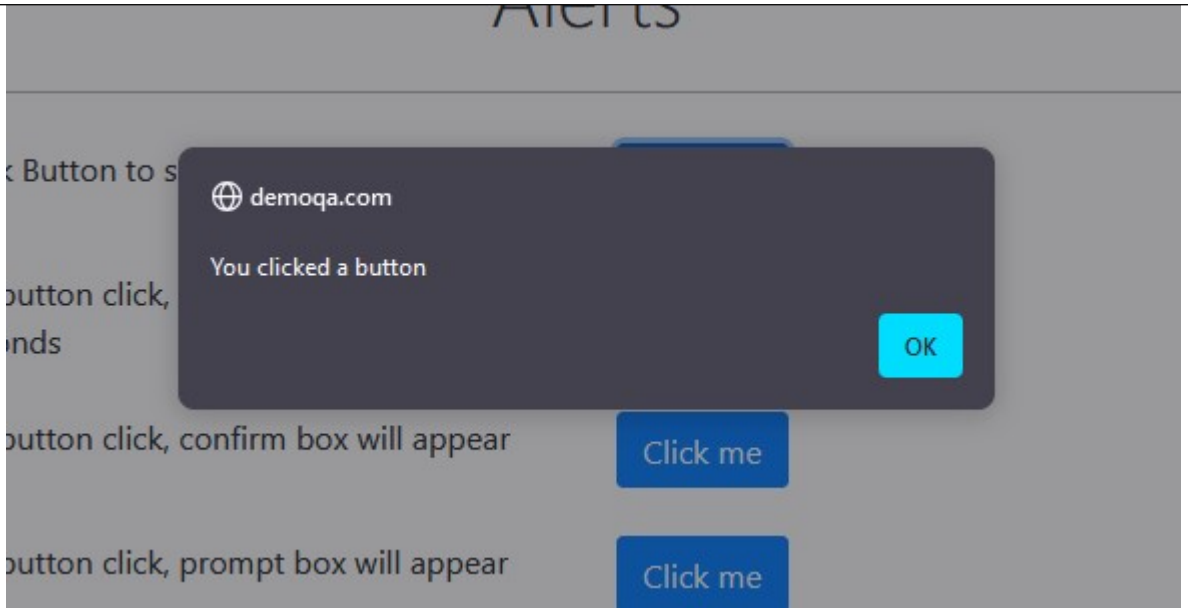
2. Write a selenium script to handle alerts on https://demoqa.com/alerts

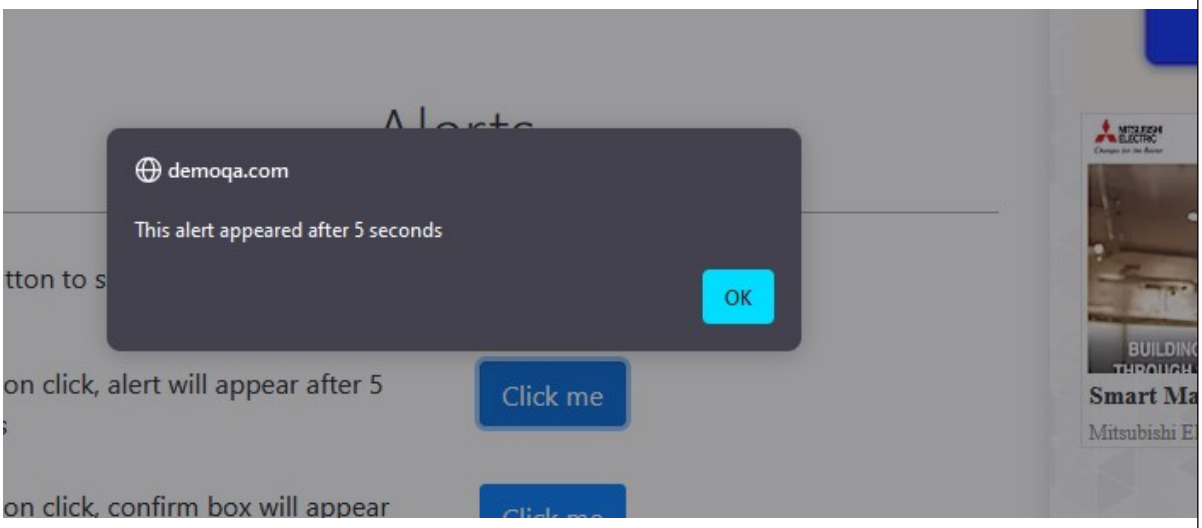
Code	package prac;
	
	import org.openqa.selenium.Alert;
	import org.openqa.selenium.By;
	import org.openqa.selenium.WebDriver;
	import org.openqa.selenium.WebElement;
	import org.openqa.selenium.firefox.FirefoxDriver;
	
	public class HandleAlertsQ2 {
	
	public static void main(String[] args) throws InterruptedException {
	// Set the system property for the GeckoDriver
	System.setProperty("webdriver.gecko.driver",
	"D:\\Applications\\Selenium_Setup\\geckodriver.exe");

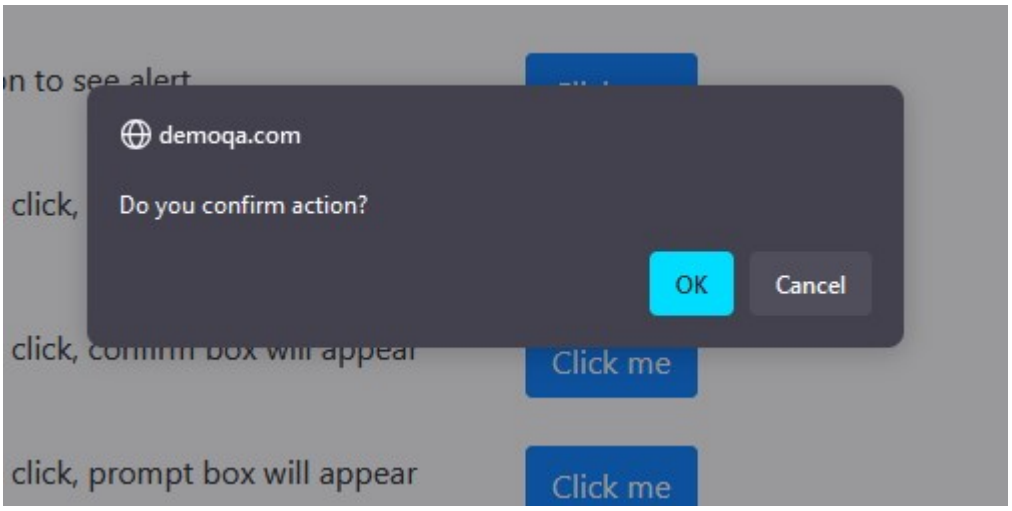
```
// Create a new instance of the FirefoxDriver
WebDriver driver = new FirefoxDriver();

// Navigate to the demoqa.com/alerts page
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();



        //confirm box alert handling
        Thread.sleep(2000);
        WebElement btn3 = driver.findElement(By.id("confirmButton"));
        btn3.click();
        Thread.sleep(5000);
```

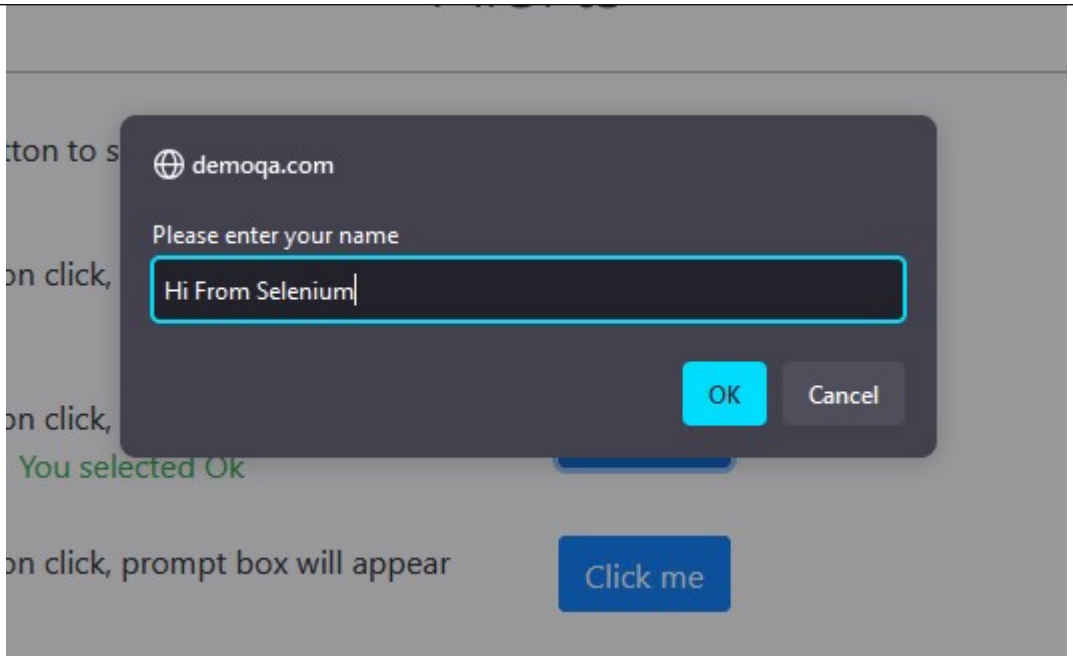
	Alert text_alert = driver.switchTo().alert();
	
	System.out.println("the confirm box alert message is "+ text_alert.getText());
	
	text_alert.accept();
	
	// prompt alert box handling
	Thread.sleep(2000);
	WebElement btn4 = driver.findElement(By.id("promtButton"));
	btn4.click();
	
	Alert prompt_alert = driver.switchTo().alert();
	prompt_alert.sendKeys("Hi From Selenium");
	Thread.sleep(5000);
	prompt_alert.accept();
	
	}
	}

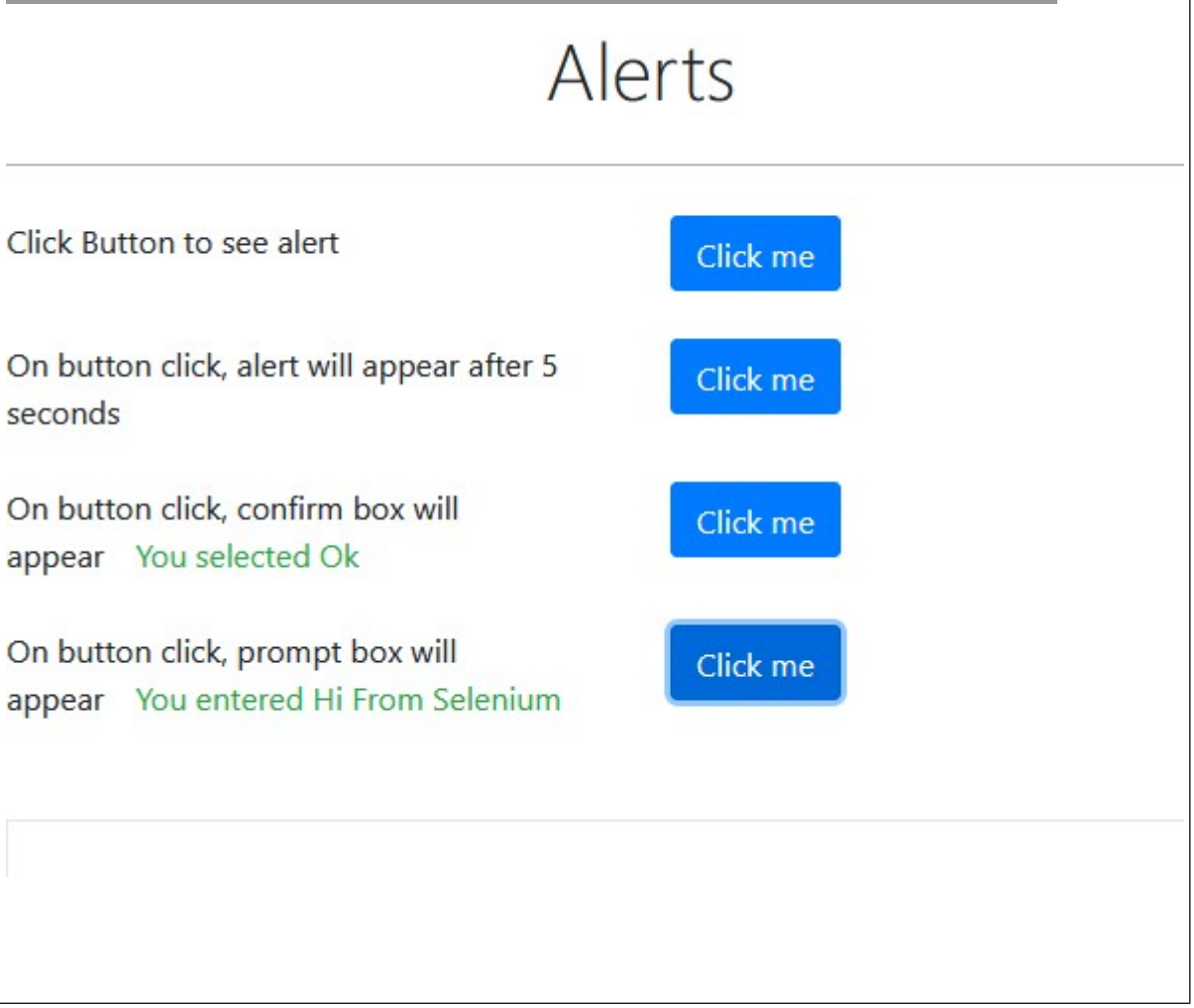
Output	


Alerts
demoqa.com
You clicked a button
OK
button click, confirm box will appear
Click me
button click, prompt box will appear
Click me


demoqa.com
This alert appeared after 5 seconds
OK
on click, alert will appear after 5
Click me
on click, confirm box will appear


demoqa.com
Do you confirm action?
OK
Cancel
Click me
click, prompt box will appear
Click me

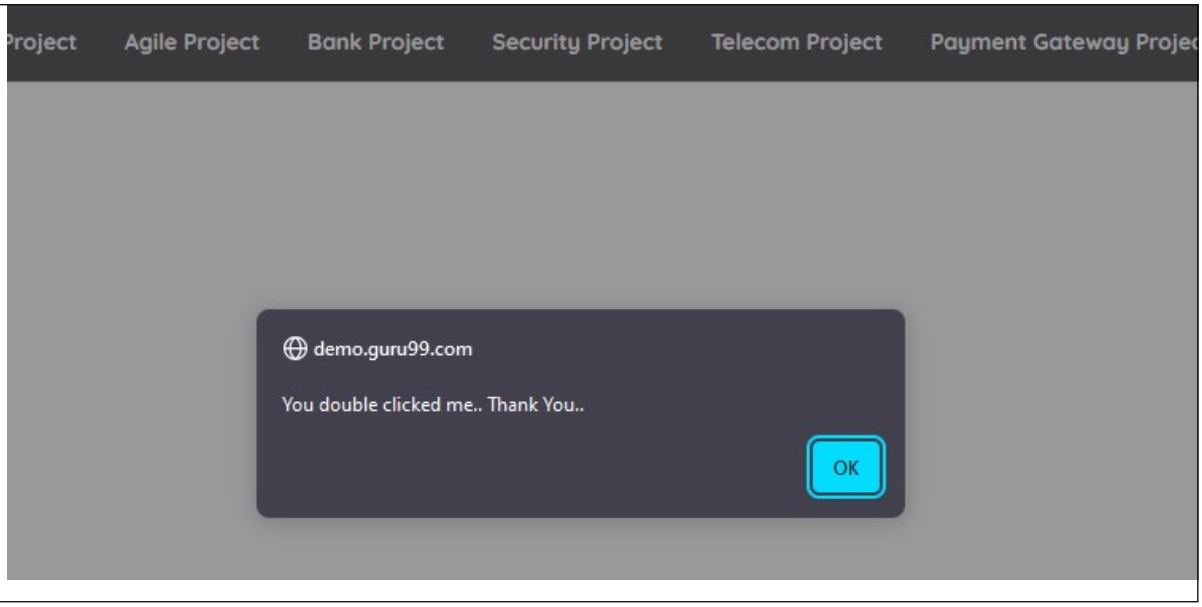




3. Write a selenium script to handle alert on http://demo.guru99.com/test/simple_context_menu.html

Code	package prac;

```
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 HandleAlertQ3 {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		System.setProperty("webdriver.gecko.driver",
"D:\\Applications\\Selenium_Setup\\geckodriver.exe");

		// create web driver instance
		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	

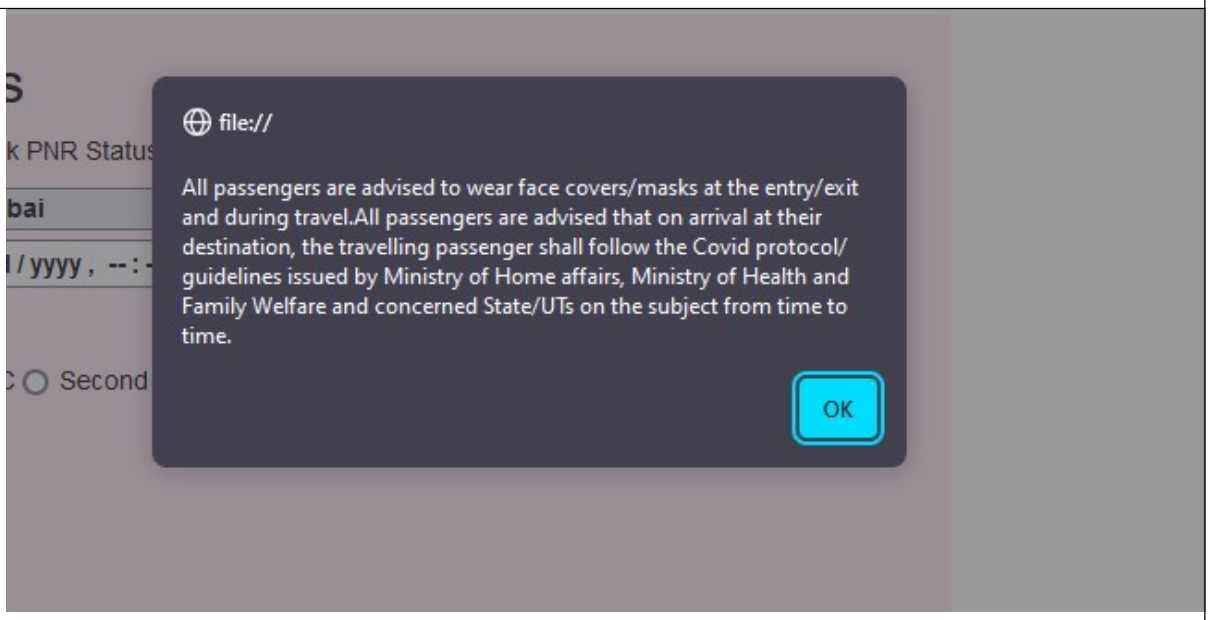
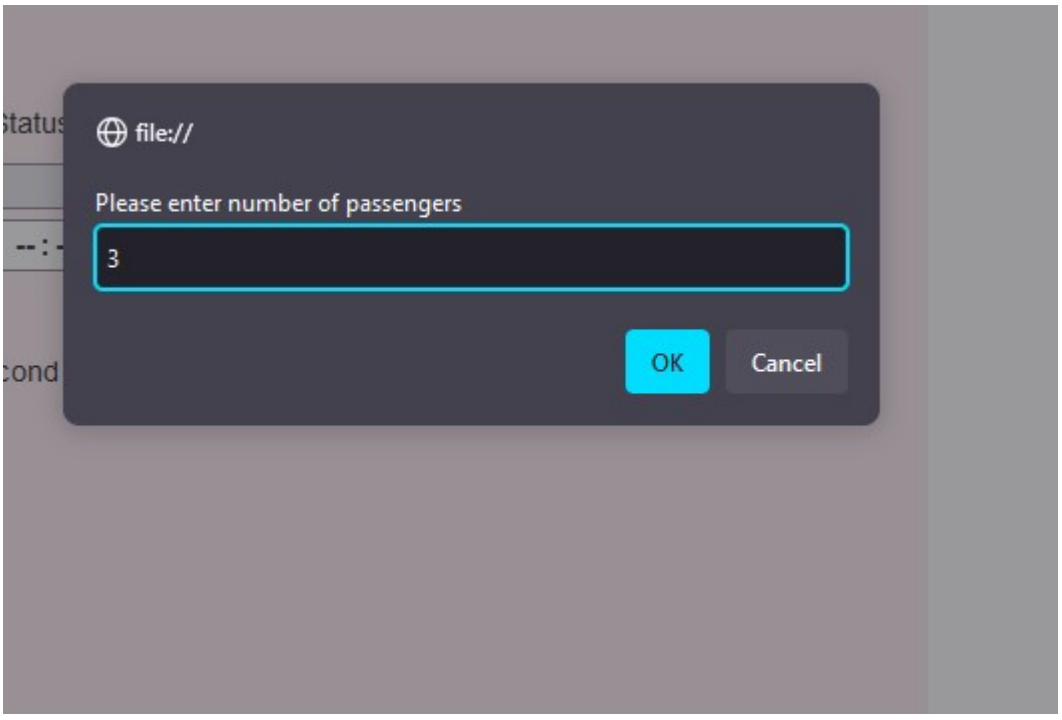
4. Open “train_reservation.html” page and handle the alerts on that page.

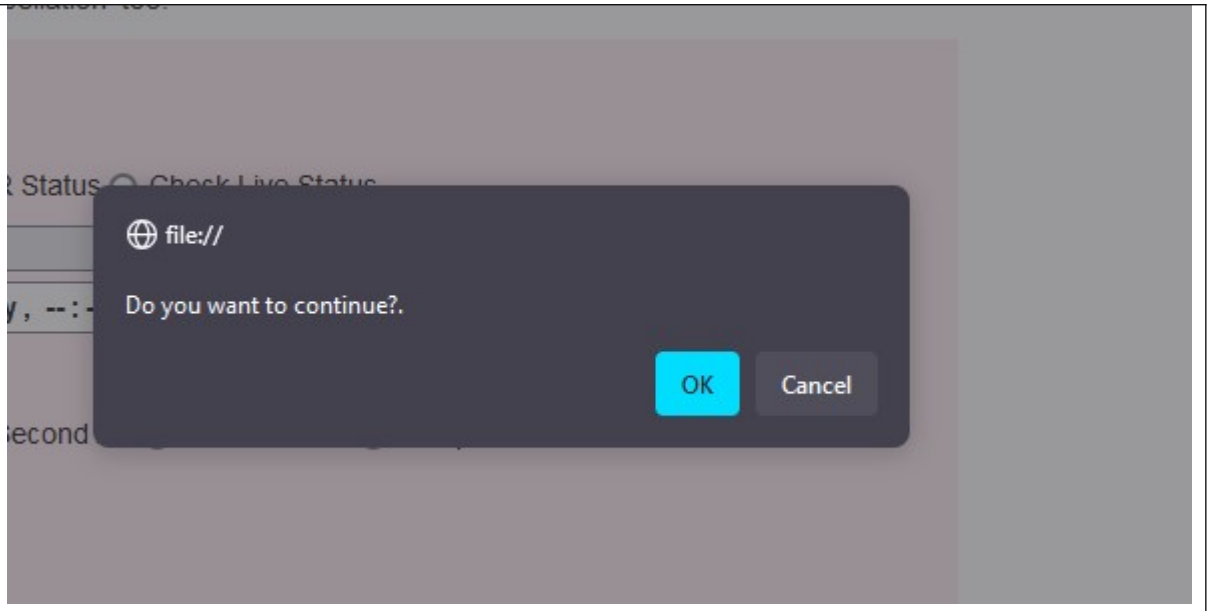
Code

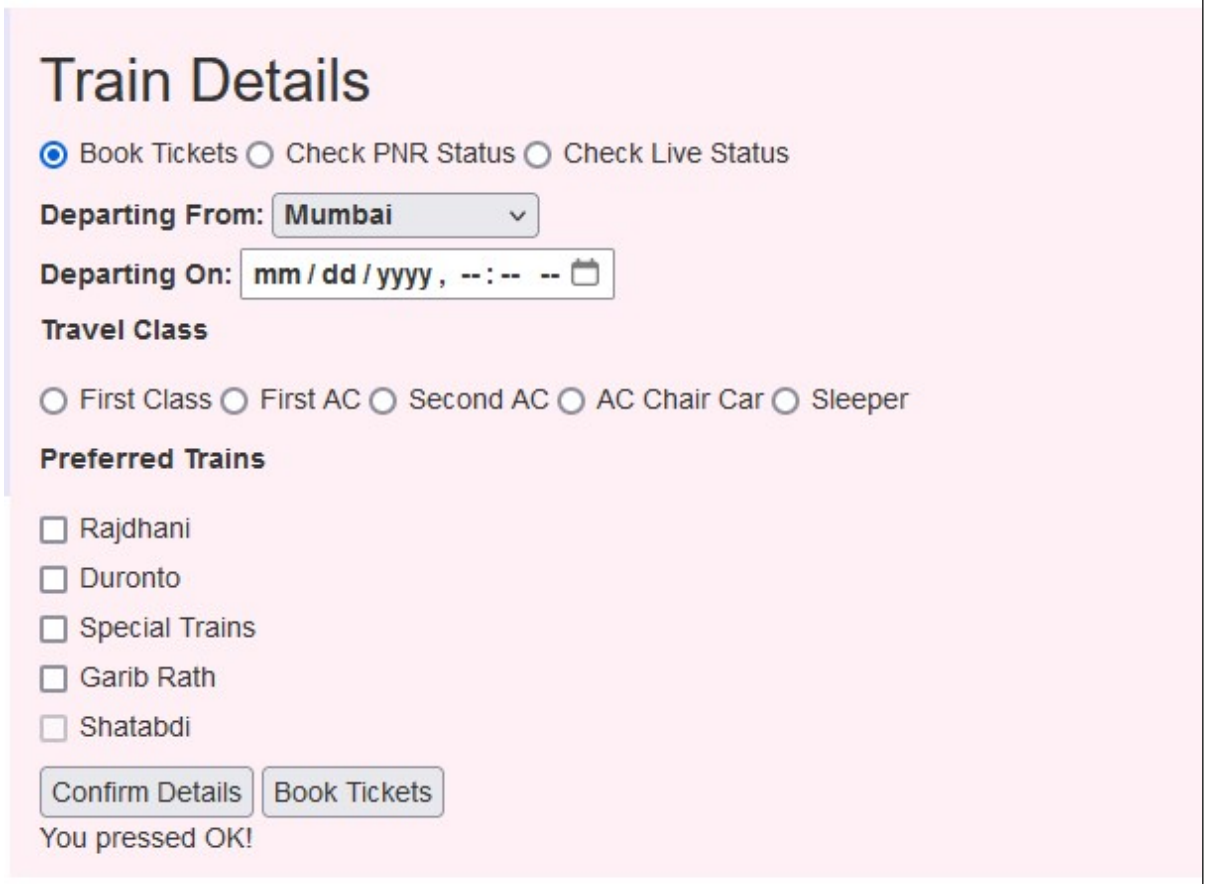
```
package prac;

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 HandlingAlertQ4 {

	public static void main(String[] args) throws InterruptedException {
		// TODO Auto-generated method stub
		System.setProperty("webdriver.gecko.driver",
"D:\\Applications\\Selenium_Setup\\geckodriver.exe");

		// create web driver instance
		WebDriver driver = new FirefoxDriver();
```

```
//open train_reservation.html
driver.get("file:///D:/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(); //click OK button of alert window

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_Tickets =
driver.findElement(By.cssSelector("input[value='Book Tickets']"));
                book_Tickets.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_tickiet_cancel =
driver.findElement(By.cssSelector("input[value='Book Tickets']"));
                book_tickiet_cancel.click();

                Alert decline_alert = driver.switchTo().alert();
                Thread.sleep(2000);
                decline_alert.dismiss();



        }
```

	}
Output	 file:// All passengers are advised to wear face covers/masks at the entry/exit and during travel.All passengers are advised that on arrival at their destination, the travelling passenger shall follow the Covid protocol/ guidelines issued by Ministry of Home affairs, Ministry of Health and Family Welfare and concerned State/UTs on the subject from time to time. OK  file:// Please enter number of passengers 3 OK Cancel





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?