

## **Assignment 1 – Action Class**

**Objective: Practice mouse and keyboard interactions.**

**Scenario:**

**Open the DemoQA site → <https://demoqa.com/buttons>**

**Perform:**

**Double Click on “Double Click Me” button.**

**Right Click on “Right Click Me” button.**

**Single Click on the third “Click Me” button.**

**Print the text messages that appear after each click action.**

**Program:**

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;
public class Task1Day20 {

    public static void main(String[] args) throws InterruptedException {

        WebDriver driver = new ChromeDriver();
        driver.get("https://demoqa.com/buttons");
        driver.manage().window().maximize();
        Thread.sleep(2000);

        Actions act = new Actions(driver);

        // Double Click

        WebElement doubleClickBtn =
driver.findElement(By.id("doubleClickBtn"));
        act.doubleClick(doubleClickBtn).perform();
```

```

    String doubleClickMsg =
driver.findElement(By.id("doubleClickMessage")).getText();

    System.out.println("Double Click Message: " + doubleClickMsg);

    Thread.sleep(2000);

// Right Click

WebElement rightClickBtn = driver.findElement(By.id("rightClickBtn"));
act.contextClick(rightClickBtn).perform();

String rightClickMsg =
driver.findElement(By.id("rightClickMessage")).getText();

System.out.println("Right Click Message: " + rightClickMsg);

Thread.sleep(2000);

// Single Click

WebElement clickMeBtn =
driver.findElement(By.xpath("//button[text()='Click Me']"));

act.click(clickMeBtn).perform();

String dynamicClickMsg =
driver.findElement(By.id("dynamicClickMessage")).getText();

System.out.println("Single Click Message: " + dynamicClickMsg);

Thread.sleep(3000);

driver.quit();
}
}

```

### Extra Challenge:

Visit <https://demoqa.com/dragabble> and drag the element from its position to another point.

**Program:**

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;

public class ActionDropable {

    public static void main(String[] args) throws InterruptedException {

        WebDriver driver=new ChromeDriver();
        driver.get("https://demoqa.com/droppable");

        driver.manage().window().maximize();
        Actions act=new Actions(driver);
        WebElement source=driver.findElement(By.id("draggable"));
        WebElement target=driver.findElement(By.id("droppable"));
        act.dragAndDrop(source, target).perform();

    }

}
```

---

**Assignment 2 – Select Class****Objective: Work with dropdowns and multi-select options.****Scenario:**

**Open the DemoQA site → <https://demoqa.com/select-menu>**

**Perform:**

**Select “Blue” from the old-style dropdown.**

**Select multiple options from the multi-select dropdown (e.g., “Green”, “Yellow”, “Black”).**

**Verify and print the selected options.**

**Extra Challenge:**

**Select options using both `selectByVisibleText` and `selectByIndex`.**

**Program:**

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.Select;

import java.time.Duration;
import java.util.List;

public class SelectClassDemo {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver", "path/to/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

        try {
            driver.get("https://demoqa.com/select-menu");
```

```

// Old-style dropdown: Select "Blue"

WebElement oldDropdown =
driver.findElement(By.id("oldSelectMenu"));

Select selectOld = new Select(oldDropdown);

selectOld.selectByVisibleText("Blue");

System.out.println("Selected color from old-style dropdown: " +
selectOld.getFirstSelectedOption().getText());


// Multi-select dropdown: Select multiple options

WebElement multiSelect = driver.findElement(By.id("cars")); // multi-
select dropdown

Select selectMulti = new Select(multiSelect);


if (selectMulti.isMultiple()) {
    selectMulti.deselectAll(); // clear any previous selection
    selectMulti.selectByVisibleText("Green");
    selectMulti.selectByVisibleText("Yellow");
    selectMulti.selectByVisibleText("Black");


    System.out.println("Selected options in multi-select:");

    List<WebElement> selectedOptions =
selectMulti.getAllSelectedOptions();

    for (WebElement option : selectedOptions) {
        System.out.println("- " + option.getText());
    }
} else {
    System.out.println("Dropdown is not multi-select.");
}

// Extra Challenge: Select using index

```

```
        selectOld.selectByIndex(3); // Example: 0-based index

        System.out.println("Selected color by index: " +
selectOld.getFirstSelectedOption().getText());

    } catch (Exception e) {
        e.printStackTrace();
    } finally {
        driver.quit();
    }
}
}
```

---

### **Assignment 3 – Alerts**

**Objective:** Handle different types of alerts.

**Scenario:**

**Open the DemoQA site → <https://demoqa.com/alerts>**

**Perform:**

**Click the button to see an alert, accept it.**

**Click the “On button click, confirm box will appear” button, dismiss the alert.**

**Click the “Prompt Box” button, enter your name, and accept it.**

**Capture and print the alert messages before accepting/dismissing.**

**Extra Challenge:**

**Wait dynamically for the alert that appears after 5 seconds, then accept it.**

**Program:**

```
import org.openqa.selenium.Alert;
import org.openqa.selenium.By;
```

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class AlertsDemo {

    public static void main(String[] args) throws InterruptedException {

        WebDriver driver=new ChromeDriver();
        driver.get("https://demoqa.com/alerts");
        Thread.sleep(5000);
        driver.manage().window().maximize();

        WebElement
samplealert=driver.findElement(By.id("alertButton"));
        samplealert.click();
        Thread.sleep(5000);
        Alert alert=driver.switchTo().alert();
        alert.accept();

        WebElement
timealert=driver.findElement(By.id("timerAlertButton"));
        timealert.click();
        Thread.sleep(7000);
        Alert alert1=driver.switchTo().alert();
        alert1.dismiss();

        Thread.sleep(3000);
```

```

        WebElement
confirmalert=driver.findElement(By.id("confirmButton"));

        confirmalert.click();

        Thread.sleep(2000);

        Alert alert12=driver.switchTo().alert();

        alert12.dismiss();


        Thread.sleep(2000);

        WebElement
promptalert=driver.findElement(By.id("promptButton"));

        promptalert.click();

        Thread.sleep(2000);

        Alert alert123=driver.switchTo().alert();

        alert123.sendKeys("okay");

        alert123.accept();

    }

}

```

---

## Assignment 4 – Combined Scenario

**Objective:** Integrate all three concepts.

**Scenario:**

Open a practice site (you can use <https://demoqa.com> or <https://the-internet.herokuapp.com/>).

**Steps:**



**Drag and drop an element (Action Class).**

**Select multiple options from a dropdown (Select Class).**

**Trigger a prompt alert, enter a message, and verify it on the page.**

**Program:**

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.Alert;
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.Select;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;

import java.time.Duration;
import java.util.List;

public class CombinedScenarioDemo {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver", "path/to/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

        try {
            driver.get("https://demoqa.com");
            // Drag and Drop
            driver.get("https://demoqa.com/dragabble");
```

```

WebElement dragElement = driver.findElement(By.id("dragBox"));
Actions actions = new Actions(driver);
actions.dragAndDropBy(dragElement, 150, 50).perform();
System.out.println("Dragged element to new position.");
// Multi-Select Dropdown
driver.get("https://demoqa.com/select-menu");
WebElement multiSelect = driver.findElement(By.id("cars"));
Select select = new Select(multiSelect);
if(select.isMultiple()){
    select.selectByVisibleText("Volvo");
    select.selectByVisibleText("Opel");
    select.selectByIndex(2);
    List<WebElement> selectedOptions = select.getAllSelectedOptions();
    System.out.println("Selected options:");
    for(WebElement option : selectedOptions){
        System.out.println(option.getText());
    }
}
// Prompt Alert
driver.get("https://demoqa.com/alerts");
driver.findElement(By.id("promptButton")).click();

WebDriverWait wait = new WebDriverWait(driver,
Duration.ofSeconds(10));

Alert promptAlert = wait.until(ExpectedConditions.alertIsPresent());

String message = "Hello Selenium!";
promptAlert.sendKeys(message);

```

```
        promptAlert.accept();

        WebElement promptResult =
driver.findElement(By.id("promptResult"));

        System.out.println("Prompt Result Text: " + promptResult.getText());

    } catch (Exception e) {
        e.printStackTrace();
    } finally {
        driver.quit();
    }
}
}
```