

AssignQues: test case

- 1: Open browser
- 2: Naviagte to demo webshop <https://demowebshop.tricentis.com/>
- 3: Mouse hover on computer and click on any one option

Script:

```
WebDriver driver = new ChromeDriver();
driver.manage().window().maximize();
driver.get("https://demowebshop.tricentis.com/");
Thread.sleep(3000);
Actions a = new Actions(driver);
WebElement comp = driver.findElement(By.xpath("//ul[@class='top-menu']/li[2]"));
a.moveToElement(comp).perform();
Thread.sleep(6000);
driver.findElement(By.partialLinkText("Desktops")).click();
```

3: contextClick(): This method is used to perform Right Click Action

4: click(): This method is used to perform left click action

Note: We cannot inspect context menu option

-->To handle context menu option we use Robot class

Script:

```
WebDriver driver = new FirefoxDriver();
driver.get("http://www.fatcowhosting.com/");
//create object of action class & pass webDriver parameter
Actions a = new Actions(driver);
WebElement ele = driver.findElement(By.linkText("MarketPlace"));
a.moveToElement(ele).perform();
a.contextClick().perform();
//select option in context menu
Robot r = new Robot();
r.keyPress(KeyEvent.VK_DOWN);
r.keyPress(KeyEvent.VK_ENTER);
```

5: clickAndHold(): This method is used to select element & Hold OR (used for left click action & Hold)

6: Release(): This method is used to release(keystroke) action.

7: dragAndDrop(): This method is used to drag an element and drop at specific element.

8: dragAndDropBy(): This method is used to drag an element & drop at a particular position

9: moveByOffset(xloc,yloc): This method is used to move mouse cursor to a specific location

Script:

```
WebDriver driver = new FirefoxDriver();
driver.manage().window().maximize();
driver.get("https://jqueryui.com/resources/demos/droppable/default.html");
Actions a = new Actions(driver);
WebElement drag_ele = driver.findElement(By.id("draggable"));
WebElement drop_ele = driver.findElement(By.id("droppable"));
//a.dragAndDrop(drag_ele, drop_ele).perform();
a.dragAndDropBy(drag_ele, 200, 300).perform();
```

Script:

```
WebDriver driver = new FirefoxDriver();
    driver.manage().window().maximize();
    driver.get("https://jqueryui.com/resources/demos/droppable/default.html");
    Actions a = new Actions(driver);
    WebElement drag_ele = driver.findElement(By.id("draggable"));
    WebElement drop_ele = driver.findElement(By.id("droppable"));
//    a.moveToElement(drag_ele).perform();
//    a.clickAndHold().perform();
//    a.moveToElement(drop_ele).perform();
//    a.release().perform();

    a.clickAndHold(drag_ele).moveToElement(drop_ele).release().build().perform();
```

10: Build(): This method is used to combine multiple action

11: pause(): This method is used to stop execution of Actions class Methods.

Examp:

```
a.moveToElement(drag_ele).pause(Duration.ofSeconds(3)).clickAndHold().moveToElement(drop_ele)
    .release().build().perform();
```

12: KeyDown(): This method is used to perform keystroke continuously

13: KeyUp(): This method is used to release performed keystroke.

Script:

```
WebDriver driver = new FirefoxDriver();
    driver.get("https://www.facebook.com/");
    Actions a = new Actions(driver);
    WebElement ele = driver.findElement(By.id("email"));
    a.keyDown(Keys.SHIFT).perform();
    a.sendKeys(ele, "admin").perform();
    a.keyUp(Keys.SHIFT).perform();
    a.sendKeys(ele, "manager").perform();
```

AsignQues: WATS to enter firstname in facebook app using keyDown and keyup

***Handling Scrolling Actions:

-->Scrolling Actions can be performed in two ways:

- 1: By using Robot Class
- 2: By using JavascriptExecutor

-->Examp: Robot Class

Script:

```
WebDriver driver = new FirefoxDriver();
    driver.manage().window().maximize();
    driver.get("https://www.amazon.in/");
    Robot r = new Robot();
    r.keyPress(KeyEvent.VK_PAGE_DOWN);
```

```
Thread.sleep(2000);
r.keyPress(KeyEvent.VK_PAGE_DOWN);
Thread.sleep(2000);
r.keyPress(KeyEvent.VK_PAGE_DOWN);
Thread.sleep(2000);
r.keyPress(KeyEvent.VK_PAGE_UP);
Thread.sleep(2000);
r.keyPress(KeyEvent.VK_PAGE_UP);
Thread.sleep(2000);
r.keyPress(KeyEvent.VK_PAGE_UP);
```

***JavascriptExecutor:

-->Javascript is the powerful language for communicating with browser
-->To execute JS commands using selenium, JSExecutor interface methods are used
-->To execute JS commands in browser which is opened by selenium, driver object should be upcasted to JSExecutor

Syntax: JavascriptExecutor js = (JavascriptExecutor) driver; //casting
js.executeScript(SCRIPT, arguments);

script: It is the javascript that needs to be executed

Argument: It is the argument to the script, Its optional

Ques: Why we use javascript in selenium?

- 1: To perform mouse scroll up and scroll down action
- 2: To identify element if selenium locators are not useful
- 3: To handle disable element

Note:

1: If element html code contains id, to identify that component JS command is:
document.getElementById("id attribute property value").value=""; ----->To enter text
document.getElementById("id property value").click(); ----->To click

2: If element html code not contains id, then JS command as follows:

```
WebElement ele = driver.findElement(Locator type);
js.executeScript("arguments[0].value='';",ele)
```

3: To scroll within webpage, following command is used

```
js.executeScript("window.scrollTo(x,y);");
```

4: To scroll upto specific element in webpage

```
js.executeScript("window.scrollTo(0,document.body.scrollHeight);");
```

5: To scroll to the top of the webpage

```
js.executeScript("window.scrollTo(0,document.body.scrollTop);");
```

Script:

```
WebDriver driver = new ChromeDriver();
driver.get("http://localhost/login.do");
//creating the javascript executor interface object by Type casting
```

```

JavascriptExecutor js = (JavascriptExecutor) driver;
//call the javascriptExecutor Method
//Username
js.executeScript("document.getElementById('username').value='admin'");
//password
WebElement ele = driver.findElement(By.name("pwd"));
js.executeScript("arguments[0].value='manager'",ele);
//click on login button
js.executeScript("document.getElementById('loginButton').click()");

```

AssignQues: WATS to enter email and pwd and click on login button in facebook App using JavascriptExecutor

Script:

```

WebDriver driver = new ChromeDriver();
driver.manage().window().maximize();
driver.get("http://localhost/login.do");
//creating the javascript executor interface object by Type casting
JavascriptExecutor js = (JavascriptExecutor) driver;
//call the javascriptExecutor Method
//Username
js.executeScript("document.getElementById('username').value='admin'");
//password
WebElement ele = driver.findElement(By.name("pwd"));
js.executeScript("arguments[0].value='manager'",ele);
//click on login button
js.executeScript("document.getElementById('loginButton').click()");
Thread.sleep(3000);
//scroll Action
js.executeScript("window.scrollTo(0,40);");
Thread.sleep(3000);
//scroll to bottom
js.executeScript("window.scrollTo(0,document.body.scrollHeight);");
Thread.sleep(3000);
//scroll to top
js.executeScript("window.scrollTo(0,document.body.scrollTop);");

```

Ques: Handle disable element

```

<html>
  <body>
    UN<input type="text" id="user" disabled>
  </body>
</html>

```

Script:

```

WebDriver driver = new ChromeDriver();
driver.get("file:///C:/Users/Alpha/Desktop/HTML/E32/JS.html");
WebElement ele = driver.findElement(By.id("user"));
JavascriptExecutor js = (JavascriptExecutor) driver;
js.executeScript("arguments[0].value='admin'",ele);

```

**Using Javascript we can print Alert popup

Syntax: js.executeScript("alert('enter message')");

Script:

```
WebDriver driver = new FirefoxDriver();
    driver.get("https://www.facebook.com/");
    WebElement ele = driver.findElement(By.id("email"));
    JavascriptExecutor js = (JavascriptExecutor) driver;
    js.executeScript("arguments[0].value=''",ele);
    js.executeScript("alert('Please Enter Email')");
```
