

# Selenium Class 29 - Element Handling in Selenium Part-4

## 9) Handle Drop down Box

- Check Displayed Status
- Check Enabled Status
  
- Select an Item
- Return Items Count

### ***Selenium WebDriver Steps:***

```
driver.get("http://www.gcrit.com/build3/create_account.php?osCsid=6rqlkh  
hibc3d4pvkdt6fafs4s1");
```

```
boolean displayStatus =  
driver.findElement(By.name("country")).isDisplayed();  
System.out.println(displayStatus);//true
```

```
boolean enabledStatus =  
driver.findElement(By.name("country")).isEnabled();  
System.out.println(enabledStatus);//true
```

```
Select dropdown = new Select (driver.findElement(By.name("country")));  
//dropdown.selectByIndex(6);
```

```
dropdown.selectByVisibleText("India");  
Thread.sleep(4000);
```

```
List <WebElement> e = dropdown.getOptions();  
System.out.println(e.size());  
driver.close();
```

## **10) Handling Web Table / HTML Table**

> Check Displayed Status

> Get / Return Cell Value

> Return Rows Count

> Return Cells count

> Return Columns Count

### ***Selenium WebDriver Test Script:***

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
WebDriver driver=new ChromeDriver();  
driver.get("file:///C:/Users/gcreddy/Desktop/HTMLExamples/htmlTable.html");
```

```
boolean  
displayedStatus=driver.findElement(By.id("students")).isDisplayed();  
System.out.println(displayedStatus);//true  
WebElement studentsTable=driver.findElement(By.id("students"));
```

```
List <WebElement> rows =studentsTable.findElements(By.tagName("tr"));
int rowCount=rows.size();
System.out.println(rowCount);//3
//Or
System.out.println(rows.size());//3
```

```
List <WebElement> cells =studentsTable.findElements(By.tagName("td"));
System.out.println(cells.size());//9
```

```
System.out.println(cells.size() / rows.size());//3
```

```
//Rows * Columns = Cells
```

```
//Cells/Rows=Columns
```

```
//Cells/Columns=Rows
```

```
String
cellValue=driver.findElement(By.xpath(".*[@id='students']/tbody/tr[2]/td[2]")).getText();
System.out.println(cellValue);
```

```
//Or
```

```
System.out.println(driver.findElement(By.xpath(".*[@id='students']/tbody/tr[2]/td[2]")).getText());
```

## 11) Handling Frames

- HTML Frames are used to divide the Browser window in to multiple sections, where each section can load a separate HTML document
- Frames are sections of web page displayed on Top window
- Whenever we access the page then focus on the top window

### **Note:**

If it is Manual testing we no need to focus on Frames, we can access elements in frames directly.

In Automated Testing using Selenium WebDriver, first we need to switch to a frame from Top window then access elements in that frame.

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Switch from Top Window to a Frame is done in two ways,

- i) Using Frame Index
- ii) Using Frame Name

.....

### **i) Using Frame Index**

Syntax:

```
driver.switchTo().frame(int index);
```

**ii) Using Frame name**

Syntax:

```
driver.switchTo().frame("String Frame Name");
```

.....

**//Incorrect Test Steps**

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
WebDriver driver=new ChromeDriver();  
driver.get("http://seleniumhq.github.io/selenium/docs/api/java/index.html")  
;  
driver.findElement(By.linkText("org.openqa.selenium")).click();
```

.....

**//Correct Test Steps**

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
WebDriver driver=new ChromeDriver();  
driver.get("http://seleniumhq.github.io/selenium/docs/api/java/index.html")  
;  
//Switch to 3rd Frame from Top Window using index  
driver.switchTo().frame(2);  
driver.findElement(By.linkText("org.openqa.selenium")).click();
```

.....

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
WebDriver driver=new ChromeDriver();  
driver.get("http://seleniumhq.github.io/selenium/docs/api/java/index.html")  
;
```

//Switch to 3rd Frame from Top Window using Frame Name

```
driver.switchTo().frame("classFrame");
```

```
driver.findElement(By.linkText("org.openqa.selenium")).click();
```

.....

**Example:**

Test Requirement:

- Launch the Web page, which has multiple frames
- Operate an element in the 3rd Frame
- Operate an element in the 1st Frame

.....

**Steps for Selenium WebDriver Test Script**

- Launch the Web page, which has multiple frames
- Switch from Top Window to 3rd Frame
- Access/Operate an Element
- Back to Top Window (default)
- Switch from Top Window to first Frame
- Access/Operate an Element

**Selenium WebDriver Test Script:**

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
WebDriver driver=new ChromeDriver();  
//Launch the Web page, which has multiple frames  
driver.get("http://seleniumhq.github.io/selenium/docs/api/java/index.html")  
;
```

```
//Switch from Top Window to 3rd Frame
driver.switchTo().frame(2);
Thread.sleep(4000);
//Access/Operate an Element
driver.findElement(By.linkText("org.openqa.selenium")).click();

//Back to Top Window (default)
driver.switchTo().defaultContent();

//Switch from Top Window to first Frame
driver.switchTo().frame(0);
Thread.sleep(4000);
//Access/Operate an Element
driver.findElement(By.linkText("com.thoughtworks.selenium")).click();
driver.close();
.....
//Using Frame Name
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");
WebDriver driver=new ChromeDriver();
//Launch the Web page, which has multiple frames
driver.get("http://seleniumhq.github.io/selenium/docs/api/java/index.html")
;

//Switch from Top Window to 3rd Frame
driver.switchTo().frame("classFrame");
Thread.sleep(4000);
//Access/Operate an Element
driver.findElement(By.linkText("org.openqa.selenium")).click();
```

```
//Back to Top Window (default)
driver.switchTo().defaultContent();

//Switch from Top Window to first Frame
driver.switchTo().frame("packageListFrame");
Thread.sleep(4000);
//Access/Operate an Element
driver.findElement(By.linkText("com.thoughtworks.selenium")).click();
driver.close();
```

## **12) Handling inline Elements**

```
System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");
WebDriver driver=new ChromeDriver();
driver.get("https://www.google.co.in");
driver.findElement(By.xpath("./*[@id='gbwa']/div[1]/a")).click();
driver.findElement(By.cssSelector("#gb36 > span.gb_k")).click();
.....
```