**Handling Elements in Selenium Part-2**  
  
i) Handle Browser  
ii) Handle Edit box  
iii) Handle Text Area, Error Message, Window Dialog  
iv) handle Button  
-----------------------  
**Return/Capture value from Edit box**  
  
public static void main(String[] args) {  
WebDriver driver = new FirefoxDriver();  
driver.get("https://www.gmail.com");  
driver.findElement(By.id("Email")).sendKeys("India123");  
System.out.println(driver.findElement(By.id("Email")).getAttribute("value"));  
}  
}  
-----------------------  
v) Handle Image  
  
Three types of Image elements in Web Environment.  
  
1) General Image (No functionality)  
  
2) Image Button (Submits)  
  
3) Image Link (Directs to another page/location)  
  
Example:  
  
public static void main(String[] args) {  
WebDriver driver = new FirefoxDriver();  
driver.get("https://www.google.com");  
System.out.println(driver.findElement(By.id("hplogo")).isDisplayed());//true  
System.out.println(driver.findElement(By.id("hplogo")).getAttribute("title"));  
  
driver.navigate().to("http://newtours.demoaut.com/");  
driver.findElement(By.name("login")).click();  
  
driver.navigate().to("http://www.seleniumhq.org/");  
driver.findElement(By.xpath(".//\*[@id='choice']/tbody/tr/td  
  
[2]/center/a/img")).click();  
  
}  
}  
-----------------------  
vi) Handle Link  
  
Operations on Link  
  
> Click  
> Check the Link Existence  
> Check Enabled status  
> Return Link Name etc...  
  
Example:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("https://www.google.com");  
//driver.findElement(By.className("gb\_P")).click();  
//driver.findElement(By.linkText("Gmail")).click();  
//driver.findElement(By.partialLinkText("mail")).click();  
//driver.findElement(By.cssSelector(".gb\_P")).click();  
//driver.findElement(By.xpath(".//\*[@id='gbw']/div/div/div[1]/div  
  
[1]/a")).click();  
WebElement Gmail\_Link = driver.findElement(By.xpath(".//\*  
  
[@id='gbw']/div/div/div[1]/div[1]/a"));  
boolean linkStatus = Gmail\_Link.isDisplayed();  
System.out.println(linkStatus);//true  
  
linkStatus = Gmail\_Link.isEnabled();  
System.out.println(linkStatus);//true  
  
String LinkName = Gmail\_Link.getText();  
System.out.println(LinkName);  
  
Gmail\_Link.click();  
}  
}  
-----------------------  
vii) Handle Radio Button  
  
Operations on Radio Button  
  
> Select  
> Check Enabled status  
> Check Displayed status  
> Check Selected status  
  
Example:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("http://www.gcrit.com/build3/create\_account.php?  
  
osCsid=47gtsrhe41613u5r3eqhgdbas7");  
WebElement maleRadioButton = driver.findElement(By.xpath(".//\*  
  
[@id='bodyContent']/form/div/div[2]/table/tbody/tr[1]/td[2]/input[1]"));  
boolean elementStatus = maleRadioButton.isDisplayed();  
System.out.println(elementStatus);//true  
  
System.out.println(maleRadioButton.isEnabled());//true  
  
System.out.println(maleRadioButton.isSelected());//false  
  
maleRadioButton.click();  
  
System.out.println(maleRadioButton.isSelected());//true  
}  
}  
-----------------------  
viii) Handle Drop Down box  
  
Operations on Drop Down Box  
  
> Select an Item  
> Check Displayed status  
> Check Enabled status  
> Items count  
  
Example:  
  
public static void main(String[] args) {  
WebDriver driver = new FirefoxDriver();  
driver.get("http://www.gcrit.com/build3/create\_account.php?  
  
osCsid=47gtsrhe41613u5r3eqhgdbas7");  
Select dropDown = new Select (driver.findElement(By.name("country")));  
//dropDown.selectByIndex(6);//Select an item by index  
//dropDown.selectByVisibleText("India");  
  
List<WebElement> e = dropDown.getOptions();  
int itemsCount = e.size();  
System.out.println(itemsCount);  
}  
}  
-----------------------  
ix) Handle Check box  
  
Operations on Check box  
  
> Select  
> Unselect  
> Check Displayed status  
> Check Enabled status  
> Check selected status  
  
Example:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("file:///E:/HTMLExamples/MultipleCheckbox.html");  
System.out.println(driver.findElement(By.xpath("html/body/input  
  
[2]")).isDisplayed());//true  
  
System.out.println(driver.findElement(By.xpath("html/body/input  
  
[2]")).isEnabled());//true  
  
System.out.println(driver.findElement(By.xpath("html/body/input  
  
[2]")).isSelected());//false  
  
driver.findElement(By.xpath("html/body/input[2]")).click();  
  
System.out.println(driver.findElement(By.xpath("html/body/input  
  
[2]")).isSelected());//true  
  
driver.findElement(By.xpath("html/body/input[2]")).click();  
  
System.out.println(driver.findElement(By.xpath("html/body/input  
  
[2]")).isSelected());//false  
-----------------------  
x) Handle Web Table / HTML Table  
  
Operations on Web Table:  
  
> Get cell value  
> Rows Count  
> Cells Count  
  
Example:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("file:///E:/HTMLExamples/htmlTable.html");  
String s = driver.findElement(By.xpath(".//\*[@id='students']/tbody/tr[2]/td  
  
[2]")).getText();  
System.out.println(s);  
WebElement htmlTable = driver.findElement(By.id("students"));  
  
List <WebElement> rows = htmlTable.findElements(By.tagName("tr"));  
int r = rows.size();  
System.out.println(r);  
  
List <WebElement> cells = htmlTable.findElements(By.tagName("td"));  
int c = cells.size();  
System.out.println(c);  
-----------------------  
xi) Handle inline Elements  
  
The span tag is used to group inline Elements in a Document.  
  
Example 1:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("https://www.google.com");  
driver.findElement(By.xpath(".//\*[@id='gbwa']/div[1]/a")).click();  
driver.findElement(By.xpath(".//\*[@id='gb36']/span[1]")).click();  
driver.navigate().back();  
-----------------------  
Example 2:  
  
WebDriver driver = new FirefoxDriver();  
driver.get("https://www.google.com");  
driver.manage().window().maximize();  
driver.findElement(By.xpath(".//\*[@id='gbwa']/div[1]/a")).click();  
driver.findElement(By.xpath(".//\*[@id='gbwa']/div[2]/a[1]")).click();  
driver.findElement(By.xpath(".//\*[@id='gb300']/span[1]")).click();  
-----------------------  
Handle Frames  
Handle Mouse Over  
Working with Multiple browser windows.  
-----------------------