

## Web elements and its methods

It is an interface used to perform action on element present in browser

### Methods of web elements

#### a) sendKeys

It is used to enter value in text field or input field

```
driver.findElement(By.xpath(" ")).sendKeys("aaa");
```

#### b) click

It is used to select radio button, checkbox, click the link and click button

```
driver.findElement(By.xpath(" ")).click();
```

#### c) getText

It is used to get text present on web page and its return type is string

```
String text = driver.findElement(By.xpath(" ")).getText();
```

OR

```
WebElement ele1 = driver.findElement(By.xpath(" "));
```

```
String text = ele1.getText();
```

When we have to apply multiple actions on same element then identify once and use multiple times.

### Program:

```
package SimpleSeleniumProg;
```

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

```
import org.openqa.selenium.WebDriver;
```

```
import org.openqa.selenium.WebElement;
```

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

```
public class AutomateRediff {
```

```
    public static void main(String[] args) {
```

```
        System.setProperty("webdriver.chrome.driver", "chromedriver");
```

```
        WebDriver driver = new ChromeDriver();
```

```
        driver.manage().window().maximize();
```

```
        driver.get("https://is.rediff.com/signup/register");
```

```
        //div[@id='div_register']//b OR //b[text()='New User? Register here']
```

```
        //p[@class='grey1']
```

```
        WebElement newUserLabel =
```

```
driver.findElement(By.xpath("//div[@id='div_register']//b"));
```

```
        WebElement tellUsLabel =
```

```
driver.findElement(By.xpath("//p[@class='grey1']"));
```

```
//        String str1 = newUserLabel.getText();
```

```
//        String str2 = tellUsLabel.getText();
```

```
//
```

```
//          System.out.println(str1);
//          System.out.println(str2);

          System.out.println("Label 1 = " + newUserLabel.getText());
          System.out.println("Label 2 = " + tellUsLabel.getText());

          driver.close();
      }
  }
```

**How we can get the status of element????????????**

**d) isDisplayed**

It is used to verify whether element is present or not, if element is present on webpage it return true else return false

**e) IsEnabled**

It used to verify whether element is enabled or disabled, if element enable return true else return false

**f) isSelected**

It used to verify whether radio button or checkbox selected or not

**Program:**

Link :- <http://megrecruitment.nic.in/rpa/register.htm>

```
package SimpleSeleniumProg;
```

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

```
public class Prog6 {
```

```
    public static void main(String[] args) throws Exception {
        System.setProperty("webdriver.chrome.driver", "chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("https://chercher.tech/practice/explicit-wait");
```

```
        WebElement button =
driver.findElement(By.xpath("//button[@id='disable']"));
        System.out.println(button.isDisplayed()); //true
        System.out.println(button.isEnabled());   //false
```

```
        System.out.println("-----");
        driver.findElement(By.xpath("//button[@id='enable-button']")).click();
        Thread.sleep(10000);
        System.out.println(button.isDisplayed()); //true
```

```

        System.out.println(button.isEnabled());    //true

        WebElement checkBox =
driver.findElement(By.xpath("//input[@type='checkbox']"));
        System.out.println("Before click :- " + checkBox.isSelected());
        Thread.sleep(1000);
        checkBox.click();
        System.out.println("After click :- " + checkBox.isSelected());
        driver.close();
    }
}

```

## How to automate dropdown/ list box in selenium??????????????

### Handling of listbox

Step 1 :- Identify the list box which needs to be handle and store it in reference variable

```
WebElement ele1 = driver.findElement(By.xpath("//select[@id="abc" ]));
```

Step 2 :- create an object of select class which accept web element argument as input

```
Select s = new Select(ele1);
```

Step 3 :- To select the option present in list box we need to call the method like

```
s.selectByVisibleText("Sri");
```

```
s.selectByValue("5678");
```

```
s.selectByIndex(2);
```

### Get all options present in listbox

#### Program:

```
package SimpleSeleniumProg;
```

```
import java.util.List;
```

```
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;
```

```
public class Prog7 {
```

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

```
        System.setProperty("webdriver.chrome.driver", "chromedriver");
```

```
        WebDriver driver = new ChromeDriver();
```

```
        driver.manage().window().maximize();
```

```
        driver.get("https://is.rediff.com/signup/register");
```

```

//      WebElement newUserLabel =
driver.findElement(By.xpath("//div[contains(text(),'Your F')]"));
//      String expLabel = "Your Full name";
//      String actLabel = newUserLabel.getText();
//
//      if(expLabel.equals(actLabel))
//          System.out.println("Label TC pass");
//      else
//          System.out.println("Label TC fail");

        WebElement day =
driver.findElement(By.xpath("//select[@id='date_day']"));
        WebElement month =
driver.findElement(By.xpath("//select[@id='date_mon']"));
        WebElement year =
driver.findElement(By.xpath("//select[@name='Date_Year']"));

        Select s1 = new Select(day);
        /*s1.selectByIndex(7);
        Thread.sleep(2000);
        s1.selectByIndex(0);
        Thread.sleep(2000);
        s1.selectByValue("09"); //If value attribute is available in html code
        Thread.sleep(2000); //then we can use selectByValue() method
        s1.selectByVisibleText("05"); */

        List<WebElement> allDays = s1.getOptions();

        for(int i=1;i<32;i++)
            System.out.println(allDays.get(i).getText());
        System.out.println("-----");
        for(int i=1;i<allDays.size();i++)
            System.out.println(allDays.get(i).getText());

//      Thread.sleep(5000);

        driver.close();

    }

}

```