

Handling Various Web Elements

This section will guide you to:

- Handle various web elements present on the page.

This section is divided into eleven subsections, namely:

Edit box

Link

Button

Image, image link, and image button

Text area

Checkbox

Radio button

Dropdown list

Web table/HTML table

Frame

Switching between tabs in the same browser window

Step 4.5.1: Edit box

- Open Eclipse

- It is a basic text control that enables a user to type a small amount of text.
- Operations on Edit box
 - Enter a Value,
 - Clear the Value,
 - Check enabled status,
 - Check edit box existence,
 - Get the value

Step 4.5.2: Link

- Link is more appropriately referred to as a hyperlink and connects one web page to another. It allows the user to click their way from page to page.
- Operations on Link
 - Click the link,
 - Check the link existence,
 - Check the link enabled status,
 - Return the link name

Step 4.5.3: Button

- This represents a clickable button, which can be used in forms and places in the document that needs a simple, standard button functionality.
- Operations on Button
 - Click
 - Check Enabled status
 - Display status

Step 4.5.4: Image, image link, and image button

- It helps in performing actions on images like clicking on the image link or the image button, etc.
- Operations Image
 - Three types of Image elements in Web Environment
 - General Image (No functionality)
 - Image Button (Submits)
 - Image Link (Redirects to another page/location)

Step 4.5.5: Text area

- It is an inline element used to designate a plain-text editing control containing multiple lines.
- Return / Capture Text Area or Error message from a web page

Step 4.5.6: Checkbox

- This is a selection box or a tick box which is a small interactive box that can be toggled by the user to indicate an affirmative or a negative choice.
- Operations on checkbox
 - Check if the checkbox is displayed or not
 - Check if the checkbox is enabled or not
 - Check if the checkbox is selected or not
 - Select the checkbox
 - Unselect the checkbox

Step 4.5.7: Radio button

- It is an option button which is a graphical control element that allows the user to choose only one predefined set of mutually exclusive options.
- Operations on Radio Button
 - Select Radio Button
 - Verify if the Radio Button is displayed or not
 - Verify if the Radio Button is enabled or not
 - Verify if the Radio Button is selected or not
- Example:


```
oRadioButton.get(1).click();
```

Step 4.5.8: Drop-down list

- It is a graphical control element, similar to the list box, which allows the user to choose one value from the list. When this drop-down list is inactive, it displays only a single value.
- Operations on drop-down list
 - Check the drop-down box's existence
 - Check if the drop-down is enabled or not
 - Select an item
 - Get Items Count
- Example:

```
Select fruits = new Select(driver.findElement(By.id("fruits")));
```

```
fruits.selectByVisibleText("Banana");
```

```
fruits.selectByIndex(1);
```

Step 4.5.9: Web table/HTML table

- Operations on Web Table/HTML Table

- Get cell value
- Get Rows Count
- Get Cells Count

Step 4.5.10: Frame

- Operations on Frame
 - Switch from Top window to a frame
 - Switch from a frame to Top window
- Examples:
 - `driver.switchTo().frame("iframe1");`
 - `driver.switchTo().frame("id of the element");`

Step 4.5.11: Switching between tabs in the same browser window

- Open a new tab using Ctrl + t.
- Driver control automatically switches to the newly opened tab.
- Perform the required operations here.
- Next, switch back to the old tab using Ctrl + Tab. You need to keep pressing this unless you reach the desired tab.
- Once the desired tab is reached, then perform the operations in that tab.
- Example:
`driver.switchTo().window(tabs2.get(1));`
`driver.switchTo().window(tabs2.get(0));`