

## Find Elements

- In order to handle the multiple web elements from the web page we use find\_elements method.
- Find Elements command takes in by object as the parameter and returns a list of web elements.

HTML Code:

```
<html>
  <body>
    <center>
      <div>
        <a href="http://www.qspiders.com">qspiders</a>
        <a href="http://www.jspiders.com">jspiders</a>
        <br><br>
        <input type="checkbox"><br><br>
        <input type="checkbox"><br><br>
        <input type="checkbox"><br><br>
        <input type="checkbox"><br><br>
        <input type="checkbox"><br><br>
        <input type="checkbox"><br><br>
      </div>
    <br><br>
  </center>
</body>
</html>
```

Write a program to select all the check boxes?

```
package findElements;

import java.util.List;

public class SelectingAllCheckBoxs {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver", "D:/Softwares/Drivers/chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("file:///C:/Users/PriyaPramod/Desktop/HTML/FindElements/checkbox.html");
        driver.manage().timeouts().implicitlyWait(100, TimeUnit.SECONDS);

        List<WebElement> checkBoxes = driver.findElements(By.cssSelector("input[type='checkbox']"));
        int count = checkBoxes.size();
        System.out.println("Total number of check boxes: " + count);

        for (int i = 0; i < count; i++) {
            checkBoxes.get(i).click();
            Thread.sleep(1000);
        }

        driver.close();
    }
}
```

Write a program to select the multiple products in flipkart?

```
package findElements;

import java.util.List;

public class FlipkartExample {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver", "D:/Softwares/Drivers/chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("https://www.flipkart.com/search?q=mobiles&marketplace=FLIPKART&otracker=start&as-show=on&as=off");
        driver.manage().timeouts().implicitlyWait(100, TimeUnit.SECONDS);

        List<WebElement> checkBoxes = driver.findElements(By.xpath("//span[text()='Add to Compare']/../span"));
        int count = checkBoxes.size();
        System.out.println("Total number of mobiles: " + count);

        for (int i = 1; i <= 4; i++) {
            checkBoxes.get(i).click();
            Thread.sleep(1000);
        }

        driver.close();
    }
}
```

Write a program to count total number of links in Google and get the URL of all the links

```
package findElements;

import java.util.List;
import java.util.concurrent.TimeUnit;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;

public class GetTheAllTheURL {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver", "D:/Softwares/Drivers/chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("https://www.google.com/");
        driver.manage().timeouts().implicitlyWait(100, TimeUnit.SECONDS);

        List<WebElement> links = driver.findElements(By.tagName("a"));
        int count = links.size();
        System.out.println("Total number of links present in Google: " + count);

        for(WebElement link:links)
        {
            String URL = link.getAttribute("href");
            System.out.println("URL: "+URL);
        }
        driver.close();
    }
}
```

Activate Winr

#### Assignment:

1. Write a script to select first and last checkbox present on the webpage?
2. Write a script to select all the checkbox present in the webpage in reverse order?
3. Write a script to select all the alternative checkbox present on the webpage?
4. Write a script to print text of the links which is present on the google.com except empty string?

```

<html>
  <body>
    <div>
      <a href="http://www.qspiders.com">qspiders</a>
      <a href="http://www.jspiders.com">jspiders</a>
      <br><br>
      <input type="checkbox"><br><br>
      <input type="checkbox"><br><br>
      <input type="checkbox"><br><br>
      <input type="checkbox"><br><br>
      <input type="checkbox"><br><br>
      <input type="checkbox"><br><br>
    </div> |
    <br><br>
    <div>
      <table border="1">
        <tbody>
          <tr>
            <td>1</td>
            <td>Java</td>
            <td>300</td>
          </tr>
          <tr>
            <td>2</td>
            <td>Selenium</td>
            <td>400</td>
          </tr>
          <tr>
            <td>3</td>
            <td>CRM</td>
            <td>500</td>
          </tr>
        </tbody>
      </table>
    </div>
  </body>
</html>

```

1. Write a script to print the contents of the table.
2. Write a script to print all numbers present in the table.
3. Write a script to print sum of all the numbers present in the table.

Difference between find element and find elements method

Find Element	Find Elements
Return type is web element	Return type is list of web elements
If the specified locator is matching with the multiple elements, it returns first matching element.	If the specified locator is matching with the multiple elements it returns all the matching elements.
If the specified locator is <b>not matching</b> with any of the element then it will throw <b>NoSuchElementException</b>	If the specified locator is <b>not matching</b> with any of the element then it will not throw any exception. Instead of this it returns the <b>empty list</b>

