Date:17/10/2020

Practical no 6

AIM: Write and test a program to provide total number of objects present / available on the page

Theory

WebElement : Represents an HTML element. Generally, all interesting operations to do with interacting with a page will be performed through this interface. WebElements objects are Selenium(Java) equivalent of HTML elements in the UI such as Form, Button, Select, A, P, H0-6, etc..

java.util.List<WebElement> : This data structure allows one two list down WebElements in Java which could be sub-elements or nested elements under the selector. The object has methods such as object.size() which returns the size of the list, object.get(index) which returns a element from the object at a specified index, object.get(index).getText() returns the text of the element.

WebDriver.findElement() : Find the first WebElement using the given method. This method is affected by the 'implicit wait' times in force at the time of execution. The findElement(..) invocation will return a matching row, or try again repeatedly until the configured timeout is reached. findElement should not be used to look for non-present elements, use findElements(By) and assert zero length response instead.

By.tagName() : By is a mechanism used to locate elements within a document from selenium code. This allows us to access elements by multiple ways such as tag names, ids, names, class names, etc.. Here we use By.tagName() to select HTML elements through specified tag name.

Code:

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

public class Total_pages {

                                static String drivePath = "E:\\tycs\\stqa
prac\\prac2\\chromedriver_win32\\chromedriver.exe";
                                public static WebDriver driver;
                                public static void main(String[] args) {
                                 System.setProperty("webdriver.chrome.driver" ,
drivePath);

                                 driver = new ChromeDriver();
                                 driver.get("https://practice.geeksforgeeks.org/");
                                 java.util.List<WebElement> link =
driver.findElements(By.tagName("a"));

                                 System.out.println("performed by krunal 713");
                                 System.out.println("Total links are " + link.size());
                                 for(int i =0; i < link.size() ; i++)
                                 {
                                         System.out.println("Link" + i +" Link name "+
link.get(i).getText());

                                 }
                                 System.out.println("performed by krunal 713");
                                 driver.close();
                                 }
}
```

Output:-

```
 Problems  @ Javadoc   Declaration   Console  ✕    Debug   TestNG
<terminated> Total_pages [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.exe (Oct 17, 2020, 10:53:46 AM – 10:54:07 AM)
Starting ChromeDriver 2.41.578737 (49da6702b16031c40d63e5618de03a32ff6c197e) on port 30559
Only local connections are allowed.
[1602912233.090][WARNING]: Timed out connecting to Chrome, retrying...
Oct 17, 2020 10:53:55 AM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
performed by krunal 713
Total links are 55
Link0 Link name Cookie Policy
Link1 Link name Privacy Policy
Link2 Link name Got it!
Link3 Link name
Link4 Link name Problems
Link5 Link name Courses
Link6 Link name Get Hired
Link7 Link name
Link8 Link name Sign In
Link9 Link name
Link10 Link name
Link11 Link name
Link12 Link name
Link13 Link name
Link14 Link name
Link15 Link name
Link16 Link name
Link17 Link name
Link18 Link name
Link19 Link name
Link20 Link name
Link21 Link name
Link22 Link name
Link23 Link name
Link24 Link name
Link25 Link name
```

```
 Problems  @ Javadoc   Declaration   Console  ✕    Debug   TestNG
<terminated> Total_pages [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.exe (Oct 17, 2020, 10:53:46 AM – 10:54:07 AM)
Link26 Link name Live Courses
Real Time Live Classes accessible from the comfort of your home
Link27 Link name Online Courses
Self paced learning with structured premium video lectures
Link28 Link name
Link29 Link name
Link30 Link name
Link31 Link name feedback@geeksforgeeks.org
Link32 Link name
Link33 Link name
Link34 Link name
Link35 Link name
Link36 Link name
Link37 Link name About Us
Link38 Link name Careers
Link39 Link name Privacy Policy
Link40 Link name Contact Us
Link41 Link name Algorithms
Link42 Link name Data Structures
Link43 Link name Languages
Link44 Link name CS Subjects
Link45 Link name Video Tutorials
Link46 Link name Courses
Link47 Link name Company-wise
Link48 Link name Topic-wise
Link49 Link name How to begin?
Link50 Link name Write an Article
Link51 Link name Write Interview Experience
Link52 Link name Internships
Link53 Link name Videos
Link54 Link name @geeksforgeeks
performed by krunal 713
```