Date:20/10/2020

Practical no 8

AIM: Write and test a program to count the number of check boxes on the page checked and unchecked count.

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.
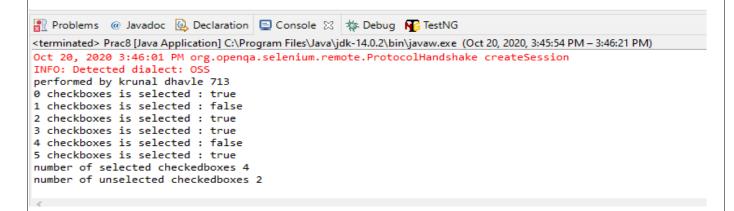
Code:

Part A

```java
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;

public class Prac8 {
    static String driverPath="E:\\tycs\\stqa
prac\\prac2\\chromedriver_win32\\chromedriver.exe";
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver", driverPath);
        WebDriver driver= new ChromeDriver();
        //driver.get("http://www.ironspider.ca/forms/checkradio.htm");
        driver.get("http://www.echoecho.com/htmlforms09.htm");
        //driver.get("file:///E:/tycs/stqa%20prac/prac8/radio.html");
        List<WebElement> checkboxes = driver.findElements(By.xpath("//input[@type =
'checkbox']"));
        for(int i = 0 ; i<checkboxes.size() ; i=i+1)
        {
            checkboxes.get(i).click();
        }
        System.out.println("performed by krunal dhavle 713");
        int checkedCount = 0 , uncheckedCount =0;
        for(int i =0 ; i < checkboxes.size() ; i++)
        {
            System.out.println(i + " " + "checkboxes is selected : "+check-
boxes.get(i).isSelected());
            if(checkboxes.get(i).isSelected())
                checkedCount++;
            else
                uncheckedCount++;
        }
        Thread.sleep(5000);
        System.out.println("number of selected checkedboxes " + checkedCount);
        System.out.println("number of unselected checkedboxes " + uncheckedCount);
        driver.close();
    }
}
```

Output:-

HTML	EXPLANATION	EXAMPLE

checkbox
  name=
  value=
  align=
  tabindex=
checked
	Choose one or more options
	Name of the field.
	Value that is submitted if checked.
	Alignment of the field.
	Tab order of the field.
	Default check this field.
		☑ ☐ ☑

```
Problems   @ Javadoc   Declaration   Console ☒   Debug   TestNG
<terminated> Prac8 [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.exe  (Oct 20, 2020, 3:45:54 PM – 3:46:21 PM)
Oct 20, 2020 3:46:01 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
performed by krunal dhavle 713
0 checkboxes is selected : true
1 checkboxes is selected : false
2 checkboxes is selected : true
3 checkboxes is selected : true
4 checkboxes is selected : false
5 checkboxes is selected : true
number of selected checkedboxes 4
number of unselected checkedboxes 2
```

Part -2

```java
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;

public class Prac8 {
      static String driverPath="E:\\tycs\\stqa
prac\\prac2\\chromedriver_win32\\chromedriver.exe";
      public static void main(String[] args) throws InterruptedException {
            System.setProperty("webdriver.chrome.driver", driverPath);
            WebDriver driver= new ChromeDriver();
            driver.get("file:///E:/tycs/stqa%20prac/prac8/radio.html");
            List<WebElement> checkboxes = driver.findElements(By.xpath("//input[@type =
'checkbox']"));
            for(int i = 0 ; i<checkboxes.size() ; i=i+2)
            {
                  checkboxes.get(i).click();
            }
            System.out.println("performed by krunal dhavle 713");
            int checkedCount = 0 , uncheckedCount =0;
            for(int i =0 ; i < checkboxes.size() ; i++)
            {
                  System.out.println(i + " " + "checkboxes is selected : "+check-
boxes.get(i).isSelected());
                  if(checkboxes.get(i).isSelected())
                        checkedCount++;
                  else
                        uncheckedCount++;
            }
            Thread.sleep(5000);
            System.out.println("number of selected checkedboxes " + checkedCount);
            System.out.println("number of unselected checkedboxes " + uncheckedCount);
            driver.close();
      }
}
```

Output:-