Selenium Assignment (Next)

Syntax & Exception

1) Assignment1

   WAP to verify is we have opened a valid web page or not.

2) Assignment2

   Find the Xpath.

3) Assignment3

   Open Facebook and click on login button - Get the color and tagText of warning message and url of forgotten password link along with size and href value.

4) Assignment4

   WAS to check the Facebook logo is present or not.

5) Assignment5

   WAS to navigate to Facebook application click on create new account and select any radio button and check whether they are selected or not.

6) Assignment6

   WAS to search for jobs in google and print all the url's present in the search page.

7) Assignment7

   WAS to print auto suggestion present in flip kart after entering "Apple iPhone" using explicit wait

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10) Assignment10

   WAS to get the url of actiTIME home page using(url contains, Explicit wait)

11) Assignment11

   Automate the following the scenario for face book.

12) Assignment12

   WAS to print all options present is face book month dropdown (getOptions, for each).

13) Assignment13

   WAS to print all options present in city dropdown in alphabetical order (static webpage).

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Selenium Assignment (Next) (Back)

14) Assignment14

WAS to print all options present in city dropdown without duplicates.

15) Assignment15

WAS to print all options present in city dropdown in alphabetical order and without duplicates.

16) Assignment16

WAS to print only duplicates in city dropdown.

17) Assignment17

WAS to check whether the mentioned city name is present in dropdown or not.

18) Assignment18

Automate the following scenario

- Open the browser and navigate to yatra.com
- Mention the depart from Bangalore to Kolkata

19) Assignment19

Sample text

20) Assignment20

Sample text

1) Assignment1

WAP to verify is we have opened a valid web page or not.

```
package basics;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
```

```
public class VerifyWebPage {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.get("https://www.google.com/");
		String ActualTitle = driver.getTitle();
		String ActualUrl = driver.getCurrentUrl();
		System.out.println(ActualTitle);
		System.out.println(ActualUrl);
		String ExpectedTitle = "Google";
		String ExpectedUrl = "https://www.google.com/";
		driver.close();
		if(ActualTitle.equals(ExpectedTitle) && ActualUrl.equals(ExpectedUrl)) {
			System.out.println("Test case is pass");
		}
		else {
			System.out.println("Test case is failed");
		}
	}
}
```

2) Assignment2

Find the Xpath.

1)Write an Xpath to identify the API Docs link in Ruby language in selenium webpage.

//p[contains(text(),'Ruby')]/..//p[4]/a

2)Write an Xpath to identify price of first HRX Jacket present in Myntra Women's section by passing only HRX

(//h3[contains(text(),'HRX')]/..//div[1]/span/span)[1]

3)Write an Xpath to identify price of 7th Red Tape shoe in the Myntra casual shoes

(//h3[contains(text(),'Red Tape')]/..//div/span/span)[7]

4)Write and Xpath to identify the price of 3rd Samsung phone in flip kart application

(//div[contains(text(),'SAMSUNG')]/../..//div[2]/div[1]/div[1]/div[1])[3]

5)Write and Xpath to identify the price of last Apple iPhone 16 Pro max in flip kart application

(//div[contains(text(),'Apple iPhone 16 Pro Max')])[last()]/../../div[2]/div[1]/div[1]/div[1]

6) Write and Xpath to identify the price of Google pixel 9 in product description page of flip kart

//span[contains(text(),'Google Pixel 9')]/../../../div[3]/div[1]/div[1]/div[1]

7) Write and Xpath to identify the price of Samsung Galaxy watch 7 in amazon.

//span[contains(text(),'Samsung Galaxy Watch 7')]/../../../../div[3]/div[1]/div[1]/div[1]/div[1]/div[1]//span[1]/span[1]

8) Write and Xpath to identify the price of Samsung buds in the product description page of amazon

//span[@id='productTitle']/../../../..//span[@class='a-price-whole']

9) Write and Xpath to identify the Customer care number.

3) Assignment3

Open Facebook and click on login button - Get the color and tagText of warning message and url of forgotten password link along with size and href value.

```
package Learn_Locators;
import org.openqa.selenium.By;
import org.openqa.selenium.Dimension;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class Assignment3 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		// Open Facebook
		driver.get("https://www.facebook.com/");
		// Click on Login button
		WebElement ele = driver.findElement(By.name("login"));
		ele.click();
		WebElement path = driver.findElement(By.xpath("//input[@id='email']/../div[2]"));
		// Get color
		String color = path.getCssValue("color");
		System.out.println("The color of the text is " + color);
		// Get tagText
		String tagText = path.getText();
		System.out.println("The tagText is " + tagText);
		// Get CurrentUrl
```

```
            String url = path.getAttribute("href");
            System.out.println("The url value is " + url);
            // Get Dimension
            Dimension size = path.getSize();
            System.out.println("The size of  is " + size);
            driver.quit();
        }
}
```

Output:

- The color of the text is rgba(240, 40, 73, 1)
- The tagText is the email address or mobile number you entered isn't connected to an account. Find your account and log in.
- The url value is null
- The size of is (364, 32)

4) Assignment4

WAS to check the Facebook logo is present or not.

```
package Learn_Locators;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class faceBookLogo {
        public static void main(String[] args) {
                WebDriver driver = new ChromeDriver();
                driver.manage().window().maximize();
                driver.get("https://www.facebook.com/");
                WebElement logo = driver.findElement(By.xpath("//img[@alt='Facebook']"));
                if(logo.isDisplayed()) {
                        System.out.println("Facebook logo is present on the page.");
      } else {
         System.out.println("Facebook logo is NOT present on the page.");
      }
                driver.quit();
```

```
    }
}
```

Output:

Facebook logo is present on the page.

5)Assignment

WAS to navigate to Facebook application click on create new account and select any radio button and check whether they are selected or not.

```
package Learn_Locators;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class UsageOfIsSelected {
    public static void main(String[] args) {
            WebDriver driver = new ChromeDriver();
            driver.manage().window().maximize();
            driver.get("https://www.facebook.com/");
            driver.findElement(By.linkText("Create new account")).click();
            WebElement maleradio = driver.findElement(By.xpath("//label[text()='Male']/..//input"));
            maleradio.click();
            if (maleradio.isSelected()) {
      System.out.println("Male radio button is selected.");
    } else {
      System.out.println("Male radio button is NOT selected.");
    }
            driver.quit();
     }
}
```

Output:

Male radio button is selected.

6)Assignment6

WAS to search for jobs in google and print all the url's present in the search page.

```
package Learn_Webelement_Methods;
```

```
import java.time.Duration;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class Assignment6 {
	public static void main(String[] args) throws InterruptedException {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));
		WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));
		driver.get("https://www.google.com/");
		driver.findElement(By.name("q")).sendKeys("jobs"+Keys.ENTER);
		driver.manage().timeouts().pageLoadTimeout(Duration.ofSeconds(10));
		List<WebElement> allsugs = driver.findElements(By.tagName("a"));
		int count = allsugs.size();
		wait.until(ExpectedConditions.presenceOfAllElementsLocatedBy(By.tagName("a")));
		System.out.println("The count of elemenets is " + count);
		for(WebElement ele:allsugs) {
			String text = ele.getAttribute("href");
			System.out.println(text);
		}
		driver.quit();
	}
}
```

7)Assignment7

WAS to print auto suggestion present in flip kart after entering “Apple iPhone” using explicit wait

```
package Learn_Webelement_Methods;
import java.time.Duration;
```

```
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 Assignment7 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("https://www.flipkart.com/");
		driver.findElement(By.name("q")).sendKeys("Apple iPhone");
		List<WebElement> allsugs = driver.findElements(By.xpath("//div[contains(text(),'apple')]"));
		int count = allsugs.size();
	System.out.println("The count of elements is " + count);
	for (WebElement ele : allsugs) {
	  String text = ele.getText();
	  System.out.println(text);
	}
		driver.quit();
	 }
}
```

Outptut:

```
The count of elements is 8
apple iphone 15
in Mobiles
apple iphone 11
apple iphone 16 pro
apple iphone 15 pro
apple iphone 11 mobile
apple iphone 13 128
apple iphone 16 plus
apple iphone 12 mini
```

8)Assignment8

WAS to navigate to flip kart and search for “Apple iPhone 14 Pro Max” and print name and price in single line.

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class Assignment8 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));
		WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(20));
		driver.get("https://www.flipkart.com/");
		WebElement searchBox =
wait.until(ExpectedConditions.presenceOfElementLocated(By.name("q")));
	searchBox.sendKeys("Apple iPhone 14 Pro Max" + Keys.ENTER);

	 // Wait for the search results to load
wait.until(ExpectedConditions.visibilityOfAllElementsLocatedBy(By.xpath("//div[contains(text(),'Apple iPhone 14 Pro Max')]")));

	// Retrieve names and prices of products
	List<WebElement> productNames = driver.findElements(By.xpath("//div[contains(text(),'Apple iPhone 14 Pro Max')]"));
	List<WebElement> productPrices = driver.findElements(By.xpath("//div[contains(text(),'Apple iPhone 14 Pro Max')]/../../div[2]/div[1]/div[1]/div"));
```

```
        for (int i = 0; i < productNames.size(); i++) {
            String name = productNames.get(i).getText();
            String price = productPrices.get(i).getText();
            System.out.println(name + " - " + price);
        }
                driver.quit();
         }
}
```

Output:

Apple iPhone 14 Pro Max (Space Black, 512 GB) - ₹1,64,900
Apple iPhone 14 Pro Max (Gold, 512 GB) - ₹1,64,900
Apple iPhone 14 Pro Max (Gold, 1 TB) - ₹1,84,900
Apple iPhone 14 Pro Max (Deep Purple, 512 GB) - ₹1,64,900
Apple iPhone 14 Pro Max (Silver, 256 GB) - ₹1,44,900
Apple iPhone 14 Pro Max (Deep Purple, 256 GB) - ₹1,44,900
Apple iPhone 14 Pro Max (Gold, 128 GB) - ₹1,34,900
Apple iPhone 14 Pro Max (Silver, 128 GB) - ₹1,34,900
Apple iPhone 14 Pro Max (Silver, 512 GB) - ₹1,64,900
Apple iPhone 14 Pro Max (Gold, 256 GB) - ₹1,44,900
Apple iPhone 14 Pro Max (Deep Purple, 1 TB) - ₹1,84,900
Apple iPhone 14 Pro Max (Space Black, 1 TB) - ₹1,84,900
Apple iPhone 14 Pro Max (Space Black, 256 GB) - ₹1,44,900
Apple iPhone 14 Pro Max (Space Black, 128 GB) - ₹1,34,900
Apple iPhone 14 Pro Max (Silver, 1 TB) - ₹1,84,900
Apple iPhone 14 Pro Max (Deep Purple, 128 GB) - ₹1,34,900

9)Assignment9

WAS to enter https://demoapps.qspiders.com/ and click on UI Testing Concepts Xpath by text click on web table and print the table in same order.

```
package Learn_Webelement_Methods;
import java.time.Duration;
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.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class Assignment9 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));
		WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(30));
		driver.get("https://demoapps.qspiders.com/");
		driver.findElement(By.xpath("//p[contains(text(),'UI Testing Concepts')]")).click();
		driver.findElement(By.xpath("//section[contains(text(),'Web Table')]")).click();

	// Wait for the table to be present
	WebElement table = wait.until(ExpectedConditions.presenceOfElementLocated(By.tagName("table")));

	// Get all the rows in the table
	List<WebElement> rows = table.findElements(By.tagName("tr"));

	// Iterate through each row and get the data
	for (WebElement row : rows) {
	   List<WebElement> headers = row.findElements(By.tagName("th"));
	   for (WebElement header : headers) {
	      System.out.print(header.getText() + "\t");
	   }

	   List<WebElement> cells = row.findElements(By.tagName("td"));
	   for (WebElement cell : cells) {
	      System.out.print(cell.getText() + "\t");
	   }
	   System.out.println("\t");
	}
```

```
        driver.quit();
         }

}
```

ITEM NAME	RATING	QUANTITY	DISCOUNT	PRICE
Levis Shirt	3.5 Star	2	23%	896
SAMSUNG Galaxy	4.3 Star	5	30%	897
APPLEIPhone	4.0 Star	7	23%	898
HP Envy	4.5 Star	3	30%	899

9a)

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.By.ByLinkText;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class Assignment9 {
        public static void main(String[] args) {
                WebDriver driver = new ChromeDriver();
                driver.manage().window().maximize();
                driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5));
                driver.get("https://demoapps.qspiders.com/");
                driver.findElement(By.xpath("//p[contains(text(),'UI Testing Concepts')]")).click();
                driver.findElement(By.linkText("Web Table")).click();

        // Get all the rows in the table
        List<WebElement> allEle = driver.findElements(By.xpath("//th|//td"));
        int count = allEle.size();
        System.out.println("The count of elements is " + count);
```

```
        int size = 0;
        for(int i=0; i<5; i++) {
          for(int j=0; j<5; j++) {
                    WebElement ele = allEle.get(size);
                    String text = ele.getText();
                    System.out.print(text + "  ");
                    size++;
          }
          System.out.println();
        }
        driver.quit();
          }
}
```

10)WAS to get the url of actiTIME home page using(url contains, Explicit wait)

```
package Learn_Webelement_Methods;
import java.time.Duration;
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
public class Assignment10 {
        public static void main(String[] args) {
                    WebDriver driver = new ChromeDriver();
                    driver.manage().window().maximize();
                    driver.get("https://online.actitime.com/ssandeep/login.do");
                    driver.findElement(By.id("username")).sendKeys("admin");
                    driver.findElement(By.name("pwd")).sendKeys("manager"+ Keys.ENTER);
                    WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));
                    wait.until(ExpectedConditions.urlContains("timetrack"));
                     // Get the current URL after the wait
                     String homePageURL = driver.getCurrentUrl();
```

```
                System.out.println("Home page URL: " + homePageURL);
                // Close the browser
                driver.quit();
        }
}
```

Output: Home page URL: https://online.actitime.com/ssandeep/timetrack/enter.do

11)Assignment11

Automate the following the scenario

- Open the browser and trigger face book application enter text into email text box copy the text and paste it in password text box and clear the value in email text box.
- Get the color font-size tag-name tag-text of create new account button.
- Fetch the tool tip text present for signup link and print it on the console.
- Check weather login button is enabled and click on create new account check the alignment & size of dropdowns and click on sign up button using submit() If the element is displayed.

```
package Learn_Webelement_Methods;
import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.Point;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class Assignment11 {
        public static void main(String[] args) {
                WebDriver driver = new ChromeDriver();
                driver.manage().window().maximize();

                //Open the browser and trigger face-book application.
                driver.get("https://www.facebook.com/");

                //Enter text into email text box copy the text and paste it in password text box.
                WebElement emailaddress = driver.findElement(By.id("email"));
                emailaddress.sendKeys("sample text" + Keys.CONTROL+"AC");
                driver.findElement(By.id("pass")).sendKeys(Keys.CONTROL+"V");
```

```
//Clear the value in email text box.
emailaddress.clear();

//Get the color of create new account button.
WebElement createnewaccount = driver.findElement(By.linkText("Create new account"));
String color = createnewaccount.getCssValue("background-color");
System.out.println("The color of Create new account button is :" + color);

//Get font-size of create new account button.
String fontsize = createnewaccount.getCssValue("font-size");
System.out.println("The font size of Create new account is :" + fontsize);

//tag-name of create new account button.
String tagn = createnewaccount.getTagName();
System.out.println("The tag name of Create new account is :" + tagn);

//tag-text of create new account button.
String tagtextis = createnewaccount.getText();
System.out.println("The tag text of Create new account is :" + tagtextis);

//Fetch the tool tip text present for signup link and print it on the console.
WebElement element = driver.findElement(By.linkText("Sign Up"));
String tooltiptext = element.getAttribute("title");
System.out.println("The signup tool tip text is :" + tooltiptext);

//Check weather login button is enabled
WebElement loginbutton = driver.findElement(By.xpath("//button[@name=\"login\"]"));
boolean check = loginbutton.isEnabled();
if(check) {
        System.out.println("The login button is enabled");
}else {
        System.out.println("The login button is disabled");
```

```
}

//Click on create new account
driver.findElement(By.linkText("Create new account")).click();

//check the alignment & size of dropdowns
WebElement day = driver.findElement(By.xpath("//select[@id='day']"));
int daywidth = day.getSize().width;
int dayheight = day.getSize().height;

WebElement month = driver.findElement(By.xpath("//select[@id='month']"));
int monthwidth = month.getSize().width;
int monthheight = month.getSize().height;

WebElement year = driver.findElement(By.xpath("//select[@id='year']"));
int yearwidth = year.getSize().width;
int yearheight = year.getSize().height;


if((daywidth==monthwidth&&monthwidth==yearwidth)&&(dayheight==monthheight&&mo
nthheight==yearheight)) {
        System.out.println("The size of the drop downs are same.");
}else {
        System.out.println("The size of the drop downs are not same.");
}

Point dayLocation = day.getLocation();
Point monthLocation = month.getLocation();
Point yearLoction = year.getLocation();

int dayYaxis = day.getRect().getY();
int monthYaxis = month.getRect().getY();
int yearYaxis = year.getRect().getY();
```

```
            if((dayYaxis == monthYaxis)&&(monthYaxis == yearYaxis)) {
                System.out.println("The elements are aligned properly.");
            } else {
                System.out.println("The elements are not aligned properly.");
            }

            //click on sign up button using submit() If the element is displayed.
            driver.findElement(By.id("password_step_input")).sendKeys(Keys.ENTER);

            System.out.println("Sign up click successful");

            driver.quit();
        }
}
```

Output:

The color of Create new account button is :rgba(66, 183, 42, 1)

The font size of Create new account is :17px

The tag name of Create new account is :a

The tag text of Create new account is :Create new account

The signup tool tip text is :Sign up for Facebook

The login button is enabled

The size of the drop downs are same.

The elements are aligned properly.

Sign up click successful

12)Assignment12

WAS to print all options present is face book month dropdown (getOptions, for each).

```
package Learn_Webelement_Methods;
import java.time.Duration;
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 Assignment12 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("https://www.facebook.com/");
		driver.findElement(By.linkText("Create new account")).click();
		WebElement month = driver.findElement(By.id("month"));
		Select s = new Select(month);
		List<WebElement> list = s.getOptions();
//		for(int i=0; i<list.size();i++) {
//			WebElement ele = list.get(i);
//			String text = ele.getText();
//			System.out.println(text);
//		}
		for(WebElement ele :list) {
			System.out.println(ele.getText());
		}
		driver.quit();
	}
}
```

Output:

Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep

Oct

Nov

Dec

13)Assignment13

WAS to print all options present in city dropdown in alphabetical order (static webpage).

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.ArrayList;
import java.util.Collection;
import java.util.Collections;
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 Assignment13 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("file:///C:/Users/raghu/Desktop/Multiselect.html");
		WebElement dropdownElement = driver.findElement(By.id("state"));
		Select stateDropdown = new Select(dropdownElement);

		List<String> states = new ArrayList<>();
		for(WebElement option :stateDropdown.getOptions()) {
			states.add(option.getText());
		}
		Collections.sort(states);
		for(String state:states) {
			System.out.println(state);
		}
```

```
		driver.quit();
	}
}
```

14)Assignment14

WAS to print all options present in city dropdown without duplicates.

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.ArrayList;
import java.util.HashSet;
import java.util.List;
import java.util.Set;
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 Asignment14 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("file:///C:/Users/raghu/Desktop/Multiselect.html");
		WebElement state = driver.findElement(By.id("state"));
		Select sel = new Select(state);
		Set<String> hs = new HashSet<>();
		List<WebElement> allOpt = sel.getOptions();
		for(int i=0; i<allOpt.size(); i++) {
			WebElement ele = allOpt.get(i);
			String text = ele.getText();
			hs.add(text);
		}
		for(String text : hs) {
			System.out.println(text);
```

```
            }
            driver.quit();
        }
}
```

Output:

Bihar
Delhi
Assam
Daman and Diu
Gujarat
Telangana
Andhra Pradesh
Madhya Pradesh
Jammu and Kashmir
Tamil Nadu
Dadra and Nagar Haveli
Puducherry
Chhattisgarh
Karnataka
Mizoram
Andaman and Nicobar Islands
Goa
Ladakh
Odisha
West Bengal
Maharashtra
Kerala
Chandigarh
Lakshadweep
Sikkim
Meghalaya
Punjab
Rajasthan

Tripura

Uttar Pradesh

Jharkhand

Haryana

Himachal Pradesh

Uttarakhand

Arunachal Pradesh

Manipur

Nagaland

15)Assignment15

WAS to print all options present in city dropdown in alphabetical order and without duplicates.

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.List;
import java.util.Set;
import java.util.TreeSet;
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 Assignment15 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("file:///C:/Users/raghu/Desktop/Multiselect.html");
		WebElement state = driver.findElement(By.id("state"));
		Set<String> ts = new TreeSet<>(); // Will sort the emelents by default without duplicates
		Select sel = new Select(state);
		List<WebElement> allOpts = sel.getOptions();
		for(int i=0; i<allOpts.size(); i++) {
			String text = allOpts.get(i).getText();
```

```
                ts.add(text);
            }
            for(String text : ts) {
                System.out.println(text);
            }
            driver.quit();
        }
}
```

Output:

Andaman and Nicobar Islands
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chandigarh
Chhattisgarh
Dadra and Nagar Haveli
Daman and Diu
Delhi
Goa
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Ladakh
Lakshadweep
Madhya Pradesh
Maharashtra
Manipur
Meghalaya

Mizoram

Nagaland

Odisha

Puducherry

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

16)Assignment16

WAS to print only duplicates in city dropdown.

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.List;
import java.util.Set;
import java.util.TreeSet;
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 Assignment16 {
	public static void main(String[] args) {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("file:///C:/Users/raghu/Desktop/Multiselect.html");
		WebElement state = driver.findElement(By.id("state"));
		Set<String> ts = new TreeSet<>();
```

```
            Select s = new Select(state);
            List<WebElement> allOpts = s.getOptions();
            for(int i=0; i<allOpts.size(); i++) {
                  String text = allOpts.get(i).getText();
                  boolean res = ts.add(text);
                  if(res==false) {
                        System.out.println(text);
                  }
            }
            driver.quit();
      }
}
```

Output:

Andaman and Nicobar Islands

Andhra Pradesh

Arunachal Pradesh

Assam

Bihar

Chandigarh

Chhattisgarh

Dadra and Nagar Haveli

Daman and Diu

Delhi

17)Assignment17

WAS to check whether the mentioned city name is present in dropdown or not.

```
package Learn_Webelement_Methods;
import java.time.Duration;
import java.util.List;
import java.util.Scanner;
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 Assignment17 {
	public static void main(String[] args) {
		Scanner scanner = new Scanner(System.in);
		System.out.println("Enter the stat name to search in the list");
		String stateName = scanner.nextLine();
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("file:///C:/Users/raghu/Desktop/Multiselect.html");
		WebElement state = driver.findElement(By.id("state"));
		Select s = new Select(state);
		List<WebElement> allOpts = s.getOptions();
		int count=0;
		for(WebElement ele :allOpts) {
			String text = ele.getText();
			if(stateName.equalsIgnoreCase(text)) {
				count++;
				break;
			}
		}
		if(count==1) {
			System.out.println(stateName + " is present in the list");
		} else {
			System.out.println(stateName + " is not present in the list");
		}
		driver.quit();
	}
}
```

Output:

```
Enter the stat name to search in the list
Goa
Goa is present in the list
```

18)Assignment18

Automate the following scenario

- Open the browser and navigate to yatra.com
- Mention the depart from Bangalore to Kolkata

```
package Learn_Webelement_Methods;
import java.time.Duration;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class Assignment18 {
	public static void main(String[] args) throws InterruptedException {
		WebDriver driver = new ChromeDriver();
		driver.manage().window().maximize();
		driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
		driver.get("https://www.yatra.com/");

		// Find and fill the departure city
		WebElement departFrom = driver.findElement(By.id("BE_flight_origin_city"));
		departFrom.click();
		WebElement departInput = driver.findElement(By.id("BE_flight_origin_city"));
	departInput.sendKeys("Bangalore");

		// Find and fill the destination city
		WebElement goingTo = driver.findElement(By.id("BE_flight_arrival_city"));
		goingTo.click();
		WebElement goingInput = driver.findElement(By.id("BE_flight_arrival_city"));
	goingInput.sendKeys("Kolkata");

		Thread.sleep(2000);
		System.out.println("Execution Successfull");
		driver.quit();
	}
```

}

19)Assignment19

Sample text

20)Assignment20

Sample text

Syntax - Index

1)cssSelector

TagName[AttributeName='AttributeValue']

Ex: input[type='password']

2)xpath by Attribute

To identify the element uniquely, we can include attribute in the 'xpath' expression using below syntax

//TagName[@AttributeName='AttributeValue']

Note: We can use more than one attribute in an 'xpath' expression:

//input[@AttributeName='AttributeValue'] [@AttributeName='AttributeValue']

//input[@AttributeName='AttributeValue'] AND [@AttributeName='AttributeValue']

//input[@AttributeName='AttributeValue'] OR [@AttributeName='AttributeValue']

3)xpath by Text

//TagNmae[text()='Complete Tagtext]

Login

//div[text()='Login'] using text

//div[.='Login'] using . function

4)xpath by contains() / by partial text

//TagName[contains(text(),'Partial TagText')]

//nobr[contains(text(),'actiTIME')]

We can use contains function when there is a 'Non-Breakable Space' to identify the element. It has following syntax

1: //tag [contains(@AttributeName,'AttributeValue')]

2: //tag [contains(text(), 'textValue')].

Example:

//button[contains(@type, 'submit')]

//button[contains(@text, 'Sign in')]

//input[contains(@value, 'Create Type of Work')]

5)xpath by Partial Attribute

//TagName[contains(@AttributeName, 'Partial Attribute Value;)]

HTML <img class="fblogo">

Xpath //img[contains(@class, 'fblogo')]

6)xpath by text() function

If Attribute is matching with more than one element or if the attribute is not present then we can identify the element using its text. It has following syntax:

//tag[text()='textValue']

Examples:

//div[text()='Login ']

//div[text()='Users']

//td[text()='Java']

//div[@class='label'][text()='Users']

POM CONCEPTS

To avoid StaleElementReferenceException we use Page Object Model POM class. POM is one of the Java designs patterns. POM concept is used by both developers and testengineers (automation) to develop and test webpages.

In POM class we declare the element using FindBy Annotation and we write it as @FindBy. It should be imported from the following package

Import org.openqa.selenium.support.FindBy;

Syntax 1: single element

@FindBy(locator="locator value")

private WebElement elementname;

Syntax2: multiple element

@FindBy(locator="locator value")

private List<WebElement> elementname;

To initialize the element, we use initElements() method of PageFactory class. It takes two arguments

- WebDriver
- Object of POM class

Exception – Index

1) NoSuchElementException (Selenium/unchecked)
2) InvalidSelectorException (Selenium/unchecked)
3) InvalidArgumentException (Selenium/unchecked)
4) TimeoutException (Selenium/unchecked)
5) UnsupportedOperationException (Selenium/unchecked)
6) UnexpectedTagNameException (Selenium/unchecked)

1)NoSuchElementException (Selenium/unchecked): Whenever the locators are not matching with any elements in the html.

We get this exception if the element is not loaded in the UI during find element method.

Whenever we pass invalid arguments for select class methods we get this exception.

2)InvalidSelectorException (Selenium/unchecked): Whenever we pass class values for class name locator along with spaces we get this exception.

We get this exception when we don't follow proper syntax while writing css selector/Xpath expression.

3)InvalidArgumentException (Selenium/unchecked): Whenever we pass invalid url for get() method.

4)TimeoutException (Selenium/unchecked): Whenever the duration mentioned for explicit wait gets over it will throw this exception after the duration explicit wait.

If the page is not loaded with in mentioned duration page load timeout will throw this exception.

5)UnsupportedOperationException (Selenium/unchecked): We get this exception whenever we perform submit action in elements which is not having type = submit.

We get this exception if we perform deselect action on single select dropdown.

6)UnexpectedTagNameException (Selenium/unchecked): Whenever we pass any other elements address has parameter for select class constructor except <select> we get this exception.