13-FEB-2020

viii. Using " following-sibling " and "preceding-sibling" in xpath

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With reference of following/preceding web element which are in same level we would be able to address webelement by using other Webelement attribute values.

a. following-sibling: ( if the tags are in the same level of the parent class)

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Using this option we can address following webelement with reference of current webelement attribute values which are in same level.

Ex: address "Phone:" edit box with reference of "Last Name" object in Mercury Tours Registration page

//input[@name='lastname']/following::input[1]

b. preceding-sibling:

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Using this option we can address preceding object with reference of current webelement attribute values.

Ex: address "First name" edit box with reference of "Last Name" edit box

//input[@name='last name']/preceding::input[1]

8. cssSelector:

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CSS ---> Cascading Style Sheet

Different Combinations in cssSelector

i. tagname with id:

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Syntax: tagname#id

Ex: To enter value in "Email" editbox in FB-Home page

driver.findElement(By.cssSelector("input#email")).sendkeys("madhukarQAIT");

ii. \*\*\* tagname with class

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Syntax: tagname.class

Ex: To enter value in "Email" editbox in FB-Home Page

driver.findElement(By.cssSelector("input.inputtext")).sendkeys("madhukarQAIT");

iii. \*\* tagname with any one of the attribute value

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Syntax: tagname[attribute=value]

Ex: To enter value in "Email" editbox in FB-Home Page

driver.findElement(By.cssSelector("input[name='email']")).sendkeys("madhukarQAIT");

or

driver.findElement(By.cssSelector("input[type='text']")).sendkeys("madhukarQAIT");

iv. tagname,class and attribute

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Syntax: tagname.class[attribute=value]

Ex: To enter pwd in FB Home Page

driver.findElement(By.cssSelector("input.inputtext[type='text']")).sendkeys("madhukarQAIT");

Note:

\*\*\* Difference between xpath & css

Compare to xpath, cssSelector is simpler & faster to identify Webelements

Ex: For images tag - Go with cssSelector

Where as in IE browser xpath will work very slowly compare to cssSelector

Note: In general we prefer xpath to address webelement, where we have more options in it.

Ex: Write script to perform login operation in Orange HRM project using cssSelector as locator

Syntax: Difference between xpath & css

css - tagname[attribute=value] // tagname[attribute='value'] ;

xpath - //tagname[@attribute=value] // //tagname[attribute='value'] ;

// To initialize browser

System.setProperty("webdriver.chrome.driver",".\\Drivers\\chromedriver.exe");

WebDriver driver=new ChromeDriver();

driver.get("https://opensource-demo.orangehrmlive.com/");

driver.manage().window().maximize();

// To perform login operation

driver.findElement(By.cssSelector("input[id='txtUsername']")).sendkeys("Admin");

driver.findElement(By.cssSelector("input[id='txtPassword']")).sendkeys("admin123");

driver.findElement(By.cssSelector("input[id='btnLogin']")).click();

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JAVA CONCEPTS -2

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For Enhancement after completion of 5 steps:

Step 1: Open browser

Step 2: Navigate to url

Step 3: Enter username

Step 4: Enter password

Step 5: Login

Step 6: Need to verify if login is successful or unsuccessful ( for this we need to learn java concepts)

1. Operators in Java

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i. Arithmetic operators ---> + , -, \*, /, %(mod)

Ex: Write program to perform different arithmetic operations

// To perform different arithmetic operations

int a=30; int b=20;

System.out.println(a+b);

System.out.println("Sum of a and b is: "+a+b);

System.out.println("Sum of a and b is: "+(a+b));

System.out.println("Multiplication of a and b is: "+(a\*b));

System.out.println("Quotient of a with b is: "+(a/b));

System.out.println("Mod of a and b is: "+(a%b));

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ii. Relational operators (Comparison operators) ==, <, >, <=, >=, !=

---> These operators will return boolean value

Ex: Write program to compare values

// To perform Relational Operators (Comparison operators)

int a=10;

int b=20;

System.out.println(a==b); // false

System.out.println(a<b); // true

System.out.println(a>b); // false

System.out.println(a<=b); // true

System.out.println(a>=b); // false

System.out.println(a!=b); // true

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iii. Logical operators ----> && (and), ||(or), ! (not)

These operators works between 2 boolean values

// To perform logical operators

boolean a=true;

boolean b=false;

System.out.println(a&&b); //false

System.out.println(a||b); //true

System.out.println(!b); //true

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iv. increment/decrement operators

// To perform Increment Operators

int a=5;

a=a+1;

System.out.println(a); //6

a++;

System.out.println(a); //7

// To perform Decrement Operators

a=a-1;

System.out.println(a); //6

a--;

System.out.println(a); //5

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v. Assignment operator ---> =

To assign value to variable

Ex: String myVal; // Variable Declaration

myVal="LiveTech" // Assign value

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Scanner class

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It is a Built-in class provided in Java library (i.e. java.Util)

which is used to read keyboard inputs from console during runtime

Procedure to use Scanner class:

Step 1: create object for Scanner class

Syntax: Scanner obj=new Scanner (System.in);

Step 2: Use Scanner class methods to read data from console based on datatype.

Syntax: datatype varName=obj.method();

Ex: To read String value

String str=obj.nextLine();

Ex: To read Integer value

int myNumber=obj.nextInt();

Ex: Write program to display your name and number of days required to get a job by reading the data during runtime

// Create object for Scanner Class

Scanner sc=new Scanner(System.in);

System.out.println("Enter your name");

String myName=sc.nextLine();

System.out.println("Enter no of days to get job");

int myDays=sc.nextInt();

System.out.println("Entered name is: "+myName);

System.out.println("No of days required are:"+myDays);

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2. Control statements:

Using control statements we can specify execution flow of the program

There are 2 types of Control statements

a. Conditional statements

b. Loop/Iterative statements

a. Conditional statements:

Which we can use to execute required block of statements based on given condition true/false

Following are the conditional statements

i. If

ii. else if condition

iii. Nested if

iv. switch case

i. If condition

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It will allow to execute particular block of statements when given expression is true

Syntax: if (condition) {

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----------// statements

}

Ex:

// To perform If condition

int a=10;

int b=20;

if (a<b) {

System.out.println("a- having smaller value");

}

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ii. else if condition:

Syntax:

if (condition)

{

--------------

--------------// statements

}

else {

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-----------// statements

}

Ex: Write program to find smaller value in given 2 numbers

Script:

// To perform if else condition

int a=30;

int b=20;

if (a<b) {

System.out.println("smaller value is: "+a);

}

else {

System.out.println("smaller value is: "+b);

====================================================================END OF CLASS ===================================================================================