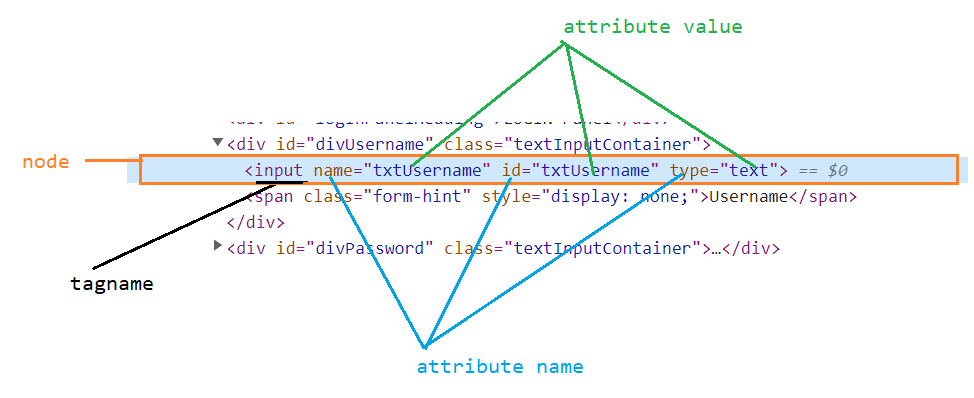
WebElement: A webpage is made up of arrangement of different webElements.

Locator: It is a unique address or expression that we create in order to locate a webelement uniquely over the webpage.

To locate the webelement we have to use findElement() in the automation script.



**Type of locator:**

**1. id:** It is a locator which can used by calling id method from By class of selenium.

**Example:**

**public** **static** **void** main(String[] args) {

System.*setProperty*("webdriver.chrome.driver", "E:\\desktop\\Katraj\\15 Jan\\Selenium\\chromedriver.exe");

WebDriver driver = **new** ChromeDriver();// chrome browser will get open

driver.manage().window().maximize();// to maximize the window

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

// to locate the webelement we have to use findelement method

// id locator

WebElement username = driver.findElement(By.*id*("txtUsername"));

// To type over a webelement we have to use sendKeys()

username.sendKeys("Velocity");

WebElement password = driver.findElement(By.*id*("txtPassword"));

password.sendKeys("123456");

}

**2. name:** It is a locator which can used by calling name method from By class of selenium.

Example:

// name locator

driver.findElement(By.*name*("Submit")).click();

3. className: It is a locator which can used by calling className method from By class of selenium.

Example:

// class

driver.findElement(By.*className*("button")).click();

4. linkText: It is a locator which can used by calling linkText method from By class of selenium.

// linkText

driver.findElement(By.*linkText*("Forgot your password?")).click();

5. partialLinkText: It is a locator which can used by calling partialLinkText method from By class of selenium.

// partialLinkText

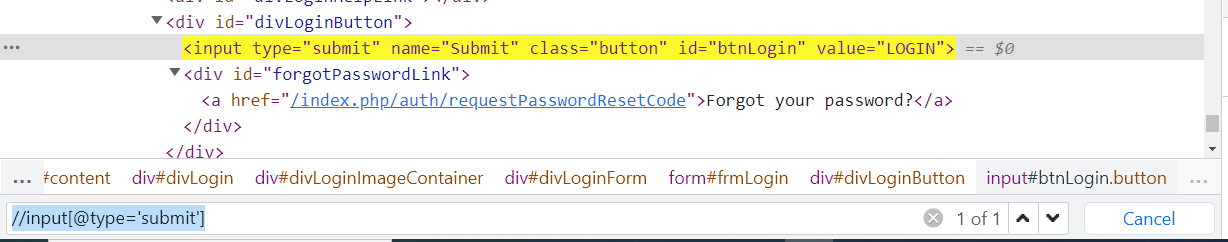
driver.findElement(By.*partialLinkText*("got your ")).click();

<https://www.facebook.com/signup>

6. xpath: It is a locator which can used by calling xpath method from By class of selenium.

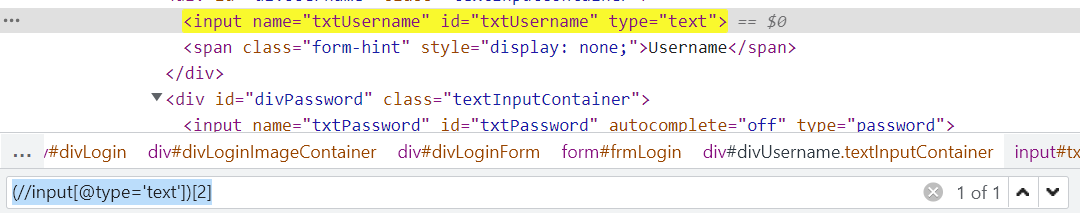
// syntax:--> //tagname[@attributename = 'attributevalue']

Example:

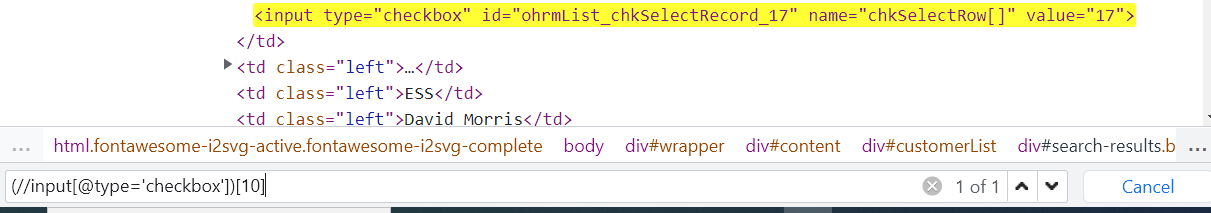


Customization of xpath:

1. indexing: If we get multiple nodes matching then we can use indexing technique to get the unique one.

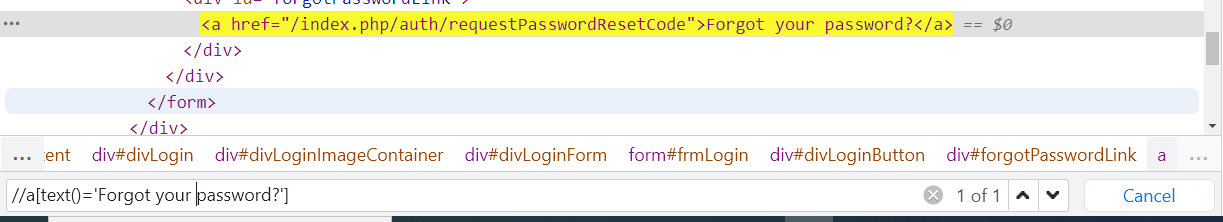


Example 2:

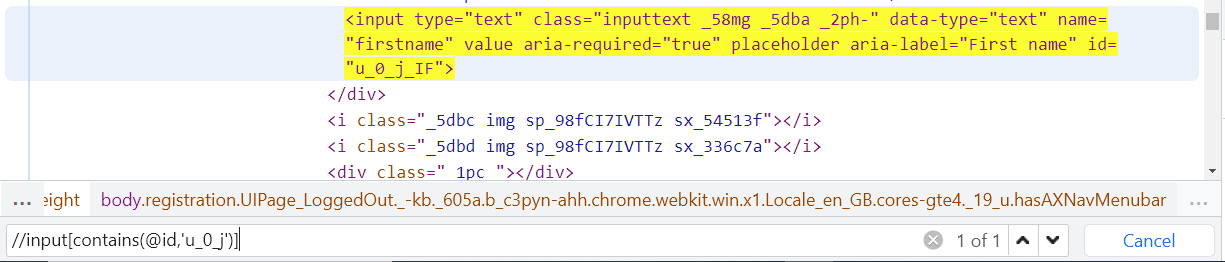


2. text(): This can be used where we have >text< kind of scenario where the text is written between the angular braces and we don’t have any other option.

Example:



3. contains(): This technique is used to find the xpath on the basis of common parameters.



4. Dynamix Xpath: The xpath which change with respect to the time (Run time) is called as dynamic xpath.

Example :

**public** **static** **void** main(String[] args) {

System.*setProperty*("webdriver.chrome.driver", "E:\\desktop\\Katraj\\15 Jan\\Selenium\\chromedriver.exe");

WebDriver driver = **new** ChromeDriver();// chrome browser will get open

driver.manage().window().maximize();// to maximize the window

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

WebElement username = driver.findElement(By.*xpath*("//input[@name='txtUsername']"));

username.sendKeys("Admin");

driver.findElement(By.*xpath*("//input[@id='txtPassword']")).sendKeys("admin123");

driver.findElement(By.*xpath*("//input[@type='submit']")).click();

driver.findElement(By.*xpath*("//a[@id='menu\_admin\_viewAdminModule']")).click();

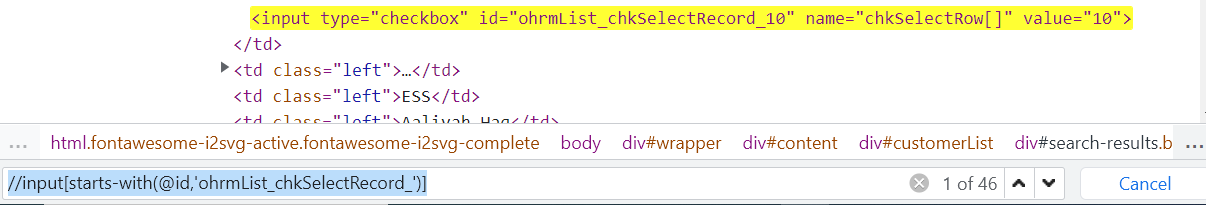
**for**(**int** i=1; i<40; i++)

{

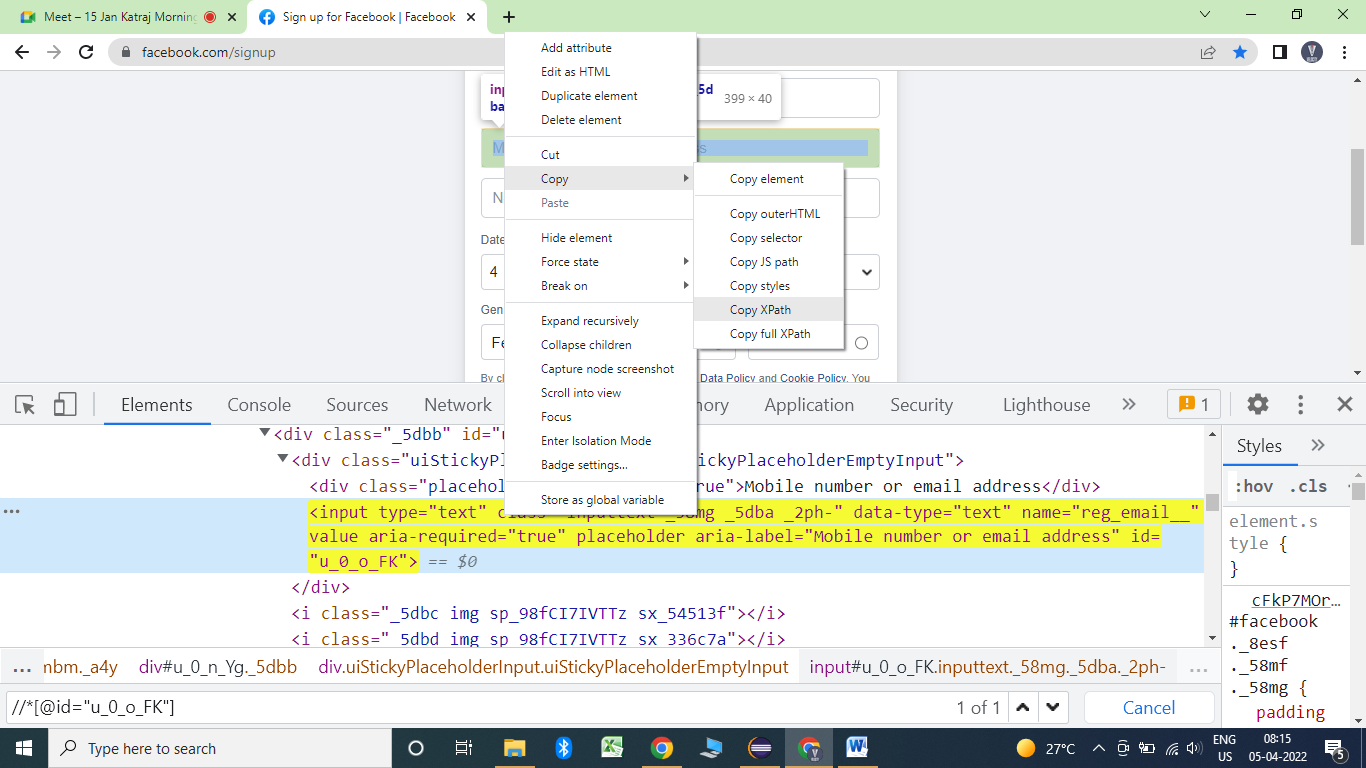
driver.findElement(By.*xpath*("(//input[contains(@id,'ohrmList\_chkSelectRecord\_')])["+i+"]")).click();

}

5. starts-with: This is a method which matches the attribute value which starts with the given attribute value based on the taken attribute name.



Shortcut to get the xpath:

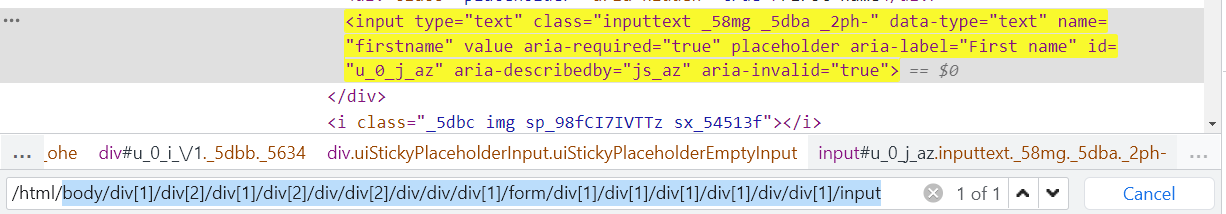


Types of xpath :

1. Absolute xpath: Xpath in which we use ‘/’ to define the locator of that node. In this xpath we have to make sure of every element to be present according to their order if any one of the element got missed then it will not be able to locate the webelement over the page.

We have to traverse from each parent to each child inorder to form the xpath.

It is too lengthy and very risky to use.



2. Relative xpath: Xpath in which we use ‘//’ to define the locator of that node. In this xpath we can jump between the nodes from the top parent to lowest child.

It is very compact in length and reliable to use.

