

How To Write Dynamic XPath In Selenium WebDriver

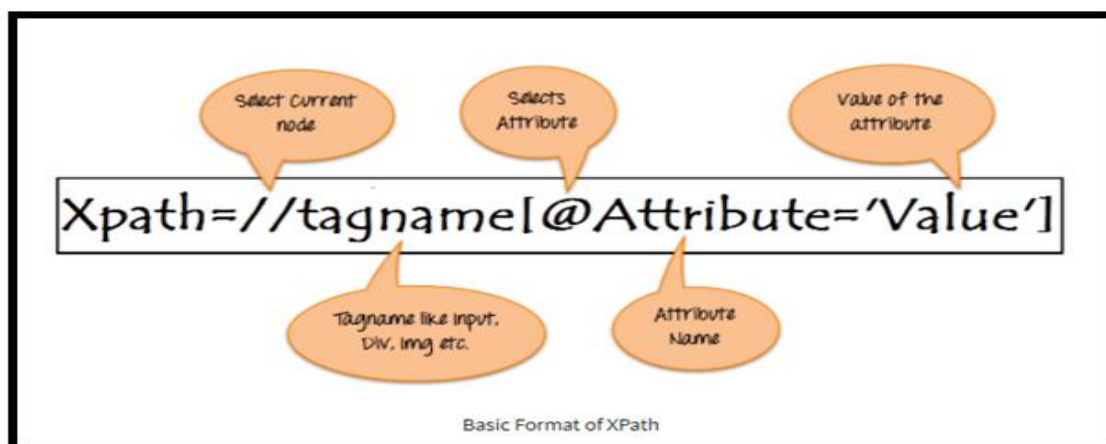
1) Basic XPath:

- The XPath expression select the node or list of nodes on the basis of attributes like ID, Name, class, value, etc.

Syntax: `//tagname[@attribute_name='attribute_value']`

Example: `//input[@id='MP_link']`

The basic format of XPath in selenium



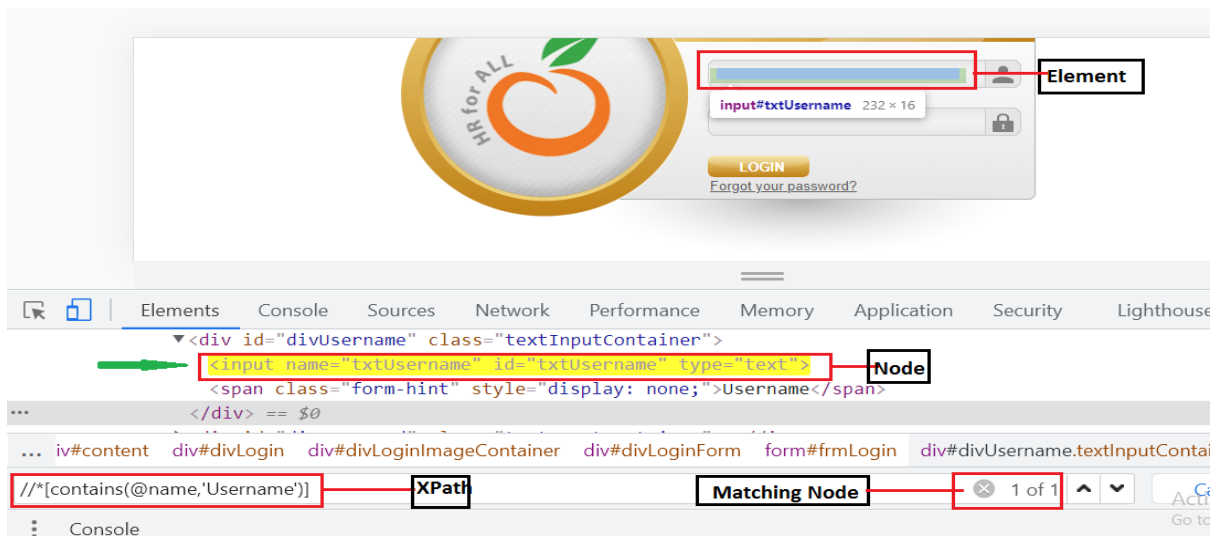
2) Using Contains():

- It is method used in XPath expression
- It is used when the value of any attribute changes dynamically.
- It has ability to find the element with partial text

Syntax: `//*[contains(@attribute_name,'attribute_value')]`
`//tagname[contains(@attribute_name,'attribute_value')]`

Example: `//*[contains(@name,'txtUsername')]`
`//input[contains(@name,'txtUsername')]`

2) Using Contains() Example:



3) Using OR & AND:

OR:

- In this case we need to use two conditions, either 1st condition OR 2nd condition should be true
- It also applicable if both conditions are true

Syntax OR: `//*[@attribute name='attribur-value' or @attribute name='attribur-value']`

Example: `//label[@type='text' or @for='candidateSearch_keywords']`

AND:

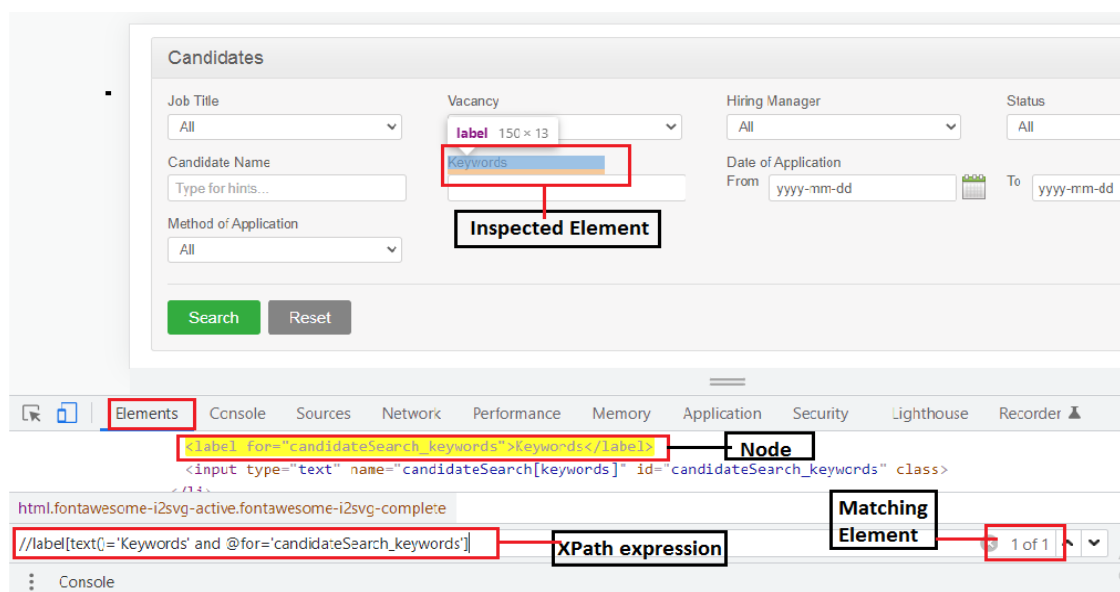
- In this case we need to use two conditions, both condition should be true

Syntax_AND: `//*[@attribute_name='attribur-value' and @attribute_name='attribur-value']`

Example_1: `//*[text()='Keywords' and @for='candidateSearch_keywords']`

Example_2: `//label[text()='Keywords' and @for='candidateSearch_keywords']`

3) Using OR & AND Example



4) Using Starts-with Function

- "Starts-with" function finds the element whose value changes on refresh any operation on web page
- We need to use the starting text or starting value of attribute to find the element
- You can also find the element using this function whose attribute value is static

Syntax: `//tagname[starts-with(@attribute_name,'attribur-value')]`

Exapmle: `//label[starts-with(text(),'Key')]`
`//div[starts-with(text(),'LOGIN')]`

4) Using Starts-with Function Example

The screenshot shows a web browser's developer tools interface. The 'Elements' panel is open, displaying the DOM tree. A node labeled 'LOGIN Panel' is highlighted. Below the DOM tree, the 'XPath expression' field contains the expression `//div[starts-with(text(),'LOGIN')]`. To the right of the expression, the 'Count of matching node' is displayed as '1 of 1'. The browser's address bar shows the URL `http://localhost:3000/`. The page title is '(Username : Admin | Password : admin123)'. The page content includes a login form with fields for 'Username' and 'Password', and a 'LOGIN Panel' button.

5) Using Text() Function:

- In this function we find the element with exact text match of the particular element

Syntax: `//tagname[text()='element_text_value']`

Example: `//label[text()='Hiring Manager']`