

Selenium WebDriver

XPATH

How? When?

The Golden Rule

What

What is Xpath?
XML path –address of the element in DOM

When

When to use?
Basic locators are not available / changing dynamically.

How

How to write xpath?
Based on the element path and syntax

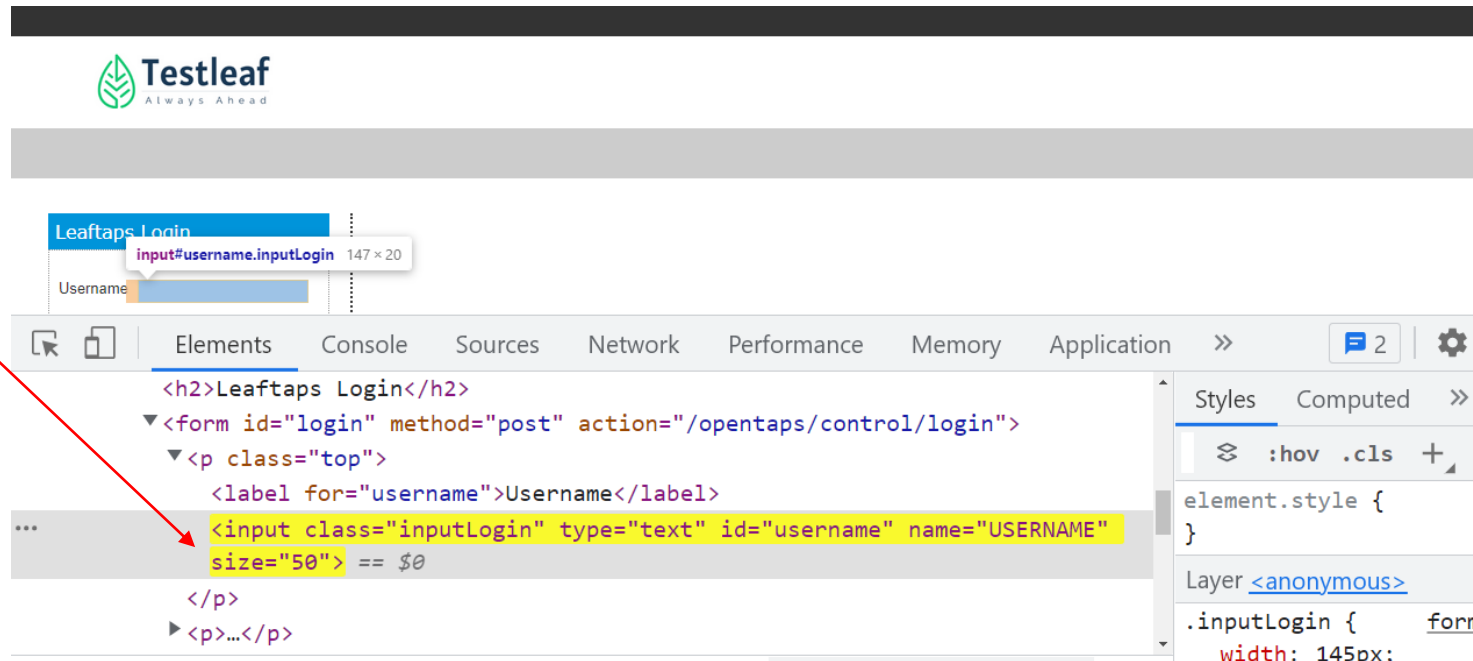
Absolute Xpath

Absolute Xpath

- long path
- Starts from root tag(<html>) and ends at the target element tag.
- Starts with “/” and traverse through each and every tag in hierarchy to reach the required WebElement.

The syntax for the absolute xpath is
/html/body/div[2]/div/div/form/p/input

-Rarely used because of unreliable

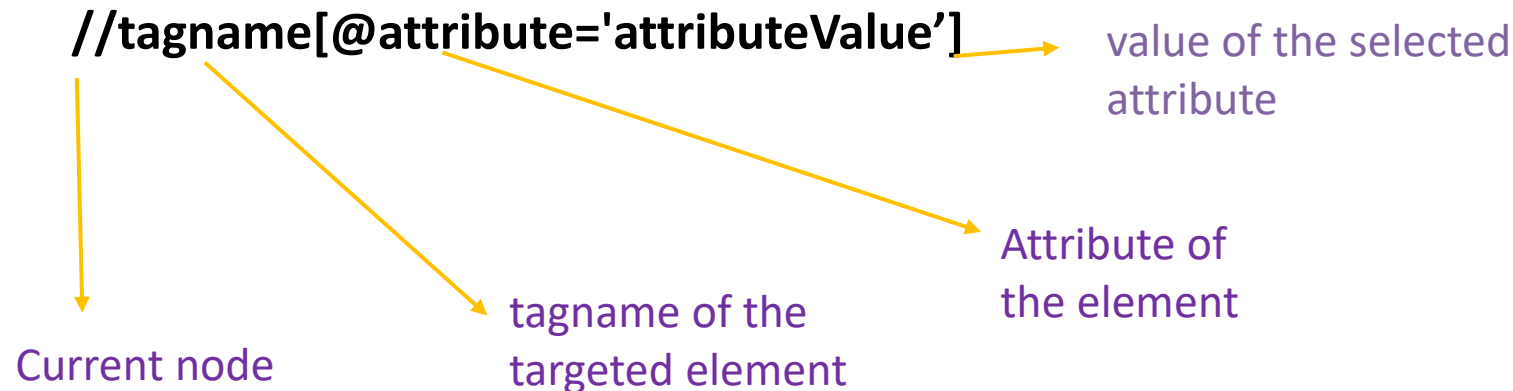


Relative Xpath

Relative XPath

- *works in relation with the WebElement location in the DOM.
It goes directly to the address of the target WebElement.
- *Relative XPath starts with the “//” which locates the inner or middle part of the DOM.

General syntax of the Relative xpath is:



Types of Relative Locators

Relative Locators

- Basic XPath
- Advanced XPath

The screenshot displays the Testleaf login page. The developer tools are open, showing the 'Elements' panel. The HTML structure is as follows:

```
<h2>Leaftaps Login</h2>
<form id="login" method="post" action="/opentaps/control/login">
  <p class="top">
    <label for="username">Username</label>
    <input class="inputLogin" type="text" id="username" name="USERNAME" size="50">
  </p>
  <p>...</p>
  <p>...</p>
</form>
```

The 'input#username.inputLogin' element is selected. The 'Attributes' panel shows the following attributes:

Attribute	Value
class	inputLogin
type	text
id	username
name	USERNAME
size	50

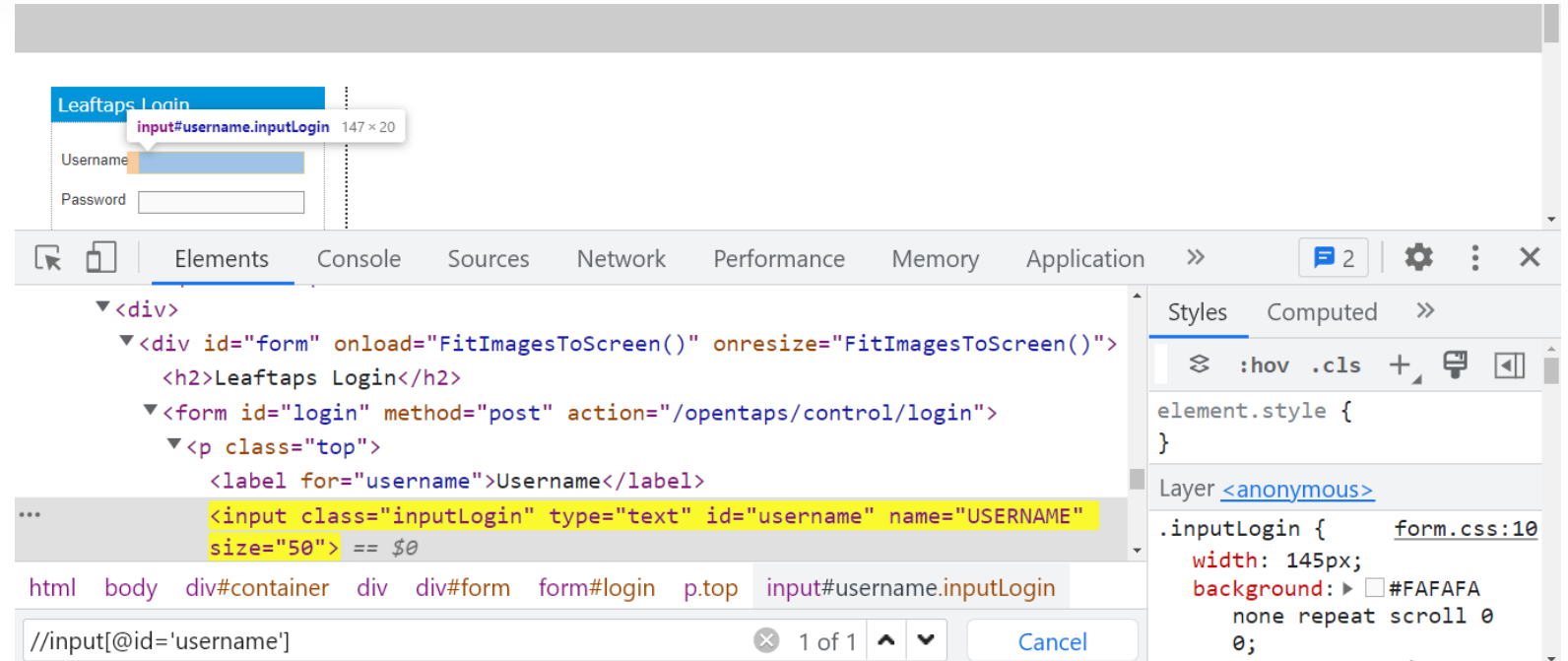
Annotations with arrows point to the following elements:

- Text:** Points to the text `input#username.inputLogin` in the 'Elements' panel.
- Attribute:** Points to the `id` attribute in the 'Attributes' panel.
- Attribute Value:** Points to the value `username` in the 'Attributes' panel.

Basic Xpath – Attribute Based

Attribute Based XPath:

->uses the attribute and attribute value of the WebElement in the DOM.



Syntax:

`//tagName[@attribute='attributeValue']`

Example

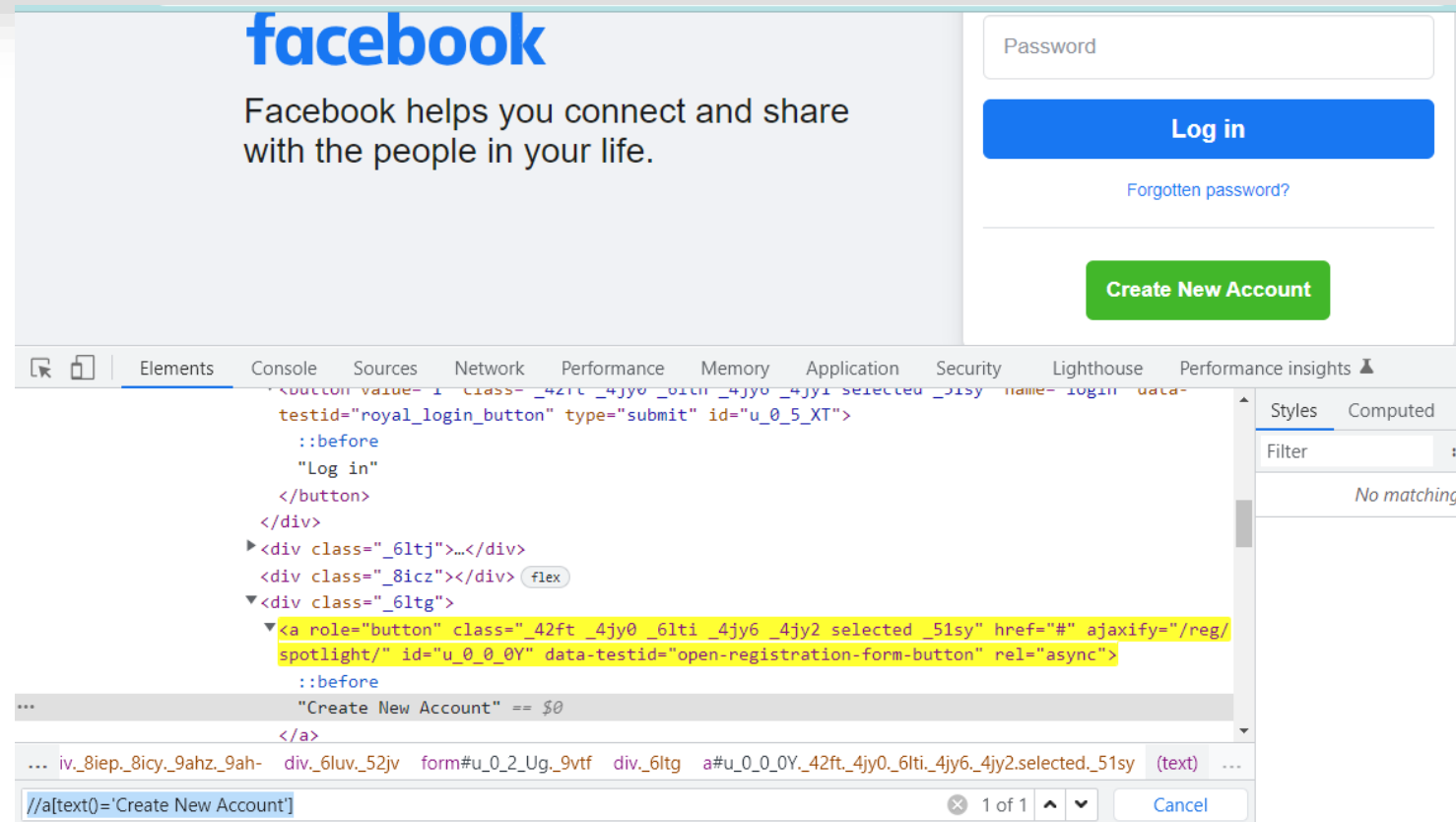
`//input[@id='username']`

Contd..

Basic Xpath – Text Based

Text Based Xpath:

->based on the text displayed for the WebElement in dom.



Syntax:

`//tagName[text()='text value in DOM']`

Example:

`//a[text()='Create New Account']`

Contd..

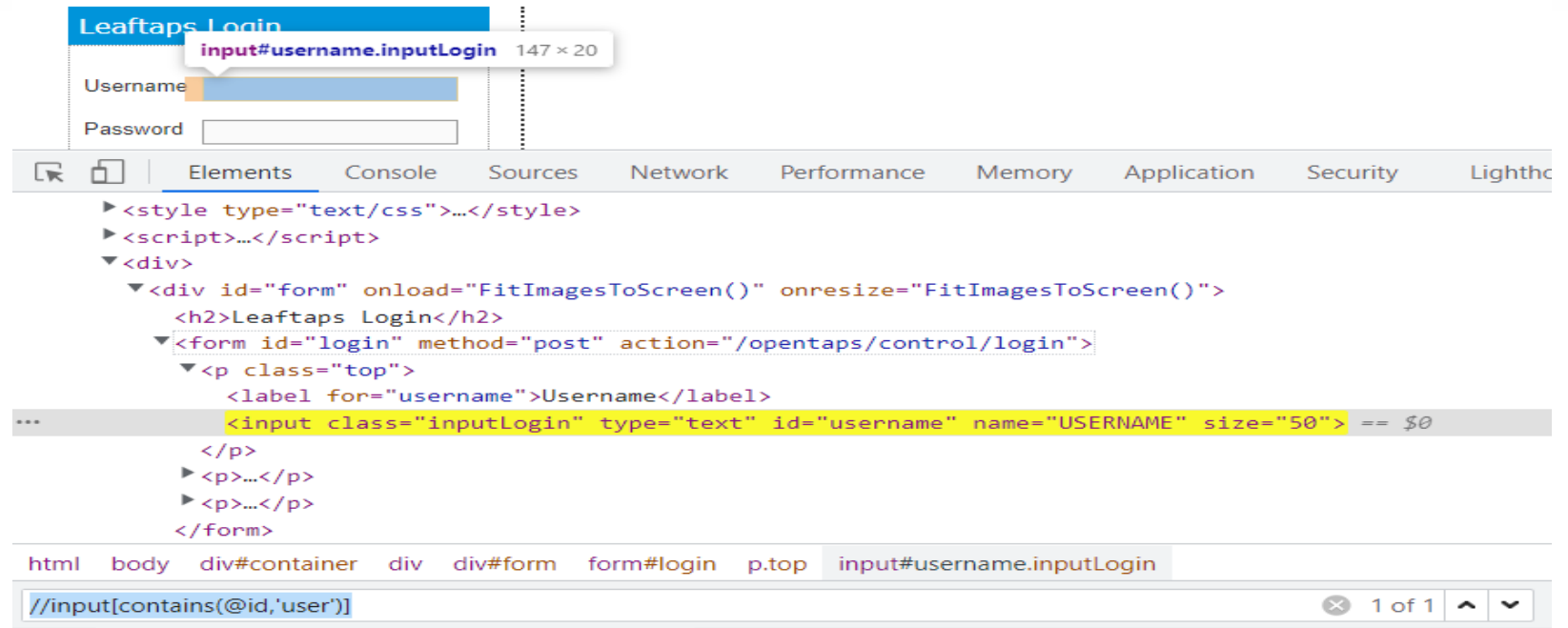
Basic Xpath – Partial Match

Partial attribute Based Xpath:

=>uses the partial attribute value of the WebElement

*Contains ->check for the given attribute

value with the value in DOM



Syntax:

//tagName[contains(@attribute, 'Partial value of the attribute')]

Example:

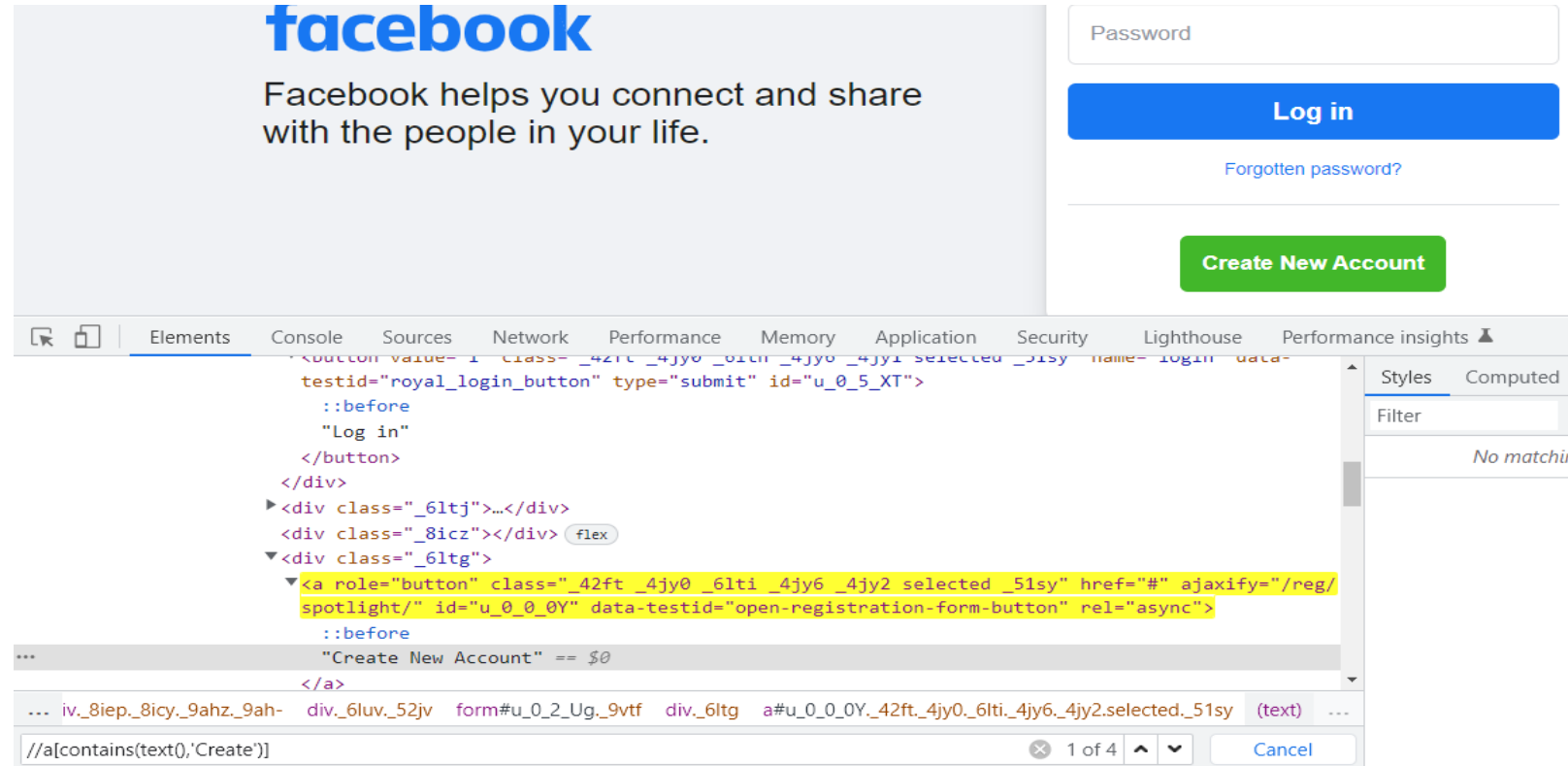
//input[contains(@id,'user')]

Contd..

Basic Xpath – Partial Match

Partial Text Based Xpath:

->uses the partial text value of the WebElement



Syntax:

`//tagname[contains(text(),' Partial text in my DOM' ')]`

Example:

`//a[contains(text(),'Create')]`

Contd..

Basic Xpath - Collection

Collection Based Xpath:

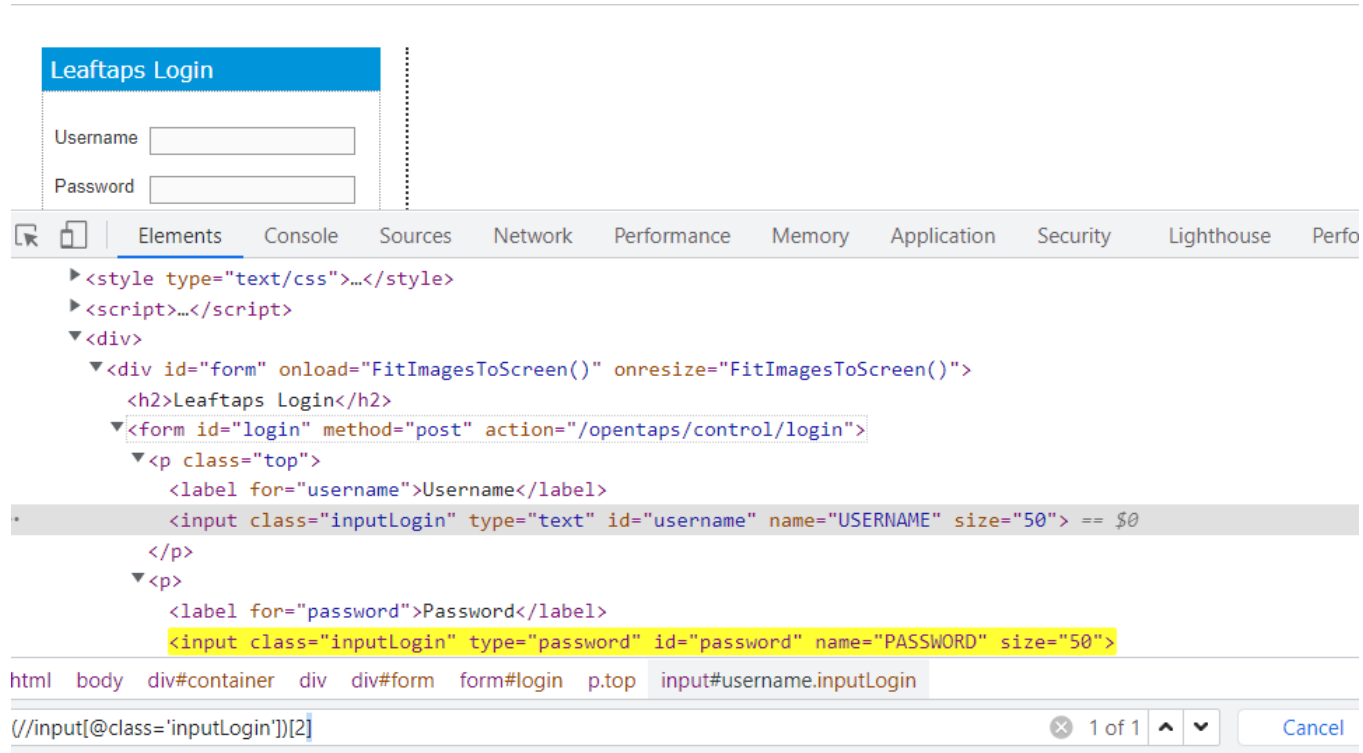
-> when there is multiple

matches of found for a xpath

->uses index to match the exact

element

->Index starts with 1



Syntax:

(//tagName[@attribute='attributeValue'])[index]

Example

(//input[@class='inputLogin'])[2]

Summary

- **Basic Xpath-What , when, How?**
- 2 types- Absolute and Relative xpath
- Most recommended –Relative xpath

Classroom (Breakout)

1. Launch <http://leaftaps.com/opentaps>
2. Enter username as demoSalesManager (Use : Attribute based)
3. Enter password as crmsfa (Use : Attribute based)
4. Click on Login (Use : Attribute based)
5. Click on CRM/SFA (Use Partial Text based xpath)
6. Click on Leads(Use Text based)