Playwright

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

Types of Xpath

➢ **Absolute Xpath**

➢ **Relative Xpath**

❑ You must follow the **exact route** and **fixed stops** of the railway line to reach your destination

❑ You can take **shortcuts** or **adjust your route** based on current traffic or road conditions.

Absolute Xpath

- Long path, Starts from root tag(<html>) and ends at the target element tag.

- Specifies the full hierarchy to target an element.

- Prone to breaking when the page structure changes.

- Starts with "/ " and traverse through each and every tag in hierarchy to reach the required WebElement
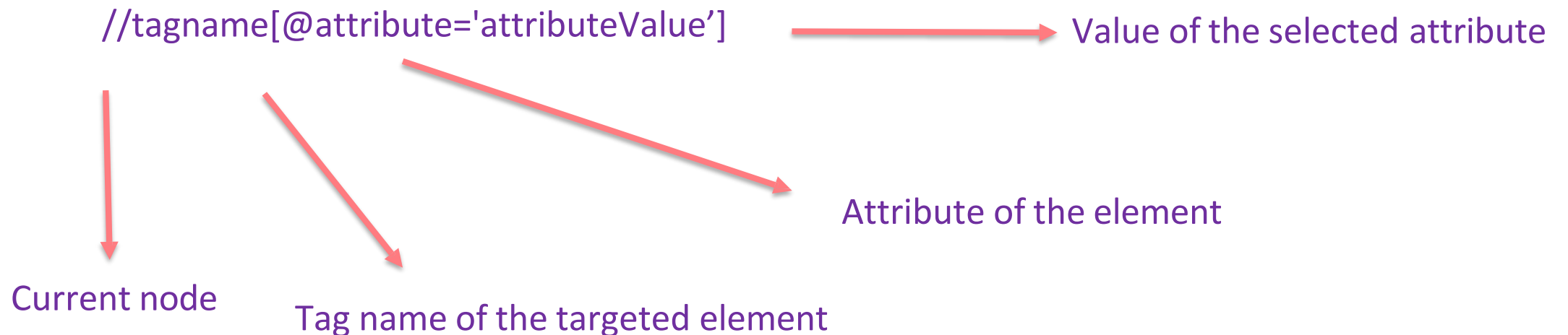
The syntax for the absolute xpath is
/html/body/div[2]/div/div/form/p/input

-Rarely used because of unreliable
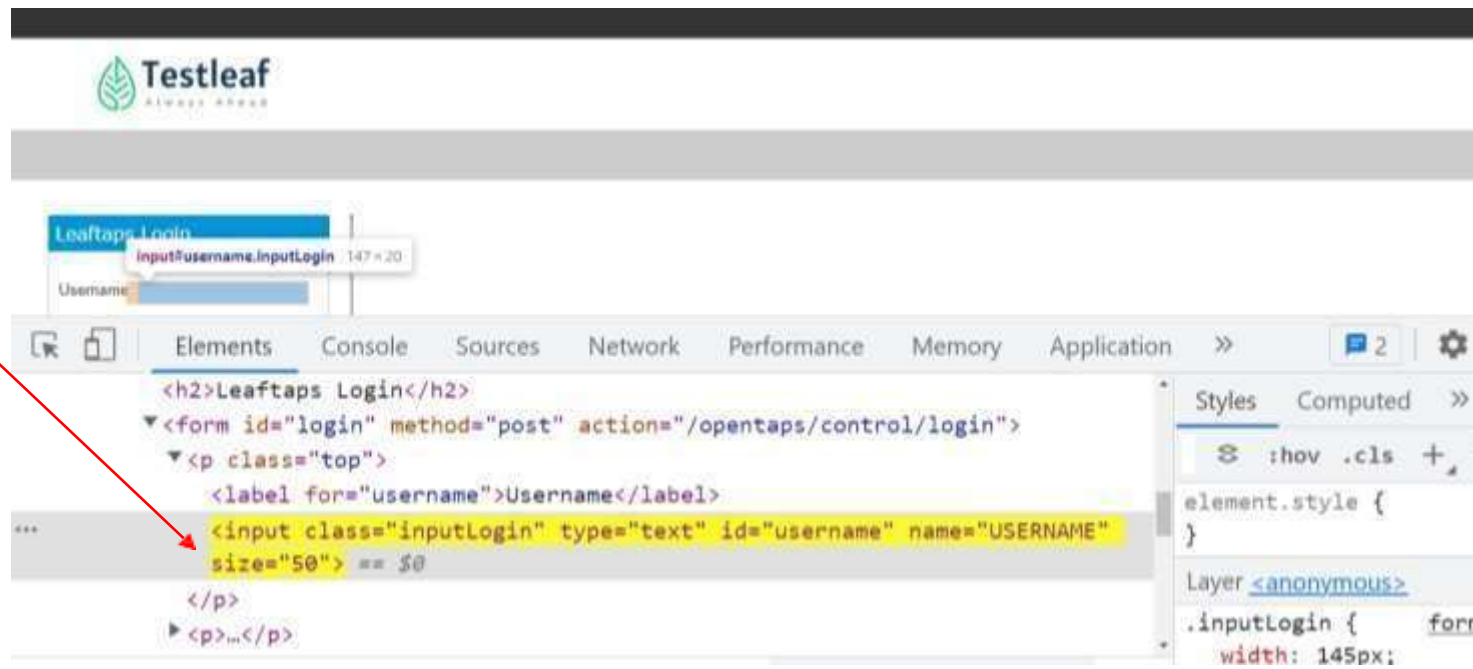
Relative XPath

- Begins from the current element, not necessarily the root. Defines a

- shorter, context-based path to locate an element

- Offers more robust and flexible element targeting, suitable for dynamic web pages.

  Relative XPath starts with the "//" which locates the inner or middle part of the DOM.

- General syntax of the Relative XPath is:

//tagname[@attribute='attributeValue']   Value of the selected attribute

Attribute of the element

Current node

Tag name of the targeted element

Types of Relative Locators

Relative Locators
- ➢ **Basic XPath**
- ➢ **Advanced XPath**

Basic Xpath – Attribute Based

Attribute Based XPath:

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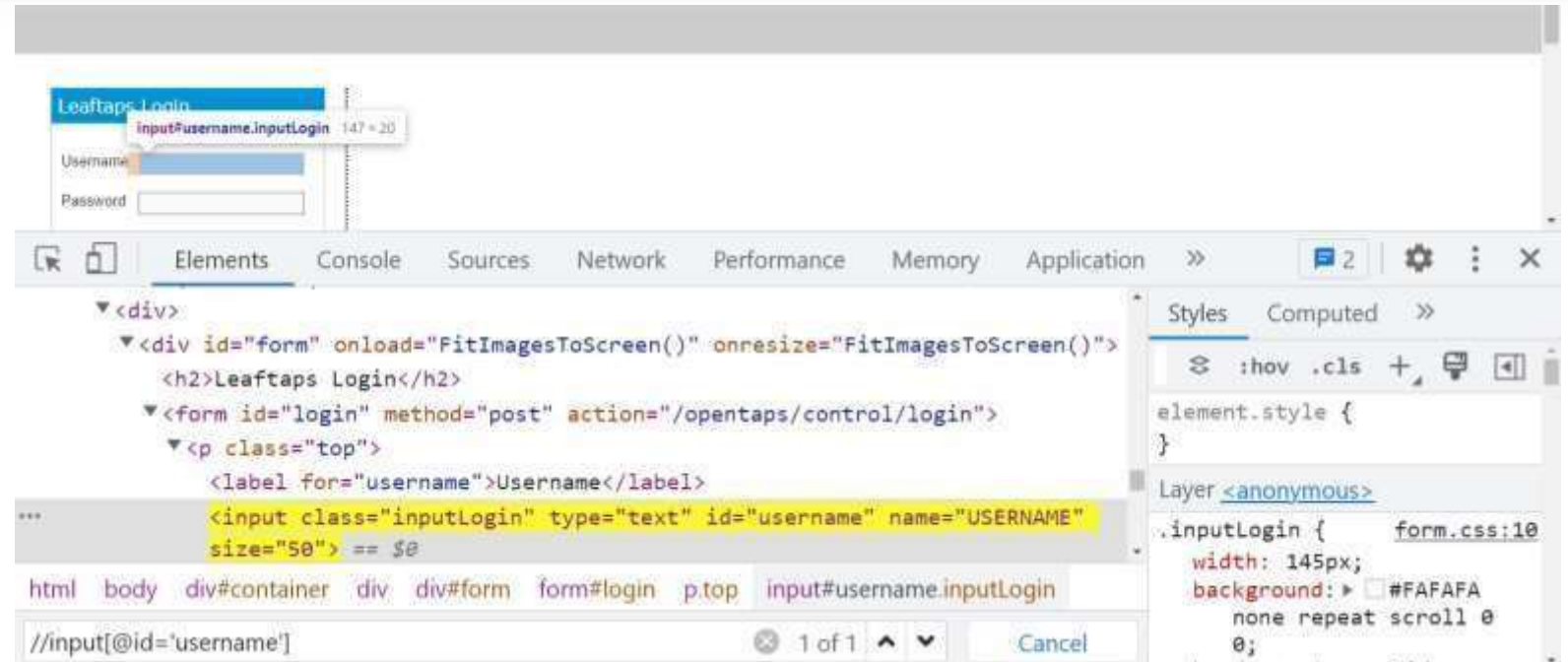
Syntax:

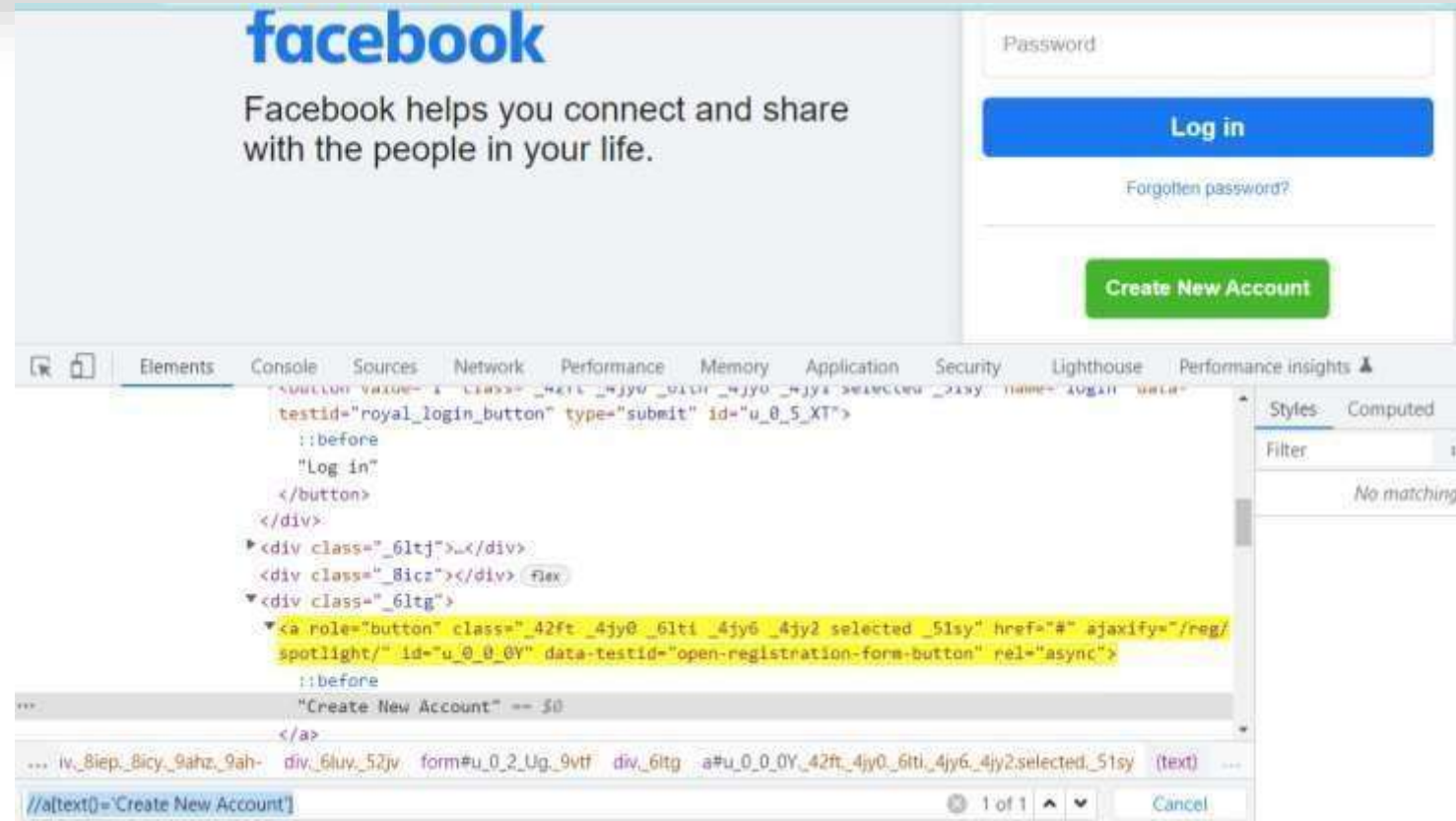**//tagName[@attribute='attributeValue']**

Example

//input[@id='username']

Basic Xpath – Text Based

Text Based Xpath:

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

Syntax:

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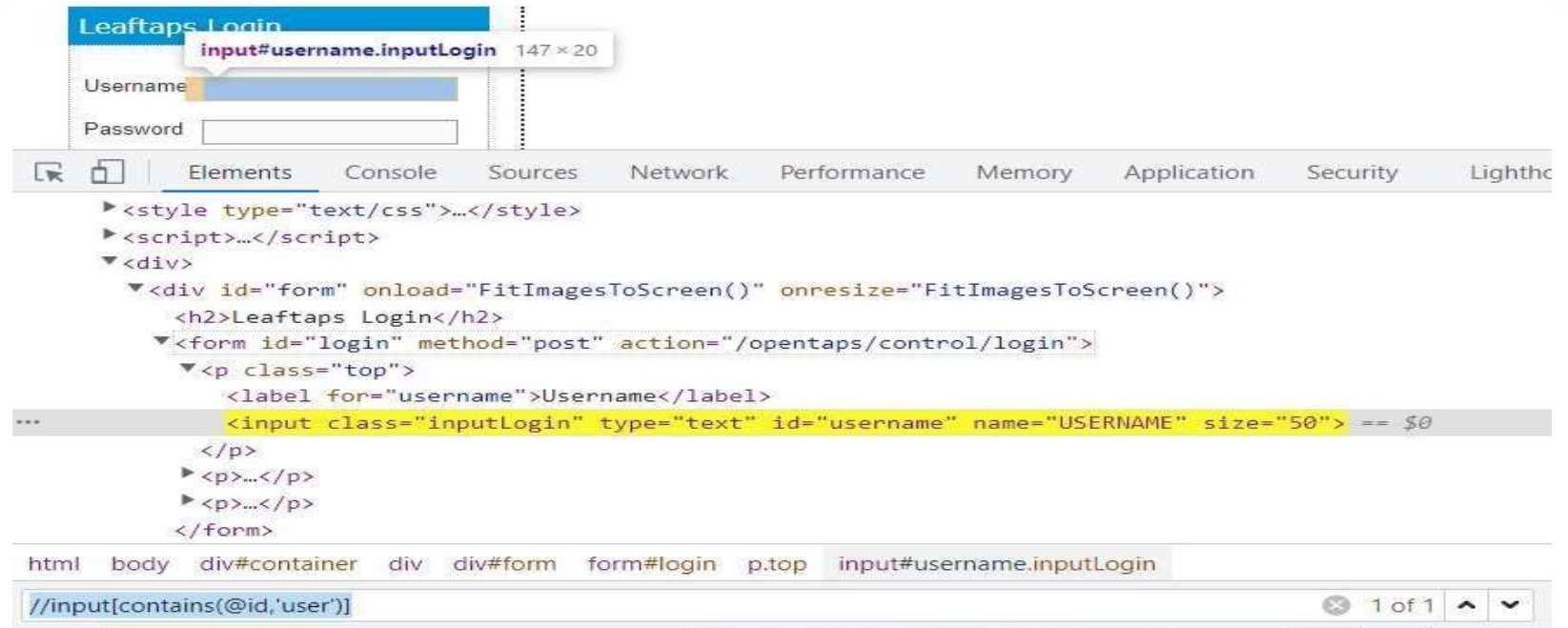
Example:

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

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
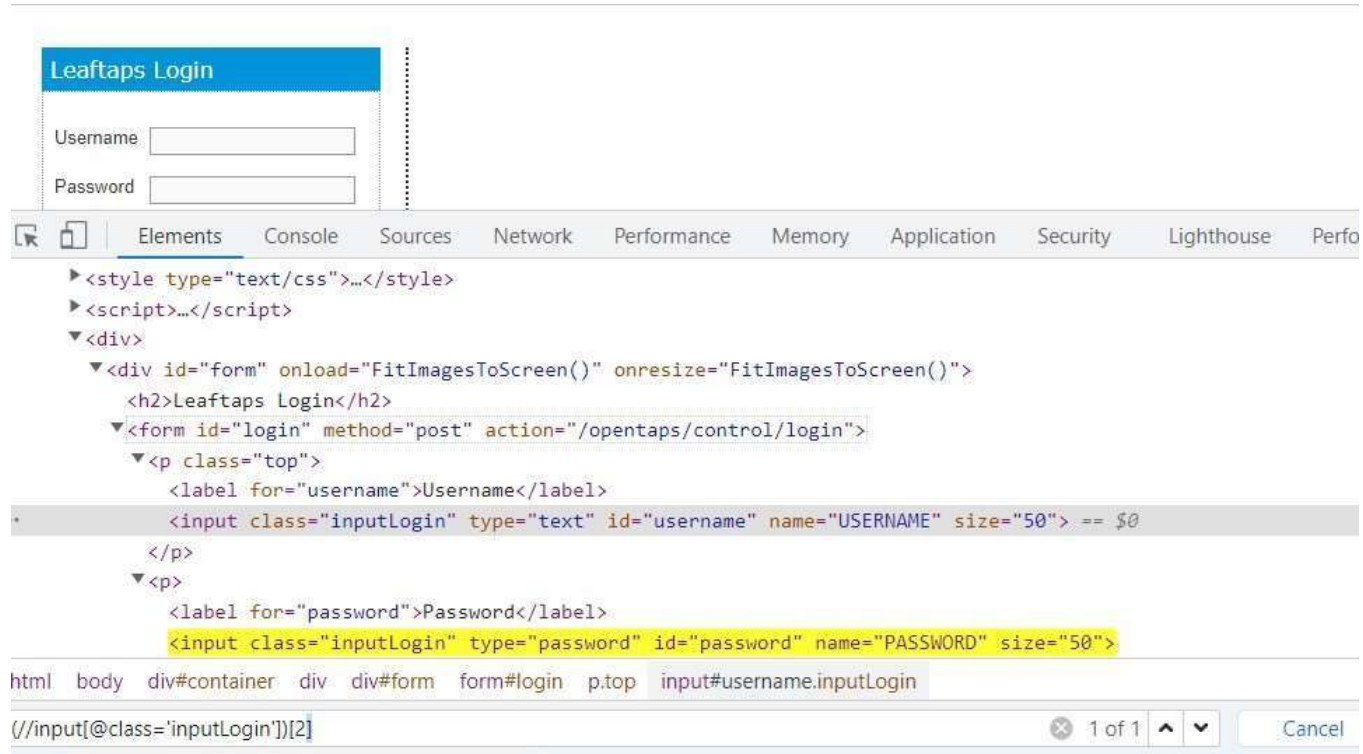
Collection Based Xpath:

-> when there is multiple

matches of found for a xpath

->uses index to match the excact

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**

Let's learn few actions & add a new Test

Practice a simple program by creating a lead in the Leaftap application and understand few actions:

- Typing
- Clicking
- Navigating