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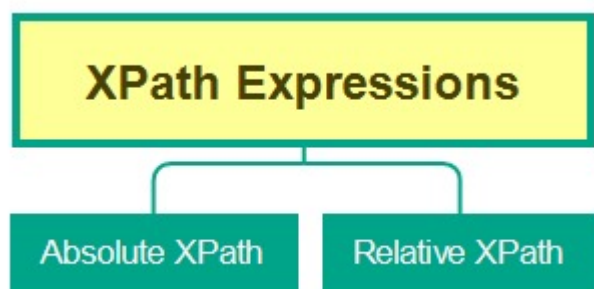
Selenium Java Training - Session 15 - XPath Expressions - Cheatsheet (Part 1)

XPath Expressions

Out of all the locators, XPath Expressions are the powerful locators and can be able to locate any type of UI element.

Types of XPath Expressions:

XPath expressions can be classified into the below two types:



- Absolute XPath
- Relative XPath

Absolute XPath

Using XPath Expressions, we can navigate through the HTML code and locate the desired element.

Absolute XPath tries to locate the element from the root. i.e. complete path.

The below examples will help us in understanding the Absolute XPath Expressions:

Demo site :: http://compendiumdev.co.uk/selenium/basic_web_page.html

- / - locates the entire HTML document
- /html - locates the complete HTML code
- /html/head - locates the head portion of HTML code
- /html/head/title - locates the title portion of head section
- /html/body - locates the body portion of HTML code
- /html/body/p - locates all the p tags in the body portion

- /html/body/p[1] - locates the first p tag
- /html/body/p[2] - locates the second p tag
- All p tags having id 'para1' - /html/body/p[@id='para1']
- All p tags having id 'para2' - /html/body/p[@id='para2']
- All p tags having class 'main' - /html/body/p[@class='main']
- All p tags having class 'sub' - /html/body/p[@class='sub']
- All p tags having id as 'para1' and class as 'main' - /html/body/p[@id='para1'][@class='main']

Using ChroPath for generating Absolute XPath

- Inspect 'Button2' button on the www.omayo.blogspot.com using auto-generate using ChroPath

Disadvantages of using Absolute XPath

- Generate Absolute XPath for 'Button2' button on the www.omayo.blogspot.com
- Change the location of the button on the www.omayo.blogspot.com
- Generate Absolute XPath again and compare the Absolute XPaths

Relative XPath

Unlike Absolute XPath, Relative XPath tries to locate the element directly instead of locating from root.

The below examples will help us in understanding the Relative XPath Expressions:

Demo site :: http://compendiumdev.co.uk/selenium/basic_web_page.html

- Generally Relative XPath Expression starts with '/'
- //html - locates the complete HTML code
- //head - locates the head portion of HTML code directly
- //body - locates the body portion of HTML code directly
- //title - locate the title portion of HTML code directly
- //p - locates all the Paragraphs on the page
- //p[1] - locates the first paragraph
- //p[2] - locates the second paragraph
- //p[@id='para1'] - locates the paragraph having the id attribute value as 'para1'
- //p[@id='para2'] - locates the paragraph having the id attribute value as 'para2'
- //p[@class='main'] - locates the paragraph having the class attribute value as 'main'
- //p[@class='sub'] - locates the paragraph having the class attribute value as 'sub'
- //p[@id='para1'][@class='main'] - locates all the p tags having id as 'para1' and class as 'main'

Using ChroPath for generating Relative XPath

- Inspect 'Button2' button on the www.omayo.blogspot.com and auto-generate using ChroPath

Advantages of using Relative XPath

- Generate Relative XPath for 'Button2' button on the www.omayo.blogspot.com

- Change the location of the button on the www.omayo.blogspot.com
- Generate Relative XPath again and compare the Relative XPaths

More Examples on XPath:

- Demonstrate at http://compendiumdev.co.uk/selenium/basic_web_page.html
 - All p tags having ids as 'para1' | 'para2' - `//p[@id='para1'] | //p[@id='para2']`
 - All p tags having ids as 'para1' or 'para2' - `//p[@id='para1' or @class='sub']`
- Demonstrate at <http://omayo.blogspot.in/>
 - All the input tags inside the HTML page - `//input`
 - Observe that matching nodes are 34
 - Observe that all the matching nodes are highlighted
 - Finding the first input tag inside the HTML page - `(//input)[1]`
 - Finding the eighth input tag inside the HTML page - `(//input)[8]`
 - Finding the last input tag inside the HTML page - `(//input)[34]`
 - Finding the input tags having name attribute - `//input[@name]`
 - Finding the input tags using its attribute name and value - `//input[@value='orange']`
 - Finding the input tags using multiple attribute names and values - `//input[@name='color'][@value='blue']`
 - Finding the input tags having checked attribute - `//input[@checked]`
 - All the image tags inside the HTML page - `//img`
 - Finding an image element using its attribute values - `//img[@height="200px"]`
 - Finding an drop down field having class 'combobox' and also an hyper link having value 'link2' - `//select[@class='combobox'] | //a[@value='link2']`
 - Finding hyper link having id='link1' and also the hyper link having value='link2' - `//a[@id='link1' or @value='link2']`
 - Finding 'button' tags having id 'but2' - `//button[@id='but2']`
 - Finding any tags having id 'but2' - `//*[@id='but2']`
 - Finding 'button' tags having any attribute value as 'but2' - `//button[@*='but2']`
 - Finding 'button' tags having id attribute with any value - `//button[@id]`

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