Xpath- Creating our own xpath.

Google search box-

//input[@name='q']

//div//input[@name='q']

Hey Dude, What is the difference between an XPath starting from ‘/’ and one starting from ‘//’?

* A single slash at the start of Xpath instructs XPath engine to look for element starting from root node. If we had written ‘/html/body’, it would have searched from the start of XML.
* A double slash at the start of Xpath instructs XPath engine to search look for matching element ANYWHERE in the XML document.

### *What does single-slash ‘/’ means if used inside the XPath?*

//table/tbody/tr/td[2]/div/input[@id='gbqfq']

It is saying like this. Hey XPath Engine. Find an element with ‘table’ tag ANYWHERE(//) in the document. Make sure that element has a immediate child element named as ‘tbody’. The ‘tbody’ element should have immediate child as ‘tr’. Hey stop here. Element ‘tr’ can have many immediate  children. I am interested in its SECOND ([2]) child element. This ‘td’ element should have a immediate ‘div’ child. And the next child in ancestor legacy should be ‘input’ element. And this  ‘input’ element should have ‘id’ property whose value should be ‘gbqfq’.

*construct partial Xpath by using following XPath functions –*

* contains()
* starts-with()
* text()
* wild-card \*
* Indexing

I often use "contains", but there are more. Here are some examples:

* multiple condition: //div[@class='bubble-title' and contains(text(), 'Cover')]
* partial match: //span[contains(text(), 'Assign Rate')]
* starts-with: //input[starts-with(@id,'reportcombo')
* value has spaces: //div[./div/div[normalize-space(.)='More Actions...']]
* sibling: //td[.='LoadType']/following-sibling::td[1]/select"
* more complex: //td[contains(normalize-space(@class), 'actualcell sajcell-row-lines saj-special x-grid-row-collapsed')]
* By.xpath("//td[contains(text(),'youruser')]") //here user text is case sensitive
* By.xpath("//td[contains(lower-case(text()),'youruser')]") //to handle case sensitivity. Here user is not case sensitive

|  |  |
| --- | --- |
| **Expression** | **Description** |
| *nodename* | Selects all nodes with the name "*nodename*" |
| / | Selects from the root node |
| // | Selects nodes in the document from the current node that match the selection no matter where they are |
| . | Selects the current node |
| .. | Selects the parent of the current node |
| @ | Selects attributes |

## Using single attribute

// tagname[@attribute-name=’value1’]

 Example

 // a [@href=’http://www.google.com’]

//input[@id=’name’]

//input[@name=’username’]

 //img[@alt=’sometext’]

## Using multiple attribute

//tagname[@attribute1=’value1’][attribute2=’value2’]

 Examples

//a[@id=’id1’][@name=’namevalue1’]

//img[@src=’’][@href=’’]

## Using contains method

**Syntax**

//tagname[contains(@attribute,’value1’)]

**Examples**

//input[contains(@id,’’)]

//input[contains(@name,’’)]

//a[contains(@href,’’)]

//img[contains(@src,’’)]

//div[contains(@id,’’)]

## Using starts-with method

**Syntax**

//tagname[starts-with(@attribute-name,’’)]

**Examples**

//id[starts-with(@id,’’)]

//a[starts-with(@href=’’)]

//img[starts-with(@src=’’)]

//div[starts-with(@id=’’)]

//input[starts-with(@id=’’)]

//button[starts-with(@id,’’)]

## Using Following node

**Syntax**

Xpath/following::again-ur-regular-path

**Examples**

//input[@id=’’]/following::input[1]

//a[@href=’’]/following::a[1]

//img[@src=’’]/following::img[1]

## Using preceding node

**Syntax**

Xpath/preceding::again-ur-regular-path

**Examples**

//input[@id=’’]/ preceding::input[1]

//a[@href=’’]/ preceding::a[1]

//img[@src=’’]/ preceding::img[1]

Examples:

.//div[@class='DayPicker-Month']

.//div[@class='DayPicker-Month']/div[@class]

.//div[@class='calender'] to find calender.

/div[@class='month']/table/thead/tr/th[@class='caption']

.//div[@class='DayPicker-Month']/div[@class='DayPicker-Caption']

datepicker-inner

skyscanner--

AUgust 2017

.//div[@class='datepicker-inner']//div[@class='calendar-info-bar datepicker\_clearfix']

button next

.//div[@class='datepicker-inner']//div[@class='calendar-info-bar datepicker\_clearfix']//button[@class='next']

css selector for next button

div.depart button[class\*='next']

current month

div.depart span[class='current']

google

//div[@class='gsfi']

//input[@id=’’]/following::input[1]

TRIPADVISER SITE CALANDER

to get the month title css

div span[class='dsdc-month-title']

for the day

div span[data-date='2017-10-30']