XPATH Cheat Sheet

Every element does not have an id -> static id, unique name, unique link text. For those elements we need to build xpath to find and then perform actions on them.

Whatever we use to find an element, id, name, xpath -> It should always be unique.

It should only find one matching node unless we want to capture a list of elements.

	attribute	Symbol used
1	Using id	use # symbol
2	Using class name	use . symbol
3	Using attribute	tagname[attribute='value']
4	Using multiple attribute	tagname[attribute1='value1'] [attribute2='value2']
5	Contains	* symbol
6	Starts with	^ symbol
7	Ends with	$ symbol

- XPath uses path expressions to select nodes in an XML document. The node is selected by following steps.

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

Difference between single '/' or double '//'

Single slash '/' anywhere in xpath signifies to look for the element immediately inside the parent element.

Double slash '//' signifies to look for any child or nestedchild element inside the parent element.

Syntax:

//tag[@attribute='value']

Relative xpath using single '/' for Login link

//div[@id='navbar']/div/div/div/ul/li[2]/a

Relative xpath using double '//' for Login link.

//div[@id='navbar']//ul/li[2]/a

Xpath	*CSS*	*Meaning*
//div	div	Locating element of particular Type(say div
/html	html	Whole web Page
Id('userName') Or //*[@id='userName']	#userName	Locating element with specific ID
//div[@id='userName']	div#userName	Locating elements of Particular type with a specific ID
//*[@class='userName']	.userName	Locating element with specific Class
//div[@class='userName']	div.userName	Locating elements of Particular type with a specific Class
//div//a	div a	Locating descendant element of particular type
//div/a	div > a	Locating direct child element of particular type
//a[@title]	a[title]	Locating elements of particular type with specific attribute
//a[@title='clickMe']	a[title= "clickMe"]	Locating elements of particular type with specific attribute value
//a[contains(@title, 'clickMe')]	a[title*="clickMe"]	Locating elements of particular type that have a attribute which contains a specific value
//*[@checked]	*:checked	Checkbox or radio button that is checked

Don't use "*", always use the tag name.

Using Text of the element to build xpath

Finding Login link:

//div[@class='homepage-hero']//a[text()='Enroll now']

Using Contains to find the elements:

Syntax: //tag[contains(attribute, 'value')]

Finding Login link:

//div[@id='navbar']//a[contains(text(),'Login')]

//div[@id='navbar']//a[contains(@class,'navbar-link') and contains(@href,'sign_in')]

Using Starts-With to find the elements:

Syntax: //tag[starts-with(attribute, 'value')]

Finding Login link:

//div[@id='navbar']//a[starts-with(@class,'navbar-link')]

Parent
Syntax: xpath-to-some-element//parent::<tag>
Preceding Sibling
Syntax: xpath-to-some-element//preceding-sibling::<tag>
Following Sibling
Syntax: xpath-to-some-element//following-sibling::<tag>
Exercise:
http://letskodeit.teachable.com/pages/practice
Find the price of the course “Python Programming Language”
Solution:
//table[@id='product']//td[text()='Python Programming Language']//following-sibling::td
http://dhtmlx.com/docs/products/dhtmlxGrid/
Find Author of the book “The Green Mile”
Solution:
//div[@id='gridbox']//a[text()='The Green Mile']//parent::td//following-sibling::td[1]