**XPATH**

WebDriver uses XPath to identify a WebElement on the web page. XPath is a short name for the XML path. The HTML for our web page is also one form of the XML document.

XPATH is of two types

Absolute xpath:- an xpath started from root tag i.e html we call it as absolute xpath.

Relative xpath: is having part of xpath.

* The root element is identified as //
* To identify all the div elements :- //div
* To identify the link tags that are within the div element :- //div/a
* To identify all the elements with a tag, we use \*. The syntax will be //div/\*
* To identify all the div elements that are at three levels down from the root:- //\*/\*/div
* To identify specific elements, we use attribute values of those elements :- //div/a[@id='attrValue'] , this will return the anchor element.

Reference:- http://www.w3schools.com/xsl/xpath\_intro.asp

**CSS**

WebDriver uses CSS to identify a WebElement on the web page. CSS is slightly faster than the By.xpath locating mechanism.  Following are the commonly used syntaxes to identify elements:

**DirectChild:-**

  XPATH is defined by the use of a "/", while on CSS, it’s defined using ">"

Xapth :- //div/a

Css :- div > a

**Child or SubChild:-**

If an element could be inside another or one its childs, it’s defined in XPATH using “//” and in CSS just by a whitespace.

//div//a

css=div a

**Id**

An element’s id in XPATH is defined using: “[@id='example']” and in CSS using: “#”

//div[@id='example']//a

css=div#example a

**Class**

For class, things are pretty similar in XPATH: “[@class='example']” while in CSS it’s just “.”

//div[@class='example']//a

css=div.example a

**Firebug**

Firebug is a add on to the firefox browser which is used to identify the xpath of an element

**Profile:-**