XPather Cheatsheet

- <u>XPather</u>
- XPath
- RegExp

XPather 1.4 Overview

XPather v1.4 main features overview.

- DOMInspector navigation toolbar (XPath Toolbar)
- Customizable XPath generation (XPath toolbar menu)
- XPath evaluation
- XPath/Regexp syntax checking
- Feature rich XPath results Browser
- Selects XPath results in the DOMInspector
- Relative XPath support (Parent Toolbar)
- Namespaces and default namespaces

- Frames, IFrames support
- Cross-frame evaluation
- Optional RegExp content matching
- Content extraction tool (text, HTML, WebClip, ...)
- Accessible from DOM Inspector, or browser context menu
- This cheetsheet;)

For complete documentation go the XPather web documentation!

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XPath Overview

The XPather uses XPath engine provided by Gecko. XPath is a <u>W3C standard</u>. XPath examples

```
//hr[@class='edge' and position()=1]
      every first hr of 'edge' class
//table[count(tr)=1 and count(tr/td)=2]
     all tables with 1 row and 2 cols
//div/form/parent::*
     all divs that have form
./div/b
     a relative path
//table[parent::div[@class="pad"] and not(@id)]//a
     any anchor in a table without id, contained in a div of "pad" class
/html/body/div/*[preceding-sibling::h4]
      give me whatever after h4
//tr/td[font[@class="head" and text()="TRACK"]]
     all td that has font of a "head" class and text "TRACK"
./table/tr[last()]
     the last row of a table
//rdf:Seq/rdf:li/em:id
     using namespaces
//a/@href
```

```
hrefs of all anchors
//*[count(*)=3]
    all nodes with 3 children
//var|//acronym
    all vars and acronyms
```

XPath functions

```
XPath functions.
Conversion:
                             String:
    boolean( [object] )
                                 contains( haystack-
    string( [object] )
                                 string
    number( [object] )
                                 needle-string )
Math:
                                 concat( string1
    ceiling( number )
                                 string2 [
    floor( number )
                                 stringn]*
    round( decimal )
                                 normalize-space(
    sum( node-set )
                                 string )
                                 starts-with(haystack
Logic:
    true()
                                 needle)
                                 string-
    false()
                                 length( [string] )
    not( expr )
                                 substring(string
Node:
                                 start [
    lang(string)
    name([node-set])
                                 length])
                                 substring-
    namespace-uri([node-
                                 after(haystack
    set])
                                 needle)
    text()
                                 substring-
Context:
                                 before(haystack
    count(node-set)
                                 needle)
    function-
                                 translate( string
    available( name )
                                 abc
    last()
                                 XYZ)
    position()
```

XPath axes

Axes are relations two nodes. Each axis has also shortcut (in parenthesis).

XPath Axes.

| ancestor | following |
|-----------------------------------|---------------------------------------|
| • ancestor-or-se | <pre>lf • following-sibling</pre> |
| • attribute(@) | parent() |
| • child (/) | preceding |
| descendant (//) | preceding-sibling |
| • descendant-or-s | self • self(.) |

Regular Expressions

More precisely: regular expresions in JavaScript, as the XPather requires regexps in JavaScript literal format, that is:

```
/.*/
matches everything
/ab+c/i
atches abc, abbc, ABbc

Processing modifiers.

g
global match
i
ignore case
m
match over multiple
lines
```

Special characters in regular expressions.

| | [xyz] |
|--|---|
| * | character set, match any char from <i>xyz</i> [^ <i>xyz</i>] |
| 0 or more | complemented character set |
| 1 00 77077 | [\b] |
| 1 or many ? | backspace \b\B |
| 0 or 1 | word boundary |
| {n} exactly n | \c X control character X in a string |
| $\{n,\}$ | \d\D |
| n or more | digit = [0-9]; not digit |
| {n,m} n to m | form feed |
| \ | \n |
| meta character for special chars, or "take literally" otherwise | linefeed \r |
| ٨ | carriage return, |
| begining; or negation in character set \$ | \s \S single whitespace = |
| match end; EOL if multiline | [\f\n\r\t\v\u00A0\u2028\u2029] |
| · | \t |
| any char (x) | tab \v |
| group; match & capture <i>x</i> | vertical tab |
| (?: x) group; match x (dont capture) | \w \W word char=alphanumeric char+_= [A- |
| x(?=y) | Za-z0-9_] |
| match x if followed by y $x(?!y)$ | \n group back reference (number, left |
| x(x,y) match x if not followed by y | count) |
| x y | \0 |
| x or y | null \x <i>hh</i> \u <i>hhhh</i> |
| | hex code char |

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