XPath/CSS Cheatsheet

Node Selection

Node selection allows you to select nodes based on their element names or hierarchy.

XPath: //element

CSS: element

Selects all element nodes in the document.

XPath: /element

Selects the root element element.

XPath: //parent/element

CSS: parent element

Selects all element nodes that are children of a parent node.

XPath: //*
CSS: *

Selects all elements in the document.

Example

To select all div elements in a document:

CSS: div XPath: //div

Position-based Selection

Position-based selection allows you to select elements based on their position within their parent or among their siblings.

XPath: [1]

CSS::first-of-type

Selects the first element of its type among its siblings.

XPath: [n]

CSS: :nth-of-type(n)

Selects the nth element of its type among its siblings.

XPath: [last()]
CSS: :last-of-type

Selects the last element of its type among its siblings.

XPath: //*[1]
CSS: :first-child

Selects the first child element of its parent.

XPath: //*[last()]
CSS: :last-child

Selects the last child element of its parent.

Example

To select the first p element: CSS: p:first-of-type XPath: //p[1]

Attribute Selection

Attribute selection allows you to select elements based on the presence or value of their attributes.

XPath: //*[@attribute]

CSS: [attribute]

Selects all elements with the specified attribute.

XPath: //element[@attribute]

Selects all element nodes with the specified attribute.

XPath: //*[@attribute="value"]
CSS: [attribute="value"]

Selects all elements where the attribute is equal to "value".

XPath: //element[@attribute="value"]

Selects all element nodes where the attribute is equal to "value".

Example

To select all elements with a class of example:

CSS: [class="example"]

XPath: //*[@class="example"]

Attribute Value Matching

Attribute value matching allows you to select elements based on partial matches of attribute values.

XPath: [starts-with(@attribute, "value")]

CSS: [attribute^="value"]

Selects elements where the ${\tt attribute}$ value starts with "value".

XPath: [ends-with(@attribute, "value")]

CSS: [attribute\$="value"]

Selects elements where the attribute value ends with "value".

XPath: [contains(@attribute, "value")]

CSS: [attribute*="value"]

Selects elements where the attribute value contains "value".

Example

To select elements with a class that starts with btn: CSS: [class^="btn"]

XPath: [starts-with(@class, "btn")]

XPath Operators & Functions

XPath includes various operators and functions to manipulate and evaluate node sets, strings, and more.

Comparison Operators:

=, !=, <, >, <=, >=

Used for comparing values in predicates.

Logical Operators:

 $\verb"and", \verb"or", \verb"not"()$

Combine or negate conditions in predicates.

Node Set Functions:

count(node-set)

Returns the number of nodes in the node-set.

osition(

Returns the position of the current node in the context of the current node list.

String Functions:

 ${\tt contains(string1, string2)}$

Checks if string1 contains string2.

starts-with(string1, string2)

Checks if string1 starts with string2.

ends-with(string1, string2)

Checks if string1 ends with string2.

substring(string, start, length)

Extracts a substring from string.

string-length(string)

Returns the length of string.

 ${\tt concat(string1, string2, \ldots)}$

Concatenates strings.

Example

To check if a string attribute contains the value example:

XPath: [contains(@attribute, "example")]

