

Xpath

Xpath

Xpath is used to traverse the elements of an XML document

Xpath expression

- Uses path notation
- Will evaluate to a node-set, boolean, number, or string

Syntax - Location Path

A location path is an XPath expression used for selecting a set of nodes relative to the context node

- Relative path - selects nodes relative to it's context
locationstep/locationstep/locationstep
- Absolute path - starts at the root node
/locationstep/locationstep/locationstep
- Double slash path - selects nodes anywhere in the tree
//rooms would select all rooms nodes regardless of where they are nested within the XML

Syntax - Location Steps

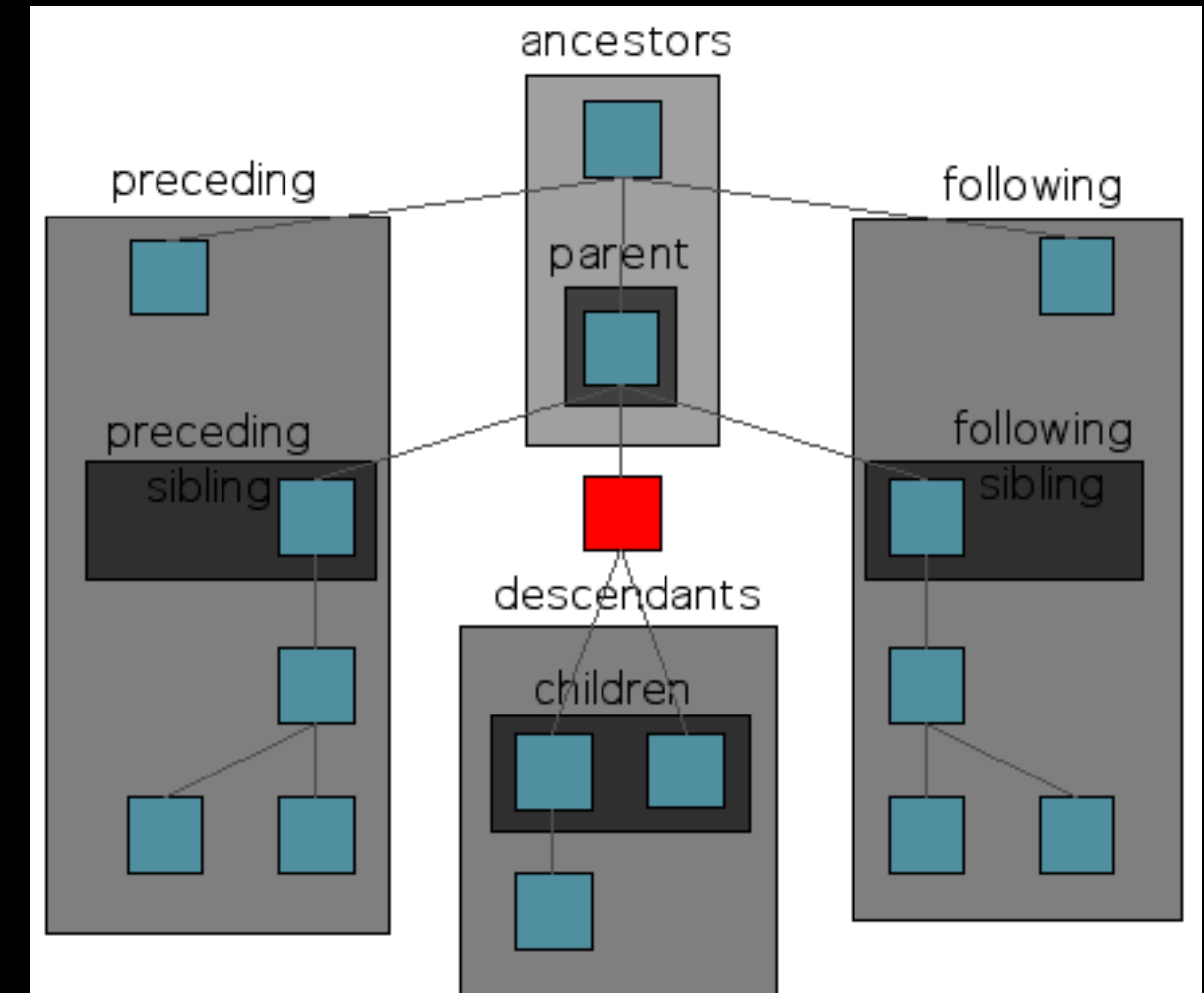
`axis::nodetest[predicate]`

- axis - relationship between the context node and the nodes to be selected
- nodetest - the name of the node
- predicate - expression to refine the set of nodes selected by the location step

Axes are relationships

Axes have a direction of forward or reverse*

- ancestor*
- ancestor-or-self*
- attribute
- child
- descendant
- descendant-or-self
- following
- following-sibling
- parent
- preceding*
- preceding-sibling*
- self



Abbreviation	Equivalent with Axes
../name	parent::name
name	child::name
//name	descendant::name
.	self::node()
*	child::*
@*	attribute::*
@name	attribute::name

Axis examples in Raynor

```
<xsl:if test="child::page[not(@exclude='true')]"><xsl:text>parent </xsl:text></xsl:if>
```

the current context has children that do not use the exclude="true" attribute. Could this be written as test="page[not(@exclude='true')]"?

Axis examples in Raynor

```
<xsl:if test="descendant-or-self::page[@id = //pageinfo/@id]"><xsl:text>current</xsl:text></xsl:if>
```

page node or a descendant of the page node has an id equal to the pageinfo id attribute

Nodetest

The node test is the only required portion of an XPath location step

- The actual name of the node or an asterisk
- The node that we are testing against
- Use @ for attributes

Predicates []

An expression enclosed in square brackets that results in a boolean value

- `//nav/page[1]` or `//nav/page[position()=1]` selects the first page node
- `//nav/page[last()]` selects the last page node
- `//nav/page[@id=56]` selects the last page with an id of 56
- `//nav/page[@id=//pageinfo/@id]` can have an whole other path within a predicate

Chrome Extension

[https://chrome.google.com/webstore/detail/xml-tree/
gbammbeopgpmaagmckhpjbfgdfkpadb](https://chrome.google.com/webstore/detail/xml-tree/gbammbeopgpmaagmckhpjbfgdfkpadb)



Thanks!