

# Node selector

Expression	Description
/	Selects the <i>document root</i> node (absolute path)
<i>node</i>	Selects the node (relative path)
//	Selects all descendent nodes of the current node that match the selection
.	Selects the current node
..	Selects the parent of the current node
@	Selects attribute nodes

# Node selector: exercise

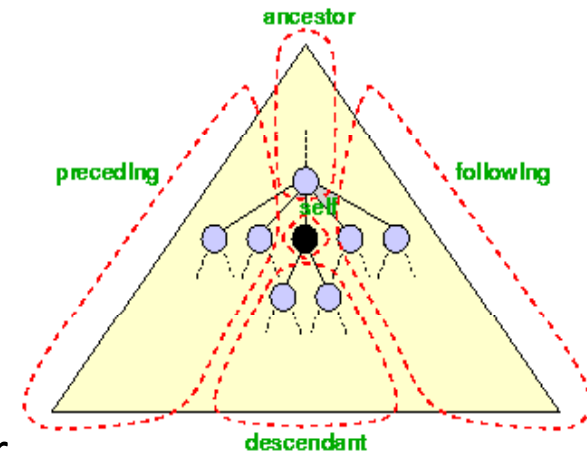
Result	Path Expression
Selects the <i>document root</i> node	? ?
Selects the <i>bookstore element</i> node	? ?
Selects all <i>book element</i> nodes	? ?
Selects all <i>price element</i> nodes	? ?
Selects all <i>lang attribute</i> nodes	?
?	././.
?	/bookstore//@lang/./..
?	<u><a href="#">./book/tilte/@lang</a></u>

# Node selector: more exercise

Result	Path Expression
Selects <i>text</i> nodes of all <i>price element</i> nodes	?
Select all child nodes of <i>book element</i> nodes	?
Select all <i>comment</i> nodes	?
Select all nodes except attribute nodes	?
Select all attribute nodes	?
?	/bookstore/book/text()
?	/bookstore/book/title/..//@*

# Complete set of Axes

- ***self*** -- the context node itself
  - ***child*** -- the children of the context node
  - ***descendant*** -- all descendants (children+)
  - ***parent*** -- the parent (empty if at the root)
  - ***ancestor*** -- all ancestors from the parent to the root
  - ***descendant-or-self*** -- the union of descendant and self
  - ***ancestor-or-self*** -- the union of ancestor and self
- 
- ***following-sibling*** -- siblings to the right
  - ***preceding-sibling*** -- siblings to the left
  - ***following*** -- all following nodes in the document, excluding descendants
  - ***preceding*** -- all preceding nodes in the document, excluding ancestors
  - ***attribute*** -- the attributes of the context node



# Axes: exercise

Result	Path Expression
Selects <i>book element</i> nodes	?
Select all <i>isbn attribute</i> nodes	?
Select <i>title</i> <b>and</b> <i>price element</i> nodes	?
?	/child::book
?	/bookstore/book/following-sibling::book
?	/bookstore/node()/descendant-or-self::node()
?	/descendant::title/@*/parent::title/following::node()

# Predicate: summary

- ***[position() op #], [last()]***
  - op: =, !=, <, >, <=, >=
  - test position among siblings
- ***[attribute::name op "value"]***
  - op: =, !=, <, >, <=, >=
  - test equality of an attribute
- ***[axis:nodeSelector]***
  - test pattern

# Predicate: exercise

Result	Path Expression
Selects the first <i>book element</i> that is the child of the bookstore element.	?
	?
Select <i>book element</i> nodes which has a child <i>title element</i> with <i>lang</i> attribute value no equal to “eng”.	?
Selects the second to last <i>book element</i>	?
Selects all nodes which have an attr	?
Selects nodes with an attribute named <i>lang</i> or has a child element named <i>price</i> .	?
Selects all the <i>title element</i> of all <i>book elements</i> with a price greater than 35.00	/bookstore/book[price>35.00]/title
?	/bookstore/book[position()>1 and attribute::isbn="111111"]
?	/bookstore/book/title[last()]