

XPath



XML

```
<notes>
<notes>
<notes>
<to id="1"> Knysliukas </to>
<to id="2"> Drakonas </to>
<from> Pukuotukas </from>
```

</notes>

</note>



Selecting

| Expression | Selects |
|------------|---|
| nodename | all child nodes of the named node |
| / | from the root node |
| // | nodes in the document from the current node that match the selection no matter where they are |
| | the current node |
| | the parent of the current node |
| @ | attribute |



Examples

| Path Expression | Result |
|-----------------|--|
| note | Selects all the child nodes of the 'note' element |
| /notes | Selects the root element 'notes' Note: slash (/) represents an absolute path |
| note/to | Selects all 'to' elements that are children of 'note' |
| //note | Selects all 'note' elements no matter where they are in the document |
| note//to | Selects all 'to' elements that are descendant of the 'notes' element, no matter where they are under the 'notes' element |
| //@lang | Selects all attributes that are named lang |



XML

```
<notes>
  <note>
    <to id="1"> Knysliukas </to>
    <to id="2"> Drakonas </to>
    <from> Pukuotukas </from>
```

</notes>

</note>



- note/to[1]
- note/to[last()-1]
- note/to[position()<5]</p>
- //message[@lang]
- //message[@lang='eng']
- note/message[weight>35.00]/title



note/to[1]

- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



note/to[last()-1]

- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



note/to[position()<5]

- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



- //message[@id]
- //@id
- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



- //message[@lang='eng']
- //to[@id='2']
- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



note/to[1]

- <notes>
- <note>
- <to id="1"> Knysliukas </to>
- <to id="2"> Drakonas </to>
- <from> Pukuotukas </from>
- </note>
- </notes>



Signs

| | Description |
|--------|----------------------|
| * | any element node |
| @* | any attribute |
| node() | any node of any kind |
| | combines two sets |



</notes>

XML

```
<notes>
  <note>
    <to> Knysliukas </to>
    <to> Drakonas </to>
    <from> Pukuotukas </from>
  </note>
```



Relationship of Nodes

- Parent
- Children
- Siblings
- Ancestors
- Descendants



Axes

- ancestor
- attribute
- Child

- child::book
- child::*
- ancestor::book
- child::*/child::price