

A7B36XML, AD7B36XML: XML Technologies

Practical Classes 9 and 10:

XQuery

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<http://www.ksi.mff.cuni.cz/~svoboda/courses/2016-2-A7B36XML/>

Expressions

- XQuery expressions
 - **XPath** path expressions
 - Computed and direct **constructors**
 - **FLWOR** expressions
 - **Conditional expressions**
 - Universal and existential **quantifiers**

Constructors

- **Direct constructors**

```
<element>
  <element attribute="value">
    text
    { nested XQuery expression }
  </element>
  <!-- comment -->
  <?target data?>
</element>
```

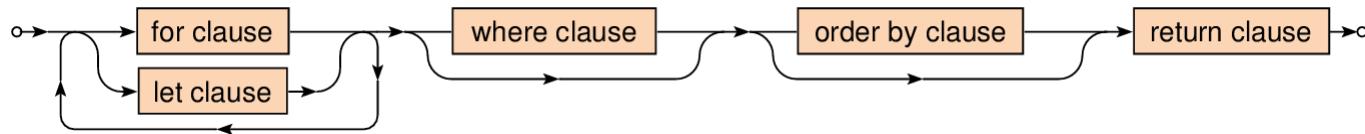
Constructors

- **Computed constructors**

- `document { content }`
- `element name { content }`
- `attribute name { value }`
- `text { text }`
- `comment { text }`
- `processing-instruction { target } { content }`

FLWOR Expressions

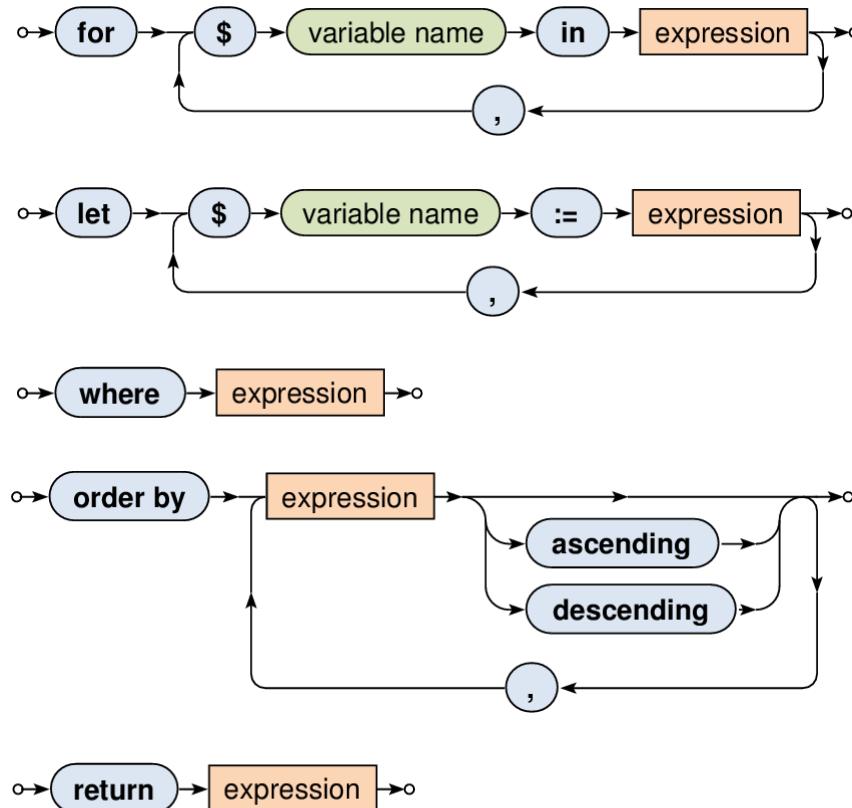
- **FLWOR clauses**



- **FOR** clause: items selection
- **LET** clause: auxiliary assignments
- **WHERE** clause: filtering conditions
- **ORDER BY** clause: result ordering
- **RETURN** clause: result construction

FLWOR Expressions

- **FLWOR clauses**



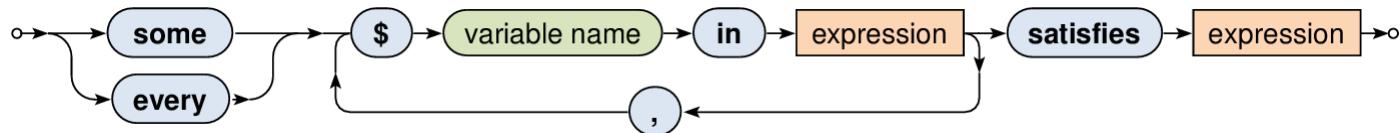
Other Constructs

- **Conditional expressions**



- **Quantified expressions**

- Existential / universal quantifier



Comparisons

- **Value comparison**
 - eq, ne, lt, le, ge, gt
- **General comparison**
 - =, !=, <, <=, >=, >
- **Node comparison**
 - is, <<, >>

