

Querying XML

XPath

Querying XML

Not nearly as mature as Querying Relational

- Newer
- No underlying algebra

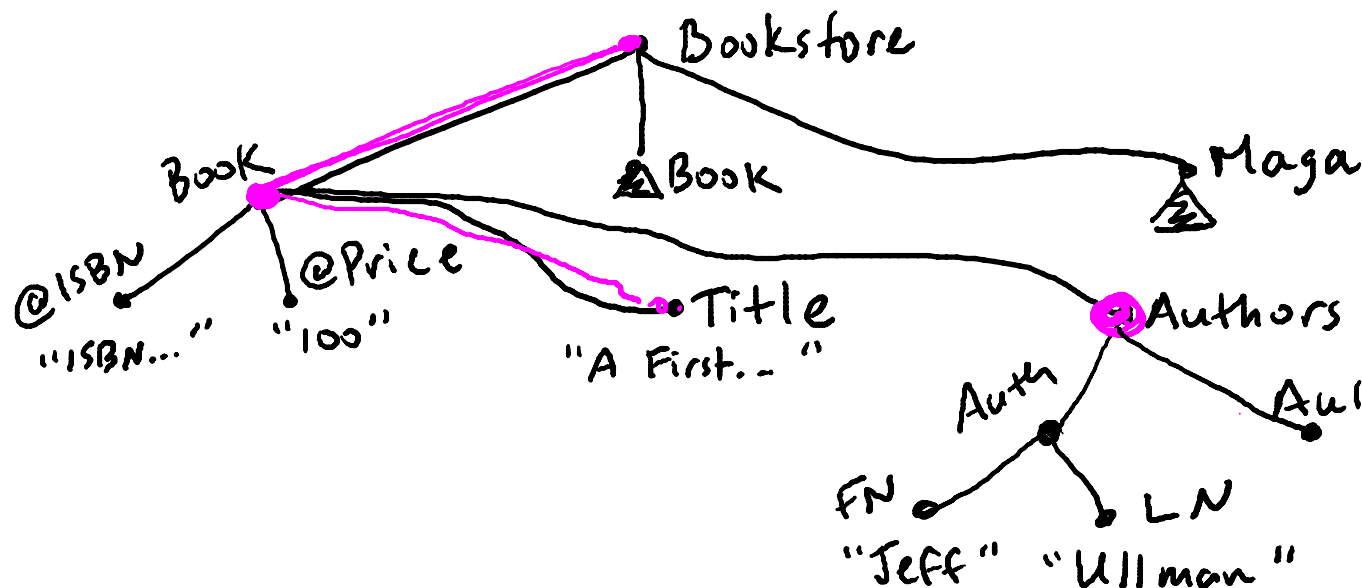
Sequence of development

- ① XPath — path expressions + conditions
- ③ 2. XSLT — XPath + transformations, output formatting
- ② 3. XQuery — XPath + full-featured Q.L.

XLink, XPointer

XPath = Path expressions + Conditions

Think of XML as a tree



Basic
Constructs

[N]

[3]

XPath = *Path expressions* + *Conditions*

Built-in functions (lots of them)

contains(s1, s2)
name()

Navigation “axes” (13 of them)

parent::

following-sibling::

descendants::

self::

//



More Details

XPath queries operate on & return *sequence of elements*

- XML document
- XML stream

Sometimes result can be expressed as XML, not always

Demo: XPath examples
over bookstore data