Ordered Lists as Fundamental Concept

RDF Next Step Workshop
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Ordered Lists as Fundamental Concept

• Ordered collections are important
• Ordered collections are used in many standard interchange formats
• In contrast almost everything in XML is ordered unless stated otherwise
• XML developers need good support for ordered collections before they would consider moving to RDF
Ordered Lists as Fundamental Concept

\[
\text{\textit{<basket> <hasFruit> ( <banana> <apple> <pear> )}.}
\]

\[
\text{\textit{<basket> <hasFruit> _:b1 .}
\text{\textit{_b1 rdf:first <banana> ; rdf:rest _:b2 .}
\text{\textit{_b2 rdf:first <apple> ; rdf:rest _:b3 .}
\text{\textit{_b3 rdf:first <pear> ; rdf:rest rdf:nil}.}
\]}
\]
Ordered Lists as Fundamental Concept

- RDF Term
- Node
  - IRI
  - Blank
- Literal
  - Plain
  - Typed
- List
Ordered Lists as Fundamental Concept

- Ordered lists as an RDF term
- Treat ordered lists as a single term
- All RDF formats must be able to serialize ordered lists
  - May use rdf:first/rdf:rest vocab
- Parsers should parse lists as a term
  - This includes rdf:first/rdf:rest vocab
- Writes should use compact list syntax
SPARQL

- SPARQL should treat lists as a single term
- All SPARQL responses should include the complete list if a list at all
- SPARQL result XML must have a syntax for lists
Thanks