Semantic Wiki characteristics

Collaboration
- Inconsistencies
- Disagreement

Work in progress
- Emerging content
- Emerging semantics

Social relationships
- Varying user expertise
- Connections between users

Heterogenous data
- Formal and informal annotation
- Text and multimedia
- Document structure

KiWi Querying: KWQL

KWQL can access all elements the user interacts with
- Combination of selection criteria from several data sources in one query
- Combined querying of text, annotation and meta data
- Querying of informal to formal annotations
- SPARQL integration
- Querying of user approval and conflicts

KWQL Examples

Java
Select documents containing "Java"

author:"Mary"
Select documents authored by Mary or containing tags assigned by Mary

ci(text:Java OR (tag(name:XML) AND author:Mary))
Select documents that either have "Java" in their text or that have the tag "XML" and were authored by Mary

ci(tag(name:Java) link(target:ci(title:Lucene) tag(name:uses)))
Select documents with the tag "Java" that contain a link tagged "uses" to a document with the title "Lucene"

ci(author:$A text:$A OPTIONAL tag(name:$T))
Bind variable $A to the names of authors whose name also appears in the text and, if the document has any tags, bind variable $T to their names.

Use SPARQL to retrieve all document titles

ci(title:$A author:$A)
Retrieve the titles and authors of all documents and display them in a new document

KWQL as a basis for reasoning

Querying induces reasoning
- Data selection is the basis of further processing
- Rules give rise to a simple kind of reasoning
- Users should not need to learn two separate languages

Current Status
- KWQL grammar defined
- Parser and semantic verification implemented
- Implementation underway