

# Setting up an Interactive Track at INEX

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*SIGIR 2004 Workshop on Information Retrieval in Context*

## An Outline

- Some background about INEX
- Why an Interactive Track at INEX?
- Context in XML IR
- A methodology for the track
- Future directions

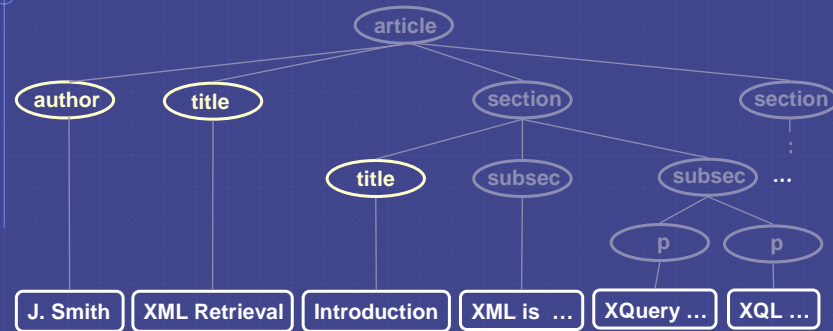
## Initiative for the Evaluation of XML Retrieval

- International effort for research into XML retrieval
  - focus on evaluation procedures: test collection, effectiveness metrics
- Test collection
  - 12,107 documents from IEEE CS journals
  - topics developed and assessed by participants

## More on Topics & Assessments

- Two types of topics are considered:
  - content-only (CO)
  - content and structure (CAS)
- Assessment procedure:
  - assessments non-binary (0-3)
  - 2 dimensions of relevance: exhaustivity & specificity

## XML Information Retrieval



- What document elements to retrieve
- How to deal with element overlap

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5

## Context in XML IR

- The nature of XML documents
  - structure of documents
  - entry points, granularity of returned elements
  - overlap between returned elements
  - internal and external links from documents
- The effect of such a context on user behaviour is still relatively unknown

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6

## Aims for the Interactive Track

- Investigate behaviour of searchers when interacting with XML components
  - focus for INEX 2004
  - applications to INEX effectiveness metrics
- Investigate & develop effective approaches for interactive XML IR
  - ongoing effort mainly for future tracks

## Track Methodology for INEX 2004

- Content-only Topics
  - topic type an additional source of context
    - e.g. Background topic / Difference topic
  - 2 topic types, 2 topics per type
  - 2004 INEX topics have added task information
- Searchers
  - searcher experience an additional source of context
    - may be limited due to the nature of the IEEE collection

## Topic Example

**<title>**+new +Fortran +90 +compiler**</title>**

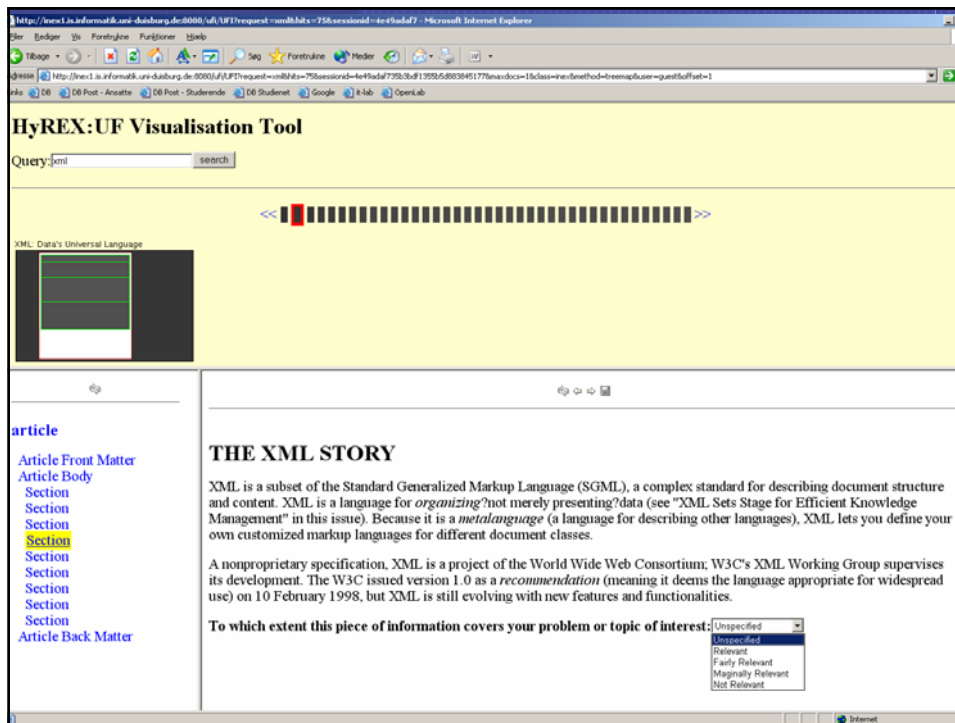
**<description>** How does a Fortran 90 compiler differ from a compiler for the Fortran before it. **</description>**

**<narrative>** I've been asked to make my Fortran compiler compatible with Fortran 90 so I'm interested in the features Fortran 90 added to the Fortran standard before it. I'd like to know about compilers (they would have been new when they were introduced), especially compilers whose source code might be available. Discussion of people's experience with these features when they were new to them is also relevant. An element will be judged as relevant if it discusses features that Fortran 90 added to Fortran. **</narrative>**

**<keywords>**new Fortran 90 compiler**</keywords>**

## Track Methodology for INEX 2004

- IR System
  - Based on HyRex (University of Duisburg)
  - Considered a "baseline" system
- Local approaches
  - not necessary for participation this year



## Data Gathering

- System logging
  - Query terms
  - Viewed and assessed components
  - Everything time stamped
- Questionnaires
- Informal interviews

## Future Directions

- Exploit the data collected in INEX 2004
  - user models for developing metrics
  - compare relevance assessments
- Concentrate on interactive approaches for XML IR
  - similar model to interactive TREC
  - expand across different collections, task types, systems, ...

## Summary

- Interactive track at INEX 2004
  - study user behaviour when interacting with XML documents
  - aim to use data for:
    - development of user models for effectiveness metrics
    - understanding the effect of *context* on user behaviour
  - Context: tasks, searchers, documents