Semistructured Data
Lecture with exercises (VU 2.0)

http://www.dbai.tuwien.ac.at/education/ssd/

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Course procedure

- Register to the course in TISS until 17th March 2016. Adding the course to your favorites is not a registration!
- Every lecture and general instructions to the exercises are given on Thursdays starting at 9:15 a.m. (sharp) until 10:45 a.m. in HS8 (Heinz Parkus), Karlsplatz 13.
- The assignment discussion for the exercise is going to be in the Informatiklabor (Favoritenstraße 9–11).

Course contents

- Basics
    - XML, JSON
    - XML Namespaces
- Schema languages
    - DTD
    - XML Schema
- APIs
    - SAX
    - DOM
- Query languages
    - XPath
    - XQuery
    - XSLT

Textbooks

- **XML in a Nutshell**

  Eliotte Rusty Harold, W. Scott Means
  O'Reilly, 3rd Edition, 2004

  German Edition is currently out of print, but can be bought as an eBook:

  `http://www.oreilly.de/catalog/pdf_xmlnut3ger/`

- **Java und XML** (German)

  M. Scholz und S. Niedermeier
  Galileo Computing, 2nd Edition, 2009

- **XQuery** (English)

  P. Walmsley
  O'Reilly, 1st Edition, 2007

Further Resources

- W3C Recommendations
    - http://www.w3.org/TR/xml/
    - http://www.w3.org/TR/xml-names/
    - http://www.w3.org/TR/xmlschema-0/
    - http://www.w3.org/DOM/
    - http://www.w3.org/TR/xpath
    - http://www.w3.org/TR/xpath20/
    - http://www.w3.org/TR/xslt
    - http://www.w3.org/TR/xquery/
- Additionally:
    - http://www.json.org/
    - http://www.saxproject.org/
    - http://w3schools.com/
    - http://www.cafeconleche.org/books/xmljava
      (Online version of the book "Processing XML with Java")

Exercises
General procedure

Two exercises are to be solved individually.

- Exercises are going to be discussed with our teaching assistants.
- The details of the assignment will be provided on our course webpage.
- Registration for the assignment discussion will be through TUWEL.
- A change of the date and time for the assignment discussion is possible until the day before.
- Missing the assignment discussion means 0 points on the exercise.

Exercises

How to obtain good solutions

- Recommended strategy:
    - Discuss with your colleagues
    - But, write your own solution
- Unrecommended strategy:
    - Copy solutions from others
- For ambiguities and questions:
    - Ask in the next lecture
    - use the TUWEL forum
    - write an e-mail: ssd@dbai.tuwien.ac.at

Exercises
Important dates

- Exercise 1:
  - Due by 5/5/2016
  - Assignment discussions start on 9/5/2016 until 20/5/2016
- Exercise 2:
  - Due by 8/6/2016
  - Assignment discussions start on 10/6/2016 until 21/6/2016
- Assignment discussions:
  - In the Informatiklabor (exact location announced in TUWEL) with the teaching assistants
  - Bring your student identity card
  - Teaching assistants check your solutions on completeness and correctness
  - Teaching assistants also ask questions about the underlying principles

Exercises

Grading

- Points:
    - Exercise 1: 0–10 points
    - Exercise 2: 0–15 points
- Points are awarded for the written solutions and for the answers to the questions during the assignment discussion. In extreme cases one can receive 0 points for a syntactic correct solution.
- Teaching assistants write a report of the discussion and make a suggestion for the number of points.

Exercises
TUWEL

- For the organization of the exercises we will use TUWEL
- Link is available on the course webpage or
  `http://tuwel.tuwien.ac.at`
- All registered students will be invited to the course after the deadline in TISS.
- Please make sure that you have added in TISS a correct eMail adress.
- TUWEL is used to Exercises and to subscribe for a time slot for the assignment discussion.

Exam
General remarks

- First exam date: Wednesday, 22nd June 2015, 18:30–20:30
- 3 further exam dates in the winter term 2016 (announced in TISS)
- Registration for the exam in TISS.
- Admission requirements:
    - Attention: STEOP!
    - Correct registration to the course in TISS

Exam

Final grade

- Necessary for a positive certificate:
    - At least 50 (out of 100) points have to be scored in total (exercises + written exam).
    - At least 37.5 (out of 75) points have to be scored in the written exam.
- Grading scheme (100 points reachable):

Points scored (p)	Grade
$p < 50$ or < 37.5 scored in the written exam	5
$50 \leq p \leq 61$	4
$61 < p \leq 74$	3
$74 < p \leq 87$	2
$p > 87$	1

- A certificate is issued once you have uploaded a solution to one of the exercises and for every attempt at the final exam.

Further information

- Homepage
  http://www.dbai.tuwien.ac.at/education/ssd/
  please read carefully and visit regularly!
  - General informations
  - Slides and other material
- TISS:
  - Messages in TISS (e.g.: for changes on short notice)
  - Add the course Semistructured Data to your favorites!
- Questions:
  - To the contents: during/after the lecture
  - TUWEL forum
  - ssd@dbai.tuwien.ac.at