

NPRG036, A7B36XML: XML Technologies

Practical Class 2:

SAX, DOM: Exercises

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<http://www.ksi.mff.cuni.cz/~svoboda/courses/2015-2-NPRG036/>

<http://www.ksi.mff.cuni.cz/~svoboda/courses/2015-2-A7B36XML/>

Exercise 1 (SAX)



- Print an input XML document on the standard output (console)
 - The hierarchy of elements must be preserved
 - Achieve indentation using white spaces
 - Transform (print) all the attributes as elements
 - Make the string data upper cased

Exercise 2 (SAX)



- Implement proprietary XML document validation
 - IDs must start with the following letters:
 - owners: o, agencies: a, properties: p, flats: f
 - Every *property* must have at least 2 and at most 5 particular features when a list of *features* is provided
 - Value of element *numberOfFlats* must be nonnegative
- Print error messages in a new element *errors* at the end of the output XML document
 - For every *error* include its position (line, column) and textual description

Exercise 3 (SAX)



- Change the output to HTML
- The output document will now contain a table, in every row there will be:
 - Flat name
 - Monthly rate
 - Comfort level
 - Features
- Put the overall number of all specified features across all the flats at the end of the table

Exercise 4 (DOM)



- Transform *rate* elements of flats to attributes

Exercise 5 (DOM)



- Remove flats with *rate* ≥ 20000

Exercise 6 (DOM)



- Create a new *owner* record with all respective data
 - Your program must run even if...
 - Element *owners* is empty
 - Element *owners* does not exist at all