Due on: Thursday 09.06.2005 by 14:00 (in class)

Exercise 1

- a) How is namespace information represented in XPath data model? What are namespaces used for?
- b) Download books.xml from the department webpage. Create five XPath expressions.
 - 1) Select every title in the document with the attribute "lang" set to de
 - 2) Select the last book element of the current node
 - 3) Select every node of the document
 - 4) Select all book elements under the books element that have *price* greater than 30.
- c) Refer to the XPath lecture slides number 20/42. Can we query it in another way around? i.e. find out all the authors first then look at the book titles? Why or why not?

Exercise 2

- a) Change all the *titles* from *books.xml* that contain the word "XML" to the word "Extensible Markup Language" and the rest of the titles to uppercase.
- b) Change all the *prices* from *books.xml* that cost above 35.00 to 40.00.
- c) Given the following Expressions and Results (see next page), generate the corresponding XML document.

Expression	Result
count(//*)	7
count(//@*)	6
count(//argument)	2
count(//class)	1
count(//function)	2
count(//description)	1
count(//return)	1
count(//text())	1
count(//function/return)	1
count(//function/argument)	2
count(//class/*)	3
count(//description/*)	0
//class/description	{"This class handles input"}
//@name	{"input", "text", "number"}
//@type	{"string", "int", "string"}
//return/@type	{"int"}
//argument/@type	{"string", "string"}
boolean(//function/@name)	true
boolean(//class/@name)	true