JOHN ABBOTT
CEGEP/COLLEGE

Centre for Continuing Education

Internet Programming and Development
AEC LEA.BN

420-PW4-AB
Course Outline

General Information

Course Title	HTML & XML
Course Number	420-PW4-AB
Course Ponderation	2-2-3
Total Hours	60
Number of Credits (Units)	2.33
Program Competency(ies)	DC52 – Identify and use fundamental web design concepts and terminology
Prerequisite course(s)	(420-PA3-AB) Introduction to Computers, the Internet, and the Web
Timetable and Location	8:30 a.m. to 1:30 a.m. in BH-210
Start Date	September 19th, 2017
End Date	October 4th, 2017
Semester	Fall 2017
Instructor	Dr. Khattar Daou, M.S., Ph.D. Technical Sciences Microsoft Certified Trainer (MCT), Microsoft Office Specialist (MOS)
Contact Information	The instructor can be reached by MIO

Assignment 01

Deadline for submission: September 25th, 2017
Late submissions will not be accepted.

Purpose

Kristin has created an XML document named authors.xml. This document contains a list of authors. For each author she has recorded the author name, the author ID, and the phone number. She forgot to ask Samantha Tracey her phone number. For each author she has entered the information about books. For each published book, she recorded the book ID, the book name, the publisher, and the book version number. Some books do not have a version number. Each author and each book should have a unique ID. She asked you to create a DTD document that declares all of the elements and attributes in the document. You should also use an XML validator to validate your document against the rules you set up in the DTD.

The XML (**authors.xml**) document has the following structure:

```xml
<?xml version="1.0" encoding="utf-8"?>
<!-- document type declaration follows -->
<authors>
  <author authorID ="A001">
    <authorName title="Mr.">
      <firstName>Ivor</firstName>
      <lastName>Horton</lastName>
    </authorName>

    <phone>212-443-8875</phone>

    <books>
      <book bookID="B0001" version="1.1">
        <book_name>Java Programming for beginners</book_name>
        <publisher>Course Technology</publisher>
      </book>

      <book bookID="B0002" version="1.2">
        <book_name>Java Programming for professionals</book_name>
        <publisher> Course Technology </publisher>
      </book>
    </books>
  </author>

  <author authorID="A002">
    <authorName title="Ms.">
      <firstName>Samantha</firstName>
      <lastName>Tracey</lastName>
    </authorName>

    <books>
      <book bookID="B0028">
        <book_name>XML and DTD</book_name>
        <publisher> Course Technology.</publisher>
      </book>

      <book bookID="B0029" version="1.1">
        <book_name>XML and Schemas</book_name>
        <publisher> Course Technology </publisher>
      </book>
    </books>
  </author>
</authors>
```

To complete this task:

1. Using your text editor, create the authors.xml document and save it as a**uthors_yourName.xml**

2. Then create the authors.dtd document type declaration and save it as a**uthors_yourName.dtd**

3. Create element declarations for all of the elements.
    a. The top-most element in the document is the authors element may contain one or more occurrences.
    b. The author element has 3 child elements: authorName, phone, and books. Remember that PHONE is optional.
    c. authorName has 2 child elements: firstName and lastName.
    d. The firstName, lastName, and phone elements can only contain character data.
    e. Next, add declaration for the books element, which must contain at least one occurrence of the book element.
    f. Each book has 2 child elements: book_name, and publisher. Both of them contain character information.
4. Insert the attribute declarations right below the declaration for the element that contains the attribute.
    a. Insert the declaration for authorID (required element).
    b. Title is an optional attribute that can have one of three possible values: Mr., Mrs., or Ms.
    c. Book has two attributes: bookID and version. Add the attribute declaration for bookID (required).
    d. Add the attribute declaration for version. This is an optional element. The default value is "1.1".

5. Validate both XML and DTD files against the rules you set up in the DTD using online validators (http://www.w3schools.com/xml/xml_validator.asp | http://www.xmlvalidation.com/ | XMLSpy or another validating parser.

6. If you get an error message, examine the reason for the error and then make the necessary corrections.

7. After successful validations, include all files related to the Assignment_01 in yourName_XML_A1 folder, and then compress the folder.

8. To compress a folder, right-click the folder, point to **Sent To**, and then select Compressed (Zipped) Folder.

9. Submit the completed and validated assignment to your instructor.

References

1. New Perspectives on XML, Comprehensive, 3rd Edition | Patrick Carey | ISBN: 978-1285075822 © 2015 | Cengage Learning - High Education