

## COMP4711 Lab 4 (Winter 2009)

Dates: Feb 2-6, 2009

### XML with Schemas

#### Background

We have an XML document reflecting golf score/handicap data, but that document was constrained using a DTD. We want to move to the next level and constrain the document using a schema!

Devise schemas for each of your golfing XML documents from last week, and bind those documents to the appropriate schema instead of the DTD you made.

Make sure that the schema enforces integer values for scores, valid integer values for holes, and valid & unique entries for any course identifiers. The business rules addressing multiplicity should be handled too.

This is an individual lab.

#### Lab Tasks

1. We talked about schemas in class ... the W3Schools [Schema tutorial](#) will walk you through the details.
2. Review your golfing XML documents from last week. Some of the elements would suit simple types using a schema, while others will be complex types.
3. Devise a schema for your golfing XML data, using your documents from last week or one of the solutions if not happy with yours. I suggest that you do these one at a time, then test them together.
4. Define your own element types in your schema, within reason. While it is legal to have everything nested inside the root element, it makes for an awkward-to-read schema.
5. You can make sure your XML document & schema are well-formed by checking and validating them, respectively, inside NetBeans.
6. Validation can also be done with a third-party tool, such as <http://validate.openlaboratory.net/>
7. Zip up your NB project, or your XML documents and associated schemas, and submit the zip file to share-in, using a suitable name, like ParryJimComp4711Lab4.zip (note: surname followed by first name).

## **Marking Guideline**

This lab will be marked out of 10 ...

- 2 marks for reasonable and complete schema
- 2 marks for at least two simple types
- 2 marks for at least two complex types (not restricted)
- 2 marks for at least two restricted types
- 2 marks for valid XML documents + schemas

## **Submission**

- Your zipped (netbeans) project, as noted above.
- Due by the end of the weekend (sunday 11:59pm)