

## Assignment 4: XML Documents and Schema Definitions

### **NOTES AND HINTS**

XML can be very easy if done correctly and almost impossible if not.  
For this reason, here are a few notes and hints on doing XML.

#### **Hint: DO THE TAGS LAST !**

- notice that the supplied data is already set up to take advantage of the method demonstrated in class and in the tutorials

Use this method and simply trace your finger down your structure to create your XML.

#### **Hint: Slower is faster.**

- Do NOT try to type in the complete XML file all at once and then attempt to validate and debug the entire document. The errors will cascade and even though it indicates an error is on one line, it may actually be a line somewhere above.

Type in ONE (1) company at a time!

#### **Hint: VALIDATING !**

- when in doubt, validate one (1) line at a time.

For example:

- comment out all but the Root and it's matching end tag.
- validate the file.
- if it validates, put in the next tag and it's matching end tag.
- validate the file.
- if it validates, put in the next tag and it's matching end tag.
- on and on until completely valid

- “ **O.M.G. !!!!!** You have got to be kidding me? That's boring and will take forever. Like, this is not my life's work ! I have other things to do !!! ”

- yes, I know. But what I am telling you is that this is actually much much faster than trying to chase down 12 errors that are who knows where and are who knows what.

For example: It will take approximately 23 minutes to type in one restaurant into the XML file by going one (1) XML element at a time and validating each one before continuing.

It will take over 50 minutes to attempt to debug the 16 elements in Assignment Four and even after all that time, there is no guarantee you will find them all.

Slower is faster !

Which brings me to the next note...

**NOTE: Teaching Assistants will be instructed to help with only ONE (1) error at a time per student's turn during consulting.**

- the TA will help with one and only one error, and then will help the next student. You will have to go to the back of the line and wait your turn again if you require help with the next error.

Otherwise the TA will have to dedicate 40 to 50 minutes to just one student if they try to go through all your errors. We just do not have the resources to accomplish this.

Remember, the TA is there to assist you with your work, not do your work for you. It is your responsibility to correct your own work.

**NOTE: Teaching Assistants are there to provide guidance and aid. They are **NOT** there to simply provide solutions on how to complete the assignment.**

- the TA will help with suggestions and guidance on how you may proceed to correct any error or problem. They are not there to do your work for you.

- 'Fix this' is not a valid request of the TA.

- 'How do you suggest I proceed' and 'What might this error mean' are valid requests.

**Hint: XSD Schema File is easy.**

- remember to count the number of unique elements in your XML document just as we did in class.

- that is the exact number of elements that MUST be declared in your XSD Schema (yes, it is that easy).

- then simply determine if the element is 'complex' or 'simple' and declare it based on the notes.

### **Hint: Slower is Faster !!!!!**

- likewise, validating the XSD schema should be done one line at a time.
- comment out your XML leaving only the Root element.
- define just the Root element in the XSD Schema.
  - check that the XSD Schema validates the XML with just the Root.
- then uncomment the next element in your XML document after the Root.
- define that element in the XSD Schema.
  - check that the XSD Schema validates the XML with just these two elements.
- then uncomment the very next element in your XML document after the Root.
- define that element in the XSD Schema.
  - check that the XSD Schema validates the XML with just these three elements.
- etc.
- eventually, the first company will be uncommented and your Schema will be complete.
- then, uncomment only the next company.
  - check that the XSD Schema validates the XML with just these two companies.
  - your minOccurs and maxOccurs may have to be adjusted
- repeat one company at a time until done.
- 'O.M.G. twice dude!!!! This will take forever !!!!!!!'
  - not as long as it will take struggling trying to validate 23+ errors
  - not as long as waiting for a TA with all the other students in the consulting room
  - trust me: slower is faster....

### **BIGGEST HINT: DO NOT CHEAT !!!!!**

- remember, we go over the work and if you cheat, you will get caught.
- this makes for a very bad day for both you and me (I very much dislike being forced to deal with this. I much rather would not, so please, do not cheat....)

Think!

You are not doing your friend a favor letting them have access to your completed (or even partially completed) work. They need to learn the material anyway in order to pass the exams and you are exposing them and yourself to the full penalty. Think about it. **IF** you do not allow them access to your work, then they cannot lose the additional penalty. You are doing them a better favor by **refusing to share** your work.

**Stand up for yourself, stand up for them.**