IMY 210
Unit Assignment 2: XML

An XML Schema is a language for expressing constraints about XML documents. There are several different schema languages in widespread use, but the main ones are Document Type Definitions (DTDs), Relax-NG, Schematron and W3C XSD (XML Schema Definitions)

Information in schema documents is often used by XML-aware editing systems so that they can offer users the most likely elements to occur at any given location in a document. Checking a document against a Schema is known as validating against that schema, this is to ensure quality assurance.

During this assignment you will be creating several XSD documents to validate XML documents. The assignment will not only test your ability to create XSD documents but also your understanding of namespaces and their implementations

Important!
- Make frequent backups of your working files in different locations.
- Use a text editor (e.g. Notepad++) to complete this assignment.
- This is an individual assignment.
- In terms of the class notes, the scope of this assignment is Themes 2.
- You will receive 0 if your final XSD document is not well form.
- You will receive 0 if you final XSD does not validate the provided XML.

Provided Files
- **Sample xml files**: Set of data to be validated by your final XSDs.

Scenario
- A publishing company has asked you to create XSD files for their website, to help standardise the data they are receiving from hundreds of collaborators.
- They have provided you with a few XML structure as sample files to be validated.
- They also requested that two namespaces are defined for fiction (f) and non-fiction(nf) books

Task
- Create XML schema documents (in XSD format) to validate the provided XML files.
- All schema rules are provided within sample.xml.
- Some additional things to keep note of:
    - All elements must appear exactly once, unless otherwise specified.
    - Create different **named custom simple** and **complex types**, as necessary.
    - Need to use **occurrences** in more than one place.
    - Need to implement both a **restriction** and **extension** of data type
- Your final validation file needs to be **data agnostic**.

Submission
- Compress only your XSD file(s) into an archive named **a2.zip**.
    - Name your main XSD file **a2.xsd**
    - Name your other files according to the namespace name (f.xsd and nf.xsd).
    - Make a final backup of all your files and keep it in a safe place.
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- Submit your ZIP file to link provided on clickUP.