

# Enterprise Systems & Architecture

## Lab 1 (Week 1): XML Exercises – Basic XML

**The primary aim of this lab sheet is to get you to think of XML as a document containing hierarchical data which starts with a single root element.**

### Exercise 1

- Download the *hits\_initial.xml* from the **Lab 1** exercises folder on webcourses.
- Right-click on the file and try to open it in Internet Explorer (IE) / Microsoft Edge. IE will display any *well-formed* XML file with syntax highlighting – does IE display the XML?
- Using the *notepad* text editor, fix the XML so that it is well-formed – re-try opening it with Internet Explorer (for your own benefit, don't use *notepad++* or *sublime* etc. unless you can't spot the errors).

### Exercise 2

- Download the *bathe\_cat\_initial.xml* from the **Lab 1** exercises folder on webcourses.
- This XML has a number of errors in it – using the *notepad* text editor, fix the XML so that it is well-formed and can be displayed properly in IE.
- Just for your own benefit, using the fixed version of your *bathe\_cat\_initial.xml* file, sketch using Microsoft Word or any diagramming tool you have (or pen and paper), a tree diagram of how you would associate this data in a hierarchy.

### Exercise 3

- Consider the following data: a catalogue of CD's with each CD entry in the catalogue having information about the title, artist, company, price and year.
- Using Microsoft Word or any diagramming tool you have (or pen and paper), draw a tree diagram of how you would associate this data in a hierarchy.
- Create a text file called *catalogue.xml* and enter some sample XML data into it that conforms to how you have specified the data in your diagram. View your xml file using IE.

### Exercise 4

- Consider the following data that company A wants to transport to company B.
- An customer order for goods which contains the following information:
  - Order ID
  - Person responsible for handling the order
  - The "Ship To" address which has a name, address lines, city and country
  - A set of items, each of which consists of a title, id, quantity and price
- Using Microsoft Word or any diagramming tool you have (or pen and paper), draw a tree diagram of how you would associate this data in a hierarchy.
- Create a text file called *orders.xml* and enter some sample XML data into it that conforms to how you have specified the data in your diagram. View your xml file using IE.