

## Enterprise Systems & Architecture

### Lab 4 (Week 5): XML Exercises – More XSD

**Note:** In notepad++, under the *Plugins* menu, you may see an *XML Tools* option – if not, you should be able to enable it using the *Plugin Manager*. Once working, you can use this to check for *well-formed* XML and also to *validate* an XML file against a schema (XSD file).

If, for whatever reason, you are unable to use the notepad++ XML Tools menu, you can use the following site to run validation of your XML against the schema:

<http://www.freeformatter.com/xml-validator-xsd.html>

#### Exercise

- *Clothes 'R' Us* is a busy clothes retail outlet that purchases substantial quantities of items from their whole sale supplier, *The Clothes Wholesaler*. *Clothes 'R' Us* have implemented a sophisticated software package that manages their order processing and payments information. Their new system can import a variety of data in XML format. *Clothes 'R' Us* have asked their wholesale supplier to invoice them by means of transferring their invoice details using an XML file.
- *The Clothes Wholesaler* has asked you as a developer to design an XML Schema that describes an XML file format that could be used to provide this data. You have also been asked to provide a sample XML instance file that conforms to the schema.
- You should include, at a minimum, the following data elements:

*Invoice Number, Invoice Date, Invoice Total, Issued By, Bill To, Item, Payment Information*

- Note, some of the above data elements will require additional data appropriate to an invoice such as names, addresses, prices, totals, bank details etc. Name your files *invoice.xsd* and *invoice.xml*.

Your **XML** should start like this:

```
<?xml version="1.0"?>
<invoice      xmlns="http://www.dit.ie"
              xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
              xsi:schemaLocation="http://www.dit.ie.com invoice.xsd">
```

Your **XSD** should start like this:

```
<?xml version="1.0"?>
<xs:schema   xmlns:xs="http://www.w3.org/2001/XMLSchema"
              targetNamespace="http://www.dit.ie"
              xmlns="http://www.dit.ie"
              elementFormDefault="qualified">
```