Lab 9 – XML/JSON and Ajax Server-Side Technology

Create a new folder '**lab09**' folder on the cmslamp server
Save today's work in this lab09 folder.

Note: as we have both XML and JSON versions, you can work on either version. But in general the JSON version is easier to work on.

Task 1 (8 marks)

a) Copy the code for the shopping cart example of Lecture 9, and run the example.

b) Add the ISBN number to the data that is sent to the client for display in the shopping cart, and also display the total cost of the order.
Hint: now the data you sent back is a two-dimensional (similar to database table), you will need to use an associative array to store the properties of a book and set it as the value for a book entry.

c) Modify the system so that when a user deletes an item, it should only delete ONE COPY of the BOOK rather than emptying the cart. If the last copy is deleted, then the shopping cart should no longer be displayed.

(Do Task 2 before attempting d, e and f below)

d) Modify the system so that it displays two books on the client page, and ensure that the system will handle any number of books.

e) Extend further by adding a third book.
(In 2 and 3, you should hard code the details of the books in the client page, just as the one book in the lecture was coded.)

f) Extend further, as a challenge, to handle multiple books. Rather than hard-code details of books in the client page, the catalogue of all the books would have to be stored on the server – use XML/JSON for this. (There is no need to implement a system to maintain the catalogue. Just assume that the catalogue is maintained by some other means. So you just have to access it as an XML/JSON file.) Store the file in the data directory. When the client page loads (onLoad), the data should be read from the server, and displayed in the client. (I am not giving any more details, so that you can think about various ways of organising this.)

Task 2 (2 Marks)

Following the DOM exercise in Lab 8, continue to implement the following two functions with an onclick event similar to that for appendRow().
selectRow() will highlight the row that is clicked using a different background colour if it is not already highlighted.
removeRow() will remove the row that is clicked if it is currently highlighted.