

The University of the West Indies COMP 6300 Advanced Internet Technologies, 2017/2018
Semester 2

Assignment 2 - XML and XSL

Due on: Sunday 11th March, 2018, 11:59 pm

This assignment requires you to write an Internet application that uses XML documents together with XSLT stylesheets and Java Servlets to create a website that allows online access to information about the inventory of a garden supplies & seedling/plant store, called Froom's Blooms.

Begin by creating an XML document called plantshop.xml that contains at least 10 garden supplies and at least 15 plant products. Each <product> should store information on:

Product code <code> Description <description> Product Category <category> Price <price>
Quantity in stock <quantity> Re-order level <reorder-level> Re-order quantity
<reorder-quantity> Suppliers <suppliers> Discount <discount> Images <images>

You are free to invent product codes and descriptions. Cater for at least three plant categories: "herb", "flowering", "fruit". Cater for at least four garden supplies categories "chemicals", "tools", "decor", and "pots".

The quantity in stock represents the amount available for sale in the store. The re-order level is a number that represents the minimum acceptable stock quantity. If the quantity in stock falls below this level, it is time to order some more. The re-order quantity is the amount that is ordered of a given product at a time.

<suppliers> should be an element that contains at least two <supplier> elements. Each should simply be the name of a supplier.

Discounts can be of two types: "monthly" and "seasonal". These types should be stored as attributes.

<images> should be an element that contains at least two and at most four <image> elements. The name of an image file should be stored for each

<image> element. This could be for example orchid1.jpg which represents the name of a file that contain an image of the product.

The first page of the website (called Froom's Blooms) should present the user with options to:

- View a price list of all products carried by the store
- View a list of all products carried by the store, and the suppliers of each product.
- View a list of items that are out of stock, or low on stock.
- Obtain an XML document that contains a list of orders to be placed to suppliers.

All lists should be sorted in ascending order based on the product code.

When a price list is displayed, the term description should be clickable, yielding a pop-up browser window (not a message box), giving detailed information about the product. The images of the product should be shown on this page. Depending on the product category, the detailed information page should contain a small decorative image to indicate the category.

If a product has a discount, the discounted price should be displayed in red along with the regular price.

The XML document for orders to be placed should use <order> elements that contain information on:

- Product code
- Quantity to be ordered
- Supplier

Since there is more than one supplier per product, the name of the first supplier should be used. The <order> element should use the same product code element and supplier element as in the plantshop.xml document. The quantity to be ordered should be an attribute of the order.

Submission Instructions

Submit your zipped source files by the due date using the myElearning system. Please ensure your student ID is included at the top of all your submission files.