

# Emerging Programming Platforms and Technologies

## Lab Work – Week 2

1. Using your text editor, open `faq.txt` and save the document as `faq.xml` and do the following
  - Create a prolog at the top of the document, indicating that this is an XML document using version 1.0 of XML. You do not need to include any other information in the XML declaration.
  - After the XML declaration, insert the following comment: “ScanMaster and DigiCam FAQ.” Add two more comments containing your name and the date.
  - Create a root element named FAQ.
  - Enclose the text “Jackson Electronics Products” in a title element, and set the text “Frequently Asked Questions” in an element named subtitle.
  - Create two product elements. Within each product element, insert a model element containing the name of the product.
  - Within the product elements, enclose each question in the text file within a question element.
  - Also within the product elements, enclose each answer in the document within an answer element, and place the text of those answers within a CDATA section.
  - Add a processing instruction to the prolog to apply the `faq.css` style sheet to this document.
  - Save your changes and open the `faq.xml` document in your Web browser.
2. To complete this task do the following:
  - Using your text editor, open the `agtxt.css` style sheet and enter your name and the date in a comment section at the top of the file and then save the file as `agents.css`.
  - This file contains the styles used for the data on the employees of a company called EPACMO. Below the initial comment section, insert a

rule (*@namespace prefix url(uri);*) creating the agents namespace with the prefix *ag* and the URI *http://www.epacmo.org/agents*. Edit both of the selectors in the style sheet to belong to the agents namespace using both the namespace (*prefix(selector {attribute1:value1; attribute2:value2})*) and the escape style syntax (*prefix\:selector {attribute1:value1; attribute2:value2}*) for each selector. Close the file, saving your changes.

- Open the *conttxt.css* file using your text editor. Insert your name and the date in a comment section at the top, and then save the file as *contrib.css*. This file contains the styles for the contributor data. Add a namespace rule to the style sheet creating the contributor namespace with the prefix *cont* and the URI *http://www.epacmo.org/contrib*. Apply this namespace to the selectors in the style sheet using both syntaxes. Close the file, saving your changes.
- Open the *reptxt.htm* file with your text editor. Enter your name and the date in a comment section, and then save the file as *report.htm*.
- Transform the file from HTML to XHTML by adding an xml declaration to the first line of the file, in the head section insert link elements linking the Web page to the *agents.css* and *contrib.css* style sheets you created.
- Set the default namespace of the elements in the document to the XHTML namespace (*<html xmlns="http://www.w3.org/1999/xhtml">*). Add namespace declarations for the agents and contrib namespaces using the same prefixes and URIs you used in the style sheets.
- Copy the elements from the *agents.xml* file and paste them into the *report.htm* file directly below the *h1* heading. Apply the agents namespace to each of the elements you pasted.
- Copy the first agent's contributions from the *contrib.xml* file and paste them into the document directly below the first closing *</agent>* tag (the first agent's contributions are identified by the agent attribute value "a01"). Apply the contributor namespace to all of the newly pasted elements.
- Copy the second agent's contributions from the *contrib.xml* file and paste them into the document directly below the second closing *</agent>* tag. Once again, apply the contributor namespace to all the newly pasted elements.

- Close the report.htm files, saving your changes, and then open the document in your Web browser. Verify that the appropriate styles are applied to the elements from the XHTML, agents, and contributor vocabularies.