# Emerging Programming Platforms and Technologies

# Lab Work – Week 3

1. Start your text editor and open the hamlet.txt file and save the document as hamlet.xml.
   - 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.
   - Add comments that include your name and the current date.
   - Enclose the entire document content in a root element named Play.
   - Place the title of the play in an element named Title. The Title element should be the first child of the Play element.
   - Place the summary of the play within a Summary element.
   - Place all of the information about each act of the play within an Act element. Place the name of each act (Act 1, Act 2, and so forth) within an Act_Number element.
   - Place all of the information about each scene of the play within a Scene element nested within each Act element. Place the name of each scene (Scene i, Scene ii, and so forth) within a Scene_Number element. Place the location of each scene within a Location element.
   - Create a processing instruction to attach the plays.css style sheet to this document.
   - Save your changes to the file and open it in your Web browser.
   - Create a DTD for the XML document in the prolog and declare rules which correspond to the structure and content of the document you just created.
   - Go to *www.xmlvalidation.com* and validate the XML document.

2. To complete this task do the following:
   - Use your text editor to open the agtxt.css, housetxt.htm, and listtxt.css files and enter your name and the date in the comment section of each of these files, and then save them as agents.css, house.htm, and listings.css respectively.
   - Change the house.htm file into an XML document by adding an XML declaration to the top of the file and adding namespaces to the html element for the XHTML, agents, and listings namespaces. Set XHTML as the default namespace. Use a prefix of ag for the agents namespace and a URI of *http://www.midwesthomes.com/agents*. Use a prefix of list and a URI of *http://www.midwesthomes.com/listings* for the listings namespace.
   - Within the head section of the HTML file, insert links to the agents.css and listings.css style sheets.
   - Within the main div element, insert the elements from the agents.xml file. Place these elements in the agents namespace.
   - Below each closing </agent> tag, insert the properties associated with that agent from the listings.xml file. Place the listing elements in the listings namespace.
   - Close the house.htm file, saving your changes.
   - Within the agents.css file, place the style declarations in the agents namespace, using both formats. Close the file, saving your changes.
   - Within the listings.css file, place the style declarations in the listings namespace, using both formats. Close the file, saving your changes.
   - Open house.htm in your Web browser, verifying that the styles for the XHTML, agents, and listings vocabularies have been properly applied.