Instructions for Wisconsin Museums 3 Coding Assignment

Assignment

The goal of this assignment is to create an HTML5 page that contains formatted information regarding Wisconsin Museums. You will achieve this by creating an XSLT stylesheet and using that stylesheet to transform an XML instance document regarding Wisconsin Museums into the target HTML5 page.

The files that you will need to begin this coding assignment have been made available as part of a downloadable Oxygen project .zip file on the D2L site. The project file is named "wisconsin_museums_3.zip". The files provided include the XML instance document and the W3C XML Schema:

imls_wisconsin_museums_1Q2015.xml
museums.xsd

You will be expected to create an XSLT stylesheet (.xsl) and to use that stylesheet to transform the XML instance document. The result of the transformation should be a well-formatted HTML5 document (.html) that presents that information regarding Wisconsin Museums that originated on the XML instance document. This HTML5 document should be accompanied by a simple CSS stylesheet (.css). In all, you should have coded or generated 3 files when you have completed the exercise:

generate_museum_report.xsl
museum_style.css
wisconsin_museums.html

Method

Use the method that was demonstrated in my demo video on creating XSLT stylesheets for data interchange documents. It is especially important to develop your stylesheet incrementally, testing it as you add each feature. XSLT processing engines are notoriously bad at identifying errors in your code. So, you do best to add just a little bit of code at a time. That way, you will know that any errors are in the little bit of code that you just added. Continue adding bits of new code and testing them until you get the overall desired results.

The XML instance document includes records for a large number of museums. While your final test should include all of the museum data, you may find it easier to do your early testing with a subset of museum data. You can create a subset simply by placing an XML comment around the museum data that you want to exclude:

```
<!--  Place comment text insider here -->
```

Since this is not an HTML class, you only need to use simple HTML constructs to structure and format your report. There is no need to create an elaborate layout using table structures to hold museum entries. Also, there is no need to create an elaborate or sophisticated layout with CSS positioning. Most of your styling can be achieved through using HTML tags for headings, paragraphs, line breaks, <a> links, bolding, and italics. While I do want you to create an external CSS stylesheet and demonstrate that you can connect it successfully to your HTML page, there is no need to create elaborate styling with CSS.

Tools
Use the Oxygen XML Editor to create the XSLT document and the CSS document. Use an Oxygen transformation scenario to generate your HTML page.

Length
Your final test should use all of the museums in the XML instance document. Make sure that your XSLT code makes allowances for all optional elements that occur in the test data. Refer to the schema provided to see which elements are optional.

Format and File Naming Conventions
When unzipped, the Oxygen project directory that I have made available in the Weekly Schedule will be named:

wisconsin_museums_3

Copy and/or rename this directory so that it has a name that takes the following form:

trainor_kevin_wisconsin_museums_3

When your work is complete, zip this directory and submit it to the D2L dropbox. The name of the file submitted should take the following form:

trainor_kevin_wisconsin_museums_3.zip

Due By
Please submit this assignment by the date and time shown in the Weekly Schedule.