RIT | Golisano College of Computing and Information Sciences
School of Information

# XML Project

## XML/DTD/Schema/XSLT

**Read all the requirements before you start!**

## Part A:

**Create a folder called *yourLastNameA* to contain your files. When completed, the folder will contain .xml, .dtd, .xslt, and .html files.**

### Task 1:

Examine the file "Movie Times in Rochester NY 2023-02-01.pdf", which was printed from the Fandango web site, showing where and when movies will be playing in the Rochester area on February 1, 2023

Using this document, determine what elements and attributes you will need to put into an XML file to capture the information on movie times. Develop an XML file that will capture information any **three** movies in any **two** theaters. Do *not* simply pick the first 3 movies in the first two theaters. There is a lot of data - make use of it! Include in the XML as much information as you can extract from the PDF (you don't need to include images though). Call the file **fandango.xml**.

**ISTE-610 students**: You *do* need to include images. For each of the movies that you choose, include the corresponding image in a folder named **images**. Include the image file names as data points in your XML. Do not include the path (i.e., don't include "images/"); just include the actual file name.

### Task 2:

Create a Document Type Definition (DTD) to validate the XML document created above, and properly reference it in the XML file. Make sure that it works using an XML validation program. Call the file **fandango.dtd**

## Task 3:

Using XPath and XSLT, you should transform the XML document into an HTML document that will yield a pleasing display in a browser. The display does not have to be elaborate, just nice-looking and readable. You don't necessarily need to include every data point that's in the XML file, but you do need to include enough information so that a user could make an informed decision about which movie to watch. Name the files **fandango.xslt** and **fandango.html**.

Note: You can use XML spear to create the HTML file, or use an online transformer, such as at freeformatter.com.

**ISTE-610 students**: Display the image that corresponds to each movie. Since the file path isn't included in the XML, you'll need to specify it in the XSLT.

# Part B:

**Copy the folder that has the solutions for Parts A, and name it *yourLastNameB. Remove the .dtd file* and create a schema file for validation. *Keep the other files as they were* (except for removing the dtd reference from the xml file).**

## Task 4:

In the new folder, create a schema to validate the XML document created in Task 1, and properly reference it in the XML. Make sure that it works using an XML validation program. Call the file **fandango.xsd**.

**Zip both folders together and submit the *yourLastName.zip* file to the myCourses Assignment folder. (Note: you must submit a .zip file only. A .7z, .rar or .tar file will not be accepted).**

# Grading Rubric

| Item | Points |
|---|---|
| **Task 1: XML** | **10** |
| Well-formed XML | |
| Contains necessary data points | |
| Contains 6 movies (2 theaters x 3 movies)<br>(not the first 6 listed in the PDF) | |
| **ISTE-610 only:** Contains image names | |
| Correctly named: fandango.xml | |
| | |
| **Task 2: DTD** | **10** |
| Correctly formed DTD | |
| Validates all elements and attributes in XML<br>(correctly "linked" in XML) | |
| Correctly named: fandango.dtd | |
| | |
| **Task 3: XSLT** | **15** |
| Well-formed XSLT | |
| Contains sufficient data points | |
| HTML successfully generated from XSLT | |
| **ISTE-610 only**: XSLT contains images; the images display correctly in the HTML | |
| Correctly named: fandango.xslt, fandango.html | |
| | |
| **Task 4: Schema** | **15** |
| Well-formed schema | |
| Validates all elements and attriutes in XML<br>(correctly "linked" in XML) | |
| Correctly named: fandango.xsd | |