

Homework 7: XSLT Exercise

1. Objectives

- Get experience using XSLT
- Get experience combining XSLT with JavaScript and DOM

2. Requirements

Given the following two XML documents

<http://www-scf.usc.edu/~csci571/2010Spring/hw7/employee.xml>

<http://www-scf.usc.edu/~csci571/2010Spring/hw7/appointments.xml>

You must write XSL Transformations and combine the information in the two XML files into a single HTML file.



The Employee.xml file includes a list of employees. Each employee has a name, date of birth, social security number, home phone, home address, and cphone. The appointments.xml file is also made up of employees, the same employees that are contained in employee.xml.

However the appointments.xml file contains, for each employee a list of affiliations, an office phone, an office address, and office hours.

Your task is to use an XSLT stylesheet(s) and JavaScript/DOM code to produce a single HTML file that contains a single table that combines the information in the two xml files as shown in figure 1.

Name	D.O.B	SSN	H.Phone	H.Addr	C.Phone	Affiliations	O.Phone	O.Addr	O.Hrs
Max	Apr 7, 1967	123-96-4567	123-3232	Apt 8 1239 W 99 ST Los Angeles CA 90007	123-9876	CS Dept Assistant Professor IMSC Assistant Professor ISI Assistant Professor	123-9982 332-2323 252-5454	CS-102 PH-998 IS-834	1:00-3:00Pm 3:00-4:00Pm 4:00-5:00Pm
Len	Mar 7, 1978	123-67-4567	444-2323	Apt 6 4321 E 28 ST Los Angeles CA 90008	434-8763	IMSC Assistant	121-9875	PH-123	
Tom	Jan 28, 1976	123-98-4567	334-6565	Apt 5 765 W 29 ST Los Angeles CA 90008		CS Dept Assistant	309-4543	CS-987	9:00-10:00Am
Joe	Dec 23, 1982	123-43-4567	323-6543	Apt 4 856 W 67 ST Los Angeles CA 90067		CS Dept Half Assistant IMSC Half Assistant	927-3423 343-4843	CS-098 PH-543	1:00-3:00Pm
David	Nov 12, 1978	123-96-4567	665-8265	Apt 12 578 W 76 ST Los Angeles CA 90075	334-9876	IMSC Research Scientist	957-8284	PH-664	
Jerry	Jul 12, 1965	123-76-4567	132-5543	Apt 18 5765 E 76 ST Los Angeles CA 90075	443-9872	CS Dept Assistant Professor IMSC Assistant Professor	126-9976 987-6264	CS-342 PH-546	4:00-6:00Pm 3:00-4:00Pm
Mary	Apr 25, 1972	123-54-4567	949-9986	Apt 26 9879 W 7 ST Los Angeles CA 90017		EE Dept Financial Officer IMSC Financial Officer	984-9872 763-9343	EE-754 PH-876	

Figure 1: Expected output

Requirements:

- The JavaScript should use the XSL stylesheet file(s) to transform the XML into HTML, rather than processing the XML directly.
- You may assume that the list of employees in both files are the same, but you may NOT assume that the employees occur in the same order in both XML files.
- Your code must work with both Internet Explorer and Firefox
- To facilitate grading you must create a webpage containing links to your employees.xml, appointments.xml, xsl_code.xsl, code_textfile.txt, html_javascript_DOM_code.html in a presentation similar to figure 2. The xsl_code file refers to your stylesheet. The html_javascript_DOM_code file refers to your file responsible for performing the XSLT, while the code_textfile is simply the same file with a .txt extension such that the graders can view the code without the browser parsing it.

Homework #7
XML file containing employee information : employee.xml
XML file containing appointment information : appointments.xml
XSL Stylesheet : present.xsl
XSLT code : work.txt
Combined result : work.html

Figure 2: Expected webpage containing links to your code

3. Hints

- The structure of the XML files will not change. The tag names and order will remain the same, but the graders may test your code with XML files containing different entries or more or fewer entries than in the sample XML files given with the assignment.
- In Firefox, use the `importStyleSheet()` and the `transformToDocument()` methods of the `XSLTProcessor` object to get a DOM object containing the XML files transformed by your XSLT.
- In IE, use the `transformNodeToObject()` method to get a DOM object of the XML transformed by your XSLT, or use the `transformNode()` method to get HTML of the XML files transformed by your XSLT.

4. Files to Submit

Add a link on your homework page, so graders can go to your website and grade your homework. The link should point to a webpage as shown in figure 2.

Submit your XML, XSL, and HTML files electronically to the csci571 account so that they can be graded and compared to all other students' code.