

CmpE 473 Internet Programming

Fall 2007

Assignment 2—Due: 7/11/2007

You will develop a system that enables users to write, evaluate, and compare XPath expressions on selected XML files.

Scenario: A user accesses a Web page using her browser. The page allows the user to enter two XPath expression. The user can enter one expression and choose to check the correctness of the expression or to evaluate the expression. An expression is correct if it is a well-formed XPath expression. If the user chooses to evaluate the expression, then she also selects an XML file on which the expression should be evaluated. When the user hits the **Evaluate** button on the page, the results of the expression are displayed to the user. If the user enter two expressions, then the system tells whether the two expressions return the same result and shows the result(s).

Technical Details: The Web page of the user will be implemented with JSP. To check correctness and to evaluate the user's expression at the server side, JAVA's XPath API (javax.xml.xpath) will be used. The system should (1) check if a given XPath expression is correct, (2) evaluate and return the result to the user and (3) compare two expressions in terms of similarity. The user should have 3–4 XML files to choose from for evaluations. In the demo, we will test the system with different XML files and with various expressions.

You will do this assignment in groups of four. One person in the group will be the project leader for each assignment in the course. The project leader should be different in each assignment.

You will give a demo of your system and hand in a detailed report on CD. You should turn in your CD on the due date **before** class. Watch for the notification of demo dates. **All** members of the group need to be present in the demo. Be prepared to show all aspects of your program, including the different scenarios listed above.

The demos will take place in the university so make sure that your demo runs on the PC Lab in the university or that you can bring in the necessary hardware and software for the demo.