

Internet Interoperability
CSC4000W
2006

The One and Only Assignment

Scenario

Suppose that you are the administrator of a digital archive where items come pouring in on a regular basis (e.g., Google, Wikipedia). Since your system is so popular, you want to publish an RSS feed to your users with a list of some recently-added items, but your feed has to be dynamically generated since your content changes so very often and users want the freshest results.

You also know that RSS implementations can be incorrect so you decide to help yourself and the RSS community by building an RSS validator to check for the correct implementation of RSS, thereby also allowing you to compare your implementation with that of others.

Task

This assignment is composed of two parts:

1. Create a Web-based application (CGI, Java servlet, PHP, etc.) that serves the contents of a fluid database as a dynamically generated **RSS 2.0** feed. The URL for the RSS feed generator **MUST** be publicly accessible.
2. Create a validation tool that tests the correctness and robustness of an **RSS 2.0** feed.

Let total number of students = S . Then the maximum number of students per group = 4; and if $(S \bmod 4 \leq 2)$ then one group will have $(S \bmod 4)$ students and may work on only the validator or only the RSS feed.

Data Source

The source data can be found in the following database:

Type: MySQL
Host: banzai.cs.uct.ac.za
Database: ii2006
User: ii2006

There is no password.

Each row contains a **value** (varchar) field and a **date** (datetime) field. The value is an XML chunk of Dublin Core metadata and the date is updated when the row is added. New entries are added to this collection approximately once every minute.

Evaluation of Assignments

On the last day of lectures (Thursday 10 August, 2pm), each assignment will be demonstrated to the lecturer and the class. First the RSS feed implementations will be demonstrated for reasonableness. Then, each validator will be demonstrated and tested against every RSS feed implementation. The mark you get will be determined by how completely your RSS feed abides by the standard, or how well your validator tests the interoperability of feeds. Further tests may be conducted using data generated from other sources.

Since the aim of this assignment is cooperation, you ARE allowed to post URLs for your RSS feed and/or your validator (if it is online) in the discussion forum, and you are allowed to discuss errors and why they occur, and you may attempt to reach consensus on what the RSS standard means. You are, however, NOT allowed to post any source code.

Submission

In addition to the demonstration, you are required to submit an archived copy of your code by the time of the lecture on the day of the demonstration.