CS6795 - Semantic Web Techniques - Project Description

Group 6
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XSLT Converter from Database Taxonomy Representation to RDFS

One common way to represent hierarchical or taxonomy data in a relational database is by using an adjacency list, where each row of data contains an identifier, a name and/or description, and a reference to the parent item. The Teclantic.ca project uses such a representation for storing the classification taxonomy.

As most database systems have the ability to export data in an XML format and there are many tools, such as visualizers, editors, etc., that work with taxonomies represented in RDFS it would be an advantage to be able use the hierarchical data from such a relational databases in the RDF(S) tools that already exist. This could be accomplished by transforming the hierarchical data from the relational database export XML format in to RDFS which could be used by the already existing tools.

The primary goal of our project is to write an XSLT transformation that will convert a dump of the taxonomy data from MySQL to an RDFS taxonomy. This XSLT style-sheet should be as generic as possible, allowing it to be easily modified to transform dumps from other databases. We will then create a few examples of using the RDFS output with already existing RDFS tools such as OO jDREW and visualization tools.