RDF Schema Rendering

Ishai Biran, ishaibiran@yahoo.com

Abstract. This article and the attached code present a convenient tool for presenting RDF Schema XSL on the browser, using a combination of XSLT and JavaScript.

Keywords: Semantic Web, XSLT, RDF Schema.

1 Introduction

An RDF Schema file contains the definitions of all tags and associated properties that can be used in an RDF file that is built with that schema.

The way RDF Schema files are structured, every <rdf:Property> contains <rdfs:domain> and <rdfs:range> elements which point to each of the <rdfs:Class> elements that contain that property.

This structure is inconvenient for the user, who wishes to see each <rdfs:Class> and all its associated properties together.

The purpose of this script is to display each <rdfs:Class> together with its domain and range properties.

2 Explanation of the Code

For each class, property, domain or range element in the RDF Schema XML, the XSLT builds a element in the output HTML. The span contains all the necessary attributes for that element.

Upon completion, the HTML page is displayed. At that time, the onload JavaScript method gets control. The JavaScript builds a table for each class category and for the properties. Each property is added as a row in the properties table, and also marked among the domains or the ranges of the class it is associated with.

The code can easily be expanded to support additional tags.

The result is a clear table that displays all RDF elements and the properties of each one of them.

The code and sample RDF schema files are attached.