RDF Lab

Ressources

RDF Validation Services:

- http://www.w3.org/RDF/Validator/
- http://rdf-translator.appspot.com/

The Corese semantic engine: http://wimmics.inria.fr/corese

1. first.rdf

Margot is a 32 years old woman, her shoe size is 38 and her pants size is 40. She is married to Arthur, with whom she has two children: Simon and Marie. Margot is a teacher; Alice and Pierre are her colleagues. Her mother is called Simone.

- Formalize the above natural language statements in RDF, in the Turtle syntax.
- Open the XML editor of your choice and translate your RDF triples in the XML syntax.
- Save your first semantic annotations in the first.rdf file and validate them with the W3C validation service.
- Download and launch the Corese standalone interface.
 - It proposes two tabs: (1) to download input files and visualize execution traces, and (2) to edit or to load SPARQL queries and visualize the result of their execution on the loaded RDF files. A default SPARQL query is available:

```
select ?x ?t where {?x rdf:type ?t}
```

The SPARQL language will be presented in a next course. Today, you just need to understand that this query enables to retrieve all the resources referred to in the loaded RDF dataset and their types.

Execute the query and examine the result.

2. human.rdf

Download the RDF file at http://wimmics.inria.fr/doc/tutorial/human 2013.rdf and examine it.

- What is the namespace used for the instances/resources created in this file? Which mechanism enables to associate the instances and the namespace ?
- What is the namespace of the RDF schema used in this file and how is it associated to the XML elements?
- Explain xmlns ="&humans; #".
- Find all the information available on John in this file.