Upgrade the Human RDFS schema into an OWL ontology

1. Declare OWL classes, OWL properties
2. Add algebraic characteristic to the declared properties
3. Observe the differences between the results of your SPARQL queries on the RDF graph, loaded with an RDFS schema or an OWL ontology.

Understanding and using an existing RDFS or OWL vocabulary

4. Find the FOAF vocabulary online
5. Briefly indicate what this vocabulary models.
6. Write in the Turtle syntax an "interesting" RDF description using at least 3 classes and 4 properties in this vocabulary and indicate in natural language what your Turtle statements represent.
7. Write 2 "interesting" SPARQL queries enabling to find information on resources described as you proposed it when answering the previous question, and indicate in natural language what your queries enable to retrieve.
8. Explain the different possible inferences that can be done on RDF data based on this vocabulary. Use example RDF descriptions to support your explanation.

Querying the Web of Linked Data

Browse DBpedia

1. Find "London" on DBpedia.org e.g. with a Google search: "london site:dbpedia.org"
2. Find dbp:populationDemonym
3. Find rdf:type
4. Find value yago:WikicatCapitalsInEurope
5. Find "Vienna"
6. Find its URI
7. Continue browsing DBpedia, to get information of interest for you, e.g. starting with http://dbpedia.org/resource/Marie_Curie or http://dbpedia.org/resource/Delphinus, http://dbpedia.org/resource/Nice, etc.
8. Have a look at the DBpedia ontology: http://mappings.dbpedia.org/index.php/Exploring_the_Ontology

Query DBpedia through its SPARQL endpoint http://dbpedia.org/sparql/

Use the DBpedia SPARQL query editor (or Corese with a service clause) to search for

- the capitals of countries
- the demonyms of countries or cities
- any other data of interest for you

Use the DBpedia SPARQL query editor to query the DBpedia ontology

Chose a domain of interest and explore DBpedia through its SPARQL endpoint

Write a short synthesis of your first experience with the Web of Linked Data.