BİL 546 Semantic Web
Fall 2015
Erdogan Dogdu

Assignment 2

Due: Oct 27, 2015

Subject: Inferencing

Find an ontology or make one in Protégé. Write the following inferences on the ontology using SPARQL CONSTRUCT queries in Protégé.

1. rdfs:subClassOf
2. rdfs:subPropertyOf
3. rdfs:domain
4. rdfs:range
5. owl:equivalentClass
6. owl:equivalentProperty
7. owl:sameAs
8. owl:inverseOf
9. owl:SymmetricProperty
10. owl:TransitiveProperty
11. owl:FunctionalProperty
12. owl:InverseFunctionalProperty
13. 3 more queries based on *rule-based reasoning*, specific to your ontology

If your ontology does not have these or related properties, add required data and then write your queries. Your submission for each query (queries.txt) should be in the following format:

i)   Type: Query type (rdfs:subClassOf, or …)
        Query: **SPARQL CONSTRUCT QUERY**
        Data: Related data (axioms) …
        Results: Inference results …

Submit the following files:
- (RDF/S) Ontology (**ont_name.owl**)
- Graph model of the ontology (**ont_name.pdf**)
- Queries (**queries.txt**)

Notes:

- You can use Protégé application's SPARQL tab.

Submit your work as a zip/rar file (**asg3-your-name.zip**) by email to edogdu@ with subject line "[BİL546] Asg 3"

References:

- Download Protégé editor
- Protégé tutorial from CO-ODE project

Late assignment policy: %10 off for each late day after the deadline, and not acceptable after 3 days.