DSDHT Assignment: Module_3, Healthcare metadata

Ontologies and Protégé

- Download and install Protégé from http://protege.stanford.edu/. Protégé is a "free, open-source ontology editor and framework for building intelligent systems". Protégé can be used to browse and explore ontologies, which is the overall task in this assignment.
- Download the latest DBPedia ontology in OWL format, from http://wiki.dbpedia.org.
 "DBpedia is a crowd-sourced community effort to extract structured information from Wikipedia and make this information available on the Web." Load the ontology into Protégé.
- 3. How many classes and axioms are in the ontology? In general an axiom is any assertion about a class, such as a SubClassOf relationship. Describe at least one class and one axiom in your report, with illustrative screen shots.
- 4. One DBPedia class relevant to health informatics is "disease" with URI http://dbpedia.org/ontology/Disease. Go to the DBPedia Sparql endpoint http://dbpedia.org/sparql and run the Sparql query below. How many diseases are found?

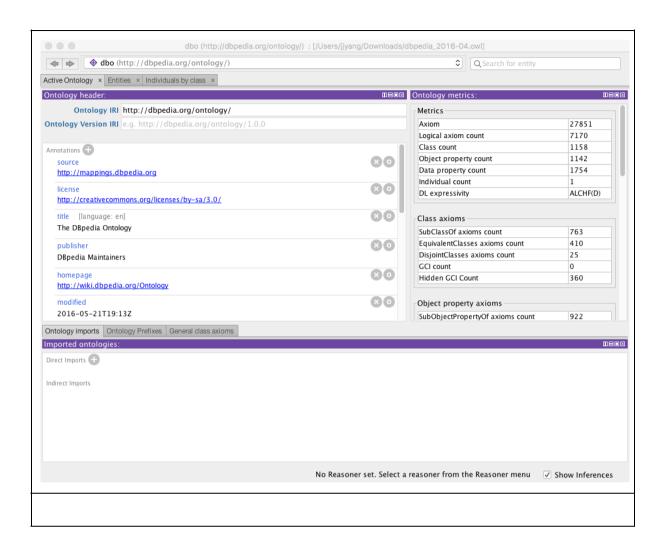
```
SELECT DISTINCT ?d
WHERE { ?d a <a href="http://dbpedia.org/ontology/Disease">http://dbpedia.org/ontology/Disease</a> }
```

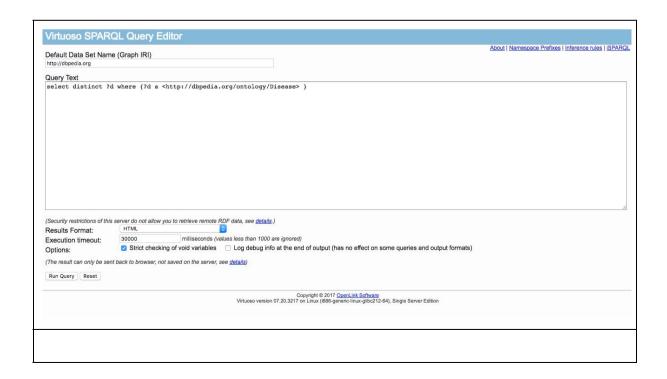
5. Each disease found should correspond with a Wikipedia "Infobox". Confirm this is true for a few diseases. Describe the role of the DBPedia ontology relative to DBPedia and Wikipedia.

Grading rubric:

Task	Points
1	20
2	20
3	20
4	20
5	20
TOTAL	100

Example output:





	d
http://dbpedia.org/resource/Abortion	
http://dbpedia.org/resource/Abscess	
http://dbpedia.org/resource/Acute disseminated encephal	omyelitis
http://dbpedia.org/resource/Alcohol intoxication	
http://dbpedia.org/resource/Amputation	
http://dbpedia.org/resource/Aphasia	
http://dbpedia.org/resource/Arteriovenous malformation	
http://dbpedia.org/resource/Arthritis	
http://dbpedia.org/resource/Bacterial vaginosis	
http://dbpedia.org/resource/Bipolar I disorder	
http://dbpedia.org/resource/Brain abscess	
http://dbpedia.org/resource/Candidiasis	
http://dbpedia.org/resource/Catatonia	
http://dbpedia.org/resource/Central pontine myelinolysis	
http://dbpedia.org/resource/Cerebral arteriovenous malfo	rmation
http://dbpedia.org/resource/Chagas disease	
http://dbpedia.org/resource/Chlamydia infection	
http://dbpedia.org/resource/Cholera	
http://dbpedia.org/resource/Cretinism	
http://dbpedia.org/resource/Endocarditis	
http://dbpedia.org/resource/Erectile_dysfunction	
http://dbpedia.org/resource/Essential tremor	
http://dbpedia.org/resource/Expressive aphasia	
http://dbpedia.org/resource/Foix-Alajouanine syndrome	
http://dbpedia.org/resource/Fugue_state	
http://dbpedia.org/resource/Genetic disorder	
http://dbpedia.org/resource/Hemiparesis	

