Prerequisites:

1. User should have Protege installed in the machine .Version should be >5.

　　　If one is not having protege or protege5.0.0 or higher installed they can download latest version of protege from based on machine's operating system:
　　　　　https://protege.stanford.edu/products.php

2. JRE should be installed in user machine and version should be >1.8

　　　To check for java version one can type java -version in terminal.The following will be the output.

```
(base) pramit67@pramit67-Inspiron-5567:~$ java -version
openjdk version "1.8.0_232"
OpenJDK Runtime Environment (build 1.8.0_232-8u232-b09-0ubuntu1~16.04.1-b09)
OpenJDK 64-Bit Server VM (build 25.232-b09, mixed mode)
```
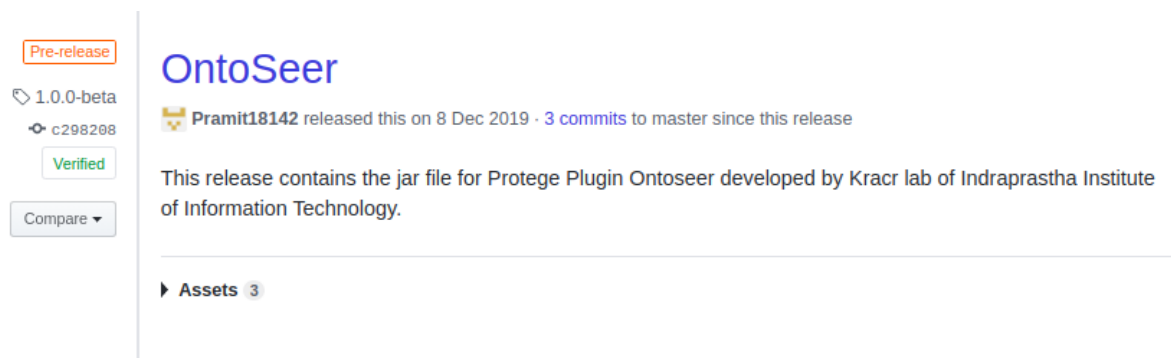
If openjdk version is less than 1.8 then download the latest jre from
https://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html based on machine's operating system.

Installation Guide :

1.One can downlaod the file from the following link:

https://github.com/kracr/ontoseer/releases

Pre-release
🏷 1.0.0-beta
◈ c298208
Verified

Compare ▾

OntoSeer

Pramit18142 released this on 8 Dec 2019 · 3 commits to master since this release

This release contains the jar file for Protege Plugin Ontoseer developed by Kracr lab of Indraprastha Institute of Information Technology.

▶ Assets 3

The link to download the code repository and instruction manual is :

https://github.com/kracr/ontoseer

2. Click on Assets->Ontoseer.jar

The jar file will get downloaded.

To copy the source code and jar file clone the github repository using   :
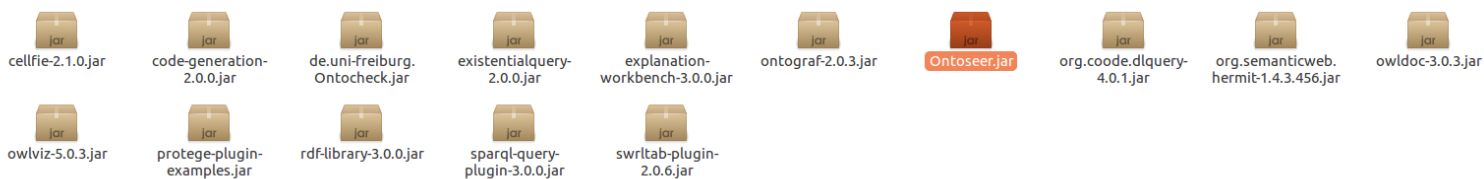
git clone https://github.com/kracr/ontoseer

3. Copy the jar file to the plugins folder of Protege.
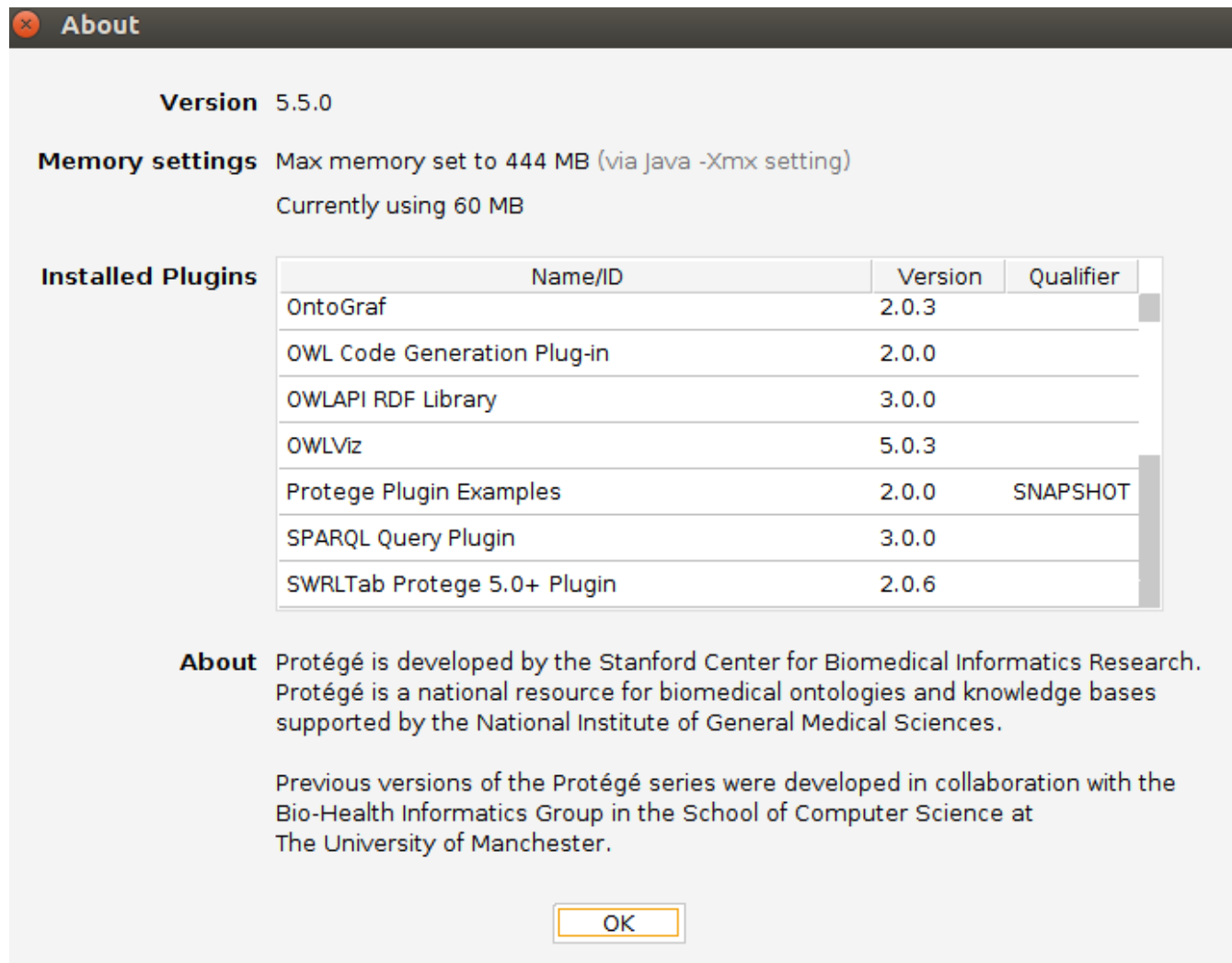
a. Click on the plugins folder.

b.Copy OntoSeer.jar in the plugin folder.

4. Restart Protege.

5. Go to about Section of Protege and check whether the plugin has been correctly installed or not .It will be shown in the window.

6 .

Click on Windows. Click on Tabs .Click on Example Tab.This window will appear.

Active ontology × | Entities × | Classes × | Individuals by class × | Example Tab ×

Ontology metrics:

Metrics

Axiom	0
Logical axiom count	0
Declaration axioms count	0
Class count	0
Object property count	0
Data property count	0
Individual count	0
Annotation Property count	0

Class axioms

SubClassOf	0
EquivalentClasses	0
DisjointClasses	0
GCI count	0
Hidden GCI Count	0

Object property axioms

SubObjectPropertyOf	0
EquivalentObjectProperties	0
InverseObjectProperties	0
DisjointObjectProperties	0
FunctionalObjectProperty	0
InverseFunctionalObjectProperty	0
TransitiveObjectProperty	0
SymmetricObjectProperty	0
AsymmetricObjectProperty	0
ReflexiveObjectProperty	0
IrrefexiveObjectProperty	0
ObjectPropertyDomain	0
ObjectPropertyRange	0
SubPropertyChainOf	0

Data property axioms

SubDataPropertyOf	0
EquivalentDataProperties	0
DisjointDataProperties	0
FunctionalDataProperty	0
DataPropertyDomain	0
DataPropertyRange	0

Individual axioms

ClassAssertion	0
ObjectPropertyAssertion	0
DataPropertyAssertion	0
NegativeObjectPropertyAssertion	0

Example view component:

Refresh | ODP | VocabSuggestion

Now Start Building your Ontology.

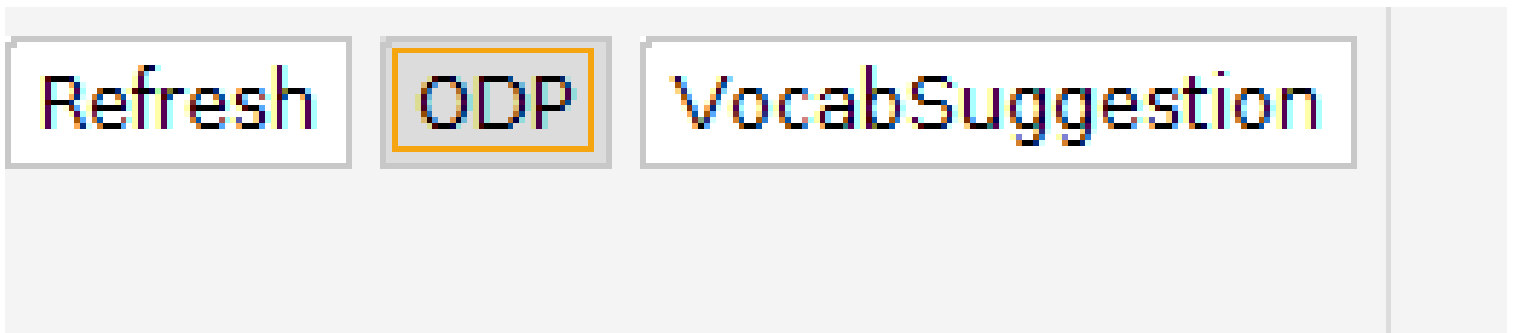For tutorial on ontology building one can refer to the Protege tutorial. This can be found in the following link:

https://cgi.csc.liv.ac.uk/~frank/teaching/comp08/protege_tutorial.pdf

OntoSeer Manual

For getting ODP(Ontology Design Pattern) Recommendation

1. Click On Odp button:

2. Enter description of the ontology that one is trying to make ,through terminal.Alternatively domain name,name of class and properties one want to make or can additively provide with the competency questions.One can provide additional comments also. But one have to make sure that they are actually answering at least one of the question as it is necessary to get recommendation. But the recommendation will get better if one provide answer to as many questions as one can.
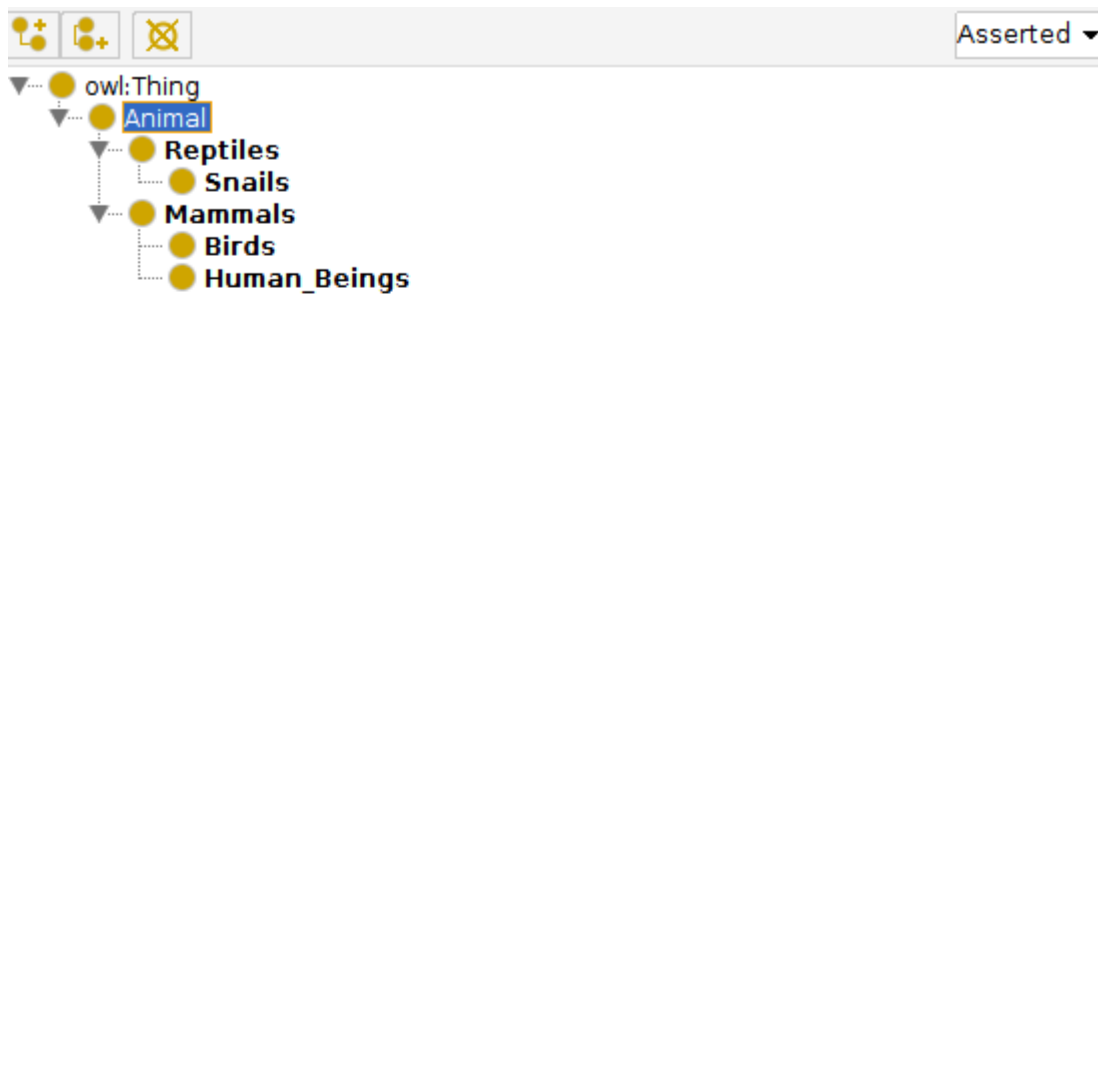

Enter description for ontology chess game

3. Get Recommendation. The recommendation is based on the data that we have scraped from 223 ODPs that we collected from http://ontologydesignpatterns.org/wiki/Community:ListPatterns
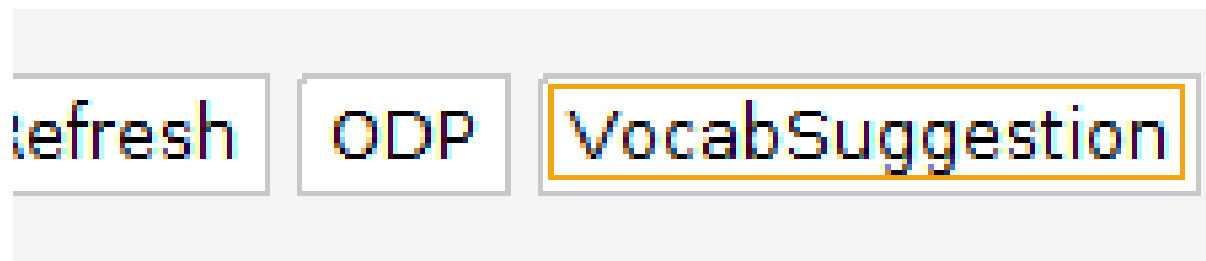
ODP for classes [Role task., Price,
Lexico Syntactic ODPs corresponding
to SubclassOf relation, Disjoint Classes,
and Exhaustive Classes ODPs,
Objectrole, Biological Entities.]

For Vocabularies Suggesstions and Alternate Names:

1. One should start buliding classes and properties in Protege .For example:-
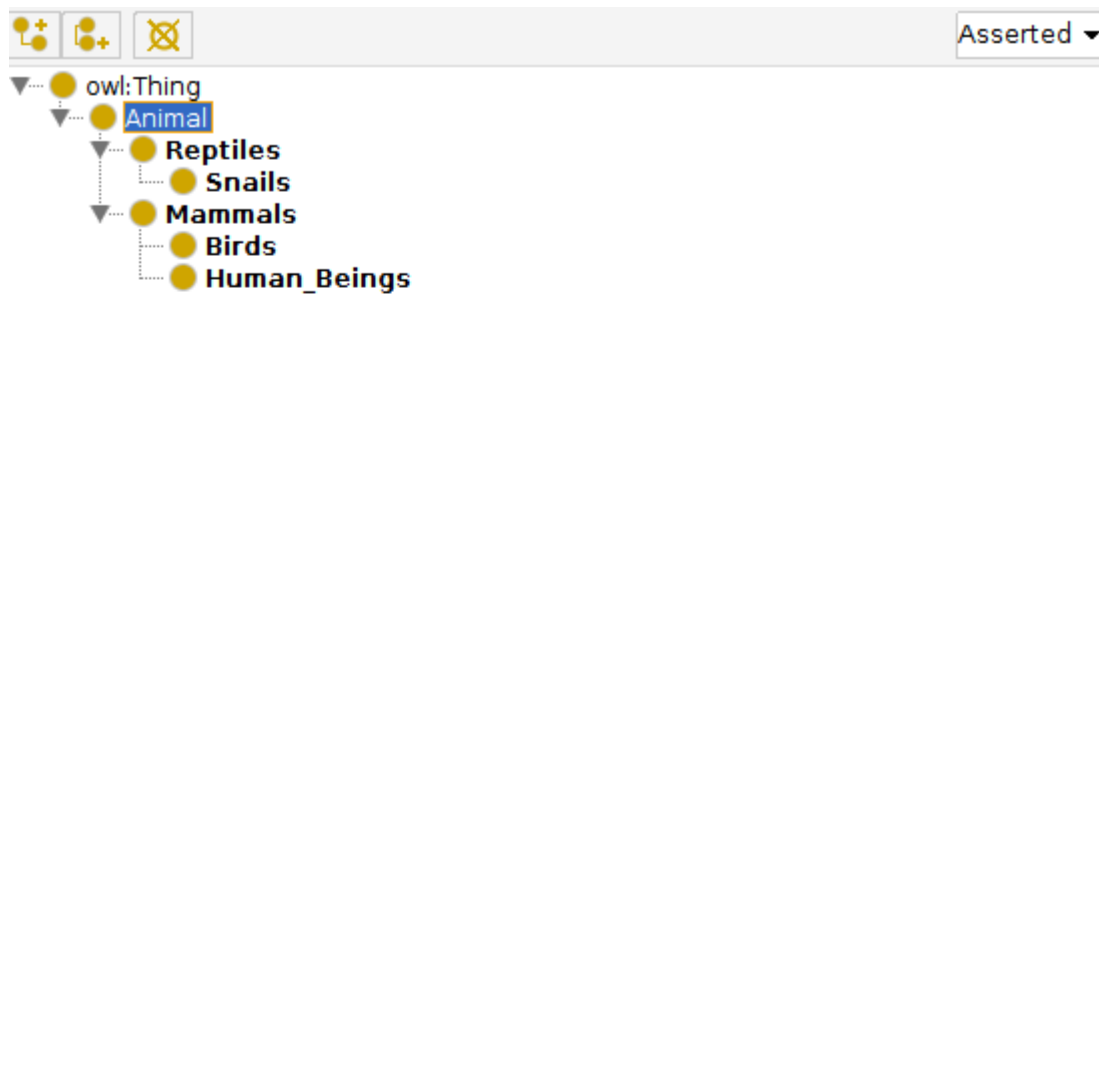
2. Click on VocabSuggestion button.

3. Get Recommendation.The recommendation will be based on the results retrieved after querying LOV https://lov.linkeddata.es/dataset/lov/suggest and bioportal
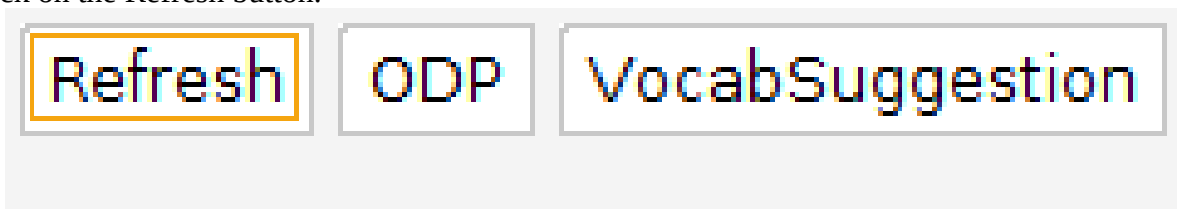https://bioportal.bioontology.org/recommender

Vocabularies for class
Human_Beings>->[[]]
Alternate names for class
Human_Beings>->[[]]
Vocabularies for class Snails>->[[]]
Alternate names for class
Snails>->[[{"score":0.6666666,"freq":6
"text":"stalls"},{"score":0.6666666,"fre
q":2,"text":"stairs"}]]
Vocabularies for class Birds>->[[]]
Alternate names for class
Birds>->[[{"score":0.6,"freq":57,"text":
"birth"},{"score":0.75,"freq":4,"text":"b
rd"},{"score":0.5,"freq":3,"text":"bias"
},{"score":0.6,"freq":1,"text":"bands"},
{"score":0.6,"freq":1,"text":"bikes"}]]
Vocabularies for class Animal>->[[]]
Alternate names for class
Animal>->[[{"score":0.6666666,"freq":
18,"text":"anomaly"},{"score":0.66666
66,"freq":6,"text":"annual"},{"score":0.
3333333,"freq":2,"text":"animals"},{"sc
ore":0.6,"freq":1,"text":"anime"},{"scor
e":0.6,"freq":1,"text":"arima"}]]
Vocabularies for class Mammals>->[[]]
Alternate names for class
Mammals>->[[{"score":0.8333333,"fre
q":3,"text":"mammal"}]]

For Naming Convention :

1. One should start buliding classes and properties in Protege .For example:-
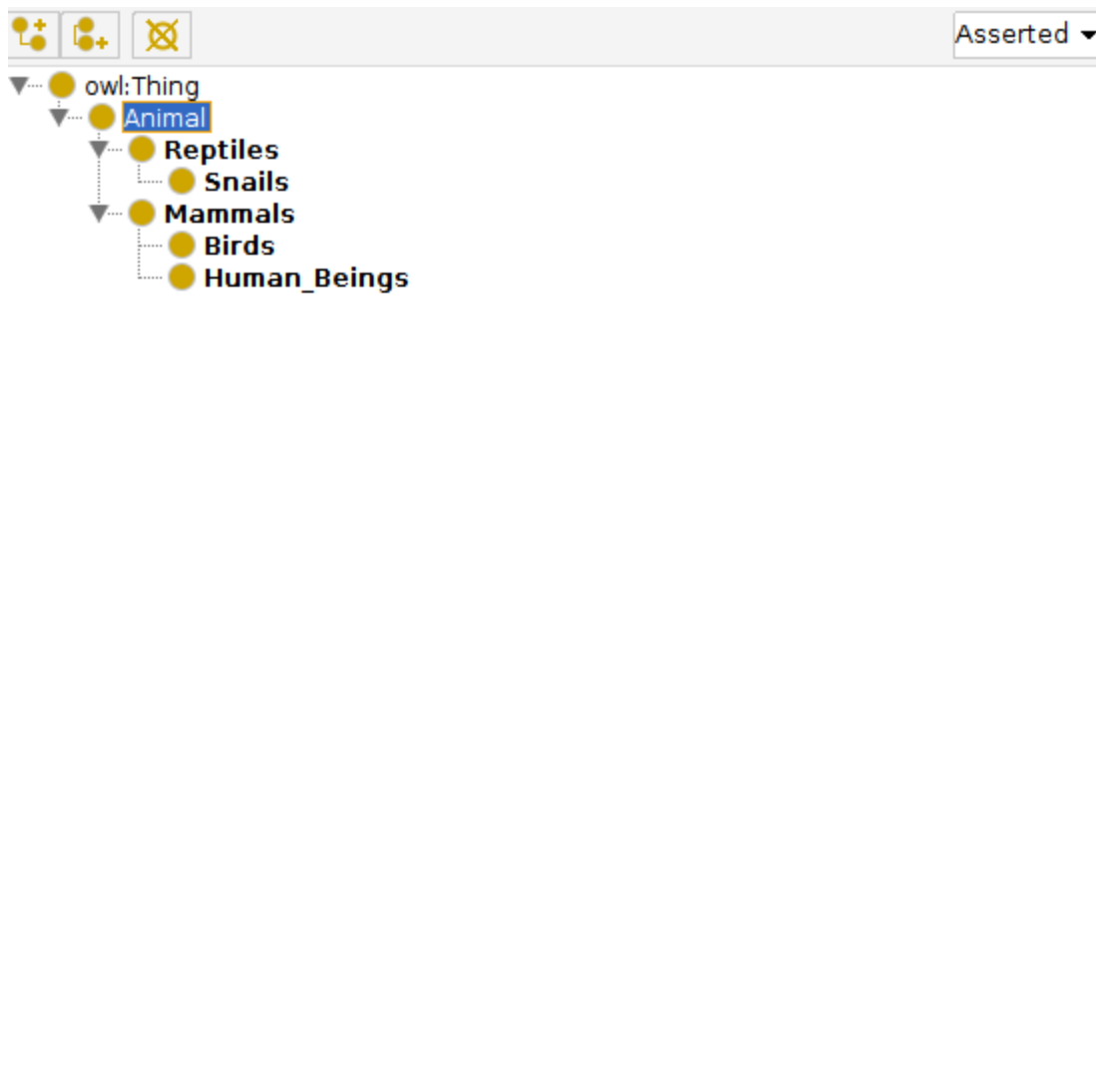
2. Click on the Refresh button.

3. Get Recommendations.

```
CamelCase for class Per123>->Per123
>
Without Alphabet Per123>->Per>
```

Axiom Recommendation

1. Start building the ontologies .

2. Click on Axiom Recommendation button .

3. Get the recommendations. The recommendation will be shown on the basis of the Manchester Owl corpus that we have downloaded .The corpus and other dataset will be available on the github page.

https://github.com/kracr/ontoseer.