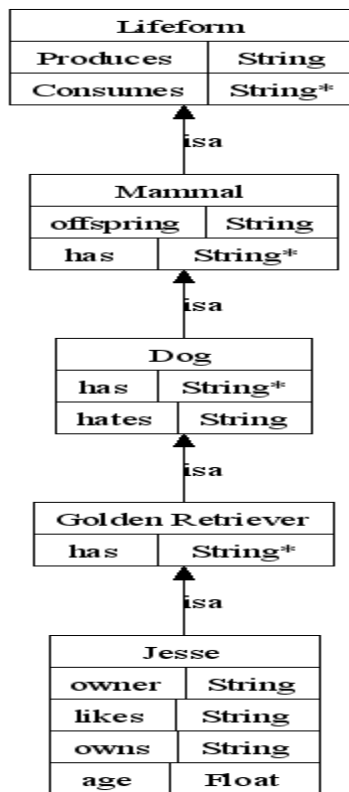


# TAKEHOME-2 REPORT

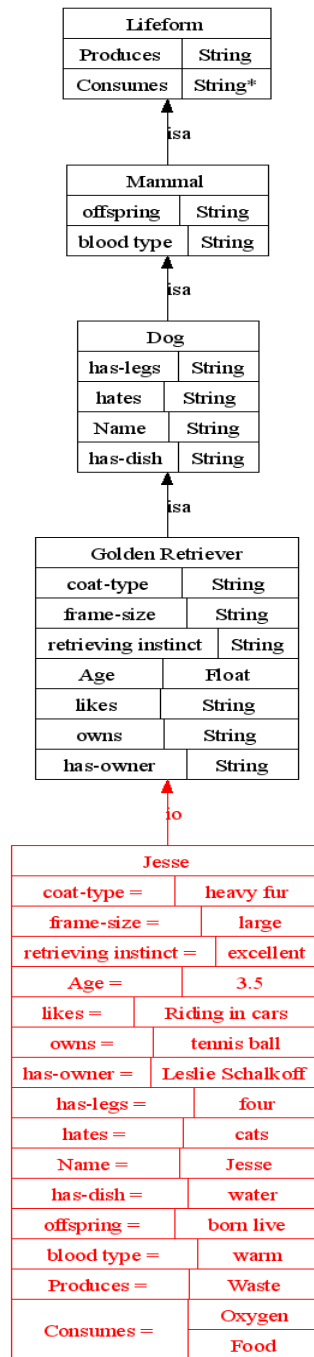
## Ontology 1

Ontology 1 graphical rendition had already been provided and all we had to do was develop it in Protégé 3.5. Ontology1 has a main class Lifeform which has a subclass mammals which in turn has subclass dog and so on and we have a subclass called Jesse in the end. There is a slot named “has” which is used in several classes and hence slot overriding is done. Given below is the graphical rendition as obtained in Ontoviz.



## Ontology-2

Ontology 2 is similar to ontology 1 except that “Jesse” is an instance of golden retriever instead of being a subclass. Also usage of “has” slot has been restricted. Below is the graphical rendition of Ontology-2.



## **Ontology-3(topic-Indian Army)**

1. The domain of the ontology is Indian army and the knowledge domain it is intended to cover is the rank structure of the officer personnel in the Indian army and the various weapons and vehicles currently used in the Indian army.
2. Sources/references for the ontology is Wikipedia and the Indian army website. They are as follows-[https://en.wikipedia.org/wiki/Equipment\\_of\\_the\\_Indian\\_Army](https://en.wikipedia.org/wiki/Equipment_of_the_Indian_Army) ,  
[https://en.wikipedia.org/wiki/Army\\_ranks\\_and\\_insignia\\_of\\_India](https://en.wikipedia.org/wiki/Army_ranks_and_insignia_of_India)  
<http://indianarmy.nic.in/>
3. The purpose of the ontology is to show the different parts of the Indian army and it also gives in-depth information about the various components of the army.
4. The intended user for the ontology is any person who is interested in the Indian army and its components and it can also be used as a database by an army personnel to update , view or filter records about any information such as tanks still in active use, weapons used by special forces etc.
5. This ontology of the Indian army uses the various functionalities such as inheritance,slots,queries and inverse slots to maximum use. It first creates subclasses of the Indian army which are personnel and machinery and equipment. Personnel then has subdivisions –special forces and officers, and these have several slots which hold important information such as ranking, weapons used which can be used in queries to filter and obtain useful information. Machinery and equipment lists all the infantry weapons and vehicles which are being used and were used by the Indian Army. Using all the above information, the ontology also creates relationship between the instances in different classes and provides valuable information, for example the user can search for the highest paid officer in the Indian army and then see who reports to him or what is the caliber of any weapon. These are few of the possible information which can be inferred from this ontology.

**The graphical representation of ontology 3 is too big to be shown in the report and hence I have also added it along with the .pprt and pins and pont file.Use paint to open the .gif file.**

