

## Semantic Web Lab 2 report

### HXE170000

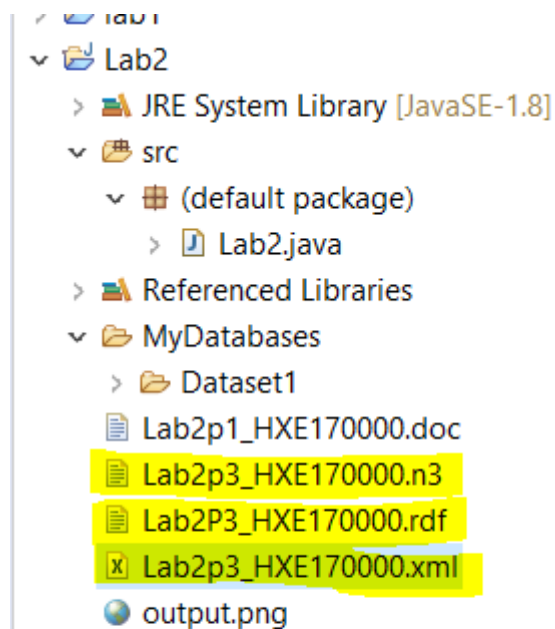
Goal: Be able to create in-memory and persisted models with Jena.

High level design:






































1. We have dealt with Gruff and Allegrograph.
2. Uploaded camera.owl file into gruff and have seen how the things work in gruff.
3. Created an in-memory and persisted model with Jena for H.G Wells and his famous 2 books and the movies/broadcast they were made into and verified the generated model in Gruff.

Steps to run the project:

Import the project as a java project and run it. You will see the following files generated



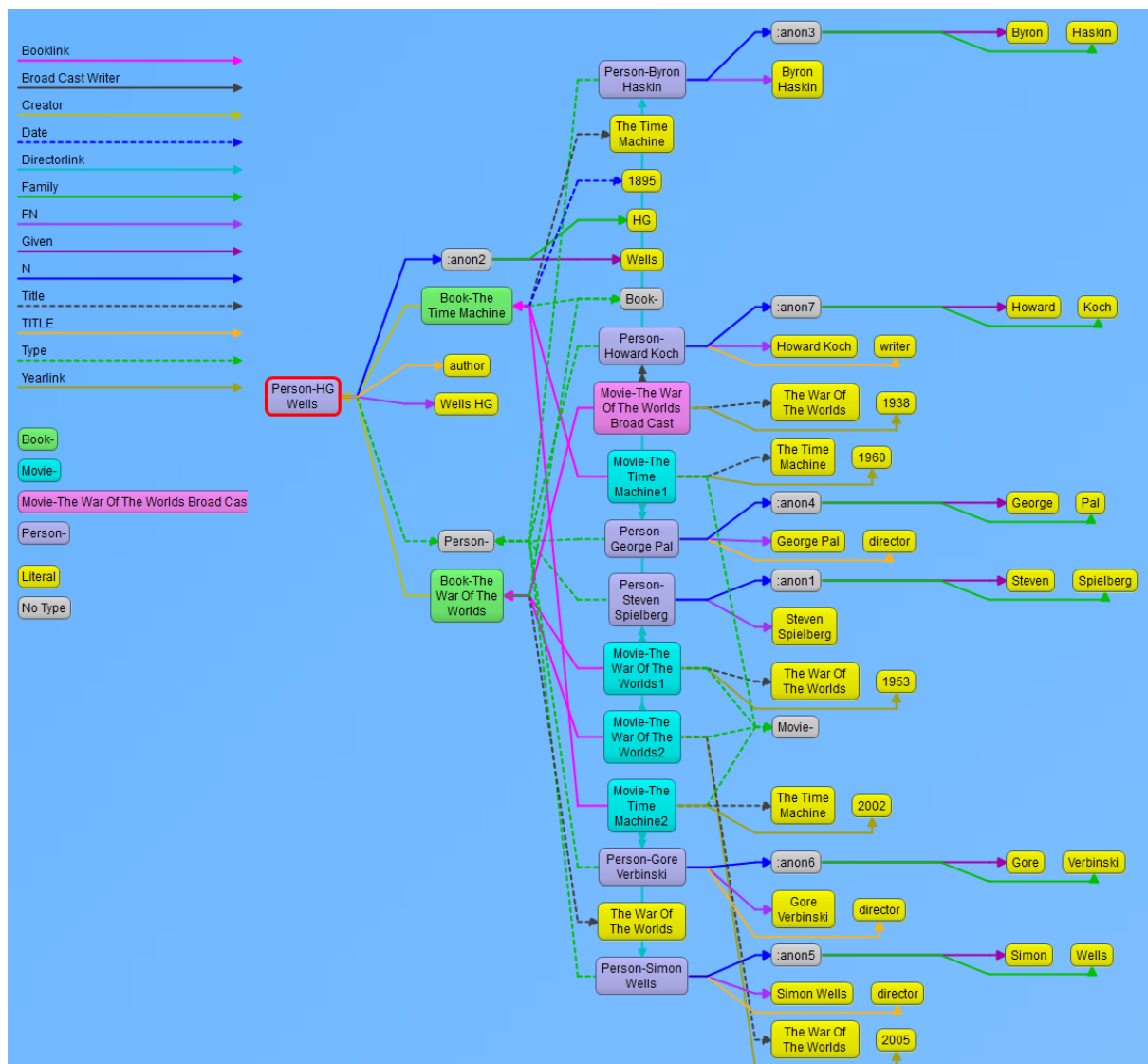
Following models are generated under MyDatabases/Dataset1

- ▼  Lab2
  - >  JRE System Library [JavaSE-1.8]
  - ▼  src
    - ▼  (default package)
      - >  Lab2.java
  - >  Referenced Libraries
  - ▼  MyDatabases
    - ▼  Dataset1
      -  GOSP.dat
      -  GOSP.idn
      -  GPOS.dat
      -  GPOS.idn
      -  GSPO.dat
      -  GSPO.idn
      -  journal.jrnl
      -  node2id.dat
      -  node2id.idn
      -  nodes.dat
      -  OSP.dat
      -  OSP.idn
      -  OSPG.dat
      -  OSPG.idn
      -  POS.dat
      -  POS.idn
      -  POSG.dat
      -  POSG.idn
      -  prefix2id.dat
      -  prefix2id.idn
      -  prefixes.dat
      -  prefixldx.dat
      -  prefixldx.idn
      -  SPO.dat
      -  SPO.idn
      -  SPOG.dat
      -  SPOG.idn
    -  Lab2p1\_HXE170000.doc
    -  Lab2p3\_HXE170000.n3

The XML output is as follows

Node	Content
?-? xml	version="1.0" encoding="UTF-8"
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ xml:ns:rdf</li> <li>⊗ xml:ns:dc</li> <li>⊗ xml:ns:vcard</li> <li>⊗ xml:ns:j.0</li> </ul> </li> </ul>	<a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a> <a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a> <a href="http://www.w3.org/2001/vcard-rdf/3.0#">http://www.w3.org/2001/vcard-rdf/3.0#</a> <a href="http://utdallas.semclass#">http://utdallas.semclass#</a>
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ j.0:Movie-           <ul style="list-style-type: none"> <li>⊗ rdf:about</li> <li>⊗ dc:title</li> <li>⊗ j.0:yearlink</li> </ul> </li> </ul> </li> </ul>	<a href="http://utdallas.semclass#Movie-TheWarOfTheWorlds2">http://utdallas.semclass#Movie-TheWarOfTheWorlds2</a> The War Of The Worlds 2005
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ j.0:directorlink           <ul style="list-style-type: none"> <li>⊗ j.0:person-               <ul style="list-style-type: none"> <li>⊗ rdf:about</li> <li>⊗ vcard:FN</li> <li> <ul style="list-style-type: none"> <li>⊗ vcard:N                   <ul style="list-style-type: none"> <li>⊗ rdf:parseType</li> <li>⊗ vcard:Given</li> <li>⊗ vcard:Family</li> <li>⊗ vcard:TITLE</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>	<a href="http://utdallas.semclass#person-StevenSpielberg">http://utdallas.semclass#person-StevenSpielberg</a> Steven Spielberg Resource Steven Spielberg director
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ j.0:booklink</li> </ul> </li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ j.0:Movie-           <ul style="list-style-type: none"> <li>⊗ rdf:about</li> <li>⊗ dc:title</li> <li>⊗ j.0:yearlink</li> <li> <ul style="list-style-type: none"> <li>⊗ j.0:directorlink</li> <li>⊗ j.0:booklink</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<a href="http://utdallas.semclass#Movie-TheWarOfTheWorlds1">http://utdallas.semclass#Movie-TheWarOfTheWorlds1</a> The War Of The Worlds 1953
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>⊗ j.0:Movie-</li> <li>⊗ j.0:Movie-</li> <li>⊗ j.0:Movie-TheWarOfTheWorldsBroadCast</li> </ul> </li> </ul>	

Model generated:



Conclusion: Learnt about gruff ,allegro and visualizing the data model we create