

# Semantic Web Lab 1 report

## HXE170000

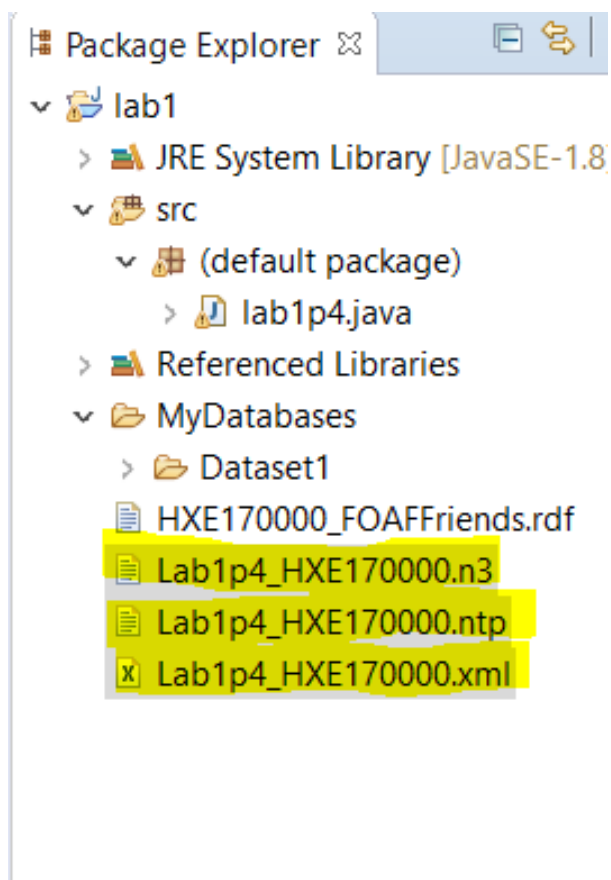
Goal: Created in-memory and persisted models with Jena.

High level design: Created a VCard and FOAF into a model using Jena

Steps:

1. Created a VCard to represent Dr. May Westford.
2. Used directory name approach in configuring TDB.
3. Created a FOAF profile (HXE170000\_FOAFFriends.rdf) and imported it.
4. Modified the code to use the namegraph (myrdf) instead of using un-named model.

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



Following models are generated under MyDatabases/Dataset1



## Lab1p4\_HXE170000.xml

```
<?xml version="1.0" encoding="windows-1252"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:admin="http://webns.net/mvoh/"
  xmlns:vcard="http://www.w3.org/2003/vcard-rdf/3.0#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
>
  <rdf:Description rdf:about="http://utdallas.semclass/874659">
    <vcard:FN>Dr. May Westford</vcard:FN>
    <vcard:BDAY>March 28, 1965</vcard:BDAY>
    <vcard:EMAIL>May.Westford@consolidatedsem.com</vcard:EMAIL>
    <vcard:TITLE>North America Division Vice President</vcard:TITLE>
    <vcard:ORG>Consolidated Semantics, U.S</vcard:ORG>
  </rdf:Description>
  <foaf:PersonalProfileDocument rdf:about="file:///C:/Users/havio/OneDrive/Documents/Semantic%20web/lab1/H/E170000_FOAFFriends.vdf">
    <foaf:makes
      <foaf:Person rdf:about="file:///C:/Users/havio/OneDrive/Documents/Semantic%20web/lab1/H/E170000_FOAFFriends.vdf#me">
        <foaf:name>Harichandana Epurvi</foaf:name>
        <foaf:title>Ms</foaf:title>
        <foaf:givenname>Harichandana</foaf:givenname>
        <foaf:family_name>Epurvi</foaf:family_name>
        <foaf:nick>Chandu</foaf:nick>
        <foaf:mbox rdf:resource="mailto:hxe170000@utdallas.edu"/>
        <foaf:homepage rdf:resource="https://personal.utdallas.edu/~hxe170000/">
        <foaf:depiction rdf:resource="file:///C:/Users/havio/OneDrive/Documents/Semantic%20web/lab1/picture.png"/>
        <foaf:phone rdf:resource="tel:4694030808"/>
        <foaf:workplaceHomepage rdf:resource="https://personal.utdallas.edu/~hxe170000/">
        <foaf:workInfoHomepage rdf:resource="file:///C:/Users/havio/OneDrive/Documents/Semantic%20web/lab1/Student"/>
        <foaf:schoolHomepage rdf:resource="https://www.utdallas.edu/">
        <foaf:knows
          <foaf:Person>
            <foaf:name>Shilpa</foaf:name>
            <foaf:mbox rdf:resource="mailto:catrycool@gmail.com"/>
            <rdfs:seealso rdf:resource="https://www.utdallas.edu/shilpa"/>
          </foaf:Person>
        </foaf:knows>
        <foaf:Person>
          <foaf:name>Rekha</foaf:name>
          <foaf:mbox rdf:resource="mailto:wtpj0613@gmail.com"/>
          <rdfs:seealso rdf:resource="https://www.utdallas.edu/rekha"/>
        </foaf:Person>
        </foaf:knows>
        <foaf:Person>
          <foaf:name>chandana</foaf:name>
          <foaf:mbox rdf:resource="mailto:harichandana281997@gmail.com"/>
          <rdfs:seealso rdf:resource="https://www.utdallas.edu/hari"/>
        </foaf:Person>
        </foaf:knows>
      </foaf:makes>
      <foaf:primaryTopic rdf:resource="file:///C:/Users/havio/OneDrive/Documents/Semantic%20web/lab1/H/E170000_FOAFFriends.vdf#me">
      <admin:generatorAgent rdf:resource="http://www.1dodds.com/foaf/foaf-a-matic"/>
      <admin:errorReportsTo rdf:resource="mailto:leigh@1dodds.com"/>
    </foaf:PersonalProfileDocument>
  </rdf:RDF>
```

## Lab1p4\_HXE170000.n3

```
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix admin: <http://webns.net/mvcb/> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .

<http://utdallas/semclass/874659>
  <http://www.w3.org/2001/vcard-rdf/3.0#BDAY>
    "March 28, 1965" ;
  <http://www.w3.org/2001/vcard-rdf/3.0#EMAIL>
    "May.Westford@consolidatedsem.com" ;
  <http://www.w3.org/2001/vcard-rdf/3.0#FN>
    "Dr. May Westford" ;
  <http://www.w3.org/2001/vcard-rdf/3.0#ORG>
    "Consolidated Semantics, U.S" ;
  <http://www.w3.org/2001/vcard-rdf/3.0#TITLE>
    "North America Division Vice President" .

<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf>
  a foaf:PersonalProfileDocument ;
  admin:errorReportsTo <mailto:leigh@ldodds.com> ;
  admin:generatorAgent <http://www.ldodds.com/foaf/foaf-a-matic> ;
  foaf:maker <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> ;
  foaf:primaryTopic <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> .

<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me>
  a foaf:Person ;
  foaf:depiction <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/picture.png> ;
  foaf:family_name "Epuri" ;
  foaf:givenname "Harichandana" ;
  foaf:homepage <https://personal.utdallas.edu/~hxel70000/> ;
  foaf:knows
    [ a foaf:Person ;
      rdfs:seeAlso <https://www.utdallas.edu/shilpa> ;
      foaf:mbox <mailto:catsycool@gmail.com> ;
      foaf:name "Shilpa"
    ] ;
  foaf:knows
    [ a foaf:Person ;
      rdfs:seeAlso <https://www.utdallas.edu/rekha> ;
      foaf:mbox <mailto:wtproject0613@gmail.com> ;
      foaf:name "Rekha"
    ] ;
  foaf:knows
    [ a foaf:Person ;
      rdfs:seeAlso <https://www.utdallas.edu/hari> ;
      foaf:mbox <mailto:harichandana281997@gmail.com> ;
      foaf:name "chandana"
    ] ;
  foaf:mbox <mailto:hxel70000@utdallas.edu> ;
  foaf:name "Harichandana Epuri" ;
  foaf:nick "Chandu" ;
  foaf:phone <tel:4694030808> ;
  foaf:schoolHomepage <https://www.utdallas.edu/> ;
  foaf:title "Ms" ;
  foaf:workInfoHomepage <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/Student> ;
  foaf:workplaceHomepage <https://personal.utdallas.edu/~hxel70000/> .
```

## Lab1p4\_HXE170000.ntp

```
<http://utdallas/semclass/874659> <http://www.w3.org/2001/vcard-rdf/3.0#FN> "Dr. May Westford" .
<http://utdallas/semclass/874659> <http://www.w3.org/2001/vcard-rdf/3.0#BDAY> "March 28, 1965" .
<http://utdallas/semclass/874659> <http://www.w3.org/2001/vcard-rdf/3.0#EMAIL> "May.Westford@consolidatedsem.com" .
<http://utdallas/semclass/874659> <http://www.w3.org/2001/vcard-rdf/3.0#TITLE> "North America Division Vice President" .
<http://utdallas/semclass/874659> <http://www.w3.org/2001/vcard-rdf/3.0#ORG> "Consolidated Semantics, U.S" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf> <http://xmlns.com/foaf/0.1/PersonalProfileDocument> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf> <http://xmlns.com/foaf/0.1/maker> <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf> <http://xmlns.com/foaf/0.1/primaryTopic> <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf> <http://webns.net/mvcb/generatorAgent> <http://www.ldodds.com/foaf/foaf-a-matic> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf> <http://webns.net/mvcb/errorReportsTo> <mailto:leigh@ldodds.com> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://xmlns.com/foaf/0.1/Person> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/name> "Harichandana Epuri" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/title> "Ms" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/givenname> "Harichandana" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/family_name> "Epuri" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/nick> "Chandu" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/mbox> <mailto:hxel70000@utdallas.edu> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/homepage> <https://personal.utdallas.edu/~hxel70000/> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/depiction> <file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/picture.png> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/phone> <tel:4694030808> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/workInfoHomepage> <https://personal.utdallas.edu/~hxel70000/> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/workplaceHomepage> <https://personal.utdallas.edu/~hxel70000/> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/schoolHomepage> <https://www.utdallas.edu/> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/knows> :B17583000X2D4ac6X2D4826X2D367X2D3479c9ffba15 .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/knows> :Bae50f0b0X2De919X2D433cX2De1bX2Dbbd25f3b8e9e .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/knows> :B554bbcbX2D211X2D4100X2D878X2D8ab37c88e7f4 .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/knows> :B17583000X2D4ac6X2D4826X2D367X2D3479c9ffba15 <http://xmlns.com/foaf/0.1/name> "Shilpa" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/mbox> <mailto:catsycool@gmail.com> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/2000/01/rdf-schema#seeAlso> <https://www.utdallas.edu/shilpa> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://xmlns.com/foaf/0.1/Person> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/name> "Rekha" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/mbox> <mailto:wtproject0613@gmail.com> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/2000/01/rdf-schema#seeAlso> <https://www.utdallas.edu/rekha> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://xmlns.com/foaf/0.1/Person> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/name> "chandana" .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://xmlns.com/foaf/0.1/mbox> <mailto:harichandana281997@gmail.com> .
<file:///C:/Users/haric/OneDrive/Documents/Semantic%20web/lab1/HXE170000_FOAFFriends.rdf#me> <http://www.w3.org/2000/01/rdf-schema#seeAlso> <https://www.utdallas.edu/hari> .
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Conclusion: Learnt how to create in memory and persisted model using Jena.