PRABAL GHOSH   ROLL-40

RDF-TURTLE(1)

@prefix : <http://example.com/ex#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix owl: <http://www.w3.org/2002/07/owl#>.

:Course   a   rdfs:class.
:Professor   a   rdfs:class.
:Assoicate_Professor   a rdfs:class.
:Assistant_Professor   a rdfs:class.
:Academic_Staff_Member   rdf:type   rdfs:Class ;
rdfs:subClassOf   :Professor,:Assoicate_Professor,:Assistant_Professor .
:Staff_Member   rdf:type   rdfs:Class ;
rdfs:subClassOf   :Academic_Staff_Member.

```
:isTaughtBy        a       owl:ObjectProperty;
rdfs:domain        :Course;
rdfs:range         :Academic_Staff_Member .



:involves          a              owl:ObjectProperty;
rdfs:subPropertyOf         :isTaughtBy.

:id a owl:DatatypeProperty;
rdfs:domain        :Staff_Member;
rdfs:range         rdfs:Literal.

:phone a owl:DatatypeProperty;
rdfs:domain        :Staff_Member;
rdfs:range         rdfs:Literal.

:David_Billington          a              :Assoicate_Professor.
:Discrete_Mathematics      a              :Course;
                           :isTaughtBy              :David_Billington .
```
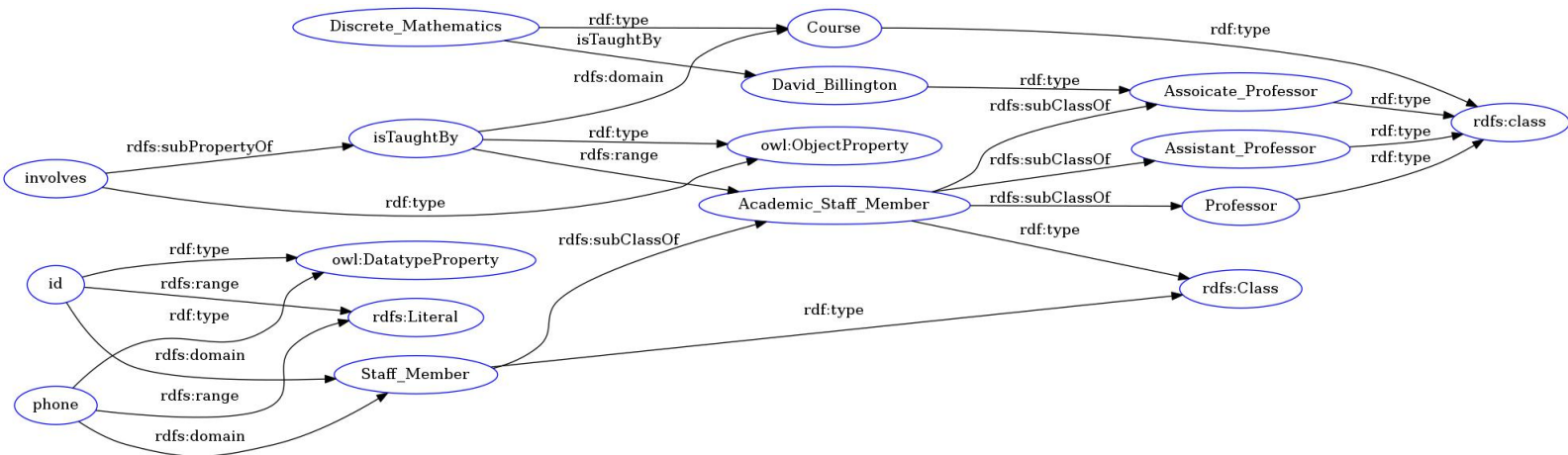

Namespaces:
http://example.com/ex#
rdf: http://www.w3.org/1999/02/22-rdf-syntax-ns#
rdfs: http://www.w3.org/2000/01/rdf-schema#
xml: http://www.w3.org/XML/1998/namespace
xsd: http://www.w3.org/2001/XMLSchema#
owl: http://www.w3.org/2002/07/owl#

RDF-TURTLE(2)

```turtle
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix ns0: <http://example.com/ex#> .

<http://example.com/ex#Course> a rdfs:class .
<http://example.com/ex#Professor> a rdfs:class .
<http://example.com/ex#Assoicate_Professor> a rdfs:class .
<http://example.com/ex#Assistant_Professor> a rdfs:class .
<http://example.com/ex#Academic_Staff_Member> a rdfs:Class ;
  rdfs:subClassOf <http://example.com/ex#Professor>,
                  <http://example.com/ex#Assoicate_Professor>,
                  <http://example.com/ex#Assistant_Professor> .
<http://example.com/ex#Staff_Member>   a rdfs:Class ;
  rdfs:subClassOf <http://example.com/ex#Academic_Staff_Member> .
<http://example.com/ex#isTaughtBy>  a owl:ObjectProperty ;
  rdfs:domain <http://example.com/ex#Course> ;
  rdfs:range <http://example.com/ex#Academic_Staff_Member> .
<http://example.com/ex#involves>   a owl:ObjectProperty ;
  rdfs:subPropertyOf <http://example.com/ex#isTaughtBy> .
<http://example.com/ex#id>   a owl:DatatypeProperty ;
  rdfs:domain <http://example.com/ex#Staff_Member> ;
  rdfs:range rdfs:Literal .
<http://example.com/ex#phone>  a owl:DatatypeProperty ;
  rdfs:domain <http://example.com/ex#Staff_Member> ;
  rdfs:range rdfs:Literal .
<http://example.com/ex#David_Billington> a
<http://example.com/ex#Assoicate_Professor> .

<http://example.com/ex#Discrete_Mathematics> a
 <http://example.com/ex#Course> ;
  ns0:isTaughtBy ns0:David_Billington .
```
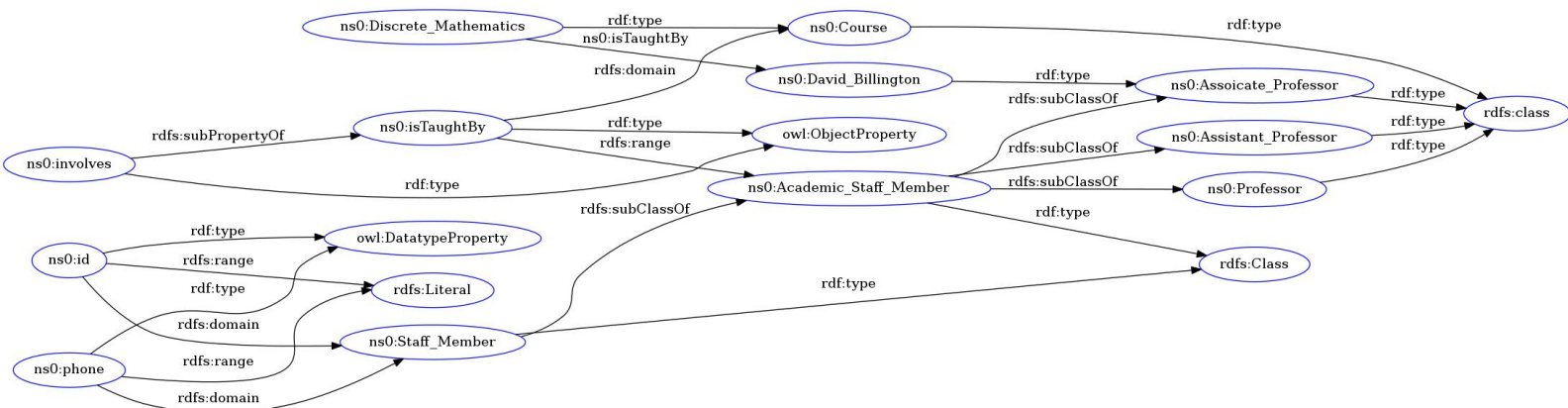

Namespaces:
rdf: http://www.w3.org/1999/02/22-rdf-syntax-ns#
rdfs: http://www.w3.org/2000/01/rdf-schema#
owl: http://www.w3.org/2002/07/owl#
ns0: http://example.com/ex#

RDF-XML(1)

```xml
<?xml version="1.0" encoding="utf-8" ?><rdf:RDF
xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
        xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
        xmlns:owl="http://www.w3.org/2002/07/owl#"
        xmlns:ns0="http://example.com/ex#">

  <rdfs:class rdf:about="http://example.com/ex#Course">
  </rdfs:class>

  <rdfs:class rdf:about="http://example.com/ex#Professor">
  </rdfs:class>

  <rdfs:class rdf:about="http://example.com/ex#Assoicate_Professor">
  </rdfs:class>

  <rdfs:class rdf:about="http://example.com/ex#Assistant_Professor">
  </rdfs:class>

  <rdfs:Class rdf:about="http://example.com/ex#Academic_Staff_Member">
    <rdfs:subClassOf rdf:resource="http://example.com/ex#Professor"/>
    <rdfs:subClassOf
rdf:resource="http://example.com/ex#Assoicate_Professor"/>
    <rdfs:subClassOf
rdf:resource="http://example.com/ex#Assistant_Professor"/>
  </rdfs:Class>

  <rdfs:Class rdf:about="http://example.com/ex#Staff_Member">
    <rdfs:subClassOf
rdf:resource="http://example.com/ex#Academic_Staff_Member"/>
  </rdfs:Class>

  <owl:ObjectProperty rdf:about="http://example.com/ex#isTaughtBy">
    <rdfs:domain rdf:resource="http://example.com/ex#Course"/>
    <rdfs:range
rdf:resource="http://example.com/ex#Academic_Staff_Member"/>
  </owl:ObjectProperty>

  <owl:ObjectProperty rdf:about="http://example.com/ex#involves">
    <rdfs:subPropertyOf
rdf:resource="http://example.com/ex#isTaughtBy"/>
  </owl:ObjectProperty>

  <owl:DatatypeProperty rdf:about="http://example.com/ex#id">
    <rdfs:domain rdf:resource="http://example.com/ex#Staff_Member"/>
    <rdfs:range rdf:resource="http://www.w3.org/2000/01/rdf-
schema#Literal"/>
  </owl:DatatypeProperty>

  <owl:DatatypeProperty rdf:about="http://example.com/ex#phone">
    <rdfs:domain rdf:resource="http://example.com/ex#Staff_Member"/>
    <rdfs:range rdf:resource="http://www.w3.org/2000/01/rdf-
schema#Literal"/>
```

```
  </owl:DatatypeProperty>

  <rdf:Description rdf:about="http://example.com/ex#David_Billington">
    <rdf:type
rdf:resource="http://example.com/ex#Assoicate_Professor"/>
  </rdf:Description>

  <rdf:Description
rdf:about="http://example.com/ex#Discrete_Mathematics">
    <rdf:type rdf:resource="http://example.com/ex#Course"/>
    <ns0:isTaughtBy
rdf:resource="http://example.com/ex#David_Billington"/>
  </rdf:Description>
</rdf:RDF>
```

RDF-XML(2)

```
<rdf:RDF
   xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
   xmlns:owl="http://www.w3.org/2002/07/owl#"
   xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
   xmlns="http://example.com/ex#"
   xmlns:xsd="http://www.w3.org/2001/XMLSchema#" >
<rdf:Description rdf:about="http://example.com/ex#Course">
   <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#Professor">
   <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#phone">
   <rdfs:range rdf:resource="http://www.w3.org/2000/01/rdf-schema#Literal"/>
   <rdfs:domain rdf:resource="http://example.com/ex#Staff_Member"/>
   <rdf:type rdf:resource="http://www.w3.org/2002/07/owl#DatatypeProperty"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#Academic_Staff_Member">
   <rdfs:subClassOf rdf:resource="http://example.com/ex#Assistant_Professor"/>
```

```xml
    <rdfs:subClassOf rdf:resource="http://example.com/ex#Assoicate_Professor"/>
    <rdfs:subClassOf rdf:resource="http://example.com/ex#Professor"/>
    <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#Class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#Assistant_Professor">
    <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#id">
    <rdfs:range rdf:resource="http://www.w3.org/2000/01/rdf-schema#Literal"/>
    <rdfs:domain rdf:resource="http://example.com/ex#Staff_Member"/>
    <rdf:type rdf:resource="http://www.w3.org/2002/07/owl#DatatypeProperty"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#Staff_Member">
    <rdfs:subClassOf rdf:resource="http://example.com/ex#Academic_Staff_Member"/>
    <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#Class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#Assoicate_Professor">
    <rdf:type rdf:resource="http://www.w3.org/2000/01/rdf-schema#class"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#involves">
    <rdfs:subPropertyOf rdf:resource="http://example.com/ex#isTaughtBy"/>
    <rdf:type rdf:resource="http://www.w3.org/2002/07/owl#ObjectProperty"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#isTaughtBy">
    <rdfs:range rdf:resource="http://example.com/ex#Academic_Staff_Member"/>
    <rdfs:domain rdf:resource="http://example.com/ex#Course"/>
    <rdf:type rdf:resource="http://www.w3.org/2002/07/owl#ObjectProperty"/>
</rdf:Description>
<rdf:Description rdf:about="http://example.com/ex#David_Billington">
    <rdf:type rdf:resource="http://example.com/ex#Assoicate_Professor"/>
</rdf:Description>
```

```
<rdf:Description rdf:about="http://example.com/ex#Discrete_Mathematics">
    <isTaughtBy rdf:resource="http://example.com/ex#David_Billington"/>
    <rdf:type rdf:resource="http://example.com/ex#Course"/>
</rdf:Description>
</rdf:RDF>
```

N-TRIPLES

```
<http://example.com/ex#Course> <http://www.w3.org/1999/02/22-rdf-
syntax-ns#type> <http://www.w3.org/2000/01/rdf-
schema#class> .<http://example.com/ex#Professor>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2000/01/rdf-
schema#class> .<http://example.com/ex#Assoicate_Professor>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2000/01/rdf-
schema#class> .<http://example.com/ex#Assistant_Professor>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2000/01/rdf-
schema#class> .<http://example.com/ex#Academic_Staff_Member>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2000/01/rdf-
schema#Class> .<http://example.com/ex#Academic_Staff_Member>
<http://www.w3.org/2000/01/rdf-schema#subClassOf>
<http://example.com/ex#Professor> .<http://example.com/ex#Academic_Staf
f_Member> <http://www.w3.org/2000/01/rdf-schema#subClassOf>
<http://example.com/ex#Assoicate_Professor> .<http://example.com/ex#Aca
demic_Staff_Member> <http://www.w3.org/2000/01/rdf-schema#subClassOf>
<http://example.com/ex#Assistant_Professor> .<http://example.com/ex#Sta
ff_Member> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2000/01/rdf-
schema#Class> .<http://example.com/ex#Staff_Member>
<http://www.w3.org/2000/01/rdf-schema#subClassOf>
<http://example.com/ex#Academic_Staff_Member> .<http://example.com/ex#i
sTaughtBy> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2002/07/owl#ObjectProperty> .<http://example.com/ex#
isTaughtBy> <http://www.w3.org/2000/01/rdf-schema#domain>
<http://example.com/ex#Course> .<http://example.com/ex#isTaughtBy>
<http://www.w3.org/2000/01/rdf-schema#range>
<http://example.com/ex#Academic_Staff_Member> .<http://example.com/ex#i
nvolves> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2002/07/owl#ObjectProperty> .<http://example.com/ex#
involves> <http://www.w3.org/2000/01/rdf-schema#subPropertyOf>
<http://example.com/ex#isTaughtBy> .<http://example.com/ex#id>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2002/07/owl#DatatypeProperty> .<http://example.com/e
x#id> <http://www.w3.org/2000/01/rdf-schema#domain>
```

```
<http://example.com/ex#Staff_Member> .<http://example.com/ex#id>
<http://www.w3.org/2000/01/rdf-schema#range>
<http://www.w3.org/2000/01/rdf-
schema#Literal> .<http://example.com/ex#phone>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://www.w3.org/2002/07/owl#DatatypeProperty> .<http://example.com/e
x#phone> <http://www.w3.org/2000/01/rdf-schema#domain>
<http://example.com/ex#Staff_Member> .<http://example.com/ex#phone>
<http://www.w3.org/2000/01/rdf-schema#range>
<http://www.w3.org/2000/01/rdf-
schema#Literal> .<http://example.com/ex#David_Billington>
<http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://example.com/ex#Assoicate_Professor> .<http://example.com/ex#Dis
crete_Mathematics> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://example.com/ex#Course> .<http://example.com/ex#Discrete_Mathema
tics> <http://example.com/ex#isTaughtBy>
<http://example.com/ex#David_Billington> .
```