**Knowledge Graphs Lab**

Semantic Data Management

Lab Report

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# B.1: TBOX Definition

Remind:

add assumption that the reviewers come up with only one decision (not 1 each).

add external constraints to force decision to be true for articles that are published?

Regular Conference exists in case of queries on this concept. Otherwise, it could be the “not conference of other type”.

The relationship “belongs\_to\_conference” should link proceedings and the subclasses of conference. Same for Paper

# B.2: ABOX Definition

# B.3: Ontology Creation

# B.4: Ontology Querying

1. Find all Authors.

SELECT ?person WHERE {

?person rdf:type KG:Author

}

1. Find all properties whose domain is Author.

SELECT ?property WHERE {

?property rdfs:domain KG:Author

}

1. Find all properties whose domain is either Conference or Journal.

SELECT ?property WHERE {

{?property rdfs:domain KG:Conference}

UNION

{?property rdfs:domain KG:Journal}

}

1. Find all the papers written by a given author that were published in database conferences

SELECT ?paper WHERE {

?author rdf:type KG:Author ;

rdf:id “<insert authorId here>” .

?paper rdf:type KG:Paper ;

KG:authored\_by ?author ;

KG:published\_in ?proceedings .

?proceedings KG:belongs\_to ?conference .

?conference rdf:type KG:Conference ;

KG:related\_to ?field .

?field rdfs:label “databases” .

}

# References

**There are no sources in the current document.**