

**LAB SESSION 3 REPORT**

Knowledge Graphs

Semantic Data Management

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# TBOX Definition

* TODO: insert graphical representation of schema
* ATTACH: code to generate file RDF
* ATTACH: output file

# ABOX Definition

* TODO: explain the methodology used to define your ABOX from non- semantic data.
* ATTACH: code to create the ABOX programmatically
* ATTACH: ABOX file (rdf, rdfs or owl)

# Final Ontology

* TODO: inference regime entailment being considered. Briefly explain what rdf:type links you saved to explicitly generate thanks to reasoning.
* TODO: Summary table of instances with statistics
  + number of classes,
  + number of properties,
  + number of instances for the main classes and
  + number of triples using the main proper- ties.
* ATTACH: code to create the links programmatically
* ATTACH: link file (rdf, rdfs or owl)

# Querying the Ontology

* provide the following SPARQL queries
  + Find all Authors.
  + Find all properties whose domain is Author.
  + Find all properties whose domain is either Conference or Journal.
  + Find all the papers written by a given author that where published in database confer- ences.
* explicitly state any assumption you make