

Web of Data - Final Project

MSc Data Science and Artificial intelligence

Individual work

Due date: April 10, 2023

This final project aims to apply and **demonstrate the skills and knowledge you have acquired in Semantic Web models and technologies** by creating the building blocks of a Semantic Web application for a higher education institution (such as UCA): programs, courses, teachers, students, promotions, etc. **It is up to you to decide of your (more or less rich) data model.**

You should:

- propose a model in the form of an RDFS or OWL ontology
- populate this ontology in an RDF graph describing your instances
- implement main features of your targeted application with advanced SPARQL queries
- Bonus: reuse existing ontologies and/or data and/or align your ontology and/or your instances with DBpedia or other relevant sources in the Linked Open Data (LOD) and/or the Linked Open Vocabularies (LOV)

The deliverables are:

- a report (in a .pdf file) describing the specification of your targeted Semantic Web application, and discussing your modelling choices, how you linked your data and/or your ontology to the LOD or LOV, what kind of inferences your modeling enables,
- a text file containing your RDF data in Turtle,
- a text file containing your RDFS or OWL ontology in Turtle,
- a text file (.txt) containing your SPARQL queries implementing the targeted functionalities.

You should send me a single file FirstnameLastname.zip containing the above cited files with subject [DSAI project].