

Introduction:

Clear aims and objectives set, with a rich motivation and justification according to the state of the art. Task very clearly understood and explained. Clearly established the cultural context in which the project operates. Extensively documents the domain use-case (organs) in a specific chapter devoted to Context as well as describe the dataset.

Literature Review:

Reviewed literature includes the semantic web, the resource description framework, ontologies, knowledge graphs, SPARQL, techniques for knowledge graph construction, knowledge graph evaluation. Diagrams are included for clarifications. Alternative techniques are mentioned (e.g. LLMs, RML, etc.) in a separate chapter, discussing their limitations and justifying the project choice.

Specification and Design:

Requirements are clearly set and classified. The specification and design are very structured, and clearly describe the approach followed through UML diagrams, ontology structure diagrams, diagram flow, etc. These are later clearly mapped into the implementation.

Implementation/Technical achievement:

Implementation is detailed and the query is sophisticated. All technical choices and parameters are included. Modelling and vocabulary choices with respect to the ontology are clearly mapped into the implemented query, keeping modularisation in mind. External data is included. Maintenance is discussed as well as results.

Evaluation:

Evaluation is performed through a detailed analysis of requirements/competency questions answered, as well as the quality of the generated KG (accuracy, coverage, succinctness). Assessment is mostly qualitative but competency questions are also evaluated quantitatively. Query scalability is analysed in terms of number of external SERVICE calls and size of files. Compared and contrasted material and great care for comparing achievements with requirements. Reflective.

General Scholarship:

Careful formatting and presentation of the writing. Excellent reporting. No grammatical or typographical errors. 63 relevant references included. The report is of an adequate size (83 pages). Arguments are well-formed and expressed and show great care in the thinking process.

Legal, Social, Ethical and Professional:

Includes relevant and thorough discussion of codes of conduct, as well as a full analysis of the compliance with the FAIR principles of data findability, accessibility, interoperability and reuse, which makes a lot of sense in a knowledge graph project.

Summary:

Very good execution of a knowledge graph construction project for an ongoing international research project. The care and level of detail of the background, related work, design and implementation are notable, and the evaluation shows to a high level of detail the achievements and areas of improvement. The resulting KG is perfectly usable in the mentioned research project, and hence this could potentially be published in an international venue as a poster or demonstration.