

Project: Query Answering over Linked Data

Note : Please refer to <https://www.w3.org/TR/sparql11-query/> for complete details of SPARQL Query Language.

Tasks

Question 1. Can you give a Semantic Web method that can answer (one of) the questions proposed in the lecture that cannot be answered by Chatgpt or the question mentioned in Tim Berners-Lee's TED talk (2009) https://www.ted.com/talks/tim_berniers_lee_the_next_web between 11'20 and 12'30 ?

Question 2. Propose another (complex) question in natural language and give your answer by checking Linked Data (and combined with the help of Chatgpt or LLM-large language model-based methods).

Question 3. Can you explain the answers? For answers from Linked Data, you can use "CONSTRUCT" to return the "justifications" of your answers. And how about the hybrid approach by combining Linked Data and Chatgpt ?

You may refer to DBpedia, Wikidata, or other linked data, such as :

- <https://lod-cloud.net>
- <https://linkedlifedata.com>
- <https://ontotext.com/knowledgehub/demoservices/linked-life-data/>

Requirements You need to report (at least 4 pages) of your work on this project. The report should contain the work's context introduction, the problem statement, the method, and the solution. Moreover, you need to develop in the report, the process of getting the answers to the two questions you have selected from the following perspectives (but not limited to) :

- Which datasets have you explored? What queries have you tried?
- What difficulties were there? And how have you solved them?
- Do you see some benefits and limitations of the techniques?
- Can you justify the reason for your answers?

Submission Report submission on eCampus before Oct. 2, 2025.

Presentation Each team (2 persons) should give a presentation of their work on Oct. ?, 2025.