Exercise 3: Web Ontologies & Knowledge Graphs

J. Länzlinger

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1 Task 1 - Your First Web Ontology

I have completed the tutorial, exported the ontology as a Turtle file and provided the `Pizza_Tutorial.rdf` in the .zip folder. Alternatively you can find the `Pizza_Tutorial.rdf` on GitHub: Pizza_Tutorial.rdf

2 Task 2.1 - Define a glossary of terms and the related TBox

1. The defined `Glossary of Terms` can be found on GitHub: README.md (scroll at the bottom of the file)

2. The TBox Turtle file of the domain blueprint can be found as a Protégé export either in the uploaded .zip folder or also on GitHub: TBox_finished.rdf

3. This file can be imported on GraphDB

3 Task 2.2 - Define an ABox and the related SPARQL queries

1. The ABox Turtle file of the instance can be found as an export either in the uploaded .zip folder or also on GitHub: ABox_finished.rdf

2. Start instantiating the ABox by executing all SPARQL insert queries from this folder: insert scripts (be careful to start with a clean graph and run each script only once)

3. To validate the competency questions, run all these script one by one: select scripts

   (a) IMPORTANT: Some of those select queries have parameters. Make sure to provide the ID of an element (farm, section, crop) that is actually in the graph. Otherwise the query can't find any records because the default ID is not corresponding to an actual element.

4 Task 2.3 - Complete a JaCaMo application for the agriculture domain

My implementation of Task 2.3 can be found on GitHub: exercise-3

After starting the Docker container, start the Gradle task (given by instructors). The task should run smoothly without any issues and all sections should get monitored accordingly. If something doesn't work, please get in touch with me (jonas.laenzlinger@student.unisg.ch)