SPARQL Project

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Goal

This project aims to train students how to use Graph queries using both: 1) an SPARQL endpoint, and using 2) Oracle Semantic Technology.

Data will be used from pervious projects (marksheets)

Oracle Semantic Technology Project

1. Each student alone should do the following:
2. Convert his/her two RDF Mark sheets into an RDF1(S,P,O) table,
3. Convert two RDF Mark sheets (from another student) into an RDF2(S,P,O) table.
4. Create a table called SamaAs(URI1,UR2) and populate it with the same entities in RDF1 and RDF2.

Practice Oracle Semantic Technology:

1. Create an RDF(S,P,O) table and populate it with RDF1 and RDF2, taking into account linked entities in the SameAs table.
2. Load this RDF table into an Oracle Semantic Technology table.
3. Write three different queries using Oracle Smatch table function: 1) a simple start query, a start query with a path with two edges length, a start query with a path with four edges length.

Practice SPARQL:

1. Load the graph in the RDF table (above) into the Query Editor: http://sparql.us/ .
2. Execute the same queries above using SPARQL.

- Each student will deliver a report that contains the following:
- Snapshot/screenshot of RDF1, RDF2, RDF, and SameAs tables.
- A screenshot of each query and its results (on both sparql.us and Oracle), and description about what this query mean.

- Each student will be asked to demonstrate all queries in his/her (own laptop), and will be asked to execute additional queries.