SPARQL: QUERYING RDF(S)

OBJECTIVES

Learn the basics on SPARQL. Specifically:

- Learn the SPARQL Syntax,

- Understand the main principle behind SPARQL's pattern matching,

- Learn about the SPARQL Entailment Regimes for RDFS,

- Understand how to explore a dataset you are not familiar with by means of querying its schema information.

ACTIVITIES

- Go to the last version of the RDF Query Language document by the W3c: http://www.w3.org/TR/2013/REC-sparql11-query-20130321/ and read the following sections:

   o 4. SPARQL Syntax,

   o 5. Graph Patterns,

   o 7. Matching Alternatives,

   o 8. Negation,

   o 9. Property Paths (equivalent to Navigational Pattern Matching: i.e., regular expressions on paths),

   o 10. Assignment,

   o 11. Aggregates,

   o 12. Subqueries and

   o 16. Query forms.

   Check this material and look for additional resources if it is not enough to grasp the main concepts of SPARQL.

- It is optional, but highly advisable you read about the SPARQL 1.1 entailment regimes (to support RDFS).

   o Section 5 from:

http://www.w3.org/TR/2013/REC-sparql11-overview-20130321/

- Section 4 from:

http://www.w3.org/TR/sparql11-entailment/#RDFSEntRegime

DELIVERABLES

- **Before** the next lecture (see the deadline), upload the solution to the SPARQL exercise (attached to this event).