

Analysis of Smart City Ontologies

This is a group assignment. The groups are those constituted for the mini-projects.

Follow the guidelines below to do this assignment.

1. Definition of smart city domain – read the papers at:
<https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008403j.pdf>
https://www.researchgate.net/publication/271851235_smart_city
2. Download at least 50 ontologies of the Smart City domain here:
<http://ci.emse.fr/opensensingcity/ns/ontologies/>
<http://ontology.eil.utoronto.ca/>
<http://www.lov4iot.appspot.com/?p=ontologies>

At this stage, you should obtain the first outcome of the assignment, which is a list of the ontologies downloaded. This list should be presented in a table with the following structure. This table could be broken into two tables if necessary.

index	Name	Source file	Location/URI
1	CarbonDB ontology	vocabulary_6.owl	http://ci.emse.fr/opensensingcity/ns/wp-content/plugins/smartcities/survey_files/vocabs/vocabulary_6
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3. Read the OntoMetrics framework for ontologies evaluation here:
<http://www.scitepress.org/Papers/2016/60846/60846.pdf>
4. Automatically gather the OntoMetrics metrics of the ontologies obtained in step 2 at:
<https://ontometrics.informatik.uni-rostock.de/ontologymetrics/index.jsp>

At this stage you should obtain two additional outcomes of the assignment which are (1) the OntoMetrics online reports and (2) 4 tables for the Base, schema, knowledge base and graph metrics of the ontologies.

5. Draw and discuss the charts of the data obtained in the 4 tables in step 4. Read the paper below to learn how to do this step.
[J.V. Fonou-Dombeu and Y.K. Kazadi \(2017\) Complexity Based Analysis of oeGov Ontologies, Lecture Notes in Computer Science \(LNCS\), Springer, Vol. 10441, pp. 115-128.](#)
6. Submit your assignment by the due date as a zipped file containing the outcomes mentioned above (source files of all the ontologies downloaded in step 2, OntoMetrics reports of all the ontologies, a report that includes the details of groups members, the tables obtained in step 2 and 4, and the charts obtained in step 5 as well as their discussions).

Assignment 1 due date: 15 March 2019.