Ontological Engineering

Miroslav Blaško

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1 Exercises – Requirement engineering

The exercises are targeted to explain early step of ontology development – ontology requirement specification. Any text editor can be used for the exercise.

Consider the ZOO web site application from the previous seminar – the web application should be able to represent information about species as well concrete animals located within the ZOO. In addition, opening hours of the ZOO, information about animal shows, representation of animal behaviors, body parts, food that they eat should be included within the website.

Ex. 1 — The following text was taken from "news" section of the Prague ZOO website showing information about new animal joining the ZOO (see sec. 2) :
"The breeding bull Tipito, who arrived from Berlin, is going to replace the older male from Amsterdam. The aim is to rejuvenate the herd and its breeding lines which is necessary for the closed groups of animals in captivity," Miroslav Bobek, the Zoo director, explained. The transport went well; although only a year-and-a-half of age, the bull was calm. "In the following days we will introduce him to our females. Due to his youth he is still rather small, however, his constitution suggests that he will grow to be a majestic bull when full grown," Barbora Crkvová, a curator of ungulates in the Prague Zoo, added.
Consider having similar "news section" within our ZOO website. Mark at least 5 interesting words within the text that could be used within filters of advanced search of the news. Explain your selection.

Ex. 2 — Create ontology requirement specification document (ORSD) based on the needs of our ZOO web application. Consider the advanced search use-case from previous exercise as well. As a template for creation of the ORSD use guidelines from the NeOn methodology (see sec. 2).

2 References for exercises

- The news about bison "Tripito" within Prague ZOO website – `https://www.zoopraha.cz/en/about-zoo/news/7931-a-handsom-young-bison-to-add-zest-to-local-herd`

- Ontology requirement specification document based on the NeOn methodology :
  - Guidelines template – `http://www.neon-project.org/web-content/media/book-chapters/Chapter-05.pdf`
  - Additional information about the guidelines –

- BBC website of wildlife animals as inspiration of our ZOO ontology :
  - List of species – `http://www.bbc.co.uk/nature/species`
  - add ".rdf" extension to the url to retrieve rdf data about the url (e.g. `http://www.bbc.co.uk/nature/species.rdf`)