Hands-on Exercise

Time: 60 minutes

EXERCISE

Starting from the result of the previous exercise (Exercise 3) about the creation of an OWL 2 ontology in Protégé, write a Java application to print the vacation spots and the activities you included in your ontology. In particular:

- Use OWL API and the HermiT reasoner
 - o Read the OWL ontology developed (and submitted) for Exercise 3
 - You can start from the example developed in class and available on GitHub: <u>https://github.com/luigidr/owlapi-example</u>
- Check for consistency in your ontology through the developed application
- Be sure to look for (and print) individuals, object properties, and data properties. Both inferred and non-inferred properties should be retrieved.
- You should <u>not</u> submit anything.

RESOURCES AND LINKS

- OWL API documentation https://github.com/owlcs/owlapi/wiki
- OWL API 4.x Javadocs http://owlcs.github.io/owlapi/apidocs_4/index.html
- Eclipse IDE <u>https://www.eclipse.org</u>
- Gradle Build Tool <u>https://gradle.org</u>
- OWL API download and installation http://owlcs.github.io/owlapi/
- HermiT download and installation (for OWL API)
 <u>https://github.com/owlcs/owlapi/wiki/Reasoners,-OWL-API-Support,-papers-about-the-OWL-API</u>