

# Ontology validation

Miroslav Blaško

November 23, 2017

## 1 Exercises

Goal of the exercises is to get experience with validation of UFO models through: 1) visual simulation in *Alloy*, 2) search of anti-patterns within *Menthor Editor*, 3) use of OWL inferences within *Protege Editor*.

**Ex. 1** — Open `transplantation.menthor` file within *Menthor Editor*. Explore opened model through visual simulation (using *Menu/Evaluate/Visual Simulation*).

**Ex. 2** — Search within the rest of the provided models for semantic anti-patterns (using *Menu/Evaluate/Semantic Anti-Patterns*)

**Ex. 3** — Export model from one of provided files into OWL (using *Menu/Transform/Semantic Web (OWL/RDF)*). Explore the exported file using *Protege Editor* by going over inferences it generates (*Reasoner/Hermit + Resoner/Start Reasoner*).

## 2 References for exercises

- **Menthor Editor (an OntoUML editor + installation guide)** – <http://www.menthor.net/menthor-editor.html>
- **Menthor's repository of OntoUML models** – <http://www.menthor.net/model-repository.html>
- **OntoUML portal** – <http://ontouml.org>
- UFO represented in OWL2 – <http://onto.fel.cvut.cz/ontologies/ufo>
- Guizzardi's slides about UFO model visualisation (slides 71-88) – [http://keg.vse.cz/\\_slides/guizzardi.pdf](http://keg.vse.cz/_slides/guizzardi.pdf)