

# Data Management

## DM11 - RDF Exercises: Adventures in Semantic Madness

Aslak Johansen <asjo@mmmi.sdu.dk>

April 29, 2020

### Quest 1: Exploring the Lecture Example (10XP)

I once again call upon you, brave student, to familiarize yourself with another topic. I sure hope you have kept your Python skills sharp! We need you to be ready for the boss event ...

Watch the video lecture and check out the repository containing the demo code. Once you have familiarized yourself with the code and have a good understanding the high-level structure you may venture into Quest 2!

### Quest 2: Defining the Simpsons (60XP)

You are now faced with one last challenge before you can obtain the title of Expert Ontologist; you need to revisit the Simpsons example from slide 10 and fill out the blanks of the partial example which you should have received in a zip archive.

It is your task to

1. Extract a copy of the example code found in the zip archive. You should end up with two files in your local filesystem.
2. Run the example once. The output does not seem quite right when compared to slide 10.
3. A part of the example has been lost. Scan through the code to identify the missing logic.
4. Implement the missing logic and verify that the program printouts match the model illustrated in slide 10.
  - (a) Pick a simple query that does not produce the correct result.

- (b) Identify the triples that the query relies on and are missing from the model.
- (c) Write code that inserts them.
- (d) Rerun code to verify that the query now produces the correct output.
- (e) Go to step 4a.

Should you succeed in the endeavor, perhaps the sun will rise once again!