

# Knowledge and the Web 2016/2017:

## Exercise session 3

October 26, 2016

### OBJECTIVE

The second central concept within Semantic Web, besides RDF and SPARQL, are *semantic ontologies*. Semantic ontology describes how the data/knowledge is structured.

### TASKS

1. go through the [Chapter 5](#) of the [RDF Primer](#) to refresh the basic concepts. If you are still unsure about your knowledge of the RDFs basics, go through the [Chapters 1 and 2](#).
2. Download and install [Protege](#) on your laptop. You can use either desktop or web version. Be sure to install the **Matrix** plugin. Familiarize yourself with it following the [instructions](#).
3. Follow the **Pizza tutorial** (the second document on Toledo). The necessary chapters are:
  - Chapter 1 - to get familiar with the annotations in the tutorial
  - (OPTIONAL) Chapter 3 - basic concepts; you should be familiar with them from the **RDF primer**
  - Chapter 4 - until section 4.8
  - pages 43 and 48 - **Creating some different kinds of Pizzas**
  - Chapter 5

### THINGS YOU SHOULD HAVE LEARNED

1. understand basic concepts of ontologies
2. how to model basic concepts in Protege
  - classes and instances
  - relations
  - properties

## NOTES:

1. the tutorial covers some advanced concepts from **OWL** syntax - feel free to ignore everything that is not a part of **RDFS**
2. [Ontology Development 101](#): a great introduction to ontology development. Read it at home as an additional material, it will help you understand the basics and good practices on the ontology development.
3. If you don't manage to finish the tasks during the exercise session, please finish them at home
4. No need to handle anything at the end of the session. If you have questions, feel free to email [Sebastijan Dumancic](#) (be sure to put [KaW] in the subject line), or ask during the exercise session.