

UNIT 4: HANDS-ON PROJECT

DEVELOPMENT OF AN ONTOLOGY NETWORK REUSING ONTOLOGY DESIGN PATTERNS AND ONTOLOGIES

The main objective is **to develop an ontology network** (implemented in OWL) in a particular **domain**¹. Domains are described using a text that explains a case study. Each case study is complemented with a set of key facts that can be considered notes about the relevant aspects of the specific domain.

The development of the ontology network should be performed following the **reuse approach**.

Specifically, it is **mandatory** to reuse at least the following resources:

- the N-Ary Relation Pattern. In this case, you should identify situations in your domain that need to be represented as an n-ary relation.
- the Experience & Observation (E&O) Pattern
 - https://github.com/modellingDH/odp_experience
- the Ontology of Reading Experience
 - <https://github.com/eureadit/reading-experience-ontology>

As an additional task, students are asked to identify situations in the domain that can be likely to be represented as a pattern. In those cases, such patterns should be created and implemented in OWL and described in a graphical way.

GENERAL INSTRUCTIONS

- This assignment should be performed in **groups** composed of 4 or 5 students.
- Only **one member of each group** should (a) select the domain for the hands-on project and (b) deliver the assignment via Moodle.
- The **assignment delivery** should include
 - a PDF file containing a document that explains the work done in the assignment.
 - The document should include the main design decisions taken during the ontology network development as well as any comment you consider useful.
 - In order to describe the reuse activity, in addition to the mandatory resources, the document should include the list of reused resources explaining how they were found and why they were selected.
 - In case you were able to identify situations that can be represented as a pattern, both the name for the patterns and the graphical representations should be included.
 - a set of files or links that contains the ontology network and the patterns (OWL code).
- **Every student** have to fill out a questionnaire related to the assignment.
 - A task in Moodle will be available for filling out the questionnaire.

¹ The list of possible domains is included in "ListOfDomains-2020-2021.pdf". Please take a look to them. One member of each group should select the domain for the hands-on project. This selection is made in Moodle (Hands-On Project: Domain Selection).