

M1 research internship - Modelling of composition through the Part-Whole relation

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In modelling techniques, composition is a central relation in the same way as the abstraction (generalisation) (see UML). This internship approaches the modelling of composition through the Part-Whole relation and proposes the design of a query language related to this notion.

We show how, using a platform that we have developed (see the video below), we can carry out modelling by making explicit the properties of composition. We illustrate this with a case study of Alpine cultural heritage data. The aim of this research subject is to represent and model composition by using ontological relations,. The ontology is described in an implementation in OWL and available [here](#). The student will need to understand the content and practical uses of the platform and then design related queries.

A [video](#) of the platform that can incorporate these queries is available. The student will not be asked to implement the queries in the platform, but simply to check their functionality.