Deriving Semantic web structures from EEG/ERP data source

MOU?EK, R., JEŽEK, P., PAPEŽ, V. *Deriving Semantic web structures from EEG/ERP data source*. Kobe, 2010.

The EEG/ERP data source has a tree layer architecture (MVC pattern) consisting of persistent layer (relational database), application layer (object oriented code) and presentation layer (JSP). There is a question which layer is more feasible for mapping of its structure into ontology. We have tested two possibilities: mapping from the relational database and mapping from the object oriented code. There are fundamental differences in richness of semantics between OWL and relational database or object oriented systems and there are also approaches how to bridge some of these semantic gaps. We transformed the relational database into ontology using D2RQ tool and OWL API. Then we transformed the object oriented code to OWL using Jenabean tool. The integration difficulties were solved.

30.08.2010 Kobe