Semantic Web in EEG/ERP Portal, Extending of Data Layer using Java Annotations

Because the Semantic Web uses its technologies for presenting data/metadata on the web and common systems are based on object-oriented languages a need for suitable mapping is emerging. This paper describes the difficulties during transformation of data layer represented by object-oriented code into the semantic web structures (OWL, RDF). Since there is difference between semantic expressivity of these data representations it is necessary to fill this semantic gap. Authors investigate these differences in semantics and provide a preliminary idea to add missing semantics into the Java code using Java annotations. These annotations are consequently processed by the proposed framework. The transformation is demonstrated within the EEG/ERP Portal.

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