

Brain, a library for the OWL2 EL profile

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Abstract. Brain is a Java library facilitating the interaction with OWL2 EL ontologies. The library aims at bridging the gap between graphical user interfaces (GUI) such as Protege and the OWL-API: It provides a series of convenience methods to create and query knowledge bases using the Manchester syntax. The library is useful to develop web applications and particularly suited for the biomedical domain. Brain relies on ELK for reasoning tasks. The open source project is available at <https://github.com/loopasam/Brain>.

Keywords: OWL2 EL, library, Java, Manchester syntax

1 Motivation

OWL2 \neg profiles profiles \neg limited set of axioms, suited for a particular task
OWL2 EL \neg suited for biomedical ontologies lots of classes, very few individuals

Traditionally interaction with OWL2 is via Protege or OWL-API no inbetween
aside OWLtools. Dedicated to fast implementation - nothing for the web, yet
it's semantic web

dedicated to the web multi threaded environnement interaction with strings
easy to query presentation OWL2 EL profile.

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