EdHibou: A Customizable Interface for Decision Support in a Semantic Portal

F. Badra and M. d'Aquin and J. Lieber and T. Meilender

A Programmatic Framework for Semantic Web Applications

Key Features
- Easy OWL instance edition by means of user-friendly forms
- Intelligent behavior provided by embedded OWL reasoner
- Interface customization capabilities thanks to an ontology-driven GUI generation
- Easy integration in Semantic Web applications: useful in particular for decision support, but developed as a generic software component

Architecture
- The application knowledge model is externalized to a knowledge server (K-OWL) that performs reasoning on OWL ontologies.
- The application configuration information is externalized to an OWL ontology, thus implementing a model-driven design approach.
- EdHibou implements a Model-View-Controller architecture pattern and was developed using the Google Web Toolkit™ Java AJAX programming framework.

An Ontology-driven GUI Generation Approach
- All configuration information is put in a separate ontology that contains an exhaustive description of the application view. The application thus manages an implementation-independent model of the user interface.
- Interface personalization can be achieved by:
  - extending the default configuration ontology,
  - adding new graphical components,
  - adding a custom CSS stylesheet.

EdHibou has been developed in the context of the Kasimir project, which aims at providing oncology practitioners of the Lorraine region of France with decision support and knowledge management tools.

http://kasimir.loria.fr