Project Proposal – ESWC 2015

ProLOV: A Plug-in of Linked Open Vocabularies for Protégé

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Project Description:
Protégé is one the popular framework for developing ontologies in a variety of formats including OWL, RDF(S), and XML Schema. It is backed by a strong community of developers and users in many domains. One success on Protégé also lies on the availability to extend the core framework adding new functionalities by means of plug-ins.

At the same time, the recent success of Linked Open Vocabularies (LOV) as a central point for curated catalog of vocabularies/ontologies is helping to convey on best practices to publish vocabularies on the web, as well as to help in the Data publication activity on the Web. LOV comes with many features, such as an API, a search function and a SPARQL endpoint.

We propose in this project to explore, design and implement a plug-in of LOV in Protégé for easing the development of ontologies by reusing existing vocabularies. The tool should be able in the ontology development of Protégé to:

➢ Propose to the user a list of candidate vocabularies in LOV matching the term
➢ Import easily vocabularies from LOV into Protégé
➢ Have an updating mechanism to LOV catalog
➢ Check if a new vocabulary created in Protégé satisfied the LOV recommendations
➢ Suggest to LOV a new vocabulary

APIS de LOV

- V2 search API call sample: http://lov.okfn.org/dataset/lov/api/v2/search?q=geo
- V1 all vocabs in LOV: http://lov.okfn.org/dataset/lov/api/v1/vocabs

References

1. "Hello plugin" answer on Protégé mailing list : https://mailman.stanford.edu/pipermail/protege-dev/2014-April/000086.html
2. Protégé plus-ings page : http://protegewiki.stanford.edu/wiki/CompileProtege5InEclipseWithMaven#Configure_Eclipse_without_Protege_sources
3. Adding plugin in Protégé : http://protegewiki.stanford.edu/wiki/CompileProtege5InEclipseWithMaven#Adding_your_own_plug-in
4. Useful samples of plugins: http://protegewiki.stanford.edu/wiki/PluginAnatomy
5. Linked Open Vocabularies project: http://lov.okfn.org/dataset/lov/
6. LOV core components in GitHub: https://github.com/pyvandenbussche/lov
7. Metadata Recommendations for Linked Open Vocabularies: http://lov.okfn.org/dataset/lov/Recommendations_Vocabulary_Design.pdf