

CS 6795 Semantic Web Techniques

Project Description

Group #2

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Project Title:

Modeling Semantic Search for Student Housing

Project Proposal:

Using the Semantic Web techniques, we plan to build an ontology for student housing, and develop a rule base for conditions on searching housing.

Motivation:

Finding an ideal housing is important for students, but the voluminous information makes the procedure nontrivial and costs much time. As a result, a relatively intelligent search seems attractive, and the Semantic Web techniques contribute to developing such a search platform that desirable information comes lightly.

Scenario:

Taking University of New Brunswick into account, we collect the housing information around UNB, and conduct a poll among UNB students in terms of their favorites on housing. Upon that, we model a semantic search for student housing, making one certain student to find his/her housing easily.

Step:

1. Classify the housing information
2. Define rules to specify the preferences of students
3. Run an engine, receiving the results for query

Project Tool:

Ontology editor: Protégé <http://protege.stanford.edu/>

Brief Intro: Protégé is an open source ontology editor and knowledge-base framework, written in Java. It supports Frames, XML Schema, RDF(S) and OWL.

Rule engine: OO jDREW <http://www.jdrew.org/ojdrew/>

Brief Intro: OO jDREW is a deductive reasoning engine for the RuleML rule markup and exchange format (including the OO extensions), written in Java.