Class 4  More on Use Cases and Ontologies

Assignment 4:  Semantic eScience (10 points of total credit score)
Written portion due:  October 1, 2012 (by 11:00 am Eastern Time – note 2 hours before class time)
Late submission policy:  First time with valid reason -no penalty, otherwise 20% of score deducted for each late day.
Naming scheme:  SemEScience4_YOUR_NAME.ext
Submission method:  email to dlm@cs.rpi.edu, chastk@rpi.edu

Note: Your report for this assignment should be the result of your own work.
Take care to avoid plagiarism (“copying”), including all web resources, texts, and class presentations. You may discuss the problems with other students. In this effort you may submit individual contributions or form groups and submit a group assignment. Groups should be no larger than 3 student members. Any group assignments need to identify who contributed. As we will be moving towards group projects, it is fine and even encouraged to work with another student on this round.

General assignment: Read the community science proposal. Note that this is a pre-proposal and should not be distributed without permission from Prof. McGuinness.

After reading the proposal and after thinking about your use case proposals and class discussion, use the use case format to propose a use case that would fit into the community science framework. A group of people will be working on the community science effort this term and it could be that one of the class projects will serve as an example in that proposal. For homework for class, either alone or in groups of up to 3 people, propose a use case. You are welcome to fill out the entire use case template, but the items that you will be graded on for this assignment are:

a. Goal  
b. Summary  
c. Questions and Answers – making sure to describe how you are making use of semantic technologies to answer the questions. Notice that most of the discussion in this round of presentations was lack of clarity for how the semantics might be used.  
d. Resources

Please submit the answers to these 4 points.

We will do short presentations in class of the projects that look like they are contenders for class projects. As such, we need this submission to come in 2 hours before class so Katie and I need the assignments 2 hours before class to look over the proposals.
Make sure to identify who contributed what to the submission if you are submitting with other class members (or if you spoke to other people about the assignment). Note – it is fine to discuss this assignment with others, just make sure to identify who you spoke to about it, what you contributed and what they contributed.

We will discuss these in the next class so be prepared to do a brief presentation in class.

Additionally read the articles listed for class reading. – (Make sure to read the papers on the course web site. Those are copied below for convenience. This listing notates if the paper is for reference later for your projects).

Also, if you felt that you had trouble with the ontology assignment, re-read the Pizza tutorial paper and do at least some of the exercises and/or re-read the ontology 101 paper and do some more encodings.

Reading from class website:

- Ontology Tool Summary: Michael Denny. Ontology Tools Survey, Revisited. XML.com - resource – just make sure you know what is in it.
- Pellet: web page: http://pellet.owldl.com - resource – we expect you will use this or something like it in your project.
- SAWSDL: Semantic Annotation of the Web Services Description Language - resource you may use this.
- Wine Agent: - example series of applications.