Assignment 7: Semantic eScience Group project Round 2 (10 pts written and 10 pts presentation of overall credit score)
Due: Monday November 5, 2012 (by NOON ET, day of the class)
Submission method: email to dlm@cs.rpi.edu, chastk@rpi.edu. Please use the following file naming for electronic submission: SemEScience_A7_YOURUSECASESHORTNAME.xxx and for any individual documents:
Late submission policy: first time with valid reason – no penalty, otherwise 20% of score deducted each late day

Note: Your report for this assignment should be the result of group work. Take care to avoid plagiarism (“copying”), including all web resources, texts, and class presentations. You are expected to work collaboratively and discuss the tasks for this assignment with other students in your group. Please use the use case template you used before as well as any previously completed use case documents for previous assignments appropriate for your use case when completing this assignment.

General assignment: Use-case Implementation Update: Write an updated use case for your group project. Perform the next round of knowledge engineering and review of the ontology using the methods and tools you have learned to date. You may leverage an existing knowledge base and/or ontologies. Identify what is new – you can use word’s review mode, italics, color or some other obvious scheme that you describe clearly for us to see what is new.

Keep in mind the questions that the use case is intended to ask and answer. The weighting score for each question is included below. Please use the question numbering below for your written assignment.

1. Remind us of the team membership and roles IDENTIFYING if any roles have changed. (.5)
2. Knowledge engineering (3)
   a. Write a description of the knowledge encoded to date, what has been added since the last encoding, and what remains to be done. (.5)
   b. Identify if any knowledge encoding requirements have been modified or specified in further detail. Remind us of the planned tool list IDENTIFYING if any tools have changed in your list. (.5)
   c. Include a description of a portion of the ontology that you are using to do some interesting inference. (.2)
3. Implementation Update (6.5)
   a. Update the documentation of the resources (data and information sources) you are using in developing the use case, including written and presentation materials and conversations with others. (.5)
   b. Update the documentation on the implementation of the use case at least in prototype/demonstration form. Document what was implemented by adding to the use case document; this should include data and services, etc. Identify what is new (1)
   c. Describe how your knowledge representation meets the goal of the use case and highlight the value of your use of semantic technologies. One concrete way to do this is to
ask and answer two questions from your ontology (label them a. and b.) to your ontology. Provide a written description of the questions (a. and b.) and the result, including any reasoning that is performed along with the provenance that was related to the data used to generate the answer. If a portion of this implementation is incomplete, describe the plan for completion. (5)

4. Oral presentation of the use case and examples of your knowledge encoding (10). Plan to present for 15 minutes, with 5 additional minutes for questions. (Timing may be modified according to how many projects we have – recheck time allotment the week before class presentations). Focus in this presentation on the use case questions, and the value of semantics and provenance in your project. Your grades will be assessed on demonstration of knowledge of your work, the use case and the ability to answer questions. Please submit your presentation (ppt, pdf or similar using the same naming scheme as for questions 1-3) before the class.