# **Project #1: Design an OWL Ontology**

This project is due on Thursday, March 2. It will count for 15% of your overall grade.

Working in teams of three people each, you will design an OWL DL ontology (or set of ontologies) for the domain of Semantic Web education. It is recommended that you consider the results of our in-class brainstorming session when scoping your ontology. However, you are encouraged to include additional information that you think is relevant to the problem. You are also expected to create a set of instances that demonstrate the use of your ontology.

### **Important Dates:**

Progress report Fri., Feb. 24
Submit final ontology Thr., Mar. 2
Class presentation Thr., Mar. 2

# **Progress Report:**

Your progress report will consist of a scheduled meeting between your team and me. We will discuss the tools you have chosen to use, the scope of your ontology, the division of labor among your teammates, and examine a draft version of your ontology. It is expected that your draft ontology will be sufficiently developed for me to give you feedback on the direction in which it is developing. You will be graded on the extent of your progress.

## **Final Ontology:**

Your final ontology (or ontologies) should be in OWL XML format. Be sure to set an xml:base so that the ontologies are location independent. These ontologies must be valid OWL DL ontologies. You will also be graded on breadth of coverage of the domain and completeness and accuracy of your class descriptions. You should use the rich modeling constructs of OWL DL whenever appropriate. In addition you should submit files containing enough realistic instances that demonstrate how your ontology can be used. Much of your instance data should be based on real sources about the Semantic Web such as Semantic Web course web sites, Semantic Web publications, Semantic Web tutorials, etc. You should submit a ZIP file by e-mail to heflin@cse.lehigh.edu.

### **Class Presentation:**

Your group must provide a 15 minute presentation to the class that discusses your ontology. You will be graded on the quality of the presentation and your ability to communicate the main features of your ontology. It is recommended that you prepare a slideshow presentation.

#### **Grading:**

Your grade on the project will be composed of the following components:

Progress report 20% Final ontology 50% Class presentation 20% Individual grade 10%

The individual grade will be based on team evaluation forms where you will be asked to evaluate the contribution of each member of your team, including yourself.