Assignment 4: Xinformatics (Spring 2016) (10% written)
Due: TUESDAY March 29, 2016 (by 12pm ET).
Submission method: written document and presentation (after you present it) by email to pfox@cs.rpi.edu and Jessica Jones jonesj17@rpi.edu
Please use the following file naming for electronic submission: Xinformatics2016_A4_YOURFIRSTNAME_YOURLASTNAME.xxx
Late submission policy: first time with valid reason – no penalty, otherwise 20% of score deducted each late day
Note - Office hours: Monday 3-4, Winslow 2120

Note: Your report for this assignment should be the result of your own individual work. Take care to avoid plagiarism (“copying”), and include references to all web resources, texts, and class presentations. You may discuss the problems with other students, but do not take written notes during these discussions, and do not share your written solutions.

General assignment: Information models and Information Architectures. The weighting score for each question is included below. Please use the question numbering (1-3) below for your written responses for this assignment.

Analyze the use case you developed for Assignment 1 and derived requirements for in Assignment 2.
1. Perform an information modeling exercise of your use case.
   a. Develop a Conceptual Information Model. What are the objects, relations, etc. and why did you choose them and their relations and exclude others? Min. 3-4 sentences. (2%)
   b. Submit a diagram of the conceptual information model that you developed. (2% undergraduate, 1% graduate).
   c. Graduate question (6400-level): Submit a logical information model (1%).
2. Consider your conceptual (and/or logical) information model and your use case goal and Normal Flow.
   a. What “interface”, in an architectural sense, would be appropriate? (What elements of the architecture are visible to the actors, and not). Min. 3-4 sentences. (2%)
   b. At the interface you defined, what representation, i.e. of the semiotic system, seems appropriate to present the interface to a user, so that they can use it? Min. 3-4 sentences. (2% undergraduate, 1% graduate)
   c. Graduate question (6400-level): What is encapsulated below the interface and why? (1%).
3. What are the design considerations for your interface?
   a. List your design considerations for the interface you conceived in 2a (elements, principles, color, ...). Min. 2-3 sentences. (1%)
   b. What icons or symbols might you incorporate into a prototype to form one point of the semiotic triangle? What is the index between signifier and what is signified? Explain the choices in terms of information entropy and semiotics. Min. 2-3 sentences. (1%)