

Assignment 2: Xinformatics (Spring 2010) (20% written of overall credit score)

Due: TUESDAY March 16, 2010 (by 12pm ET)

Submission method: email, pfox@cs.rpi.edu.

Please use the following file naming for electronic submission:

Xinformatics2010_A2_YOURFIRSTNAME_YOURLASTNAME.xxx

Late submission policy: first time with valid reason – no penalty, otherwise 20% of score deducted each late day

Office hours: Monday 3-4, Winslow 2120 or by appointment (via email).

Note: Your report for this assignment should be the result of your own individual work. Take care to avoid plagiarism (“copying”), including 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: Based on the use-case that you developed in Assignment 1, address the question of assessing information uncertainty in different aspects of the use case and determine possible ways to condition the system to reduce uncertainty in achieving the goals of the use case. [You will need to take into account that since the use case is not implemented, this is a hypothetical exercise]. The weighting score for each question is included below. Please use the question numbering (1-3) below for your written responses for this assignment.

1. Analyze the use case for information uncertainty
 - a. What are the potential sources of uncertainty in general terms? 1-2 sentences (4%)
 - b. Can they be quantified and are any theoretical concepts applicable? 1-2 sentences (4%)
 - c. Categorize the uncertainties according to Presentation, Organization, Context, Content and Structure and discuss some options for addressing the factors. Use at least 1 sentence for each category (4%)
2. Would you re-scope the use case as a result of what you found in 1? If so how? If not explain why. 2-3 sentences. (4%)
3. Describe how your current use case relies on induction and how it may be re-specified to accommodate abduction. 3-4 sentences (4%)