

Final Project assignment: Xinformatics (Spring 2013) (40% written, 10% presentation)

Due: Written - TUESDAY April 30, 2013 (by 12pm ET) and Presentation - TUESDAY May 7, 2013 (by 12pm ET)

Submission method for materials: email, [pfox@cs.rpi.edu](mailto:pfox@cs.rpi.edu), [abimak@rpi.edu](mailto:abimak@rpi.edu)

Please use the following file naming for electronic submission:

Xinformatics2013\_Project\_YOURGROUP<i.e. red, orange, yellow, green, blue, indigo etc>.xxx, including the presentation (after you present it on May 7).

Late submission policy: **this is not an assignment to hand in late.**

Office hours: Monday 3-4, Winslow 2120 or by appointment

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 may discuss the problems with other groups, but do not take written notes during these discussions, and do not share your written solutions.

General assignment: option A) Analysis of existing information system content and architecture, critique, redesign and prototype redeployment. Option B) Pursuit of a detailed use case around a particular area of informatics, includes developing a prototype information system, architecture, design, etc. The weighting score for each question is included below. The detailed definition of the assignment details will be developed in class and within your team. Please use the question numbering (1-3) below for your written responses for this assignment.

1. Either A or B.

- a. (A) Choose an information architecture/ system to analyze/ critique (10%)
  - i. Choose an advanced information application. Write min. 3-4 sentences describing the current implementation, what you think the use case is and why you made your choice.
  - ii. Analyze the information architecture including presentation of information content, clarity, what goals of a use case were achievable, etc. Min. 3-4 sentences
  - iii. Critique the implementation in the areas defined in lecture materials covering information uncertainty, semiotics, cognition, design and architectures. Give details on your assessment; include screen shots and other documentation to support your critique. Min. 5-6 sentences
- b. (B) Develop or refine a use case around a particular area of informatics including the developing a prototype information system, architecture, design and prototype implementation to meet the goal(s) of the use case (10%)
  - i. Develop the functional requirement and information aspects of the use case. Write min. 3-4 sentences describing what the use case is and why you made your choice, including a use case document (using the template from assignment 2).

- ii. Develop an information architecture including presentation of information content. Min. 3-4 sentences
  - iii. Develop a prototype implementation and address areas defined in lecture materials covering information uncertainty, semiotics, cognition, and architectures. Give details on your design. Min. 5-6 sentences
2. Perform a conceptual and logical model design for the use case you chose (A) or are developing (B). This design should include architectural elements, content provisioning and application of information theory and architecture principles. Include design diagrams and (minimum) 1 page text description of the design. (20%)
3. Prototype re-implementation (A) or implementation (B). Discuss all considerations you used and reference material. Include mockups, architectural plans and related materials. Describe how you made implementation choices and relate them to the inferred functional requirements of the use case. Min. 8-10 sentences and diagrams. (10%)
4. Oral presentation of the results for questions 1, 2, and 3. The presentation should be ~ 20 minutes (present for no less than 15 mins), *including* time for questions. Your grade will be assessed on demonstration of learned skills in information theory, design and architecture. All members of the team should equally present part of the presentation. Submit your presentation (ppt, pdf or similar), using the same naming scheme, after the class. (10%)