

Assignments

ISYS 310 Human Computer Interaction II, Winter 2004

- Week 1
1. Complete the **HCI Questionnaire**. This should be the first thing you do for the class. Please do it as soon as possible.
 2. Purchase the textbook and browse through it. Carefully read **Chapter One** of the textbook. Take notes. Think about the exercises in the chapter.
 3. Read: Scardamalia & Bereiter, “**Computer Support for Knowledge-Building Communities**”.
 4. Discuss the readings in Blackboard. Press the button "Discussion Board" and click on the discussion forum defined for “**Discussion - Week 1**”.
 5. **Write a brief autobiographic description**, including your interests and background related to this course. Also create a **digital picture** of yourself. Post these to your **personal Web Space**.
 6. Participate in a collaborative math problem in class.
 7. Complete this week’s assignments by midnight of the due date (stated in the Course Overview).
- Week 2
1. Carefully read **Chapter Two** and **Chapter Three** of the textbook. Take notes. Think about the exercises in the chapter
 2. Discuss the readings in Blackboard. Press the button "Discussion Board" and click on the discussion forum defined for “**Discussion - Week 2**”.
 3. Work with your group on a collaborative math problem. Do this in your group’s “virtual classroom” in Blackboard. Be sure that you archive the session’s chat log and snapshots of whiteboard drawings -- you will need to use these archives in future group projects. Be sure to follow the procedures and do all work online – any bending of the rules could spoil your future work in the course.
 4. Work with your group to create a group web space. Include an introduction to your group, its name and logo, its members and mission. Include the logs from (3) above.
- Week 3
1. Carefully read **Chapter Four** and **Chapter Five** of the textbook. Take notes. Think about the exercises in the chapter.
 2. Discuss the readings in Blackboard.
 3. Participate with your group in a face-to-face collaborative math problem, scheduled with your instructor and videotaped by INFO 610 students.
 4. Participate in a survey if requested by INFO 610 students.
- Week 4
1. Carefully read **Chapter Six** and **Chapter Seven** of the textbook. Take notes. Think about the exercises in the chapter.
 2. Read: Stahl, “**The Complexity of a Collaborative Moment**”.
 3. Discuss the readings in Blackboard.

4. Work with your group to **understand collaborative math problem solving**. Analyze the process that your group and other groups went through in working on the math problems by finding illustrations of key interactions in chat logs, discussion threads and meeting minutes. In particular, document how decisions were made, such as task clarification, organization of the work, roles of members, selection of ideas and negotiation of group products. Cite and analyze detailed log excerpts. Post your findings to your group Web Space in a presentation format.
5. Participate in a focus group if requested by INFO 610 students.

- Week 5
1. Carefully read **Chapter Eight** and **Chapter Nine** of the textbook. Take notes. Think about the exercises in the chapter.
 2. Discuss the readings in Blackboard.
 3. Work with your group to **establish requirements**. Identify needs and establish requirements for computer support of collaborative math problem solving in Blackboard. Formulate the requirements using “essential use cases.” Post your findings to your group Web Space in a presentation format.
 4. Participate in an interview if requested by INFO 610 students.
 5. Begin to work on your **personal and group portfolios** in your personal and group Web Spaces (see Assignment – week 10).

- Week 6
1. Carefully read **Chapter Ten** and **Chapter Eleven**.
 2. Read: Stahl, “**Groupware Goes to School**”. It is attached above.
 2. Discuss the readings in Blackboard.
 3. As an individual assignment, develop a **conceptual design** for some extension to Blackboard that would help to support collaborative math problem solving. Post the designs of the members of your group in your group Web Space in a presentation format.
 4. Work with your group on a collaborative math problem. Do this in your group’s “virtual classroom” in Blackboard. Be sure that you archive the session’s chat log and snapshots of whiteboard drawings.

- Week 7
1. Carefully read **Chapter Twelve** and **Chapter Thirteen**.
 2. Read the supplementary readings on heuristic design.
 3. Discuss the readings in Blackboard.
 4. Work with your group to develop an **interactive low-functionality prototype** for some extension to Blackboard that would help to support collaborative math problem solving. Post the prototype and related materials in your group Web Space in a presentation format.

- Week 8
1. Carefully read **Chapter Fourteen** and **Chapter Fifteen**.
 2. Read the supplementary readings on cognitive walkthrough.
 3. Discuss the readings in Blackboard.
 4. As an individual project, conduct an **heuristic evaluation** of a prototype developed by a

different group. Everyone in your group should critique the same prototype. Consolidate and post the individual findings of the members of your group in your group Web Space in a presentation format.

Week 9 1. Conduct several **cognitive walkthroughs** of your own group's prototype. Use friends who are not in the HCI class, who are computer literate and who might be typical users of the support system. Define an explicit task and path through the prototype for the walkthrough. Assign one group member as guide and one as scribe for each walkthrough. Post a report of your walkthrough and the findings in your group Web Space in a presentation format.

Week 10 1. As a group, organize your **group Web Space** to be a portfolio showing the findings of your group work this quarter.

2. As an individual, organize your **personal Web Space** to be a portfolio showing your work this quarter.

3. As an individual, write a ten-page (single spaced) **reflection paper** proposing what you think should be done if your group had another 10 weeks to continue this quarter's work. This paper should be your personal reflection on what you learned in the course. This paper should be presented either as a Word document stored in your personal web space or as a hypertext document in your personal web space, referencing items in various web spaces, in the course readings and in related literature.

4. All course work must be completed by midnight, March 17.

Supplemental Readings

- Week 1 Scardamalia, Marlene & Bereiter, Carl (1996) [Computer support for knowledge-building communities](#). In T. Koschmann (Ed.) *CSCL: Theory and Practice of an Emerging Paradigm*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 249-268.
- Week 4 Stahl, Gerry (2002) [The complexity of a collaborative interaction](#), In: Proceedings of *International Conference of the Learning Sciences (ICLS 2002)*, Seattle, WA.
- Week 6 Stahl, Gerry (2002) [Groupware goes to school](#), In: Proceedings of *Groupware: Design, Implementation and Use -- CRIWG 2002, 8th International Workshop on Groupware*, La Serena, Chile, pp. 7-24.
- Week 7 Heuristic evaluation articles:
- http://www.useit.com/papers/heuristic/heuristic_list.html
- http://www.useit.com/papers/heuristic/heuristic_evaluation.html
- http://www.cc.gatech.edu/computing/classes/cs4753_94_fall/handouts/heur.eval.html
- Week 8 Cognitive walkthrough articles:

http://www.acm.org/sigchi/chi95/proceedings/tutors/jr_bdy.htm

<http://facweb.cs.depaul.edu/cmiller/eval/cw.html>

<http://www.cc.gatech.edu/computing/classes/cs3302/documents/cog.walk.html>