Distributed Collaboration - Assignment 2: Classifying Recent CSCW Papers

Date Assigned: Sep 10, 2009

Completion Date: Thu Sep 24, 2009

Objectives:

- Use and compare synchronous application and model sharing

- Compare collaboration tools with face-to-face and mail-based collaboration.

- Understand some of the technical details of the systems you use.

- Get an idea of recent CSCW literature

This assignment has several parts, which involve the understanding, use, and evaluation of a variety of collaboration tools: Microsoft's LiveMeeting and Groove and Google's spreadsheet and word processor. LiveMeeting is a synchronous server-based window- sharing system. Groove is a peer to peer, model-sharing system providing asynchronous directory sharing and semi-synchronous sharing of Word documents. Google's spreadsheet and word processor are server-based model-sharing systems, the former is strongly synchronous while the latter is semi-synchronous. Thus, by using these systems, you will meet the goals above. For all parts you will need one or more partners. In the first part, you will classify CSCW papers. In each of the following two parts, you will write a report on your experience with the previous part. Finally, you will try to understand technical aspects of the collaborative tools you use. Like the last assignment, this assignment will also be done with a partner. Try and choose a different partner, but if you and your current partner have similar schedules or you want to really continue working together, keep your current partner.

Part 1: Synchronous Collaboration using Window and Model Sharing

In this part you will classify papers published in CSCW '08 (http://portal.acm.org/toc.cfm?id=1460563) and CSCW '06 (http://portal.acm.org/toc.cfm?id=1180875&type=proceeding)

Classify 20 papers from each conference that are of interest to you and/or your partner.

To classify each paper, use an internet browser to retrieve and read the abstract of the paper. Categorize it according to the problem/issues/disciplines taxonomies we studied in class. You

may have to add new categories for each category. For example, if you find a paper that seems to use data mining or sociology, you can data mining and sociology to the disciplines taxonomy. The abstract may not give you enough information to completely classify the paper. Do the best classification you can based on the information it has. If a paper evaluates a system, classify both the system and the evaluation.

Use a table to do the classification. The table should have the following columns: paper title, problems or application areas, issues, disciplines. Each classified paper would correspond to a row.

Classify the CSCW '06 papers using Google Docs Spreadsheet. Classify the CSCW '08 papers by sharing Excel under LiveMeeting.   Use Google Docs first – otherwise you might use the more constraining collaboration model supported by LiveMeeting even when using Google Docs.

In both cases, you should be situated in different rooms, but can use the phone to talk to each other.

Record your sessions using LiveMeeting in both cases. In the LiveMeeting/Excel case that is easy as all of you are using the same LM session for sharing and one of you can hit the record button. In the Google case, each of you can run the spreadsheet in a separate LM application sharing session and record your individual actions.

When you set up a LiveMeeting ongoing meeting session, you have to give a telephone number. When you enter the conference, LM calls this number to join the conference. This means the number must allow multi-party conferencing. I believe the phones in graduate student offices have conferencing capabilities. If you and your partner do not have such capabilities, do not worry about recording the voice.

You are encouraged to study the taxonomies and try the two tools individually before the assignment. However, do all other work on the assignment collaboratively. In particular, do not read the abstracts or refine the classification individually. Moreover, do all collaborative work on this assignment electronically. This means the class notes/slides on the taxonomies should be read online during the joint session. After the session, each of you can individually create notes on your experience.

Part 2: Google Docs Word Processor

Based on your memory, the notes you took in part 1, and the LM recordings, jointly create a document doing a three way comparison of (a) face to face and email-based collaborations you have done in the past, (b) LM-Excel based screen sharing, and (c) Google Spreadsheet based model sharing. Do not meet face to face or use email to create this document. Instead use Google Docs word processor. Be sure to explain the processes you followed and all the applications you used in the two tool-based collaborations.

Part 3: Understanding Technical Details

When using co-editing, it is possible to make conflicting changes such as editing the same line/word/character. Explain how the Google spreadsheet and word processor handle conflicting changes. Also explain the collaboration semantics of undo in the two tools. You and your partners should try out and document as many boundary cases as possible to derive the conflict and undo semantics in the two tools.

LiveMeeting application-sharing is implemented using a centralized shared window system. Present evidence to show that (a) it shares windows and not the whole screen or an object in a window, (b) it is a centralized system. As in the case of conflicting changes and undo, the evidence should be experiments you perform with the system. Also explain, based on such experiments, whether LiveMeeting couples expose events or not.

Finally, share the whiteboard and experiment with it. What kind of coupling does it offer? Is the whiteboard sharing implemented by a shared window infrastructure?

You should collaboratively write a document giving the explanations and cases you tried to do this part of the assignment. You can use face-to-face collaboration or any collaboration tool of your choice to produce this document. Explain the reason for choosing your mode of collaboration.