CS 66.460
Introduction to Graphical Human–Machine Interfaces
Spring 1997
Term Paper Assignment

Deadlines

- **Papers Due: Friday, April 18, 1997 by 5PM in the Instructor's Mailbox**
- **Presentations: April 21, 23, and 28 in-class**

Objective

You are to write a research paper on some aspect of user interfaces, drawing from papers found in the scientific literature and to also prepare a oral presentation. The goal of this assignment is to allow you to explore an area of interest in more detail and gain experience writing a research paper and performing an oral presentation.

You may work alone or in pairs to investigate some aspect of human-computer interaction, by reading one or more papers presented during the past year at a major conference. Together, you will write a research paper summarizing what you have learned, and present your findings to the rest of the class. The specific selections will be determined in accordance to your own personal interests, in consultation with the instructor.

Topic Selection

As discussed in a previous handout, your topic will be chosen from one of the following proceedings:

- **Human Factors in Computing Systems (CHI96)**,
  Vancouver, British Columbia, Canada, April 13–18, 1996, ACM Press, New York City, NY.
- **User Interface Software and Technology (UIST '96)**,
  Seattle, Washington, USA, November 6–8, 1996, ACM Press, New York City, NY.
- **The Second Annual ACM Conference on Assistive Technologies (Assets '96)**, Vancouver, British Columbia, Canada, April 11–12, 1996, ACM Press, New York City, NY.
- **The First European Conference on Disability, Virtual Reality, and Associated Technologies (ECDVRAT '96)**, Maidenhead, Berkshire, UK, July 8–10, 1996, The University of Reading.

The table of contents from each of these conferences has already been handed out to help you choose your topic. As discussed in that handout, you must confirm your topic selection via e-mail to `wiseb@cs.rpi.edu` by **Friday, March 21, 1997 by 5PM**.

Format

Your paper should be between 5–7 pages in length, including any figures, and references. The first page should include your name along with the title, an abstract, and keywords. Your paper should have an introduction, conclusion, and probably, 2 or 3 or 4 inner sections. If you have questions about how to further organize your please see the instructor or the TA.

Papers must be typed. No hand-written papers will be accepted.

It is recommended that you use one of the CHI97 electronic templates provided to give your paper a professional look. (i.e., double column, 10 point body text, bold headings, etc). See the attached sample sheet. The templates, available for FrameMaker (versions 4 and 5) and Microsoft Word (versions 5 and 6) can be found on the course Web site at `http://www.cs.rpi.edu/courses/spring97/GHMI/paperfmt/`.

If you do not wish to use one of these templates, that is fine, but you should try to format your paper as close to the CHI97 format as you can. At a minimum you should use double columns, 10 point body text, a consistent style for headings (bold), and one inch margins.

What to Write About

The goal of this assignment is to give you a deeper understanding of some aspect of user interfaces or human-computer interaction that is of interest to you. During the last few weeks of the course you will share your findings with the rest of the class in a short in-class presentation.

After reading the paper you select from the above proceedings, you should find at least two other references about your chosen topic. This will give you an even better understanding or different perspective of the topic you have chosen.

The term paper is more than just a summary of the papers or other materials you read. It needs to show evidence of not only your understanding of the material but also your own insights and criticisms. You may wish to contrast the different articles, or make comparisons to other systems and ideas seen in class.

Presentations

Presentations will be around 10 minutes with 5 minutes for questions. Keep in mind that it takes about 2 minutes per slide when giving a talk. So around 5 or 6 slides is probably sufficient. I can provide blank transparency sheets and markers for your use. Or, if you wish me to Xerox your slides on to transparency film I can do so, but you must make arrangements at least **two days prior to your scheduled talk!**

Grading

Your paper will be graded primarily on its content – including your own ideas and criticism – and the effectiveness of its organization and presentation (80%). Your grammar, spelling, and style are also important (20%). The presentation will be graded separately. The presentation and paper are worth 30% of your total course grade; the paper is worth 20% and the presentation 10% of your total course grade.

Suggestions and Writing Tips

Provide a structure for your paper with sections and headings. These should include an abstract, introduction, conclusion, and other sections.

Good writing takes time and effort. So be sure to give yourself plenty of time to write the paper. Good writers go through many iterations of their paper, rewriting sentences and paragraphs, over and over. The more iterations the better! After a few revisions, you might have someone else read your paper for feedback.

Plan your paper. Start with an outline. Introductions and conclusions are usually written last. Don't try to do everything in one sitting. Your paper will improve over time.

Be careful with summaries and conclusions. Summary or conclusion sections should not merely reiterate the points that you have raised previously. It is okay to restate your main points or central message, but do not give an exhaustive revisit of your paper. And never paste sections of text or sentences the reader has already seen!

The conclusion is a great place for bulleted lists that quickly (in a few words per bullet) summarize your main ideas or, for example, the main advantages of your technique.

Avoid unnecessary adjectives. Words like – simple (simply), very, quite, obvious, basic (basically), almost – rarely add anything to your paper and more often weaken it. Write using verbs and nouns. In scientific papers it is especially important to avoid unnecessary adjectives and flowery prose.

Be concise. Say only what you want to say and say it concisely. Use no unnecessary words. As you read your draft, always ask yourself, "could I convey the same ideas with fewer words?" Keep paragraphs fairly short. Break up long paragraphs.

Write simply and concretely. Do not be too abstract, even when you are explaining abstract or complex concepts. Use concrete examples to illustrate what you mean.