

# COMP3503/IENV7933 Interaction Design 2005

## Assignment 1 - Interaction Breakdown (10%)

Due Week 3 (August 7<sup>th</sup>)

Bring artifact to tutorial in week 2 (July 31)

This is an exercise in identifying interaction issues associated with an interface with which you are familiar, and observing someone else's attempt to use the same interface. You will put your results in the form of an A4 poster.

The assignment will be due in class in Week 3. You are expected to bring an artifact or a description of an artifact with which you have had an interaction breakdown to tutorial in week 2 for discussion. In the tutorial session you will observe a partner trying to perform the same task with the artifact or if this is not practical then with a paper representation of the artifact.

Choose an interactive interface with which you have experienced some kind of interaction breakdown. This could be a workstation application, such as a word processor or spreadsheet, an interactive web page, such as a registration page for some service, or an information appliance, such as a VCR, alarm clock, mobile phone, camera, etc.. The problem should be one that came up as in a difficulty with getting it to do what you want, due to flaws in the design of the interaction (i.e., we're not interested in cases where the system crashed, or the device just didn't work).

Bring the artifact to the tutorial in week 2. If this is not possible, bring a sketch of the artifact that is clear and detailed enough for someone else to reason about how the device should be operated, and notes of the frustrating interaction sequence, screen dumps, etc. You should also include a brief specification of the task to be performed with the artifact that will lead to the interaction breakdown being encountered. In the tutorial you will be given instructions for how to observe someone else's interaction with the artifact.

Your deliverable in Week 3 will be an A4 poster (no bigger, and with readable text) which includes the following:

1. If the example is not likely to be familiar to everyone, give a few sentences describing what it does and what audience it is intended for.
2. Give a few sentences ("bullet points") characterising the breakdown from the point of view of you as a user. They should say briefly what you tried, what you expected, and what happened.
3. Include annotated sketches or illustrations that give substantive help to the reader in understanding the problem (not just pretty pictures).

On the rear of the poster:

1. Describe your experience with observing someone else trying to use the artifact. Did they experience the same problem as you had? Is there anything else that struck you about what they did? Try to give as detailed a description as possible of their interaction with the artifact.
2. Characterise as clearly as you can the general issue that you believe was at the root of the problem and how your observations confirmed this diagnosis (or not). This shouldn't be overly vague and general ("The interface is badly designed") nor just a repetition of the breakdown description. Look for a level of description that could apply to a family of breakdowns of which your case was an example.
3. Reflect on how the process of observing someone else trying to use the artifact affected your opinion on what was wrong with it. Does your experience with the artifact feel more or less typical after you have observed someone else trying it? Why?

Grading will be on the basis of your being able to carefully identify and briefly state the key points of the example. Try to find an especially clear example of why interfaces fail. Work for clarity and communication. Describe your observations in as much detail as you can.

The style of poster required here is an academic one, where the main emphasis is on the content and how well it communicates your understanding of the breakdown, rather than on the aesthetic design of the piece.

### **Submission**

Submission of poster will be at the Information Environments Program Reception no later than 4pm on Tuesday 7<sup>th</sup> August. Your submission must be accompanied by a signed coversheet declaring that the submission is your original work.

### **References**

Some background reading on interaction breakdowns.

1. Norman, DA. (1990). The design of everyday things. Chapter 1: The psychopathology of everyday things. Doubleday/Currency, New York.
2. Gaver, William W. (1991) Technology affordances, *Human factors in computing systems conference proceedings on Reaching through technology*, Pages 79–84. Available through the ACM digital library via UQ campuses:  
<http://www.acm.org/pubs/citations/proceedings/chi/108844/p79-gaver/>
3. David Liddle, (1996) Starting with the User Experience - Design of Conceptual Model: An interview from *Bringing Design to Software*, Terry Winograd, Addison-Wesley, 1996 Ch 2, pp17-36. Available on line at: <http://hci.stanford.edu/bds/2-liddle.html>

### **Acknowledgement:**

This assignment is adapted from one by Terry Winograd, Stanford University.