

COMP3503/IENV7933 Interaction Design 2007

Assignment 2 – Interactions with mundane technologies (25%)

Due Week 4 (17th August) – Video Clips
Due Week 7 (28th August) – Wiki theme
Due Week 8 (11th September) – Theme movie

Background and aims

The subject of this assignment is to **examine social interactions around the proliferation of 'mundane' technologies.**

This is a current research topic in interaction design, For more information, refer to the call for an upcoming workshop on the topic at:

<http://www.mundanetechnologies.com/goings-on/workshop/melbourne/call.html>

In the assignment we ask you to shoot video of activities, to examine video sequences of activities, to identify interactions of interest, to describe interactions of interest and to construct a short movie to express interactions of interest. We do this through the method of the Video Card Game described by Buur and Soendergaard (2000). This method uses video to encourage examination of interactions and to facilitate group discussion about them. We find that the group discussion widens everyone's perspective on how interactions can be construed.

For an example of how the video card game has been used to inform design, see the paper by Brereton et al (2003) who use the video card game to examine gesture in a variety of settings in order to inform the design of gestural input devices. Jordan and Henderson's (1995) paper explores the detailed analysis of video of human activities.

Step 1—(Tuesday 14th August)

Choose a group of four people.

Discuss activities that will provide you with interesting examples of social interaction around mundane technologies.

Shoot 20-30 minutes of videotape in settings of interest.

View the 20-30 minutes of videotape and note interesting clips of activity. Choose about 5 clips, each lasting 30 seconds – 2 minutes, of continuous (unedited) activity.

Your group should submit at least 5 (and no more than 8) separate video clips (of 30 secs – 2 minutes duration), each one titled with a short descriptive title (such as "Ben makes a call") by Friday August 17th.

The clips should be uploaded (.mpg format) into a new folder in the comp3503 share (details of share address to be distributed in newsgroup and announced on course web page).

Step 2—(Tuesday 21st August)

Choose a group of eight people

Select a partner within that group.

Each person should collect ten cards in class. You and your partner should have the same set of ten cards.

Arrange a time when the group can meet for 4 hours to do the assignment

Step 3—Read your cards (1 hour, in pairs)

Split into pairs to watch your 10 video sequences. After you watch each sequence, write notes on the cards about your observations of the videotaped activity. At this stage, work individually and do not discuss what you saw with your colleague.

The video sequences are available via the course web page.

Step 4—Arrange your hand (30 mins, in pairs)

Each pair should group their cards into families. There are no restrictions on how you group the cards into families as long as each family has some kind of theme in terms of interactions. You will probably have between 3 and 6 families. Some cards may not fit into any particular family.

Step 5—Collect card families

Each pair should choose a favourite family of cards—a theme of interactions that they find interesting and wish to explore. Give the theme a short name.

Reassemble into your larger group of 8. One after another, players describe their theme of interactions as precisely as they can. Invite other players to contribute cards which seem to fit into the same theme. Other players should describe why they feel the card fits into the theme. The family owners decide whether or not they will accept the card.

Step 6—Discuss the card families

Spend time discussing each theme of interactions.

Step 7 – Write up and submit theme (Due on 28th August)

You and your partner should then write up your theme in a wiki page.

There is an example Theme Summary from last year's video card game available at:
http://www.itee.uq.edu.au/~comp3503/_resources/ExampleTheme.html

You could:

Give a succinct description of the theme,

- Describe what it is you see in an interaction that leads you to put it in this family,
- Describe an example or two,
- Describe the context in which this kind of interaction occurs,
- Describe how this kind of interaction works in the context of technology, etc., etc.

You may wish to examine video sequences from some of the cards that you collected during the card game to help you.

Both staff and students can comment on themes once they appear on the wiki. Everyone is encouraged to do so, and to act upon comments made on their own themes.

Step 8- Make a theme movie (Due on 11th September)

Make a short movie (approx 2 minutes) to express your theme using footage from the repository of video clips. This will be presented to class for critique.

Reading

1. Brereton, M., Bidwell, N., Donovan, J., Campbell, B. and Buur, J. (2003). Work at Hand: An Exploration of Gesture in the Context of Work and Everyday Life to Inform the Design of Gestural Input Devices. In Biddle, R. and Thomas, B., (Eds.) ,*Proc. Fourth Australasian User Interface Conference (AUIC2003)*, Adelaide, Australia, pp. 1-10.
2. Buur, J. and Soendergaard, A., Video card game: An augmented environment for user centred design discussions. in *Proceedings of DARE: Designing Augmented Reality Environments*, (Elsinore, Denmark, 2000), ACM.
3. Diercke, C. (2005), *The secret lives of fridges*, unpublished manuscript, Information Environments Program, University of Queensland
4. Hughes, J.A., O'Brien, J., Rodden, T., Rouncefield, M., Viller, S., (2000) Patterns of home life: informing design for domestic environments, *Personal Technologies* **4** (1), pp. 25-38.
5. Jordan, B. and Henderson, A. (1995), Interaction analysis: foundations and practice. *The Journal of the Learning Sciences*, **4** (1), pp. 39-103.
6. Kilbourn, K. (2005). Don't Destroy the Vitamins! – A Look at the "Tada" Microwave from Several Perspectives. *Nordic Design Research Conference*, 2005, Copenhagen, Denmark, pp.29-31.
7. O'Brien, Jon, Tom Rodden, Mark Rouncefield, and John Hughes, At Home with the Technology: An Ethnographic Study of a Set-Top-Box Trial. *ACM Transactions on Computer-Human Interaction*, **6** (3), pp. 282–308.

Ethical guidelines

When conducting research which involves human subjects, we have to attend to ethical issues. The main concern with the type of activity involved in this assignment is that when capturing information about people through which they may be identified in the future (in this case, the video clips), we must obtain their permission in order to make use of the information in our research. The term used to refer to this permission is *informed consent*. What this means is that in allowing you to use identifiable data the participant should know what it is that they are agreeing to (what you are gathering, and what you will then do with it). When gathering your video clips, you should follow this procedure:

1. Provide the people you will be filming with a consent form (see next page for example).
2. Ensure that they read and understand the contents, and sign the form.
3. Try where possible to film the subject in such a way as to avoid capturing identifiable images (in general, this means avoiding shots of the face).
4. Allow all participants to review the video clips and approve your use of them for your assignment.
5. Wipe contents of the tape after you have uploaded the clips.

Further information

If you require further information on this assignment, please check the course web page and wiki in the first instance (wiki location TBA).

See <http://www.itee.uq.edu.au/~comp3503/>

Consent for participation in video filming

We are students taking the COMP3503/IENV7933 Interaction Design course at the University of Queensland. As part of this course we would like to film some typical interactions in the kitchen. We will use a selection of the clips produced as part of a design exercise in which we will explore how observations of people in their natural settings can be used to inform the design of technology for use in those settings.

We would like your permission for us to film you undertaking everyday tasks in the home, and for us to use these clips in our coursework. This will involve in particular:

1. Uploading clips to a departmental server with access provided for course teaching staff only
2. Viewing of selected clips in a group exercise within the class
3. Incorporating selected clips into a write-up and summary movie of the exercise

In seeking your permission, we wish to make it clear that you may withdraw your consent at any time. If you do so, we will stop filming, and delete any recorded footage without any prejudice. We will also allow you the opportunity to review any recorded footage before it is uploaded to the course server. Finally, your consent is sought for the use described above only. If for any reason we wish to make use of the obtained footage for any other purpose, we will contact you again for further approval.

If you would like to know more about the assignment or further details about our course, you can contact the course coordinator, Dr Stephen Viller, on 3381 1129, or via email: viller@itee.uq.edu.au.

Thankyou for your time.

<Insert names of students here>

I give permission to the above named students to use video recordings of me in their Interaction Design assignment as described above. I have been given the opportunity to review all footage prior to giving this permission, and understand that I can withdraw my consent at any stage. I also understand that the footage will not be used for any other purpose without my further consent being sought.

Signed

Date