Concept for an Interactive Public Notice Area
Exercise 1

Task 1: Reading

Attached to this assignment you can find a reading list, introducing concepts and ideas behind interactive public displays. Papers provide models, discuss core challenges, and present sample applications as well as evaluations. Your task is to use these papers as a starting point (you do not need to read every paper in detail) and look into interactive public display applications, particularly into aspects that are of interest in the context of the course.

Further sources to look for scientific papers are:
• http://scholar.google.com
• http://www.acm.org/dl
• http://www.springerlink.de
• www.computer.org

A comprehensive reading list is provided at http://pd-net.org/reading-list/

Task 2: Focus Group and Interviews

Conduct a focus group with the staff of the 'Group for Media Informatics'. Participants will be scientific staff, professors, and the secretary. The focus group is scheduled to take place on Tuesday, 13th May at 11h in Room A507 and will last approximately 60 minutes. To prepare for the focus group, think about topics you want to discuss and come up with guidelines that will be used during the discussion. Your main task will be to guide the discussion, identify interesting aspects and explore them in more detail, and finally extract a set of features that will form the basis of your system.

Possible topics to discuss:

• Processes around the current (analog) public notice areas (CIP Pool and 5th floor)
• Envisioned Content
• Suitable procedures for administering content
• Techniques for posting and retrieval of content
• (Technical aspects)

It is advisable to (video-) record the discussion and also to take notes. Information on how to conduct a focus group can be found here:
http://www.cse.lehigh.edu/~glennb/mm/FocusGroups.htm

In addition, conduct interviews with different potential stakeholders of your final application with the aim to inform its design. Stakeholders include, but are not limited, to

• students
• secretaries
• scientific staff
• external companies offering theses, trainee programs, and jobs
• university institutions (Studentenwerk, cafeteria, library, etc.)
• …

Task 3: Concept

Based on your readings, interviews and focus group, develop two concepts (one per group) for an interactive public notice area application. Your concept should not be limited by technical feasibility and time constraints, but represent an "optimal" solution.

Your concept should focus on the following aspects:
- What kind of content do you want to use?
- Which features will be provided? Think about how the application can exploit the fact that it is networked.
- How would users create and exchange content with your system?
- Briefly describe a concrete user scenario!
- Describe a possible system architecture!

For presenting the concept (max. 10 minutes), prepare 2-5 slides. Concepts will be presented and discussed in the next plenum on 23. May 2014.

Reading List

- M. Weiser. 1999. The computer for the 21st century. SIGMOBILE Mob. Comput. Commun. Rev. 3, 3 (July 1999), 3-11.
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- J. Müller, F. Alt, D. Michelis, and A. Schmidt, "Requirements and Design Space for Interactive Public Displays," in Proc. of ACM Multimedia, New York, NY, USA, 2010
  http://www.florian-alt.org/academic/wp-content/papercite-data/pdf/mueller-mm10-design-space.pdf

- Huang, E. M., Koster, A., Borchers, J., Overcoming assumptions and uncovering practices: When does the public really look at public displays? Proceedings of the Sixth International Conference on Pervasive Computing. Sydney, Australia (2008)
  http://luci.ics.uci.edu/websiteContent/weAreLuci/biographies/faculty/djp3/LocalCopy/fulltext-1.pdf

- H. Brignull, Y. Rogers: Enticing people to interact with large public displays in public spaces. Proc. of INTERACT 2003.
  http://www.idemployee.id.tue.nl/g.w.m.rauterberg/conferences/interact2003/INTERACT2003-p17.pdf

- S. Izadi, H. Brignull, T. Rodden, Y. Rogers, and M. Underwood. 2003. Dynamo: a public interactive surface supporting the cooperative sharing and exchange of media. In Proceedings of the 16th annual ACM symposium on User interface software and technology (UIST '03). ACM, New York, NY, USA, 159-168.
  http://research.microsoft.com/pubs/132613/p159-izadi.pdf

- F. Redhead and M. Brereton. 2009. Designing Interaction for Local Communications: An Urban Screen Study. In Proc. of Interact '09, Springer, Berlin, Heidelberg, 457-460.
  http://eprints.qut.edu.au/26857/2/26857.pdf

- S. Greenberg and M. Rounding. 2001. The notification collage: posting information to public and personal displays. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '01). ACM, New York, NY, USA, 514-521.
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- F. Alt, N. Memarovic, I. Elhart, D. Bial, A. Schmidt, M. Langheinrich, G. Harboe, E. Huang, and M. P. Scipioni, "Designing Shared Public Display Networks: Implications from Today's Paper-based Notice Areas," in Proceedings of the Ninth International Conference on Pervasive Computing, Berlin, Heidelberg, 2011, pp. 258-275.
  http://www.florian-alt.org/academic/wp-content/papercite-data/pdf/alt-pervasive11-pnas.pdf

- N. Memarovic, M. Langheinrich, K. Cheverst, N. Taylor, and F. Alt, "P-LAYERS — A layered framework addressing the multi-faceted issues facing community-supporting public display deployments.," ACM Trans. on Comp.-Hum. Int. (ToCHI), 2013.
  http://www.florian-alt.org/academic/wp-content/papercite-data/pdf/memarovic-tochi2013-player.pdf

- F. Alt, J. Müller, and A. Schmidt, "Advertising on Public Display Networks," IEEE Computer, vol. 45, iss. 5, pp. 50-56, 2012.
  http://www.florian-alt.org/academic/wp-content/papercite-data/pdf/alt-computer12-advertising.pdf

- Storz, O., A. Friday, N. Davies, J. Finney, C. Sas, and J. Sheridan, Public ubiquitous computing systems: Lessons from the e-campus display deployments, IEEE Pervasive Computing, 05(3):40-47, 2006.
  http://eprints.lancs.ac.uk/12758/2/storz%2Decampus%2Dlessons%2Dpervasive%2Dpreprint.pdf