

Human- Computer Interaction



Proseminar

Media Computing Group
RWTH Aachen University

Summer term 2005

<http://media.informatik.rwth-aachen.de/>

Today

- Proseminar topics and style
- Who, what, and where
- Individual topics and group formation

Proseminar style

- In groups of two
- 45 mins talk, shared equally between both
- 15 mins questions and critique
 - Format
 - Contents
- Written report
 - Due one week before presentation
 - 8 pages

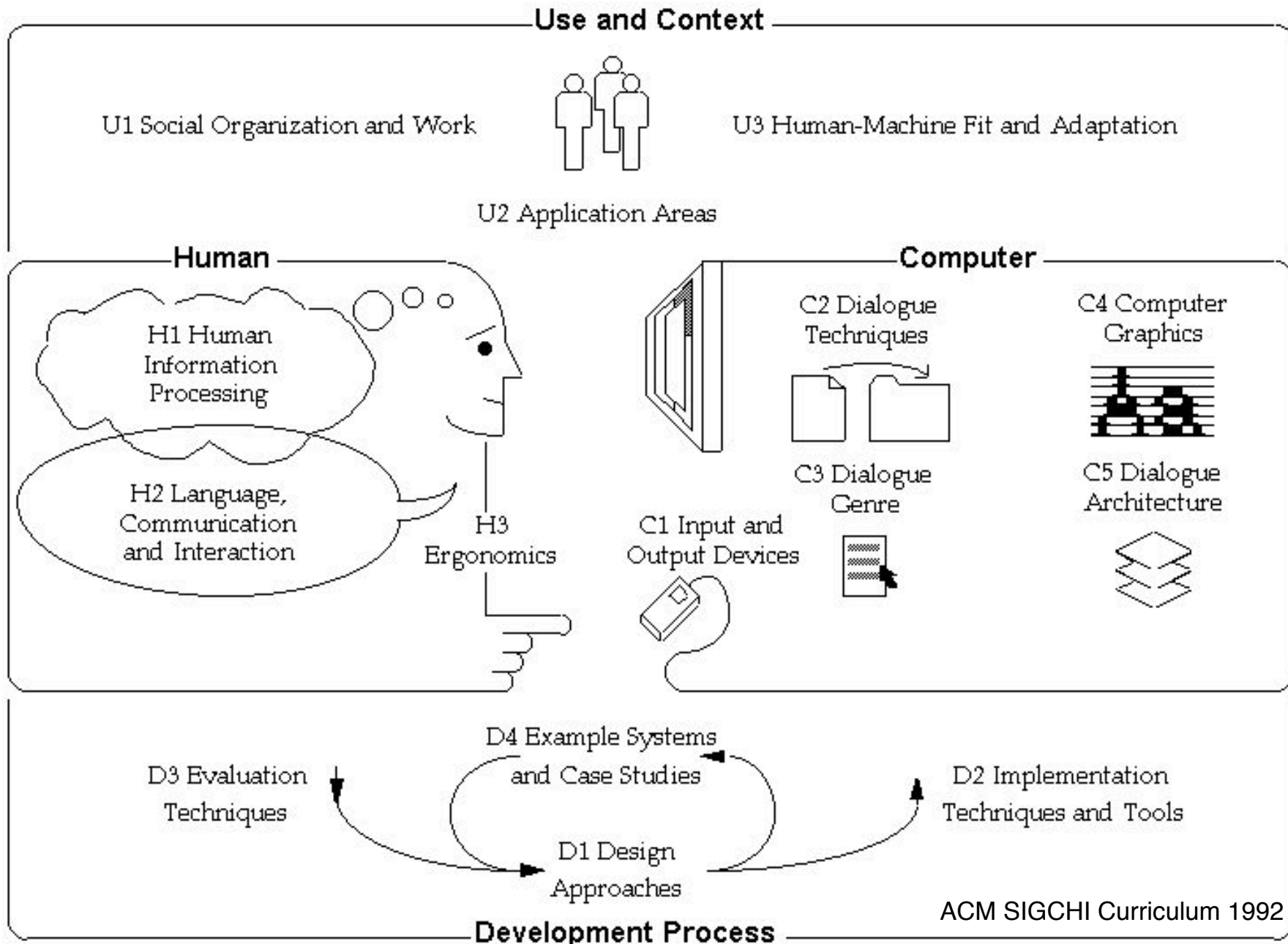
Who are we?



- Prof. Dr. Jan Borchers
 - B.Sc. & M.Sc. CS, U Karlsruhe & U London
 - Ph.D. CS, U Linz, U Ulm & TU Darmstadt
 - Assist. Prof. at Stanford & ETH Zurich
 - Research area:
Interaction Design for New Media
- Dipl.-Inform. Daniel Spelmezan
 - RWTH Aachen



What's Human-Computer Interaction?



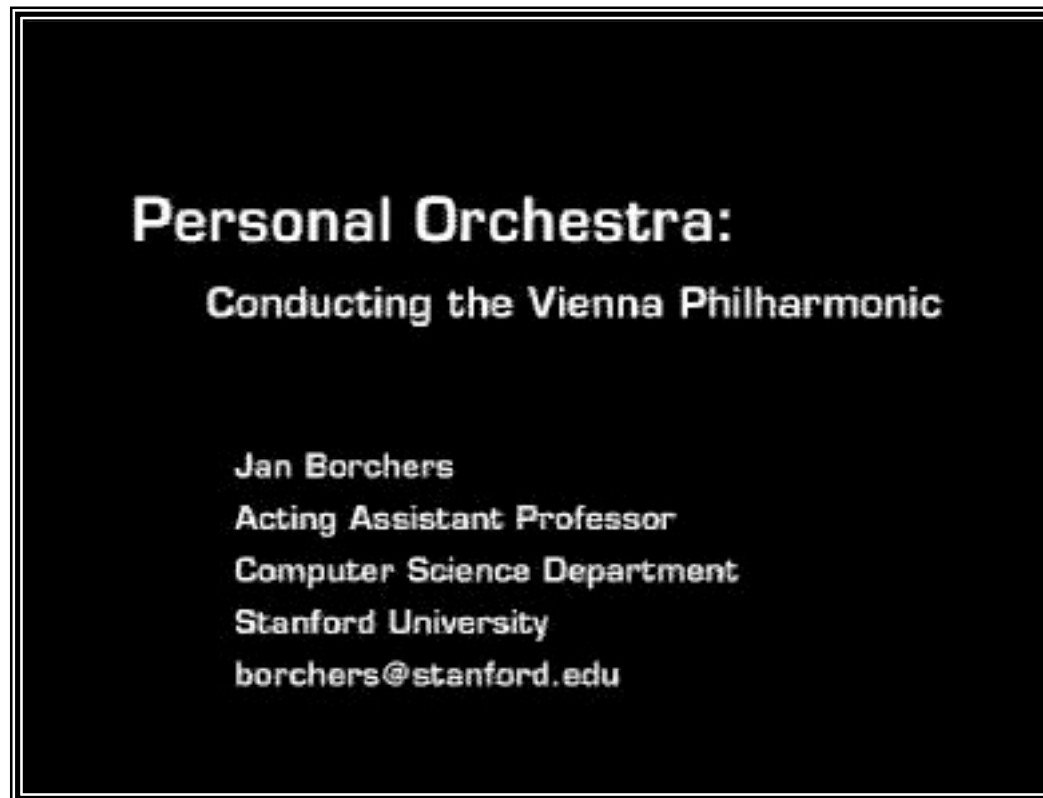
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- Interaction with multimedia: WorldBeat



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- Interaction with multimedia:
Personal Orchestra



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- HCI Design Patterns

H13 IMMERSIVE DISPLAY *



Figure 4.31: CAVE in the Ars Electronica Center Linz.

... you have decided to create an exhibit that several people can experience simultaneously—COOPERATIVE EXPERIENCE (H3). Now you need to find a way to design the visual output of such a system.



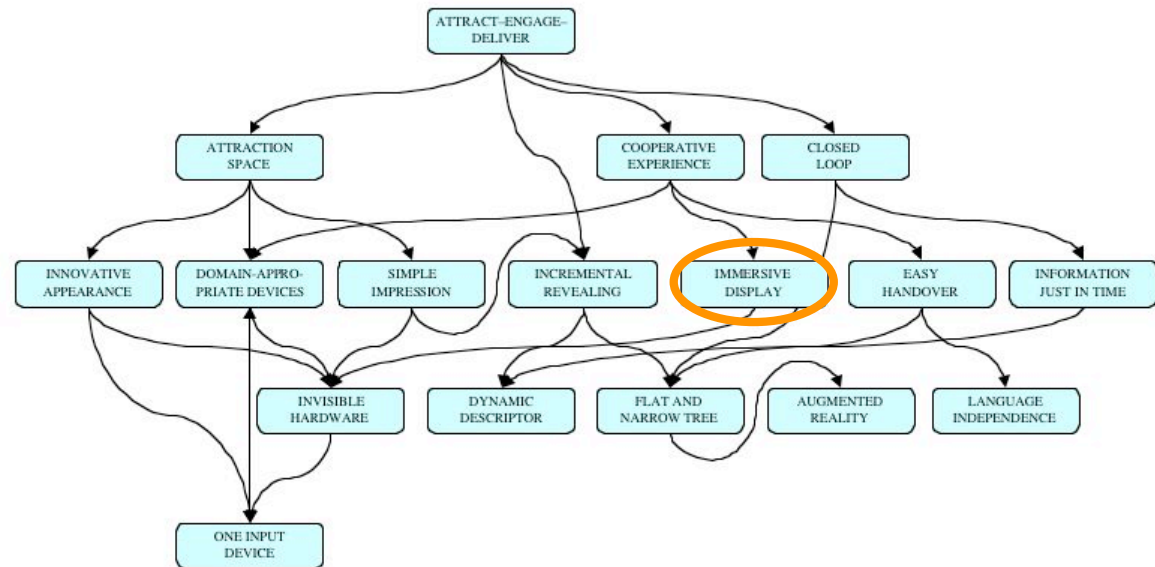
Typical usage scenarios of standard computer systems often involve only one human interacting with the computer at any time, and the system is only a small part of the real environment of the user. But exhibits are usually visited by groups of people, and when users interact with them, they are ready to immerse themselves into the world of the exhibit.

The CAVE installation in the Ars Electronica Center in Linz uses wall-size projections all around the visitors to immerse them into a virtual reality. Special glasses synchronize with these displays to create a three-dimensional impression.

Virtual Vienna uses a rear-projected display screen of about

CAVE: 3-D walls

Virtual Vienna: panorama



many may find already sufficient without becoming an active user.

Therefore:

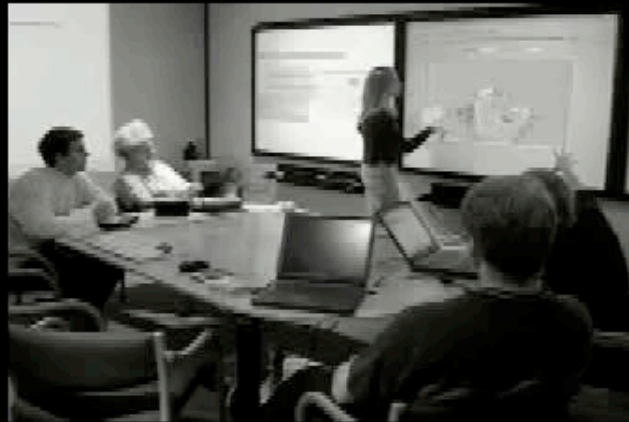
Prefer a single exhibit with a large-scale display, with a minimum of 1.5 m in display width, over several similar stations with smaller displays, and over other output devices that shield a single user from his co-visitors, such as head-mounted displays. Design for a viewing distance that roughly equals the width of the display.



If you hide the display technology, it can become a “magic image”—INVISIBLE HARDWARE (H14). ...

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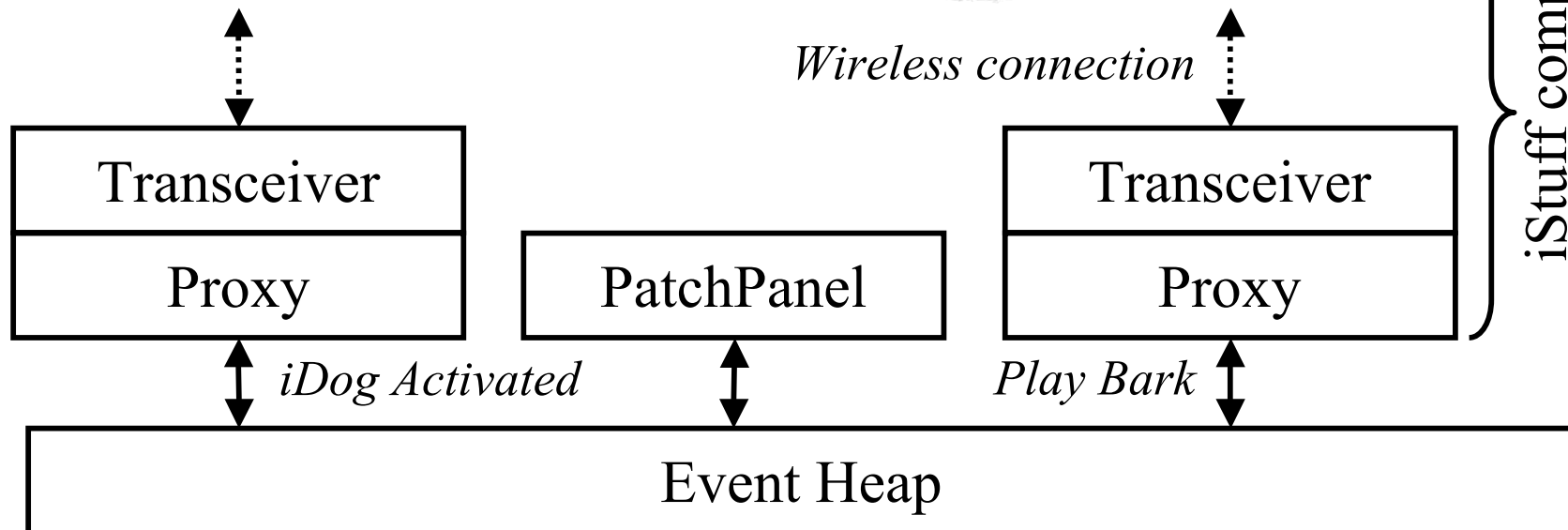
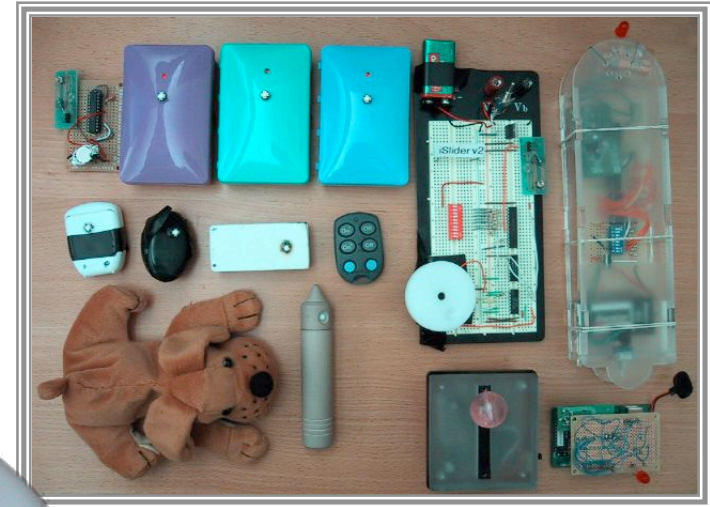
- Media Spaces



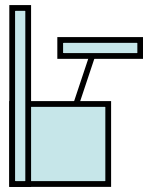
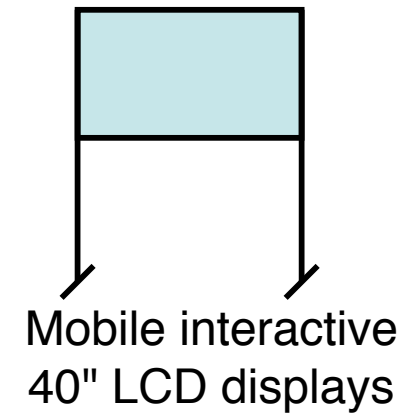
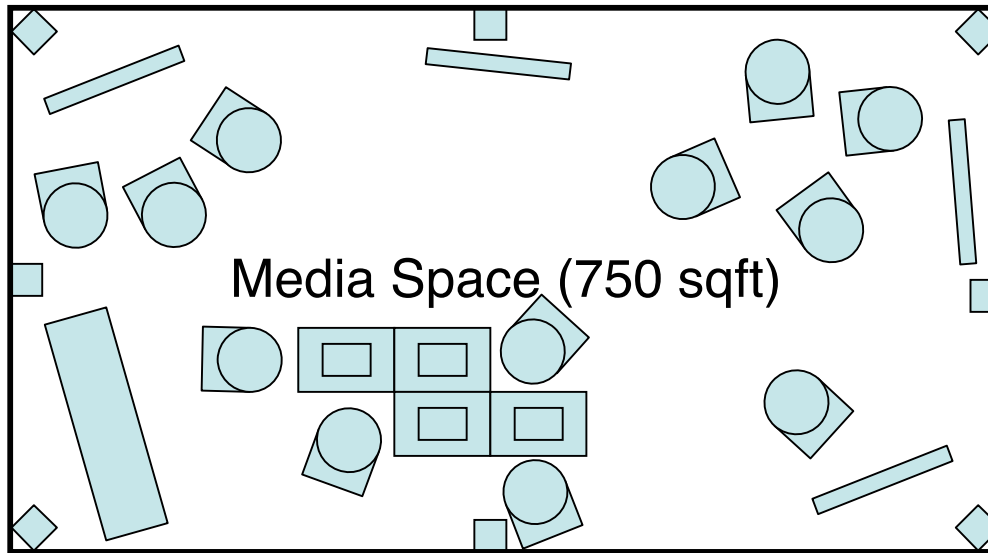
Interactive Workspaces Project

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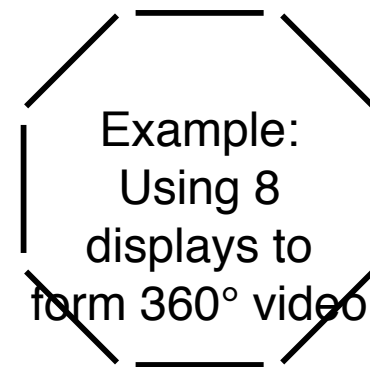
- iStuff: Post-Desktop User Interfaces

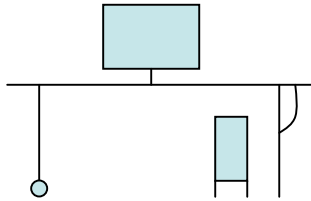


Media Space Architecture

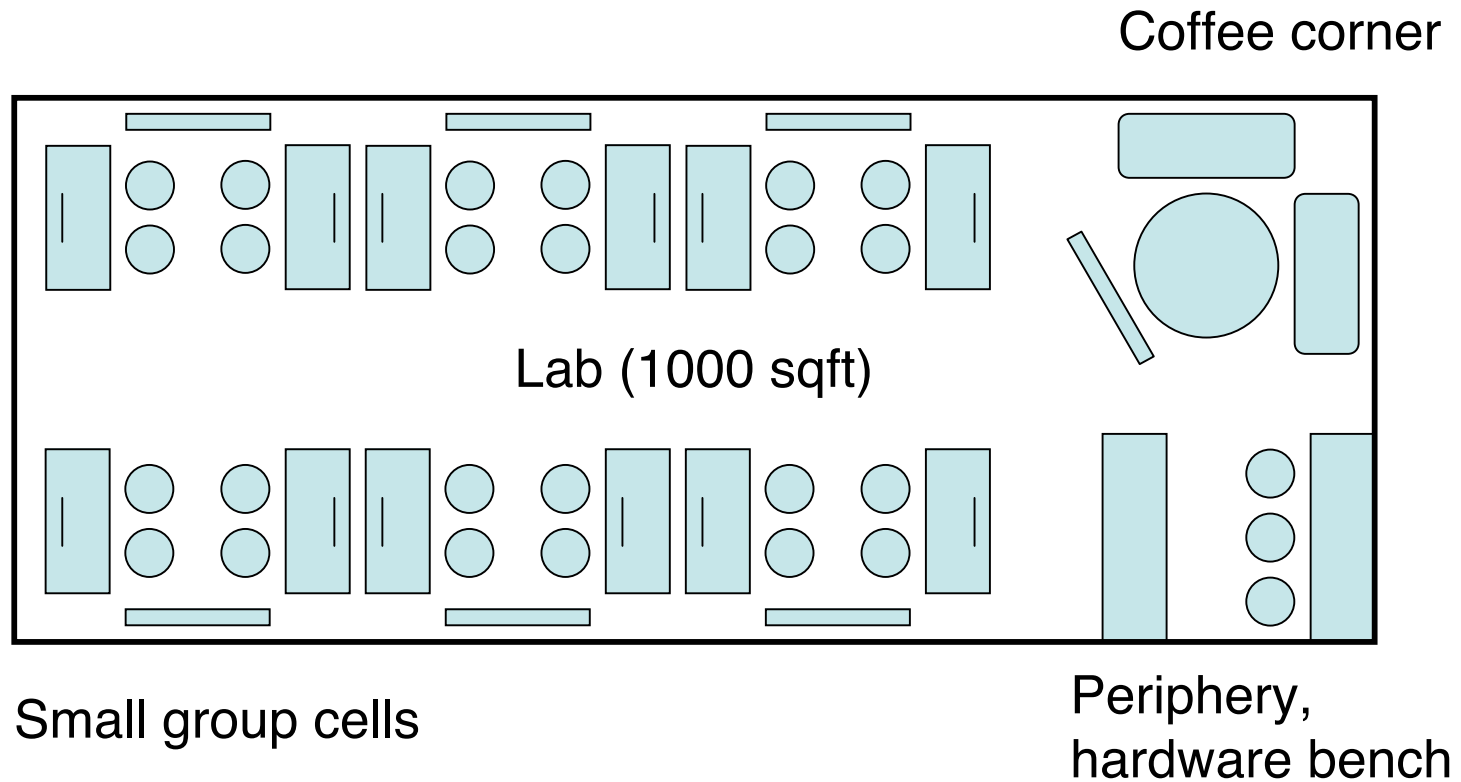


Chairs for laptop use — rotate easily
— storage space for backpack —
with power supply?





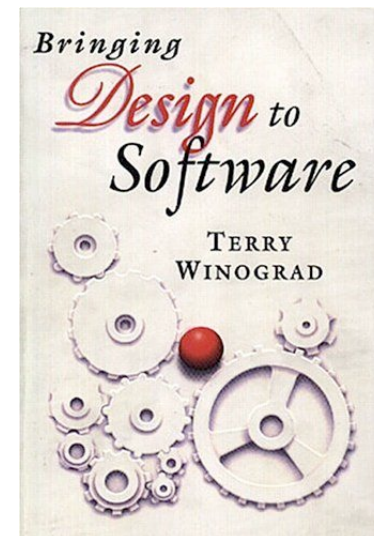
Lab Architecture



Proseminar Topics

- Bringing Design to Software
Terry Winograd

- ISBN: 0201854910
- at Amazon for 37,50 Euro



Bringing Design to Software

- What is software design? How can we produce satisfying software for the user?
- Essays and interviews with software and design professionals from various design fields (architecture, graphics design, etc.)
- Profiles highlighting a specific product or concept (Xerox Star, Mosaic, Quicken, Macintosh Human Interface Guidelines, etc.)

Schedule

- First presentation on April 06, then every week, Thursdays, 14:15–15:45, room 2010
 - 06. April, 13. April, 20. April
 - 04. Mai, 11. Mai, 18. Mai
 - 01. June
 - 22. June, 29. June
 - 06. Juli, 13. Juli

Literature review

- Required course at RWTH CS Library
 - Contact Mrs. Renate Eschenbach
 - Special courses for our seminar
 - Monday, 6th March, 10am
 - Monday, 20th March, 10am
 - Tuesday, 21th March, 11:30am
 - Groups of 6 students

Our next meeting

- Tuesday, 21th March, 10:00-11:00, room 2010
 - Allocation of topics
 - How to give a good presentation talk
(see also http://media.informatik.rwth-aachen.de/seminar_howto.html)