Exercise 1 – Mensch-Maschine-Interaktion 1

Task 1: Choosing a topic

Choose one of the following topics together with your team. Keep in mind that you will be working on this topic for the whole semester and design an application based on the topic.

1. Mobile User Interface Design
   …is part of the usability of mobile devices and their applications.

2. Privacy for Mobile Computing
   …is important today due to the manifold information and future applications (e.g. current location, payment, your choice) a mobile device (e.g. mobile phone) is carrying about us.

3. Interaction in the Automobile
   …is possible due to new technology in modern cars. Especially the interplay of several displays is part of recent research.

4. Location-Based Services
   … are mobile applications that use location information to offer currently relevant services to the user.

5. Interaction with Interactive Displays
   … is the interaction with tabletops or other surfaces (e.g. Curve) which usually offer direct input methods with multi-touch.

6. Projector Phones
   … can be used as small portable projectors and therefore offer the possibility to project information anyplace and anytime.

7. Shareable Displays
   … are displays that can be used by several users together even at the same time.

8. Multi-Display Environments
   … are environments with several display which can be used together for a task.
9. Ambient Information
   … is information presented in the periphery of the user which does not demand the user’s full attention.

10. Web Based Collaborative Tools
   … like Google Wave gain more and more popularity and offer collaboration between distant groups.

**Task 2: Short Report**

*This task is an individual homework and has to be done by every team member individually!*

Write a short report (2 pages; Acm Format: Extended Landscape; Template can be downloaded on the Website) about the topic your team chose. To do so research the topic (e.g. with the help of Google Scholar or the ACM Digital Library), aggregate data and analyze it. Use figures to illustrate your findings. Additionally, document all the sources you used.

The content should include:
- A short description of the topic
- A history review:
  - When was the topic first mentioned in scientific research?
  - How did the topic develop in scientific research?
- The most recent developments / research approaches
- The two or three most important publications and a summary of their content

Optional: You can decide on writing complementary reports together with your team members, meaning everyone of your group is writing about one aspect of the topic. Still, everybody has to write the short report themselves!

**Submission:**

- Submit your Short Report as PDF via UniWorx.
- Deadline: 04.05.2010 8:00
  (Late submissions or submissions via eMail will not be accepted!)