

June 10, 2008

Reading:

- Mitchell Page, Andrew Vande Moere. Evaluating a wearable display jersey for augmenting team sports awareness. Pervasive 2007.
- Chueh-Min Cheng, Meng-Fang Chung, Ming-Yang Yu, Ming Ouhyoung, Hao-Hua Chu, Yung-Yu Chuang. Chromirror: A Real-Time Interactive Mirror for Chromatic and Color-Harmonic Dressing. CHI 2008.
- Ernesto Arroyo, Shawn Sullivan, Ted Selker. CarCoach: a polite and effective driving coach. CHI 2006.
- S. S. Intille, K. Larson, E. Munguia Tapia, J. Beaudin, P. Kaushik, J. Nawyn, R. Rockinson. Using a live-in laboratory for ubiquitous computing research. Pervasive 2006.

Group discussion

Say you have been assigned to review these four papers. As a job of the paper reviewer, you would need to give your ranking of these four papers by critically assessing their strengths and weaknesses. Here is a proposed assessment criteria based on the general 5 steps of user-centered design and research cycle (from the book “Being Human: Human-Computer Interaction in the Year 2020” from Microsoft Research): **(1) understand (2) study (3) design (4) build, and (5) evaluation**. You will provide assessment on how well each of these 5 steps is done.

1. Understand: this is about identifying target users and clarifying user experiences in which users could get from the technology. In other words, this is about making “high-level choices”. The question to ask is whether different choices were explored in order to make good choices.
2. Study: this is about obtaining a more “detailed” understanding of different factors (context or 5Ws) how the target users interact with the technologies (and beyond). This often involves a user study (i.e., ethnography or context inquiry) to assess target users’ actual needs and set specific design goals or considerations. Such information can be used to explore different technological possibilities in the next stage. The question to ask is how well such user study was done.
3. Design: this is a creative process of designing solutions to meet the design goals identified in the previous step. The question to ask is how creative is the proposed solution and how well the proposed solution meets the design goals in the context of its use.
4. Build: this is about using high/low tech methods to prototype a system for actual field testing with target users (in evaluation). The question to ask is whether the system prototype enables researchers to get evidence about the “user experience” they are trying to enable?
5. Evaluation: this is about evaluating the system prototype on actual users. There are many ways to conduct quantitative/qualitative, long-term/short-term evaluation (e.g., in-situ field test, focus group, etc.). The question to ask here is how strong is the evidence gathered and whether the evaluation method is appropriate?