Human-Computer Interaction Design
Project 2.B Comfortable Spaces & Comfort Control Systems

Tuesday September 22nd 2009

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Project
Use the design research you did for Project 1.A to motivate and inspire a new concept related to comfort control systems and which integrates digital materials and interactivity. You may use the design research of other students also to help inspire your concept, provided only that you properly attribute. Illustrate and explain your concept—there is a fair bit of latitude about how you do this. Note that clarity and production values matter.

Format:
Your project must be presented on a single landscape mode page in pdf format, for both the initial rough first iteration and the final form completed project. You may include auxiliary files of other media types, as instructed in class. Upload your work to oncourse, as instructed in class. Be certain to reference all of your sources accurately and completely.

The example on the page that follows gives an idea of what a design research project could look like for the purposes of this class assignment. The example is by no means the most ideal project—yours should not be longer, but it can be more compelling and interesting than the example.

DUE Wednesday September 23rd no later than 23:59: An initial rough SKETCH first iteration of your ideas for how you will complete this project.

DUE Tuesday September 29th no later than 11:15: A FINAL form completed project.
Fry’s notion of acts of elimination location, location, location
Comfortable Spaces & Comfort Control Systems

SKETCH (ALTERNATIVE B)
Concept: E-Ink Fabric Wearable Personal Thermostat & Ambient Sensors

The idea of this concept is that a digital thermostat control is woven into the fabric of clothing or worn like a bracelet or as part of a watch. The control travels with the wearer and electronically signals (many tiny transmitter/receiver technologies are available) desired temperature settings to the ambient sensors in whichever environment the wearer occupies at the moment. The environment—home, office, car, train, plane, etc.—adjusts to the needs of its occupants based on reading the desired setting, averaging desired settings when there is more than one person present, or tailoring to specific individual settings where possible, as in—for example—a car equipped with individual climate control settings capabilities. When no one is present in a particular environment, that environment does not need to use as much energy to maintain a temperature and its climate control system can respond accordingly. There are of course details to work out about how fast an environment needs to react to the entrance of a person and to what extent an environment needs to keep a certain temperature when empty in order to respond quickly. These details need to be worked out as a matter of energy use versus convenience and perceived viability of the system.
Primary Attributions
Wearable computers: Katie O’Donnell
E-Ink digital watch: Kathleen Surfus
Personal thermostat: Haiko Maiwand
Circular control: John Hill

Secondary Attributions
Image call-outs technique: Kevin Makice
Image source for picture of woman in hallway : E. Blevis
Image source for circular arrows: http://www.mattstow.com/circular_arrows.html @ 9.21.09

note: gray text denotes examples to illustrate how to handle attributions, rather than actual attributions