Lab Structure Changes

Designing Interactive Systems I: Lab 6

- Prof. Dr. Chat Wacharamanotham
- RWTH Aachen
- Winter term 2008/2009

Media Computing Group
RWTH Aachen University
Winter term 2011/2012
http://hci.rwth-aachen.de/dis

Project Coaching Schedule

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- Themed talks
  - Persuasive Technology
  - Game design
  - Emotional design
- Project coaching

Persuasive Technology

Using Computers to Change What We Think and Do

B.J. Fogg
Characteristics of Persuasive Technology

- **Persuasion**: an attempt to change attitudes or behaviors or both
  - Without using coercion or deception
- **HCI not CMC**: Change resulted from the interaction between human and computer
  - Not the result from human–human communication via computer
- **Intended effect** of technology, not side effect
  - Not a persuasive technology, e.g., Email ⇒ People go to post office less often
- **Endogenous effect**: The technology itself persuades
  - Not when people use technology to persuade, e.g., giving an iPhone as a reward for quitting smoking

Strengths of Computer

- Computers are better than other media
  - Interactivity
- Computers are better than human
  - More persistent
  - Greater anonymity
  - Manage huge amount of data
  - Multiple modalities to influence
  - Scale easily
  - Ubiquitous

Human–Computer Relationship Triad

Computer as a Persuasive Tool

- **Reduction**: make complex tasks simpler
- **Tunneling**: persuading in a focused experience
- **Tailoring**: personalized information can persuade better
- **Suggestion**: intervene at the right time
- **Self-monitoring**: allow people to track themselves
- **Surveillance**: make people aware that they are being tracked
- **Conditioning**: positive reinforcement for desired behavior
Reduction: CapWiz
Simplifying the process of writing to elected officials

Windows 95 Setup
Welcome
Welcome to Microsoft Windows 95
Windows 95 lets you unlock the potential of your PC.
- What you do now will be easier and faster
- What you want to do, everyone, is now possible
- Whatever you do will be more fun

Tunneling: Software Installation
Windows 95 persuades with system features during the installation

Reduction: Online Petition
Only take single step to sign

Tunneling: Apple Ecosystem
Change software distribution practice by starting from music
Tailoring: Recommendation on Amazon.com

Personalized info ➔ more attention + easier to be persuaded

Suggestion: Kustom Signal’s SMART
Opportune suggestion ➔ greater persuasive power

Self-monitoring: Tanita Jump Rope
Tracking self performance helps achieving predetermined goals

Surveillance: Hygiene Guard Hand Washing Surveillance
When people aware that they are monitored, they change the behavior
Conditioning: Sound and visual effects in games
Give positive reinforcements to turn existing behavior into habits

Computer as Persuasive Media

- Bridge cause/effect gap: Experience it right here, right now
- Virtual rehearsal: A safe place to try dangerous stuff
- Augmenting the real life: Simulating clear impact in the real life

Bridge the Gap Between Cause and Effect: HIV Roulette
Frees users from real-world consequence. Close the space/time gaps between cause and effect.

Virtual Rehearsal: Gauging Your Distraction
A simulation from NYTimes showing how your reaction time is affected by external distractions
Virtual Rehearsal: Spider and Cockroach Phobia Simulator

Augmenting the Real Life: RealCare Pregnancy Suits and Baby

Computer as a Persuasive Social Actor

- **Physical cues**: Attractive on-screen characters are more persuasive
- **Psychological cues**: humor, personality, feeling
- **Language cues**: convey social presence, praise
- **Social dynamics**: turn taking, peer pressure, praise, reciprocity
- **Social roles**: authority, teammate
Psychological Cue: Google Chrome Crash Page
Give a message that convey empathy

Language cue: Chrome Bug Report
Convey social presence through the language

Social Dynamics: “Register Later”
Instead of “no”, the user made commitment to reconsider registration

Social Role: Being an authority
People trust the computer that has tutor or doctor
Summary

Resource


- Papers
  - Abridged version of the book
  - Oinas-Kukkonen and Harjumaa. A Systematic Framework for Designing and Evaluating Persuasive Systems (2008) [http://www.springerlink.com/content/h7n7k22740h6003p/](http://www.springerlink.com/content/h7n7k22740h6003p/)
    Table of principles and corresponding examples
    Design process

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