Module II: Interfaces

Human-Computer Interaction
Graphical User Interfaces

Learning Goals [today]

you should be able to

• explain how tools augment and constrain our power to think and act, define the “myth of human error” and give examples that dispel this myth;

• explain strengths and weaknesses of human-computer interfaces, referring to concepts such as familiarity and consistency, mappings and metaphors, feedback, negative transfer, or additional concepts that you identify.

Announcements

• You are all invited for a special lecture titled “Tales from Crystalline World: The Power, Science and Beauty of Computation” by Holger Hoos, Thu, 22 Sep, 12:30-13:30 in CHEM B250.

• Because of illness, the office hour of Scott Newson (TA) is cancelled for this week.

Selected RQ3s

• The textbook states that most of our interactions with computers use Graphical User Interfaces (GUIs).

Is any application with menu options using a GUI? For example: web browsers and word processors; what about My Computer/Windows Explorer?

• What is an example of interacting with a computer, but without the use of a Graphical User Interface?

(Submitted by Megan)
Selected RQ3s

- Since the effectiveness of a GUI depends on how intuitive it is for the user, do software developers need to have a psychology background since they need to understand how humans interact with technology in order to better create GUIs?

  (submitted by Sandra)

Selected RQ3s

- After reading Don Norman’s praise of good design, I was left with the question of how much design is related to our own experiences. For example the piece of luggage that was also a baby stroller, may appear to be a good design to someone who has been in a situation where they needed a stroller, as well as luggage, but to those of us who have never experienced a need for such a creation it appears rather useless.

  To what extent is good design merely in the eye of the beholder? (Or the user for that matter)

  (submitted by Marya)

Selected RQ3s

(Not a question, but an interesting observation:)

- The power button on nearly every electronic device is a circle with a vertical line inside, the eject symbol is always a horizontal line below an upward pointing arrow. All of these examples have become natural instinct to most of my generation, across the globe.

  (submitted by Chris)

Clicker question

- Chris’s observation is an illustration of

  (A) Feedback
  (B) Watching others
  (C) Form follows function
  (D) Consistency
**Selected RQ4s**

- Unix is a text base interface. Can you evoke GUI based programs with Unix commands. For example can you open internet on a Unix operating system?

- If a text-based interface turned out handy sometimes why do Apple and Microsoft not have a text based operating system? Or is there a possibility to control windows only with written commands?

  (submitted by Anne-Sophie)

**Administrative Question**

- Do we have to know specifically how to use UNIX for the final exam, while the concept was not covered much both in the module or the lab?

  **Answer:** Anything that was covered in any component of the course (lab, reading, class, ...) is relevant for your exams. Unix was covered in Lab 0 and in the reading for Module 2, so it is definitely relevant.