What is Human-Computer Interaction (HCI)?

The design and evaluation of systems, applications, or devices that utilizes computation or information and communication technology to support human activity in a manner that respects the users physical, cognitive, social, and cultural needs and aspirations.

Prof. Kellogg Booth
Human-Computer Interaction (HCI)

- **Human**
  - the end-user of a program
  - the others in the organization

- **Computer**
  - the machine the program runs on
  - often split between clients & servers

- **Interactions**
  - the user tells the computer what they want
  - the computer communicates results
What are the main concerns of HCI?

What is Usability?

- Ease of learning
- Recall
- Productivity
- Minimal error rate
- High user satisfaction
Example of bad UI designs

A.X.E.

You are about to overwrite the original file. Go ahead?

OK
User Interfaces (UI’s)

- HCI sometimes (narrowly) thought of as the design, prototyping, evaluation, and implementation of UI’s for desktop computers
Usability and the concept of Norman Doors
Human-Centered Design (HCD)

- Focuses on the need and core issue of the user
- Keeps people involved in the process of design
- People’s tasks, goals, and values drive development
Applying HCI principles in digital civics

- Reframing “users” as “people/the public”
- Design digital technology with and for the public to create more relational and community services
Design.a. hack.a.thon @ MIT Media Lab

10K

design•a•hack•a•thon

for People-Centric Mobility

with Don Norman

Sept 15-17 @ MIT Media Lab
People-Centered Mobility

The Future of Streets
A Human-Centered Urban Design Workshop
People-Centric Mobility

- Define the problem
- Research and observe
- Design
- Prototype
- Iterate