

Digital Civics (COMPSCI 592C)

HCI for Digital Civics

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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.

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

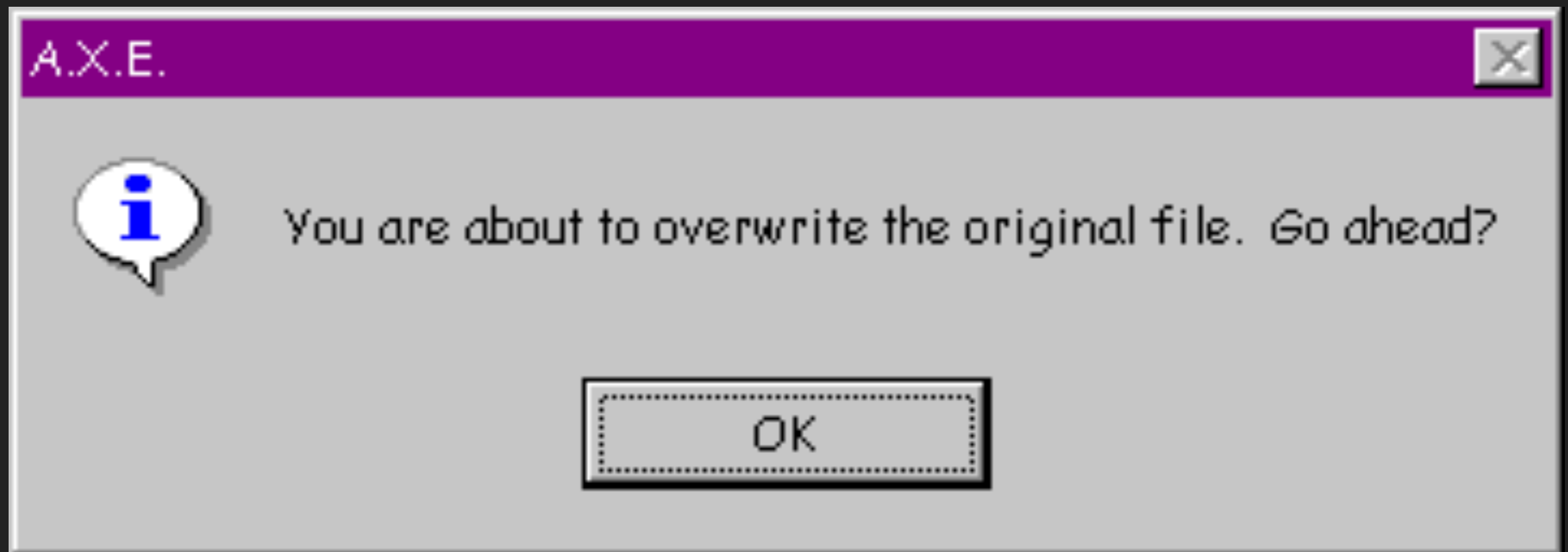
What are the main concerns of HCI?

- ▶ Design, Implementation and Evaluation of interactive systems for HUMAN use.

What is Usability?

- ▶ Ease of learning
- ▶ Recall
- ▶ Productivity
- ▶ Minimal error rate
- ▶ High user satisfaction

Example of bad UI designs

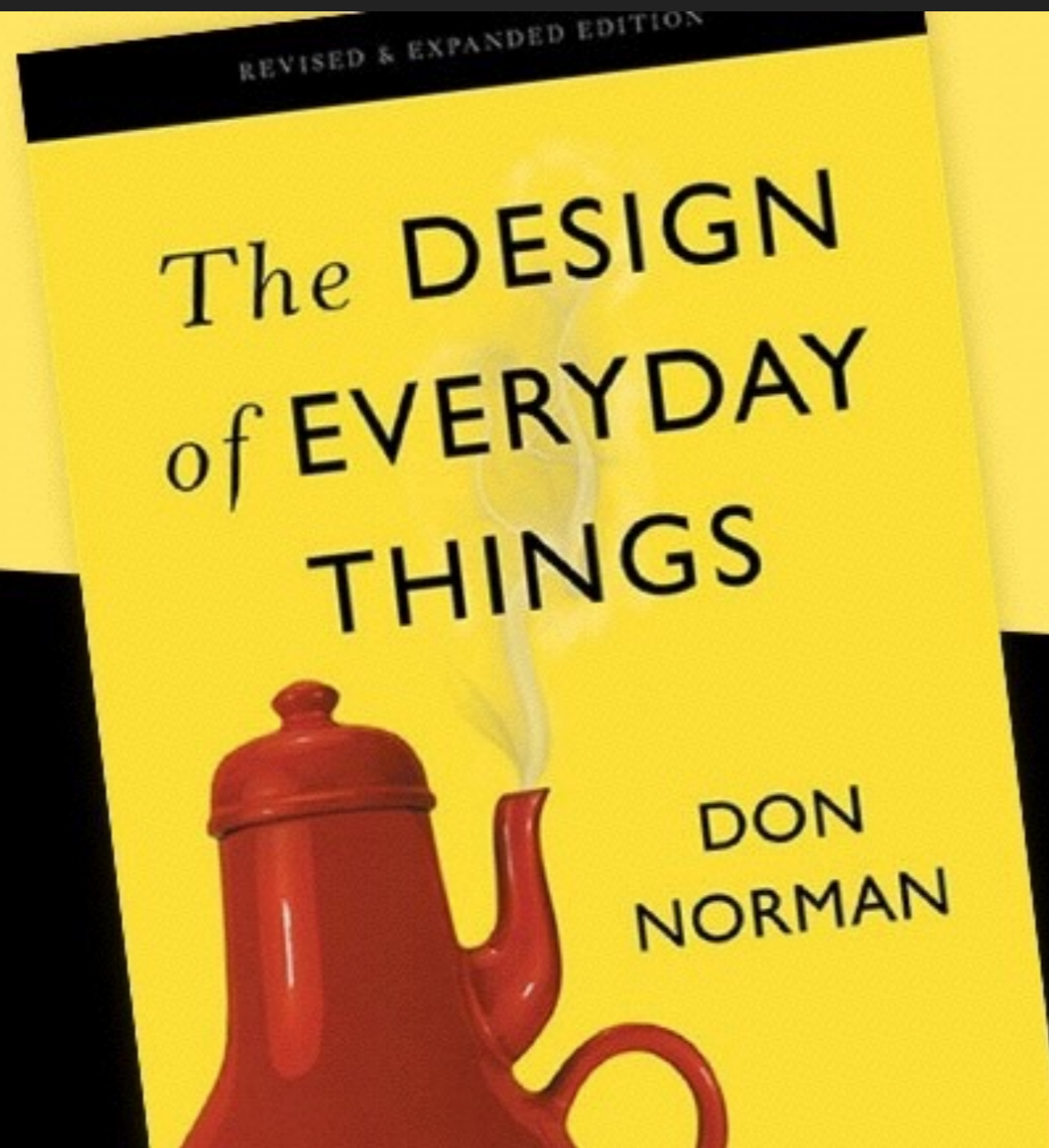


User Interfaces (UI's)

- ▶ 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





Norman door!

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



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design•a• hack•a•thon

for People-Centric Mobility
with Don Norman
Sept 15-17 @ MIT Media Lab



CITY ROBOTICS
design-a-hack-a-thon
for People-Centric Mobility
with Dan Rothman,
Clayton Lammiman,
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PROCEEDINGS AVAILABLE AT THE END OF THE EVENT

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The Future of Streets

A Human-Centered
Urban Design Workshop



People-Centric Mobility

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