Designing the Future:
Early Visions of HCI

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Interface Hall of Shame or Fame?

- Bar of Soap
  - has a hole!
  - where found?

Interface Hall of Fame!

- Bar of Soap
  - has a hole!
  - where found?
- Eco-Friendly
  - doesn’t waste

Interface Hall of Shame or Fame?

- From IBM’s RealCD
  - prompt
  - button

- Black on black???
  - cool!
  - but you can’t see it
  - “click here” shouldn’t be necessary
  - like a door that has a sign telling you to push
Outline

- Review
- Computing in 1945
- Vannevar Bush & As We May Think
- Doug Engelbart & Augmenting Intellect
- SketchPad, Dynabook, & The Star
- Administrivia
- Name Game

Review

"Instant messaging has unleashed many new tasks" – Doug Engelbart

Context - Computing in 1945

Harvard Mark I: 55 feet long, 8 feet high, 5 tons

Vannevar Bush Kicked Off Big Science

- MIT faculty member
- Coordinated WWII scientific effort
- Social contract for science
  - federal government funds universities
  - universities do basic research
  - helps economy & national defense
- "As We May Think", the *Atlantic Monthly*, July 1945
- Futuristic inventions / trends:
  - wearable cameras to record life
  - encyclopedia for a nickel
  - automatic transcripts of speech
  - trails of discovery
  - capture of nerve impulses
  - Memex

As We May Think
Predicting → Inventing the Future

Computers weren’t always like this…

Computers don’t have to be like this!

Douglas Engelbart
Augmenting Human Intellect

- Stanford Research Institute (SRI) in the 1960s
- 1962 Paper “Conceptual Model for Augmenting Human Intellect”
  - complexity of problems increasing, need new tools to solve
- Demoed NLS (oNLine System), '68 Fall Joint Computer Conf. (SF)
  - a real paradigm shift here

Augmenting Human Intellect: Firsts!

- First mouse
- First 2D editing & windows
- First hypertext
- First word processing
- First document version control

- First groupware (shared screen teleconferencing)
- First context-sensitive help
- First distributed client-server
- Many, many more!

Tricycles & Bicycles: Specialized Tools

Tricycles vs Bicycles

SketchPad – Sutherland (1963)
Dynabook – Kay (1974)

Xerox Star – 1st Commercial GUI (1981)

The Future

“"The best way to predict the future is to invent it”
Alan Kay

Administrivia

• Attendance
• Everyone should have turned in assignment #1 – any problems doing so?
• Your job to keep up w/ class web site
  http://www.cs.washington.edu/education/courses/cse440/13wi/

Next Week

• Readings
  – Chapter 3 of The Design of Sites
  – Tips for Working Successfully in a Group by Randy Pausch
  – The Discipline of Teams

• Lecture
  – Choose team projects (attendance mandatory)
  – Problem Finding
  – Working as a Team

• Homework (due Thur.)
  – Studio Task #1 – Gestalt Principles (individual)
  – Attendance next Thursday is mandatory (you will discuss your answers to this assignment)