Introduction To HCI

- Historical Perspective
- Concepts
- Examples (along the way)

Historical Perspective

- 1940’s-1950’s Hardware Invention
- 1960’s-1970’s High Level Languages, Use of “large” machines by the specially trained
- mid 1970’s Jobs & Wozniak make technology “cheap”
- 1980’s Proliferation, New tools in the hands of “the Masses”, User Frustration
- 1990’s Decade of the User, Communications, & Distributed Computing
- 2000’s Decade of Shake-out: Who’s got what it takes?

Concepts

- A computer system involves the communication from a Designer to a User
- Hopefully the model intended by the designer is perceived by the user.

Concepts

- A new view of programming
- The designer is responsible for the entire system.

Concepts

HCI Design Requires:

- Knowledge about People
- Knowledge about the Task
- Knowledge about Computers
Concepts
Knowledge of People
• Cognitive Psychology
• Personality
• Education
• Physical features and abilities
• Problem solving
• Motivation
• Language
• Social Interaction

Concepts
Knowledge about Tasks
• Pilot/cockpit
• Office Automation
• Other Examples

Concepts
Golden Rules of Design
• Visibility
• Good Conceptual Model
• Good Mappings
• Feedback

Concepts
• Norman’s Model of how people interact with a device
• Problems involved with the “Gulf of Execution” and the “Gulf of Evaluation”

Assignment (Due: Class time January 17)
• Design a parking sign describing the following rules:
  Parking is allowed between 7 PM and 6 AM on weekdays and all day on weekends. Parking is not allowed between 6-9 AM or between 4-7 PM on weekdays, towing enforced. One-hour parking is allowed between 9 AM and 4 PM on weekdays. The sign should be readable from at least 40’ away. The sign to communicate this information must be no more than 1 foot wide and 1.5 foot tall.
• Communicate this information using whatever means you have available (paper and pen, graphic applications, etc.).
• This is an actual problem that appeared in the Charlotte Observer (NC) five years ago.