Questions?

- Project #3
  - implementation
- HW#5 in!
- HW#6 is out.
- Note about Midterm/Exam requirement
Clearly marked exits

- Users don’t like to be trapped!

- Strategies
  - Cancel button (or Esc key) for dialog
    - *Make the cancel button responsive!*
  - Universal undo
Shortcuts (I)

• Expert users should be able to perform operations rapidly
  – Try to limit the training necessary to access advanced features

• Strategies
  – Keyboard and mouse accelerators
    • menu shortcuts and function keys
    • command completion, command abbreviations and type-ahead
  – Toolbars and tool palettes
    • Trade screen real estate for rapid access
  – Navigation jumps
    • History systems
      – 60% pages are revisits
Shortcuts (II)

- Expert users should be able to perform operations rapidly
  - Try to limit the training necessary to access advanced features
- Strategies
  - Keyboard and mouse accelerators
    - menu shortcuts and function keys
    - command completion, command abbreviations and type-ahead
  - Navigation jumps
    - History systems
      - 60% pages are results
Preventing errors

• Error types
  – Mistakes
    • Conscious decision with unforeseen consequences
  – Slips
    • Automatic behaviors kicking in
      – Drive to the store, end-up in the office
      – Press enter one time too many…
    • Mode errors
      – Forget the mode the application is in
  • Loss of activation
    – Forget what your goals were
Designing for slips

One once of prevention is worth more than a pound of cure!

• Examples
  – Design modeless interfaces
  – Instead of confirmations provide undo mechanisms
  – Check for reasonable input
    • Be prepared to handle several formats
    • Make entering a incorrect format impossible
  – Make the current goal clear
    • Prevent lost of activations
Forcing functions

• Interlock mechanisms
  – Switching from P to D in a car

• Lockin mechanisms
  – No eject button for floppy disk on Mac

• Lockout mechanisms
  – Exit stairways
Dealing with errors

• People will make errors!
  – You can ignored them
    • Generally very confusing
  – You can correct them automatically
    • Spelling corrector
    • But will I trust the system to be right 100%
  – You can discuss about it
    • But novice/expert tradeoff
  – You can try to teach the user what to do
    • Office assistant

• Respect users feelings!
Good error messages

From Cooper’s “About Face 2.0”
Good error messages

• **Provide meaningful error messages**
  
  – Explain the problem in term or user conceptual model
  – Don’t make the user feel stupid
  – Offer a way to correct the problem

  – Compare

  • *Error 25: access denied*
  • *Cannot open “chapter 5” because “Microsoft Word” is not installed.*
    *Do you want to use Notepad instead?*
Provide help and documentation

• Providing help is not an excuse for poor design!
  – Saving a couple of line of code or writing several pages of documentation?
  – Users don’t like to read manuals
    • They prefer to learn while making progress toward their goals

• Most users will stay at the intermediate level
  – Need reminders and a clear learning path
  – Need a quick way to access critical information
    • Online documentation and good search tool
Types of help
Types of help (I)

• Tutorial and/or getting started manuals
  – Presents the system conceptual model
    • *Basis for successful explorations*
  – Provides on-line tours and demos
    • *Demonstrates basic features*

• Reference manuals
  – Designed with experts in mind

• Reminders
  – Short reference cards, keyboard templates, tooltips…
Types of help (II)

- **Wizards**
  - Walks user through typical tasks
  - *Users feel they are losing control*
  - *What if I do not have the information requested?*

![Wizard Screen](image)

- **Tips**
  - Migration path to learning new features
  - Can become boring and tedious
Types of help (II)

- Context sensitive help
Help manual

• Write a manual for one of the following:
  – ATM, MP3 player, car, cell phone

• You should assume:
  – Target population have never seen a similar device before;
  – They have used the previous generation technology before;

• What to do:
  – 5min brainstorming to establish the manual design;
  – 10min to build the manual;
  – Present to the class