# Chapter 13

User Manuals, Online Help, and Tutorials

#### Introduction

- Even though increasing attention is being paid to improving interface design, there will always be a need for supplementary material that help users.
- Forms of paper user manuals:
  - Installation manual
  - □ Brief getting-started notes
  - Introductory tutorial
  - Thorough tutorial
  - □ Detailed reference manual
  - Quick reference card
  - □ Conversion manual

#### Introduction

- Online materials
  - Online manual
  - Online help
  - □ Context-sensitive help
  - Online tutorial
  - □ Animated demonstration
  - □ Guides
  - □ FAQs
  - Online communities, newsgroups, listservers, e-mail, chat, and instant messaging

# Introduction

 Users' goals are a good way to classify paper and online materials

User's Goal	Paper	Online
I want to buy it	Sales brochure, fact sheet	Animated demonstration
I want to learn it	Tutorial	Manual, tutorial, guide, animated demonstration
I want to use it	User manual	Manual, help, context- sensitive help
I want to <i>solve</i> a problem	FAQ	Help, FAQ, online community

### Paper versus online manuals

- There are many reasons to have online manuals
  - □ Physical advantages
    - accessibility, space, easy updating
  - □ Navigation features
    - searching, linking to internal/external destinations
  - □ Interactive services
    - multimedia, bookmarking/annotating, turning to online communities
  - □ Economic advantages
    - cheaper to duplicate and distribute

## Paper versus online manuals

#### Online manuals: negative side effects

- □ Displays may not be as readable as paper manuals
- □ Each display may contain substantially less information than a sheet of paper; also screen resolution is lower than that of paper
- ☐ The *user interface* of online help systems may be novel and confusing to novices
- The extra mental effort required for navigating through many screen may interfere with concentration and learning, and annotation can be difficult
- □ Splitting the display between work and help or tutorial windows reduces the space for work displays
- Small devices such as cell phones do not have enough display space to provide online help

## Reading from paper versus from displays

- Numerous studies have found 15% to 30% slower task times for comprehension or proofreading of text on computer displays, compared to on paper
- Potential Disadvantages in Reading from Displays:
  - □ Poor fonts, especially on low resolution displays
  - Low contrast between characters and the background
  - Emitted light from displays may be more difficult to read by than reflected light from paper
  - Small displays require more frequent page turning
  - □ Displays are fixed in place; maybe not convenient for reading
  - □ Layout and formatting problems
    - improper margins, line widths; multi-columns require constant scrolling
  - Reduced hand and body motions with displays as compared to paper may be fatiguing

# Reading from paper versus from displays

- What is your experience with reading online vs. on paper?
  - □ online exams?
  - □ evaluations?
  - □ ebooks?
- Mobile devices offer some benefits
  - □ news papers, maps, ...
- Plasticity of documents
  - documents can be read on different sizes of displays and different formats

## Shaping the content of manuals

- Traditionally, training and reference material often written by junior members of development team
  - □ manuals were often poorly written
  - □ were not suited to the background of the users
  - were delayed or incomplete
  - □ were not tested adequately

- The benefits of well-designed manuals include:
  - □ shorter learning times,
  - □ better user performance and satisfaction,
  - ☐ few calls for support ☺

#### Towards minimal manuals

- The "active user paradox"
  - □ Users' eagerness to conduct meaningful activities often stops them from spending time "just" learning, and therefore their skills remain at average level.
- Learners prefer trying out actions on the computer, rather than reading lengthy manuals

- These observations led to the design of minimal manuals
  - Encourage active involvement with hands-on experiences

#### Towards minimal manuals

#### Guidelines:

- □ Choose an action-oriented approach
  - Provide an immediate opportunity to act
  - Encourage and support exploration and innovation
  - Show numerous examples
- □ Let users' tasks guide organization
  - Select or design instructional activities that are real tasks
  - Present task concepts before interface objects and actions
  - Create components of instructions that reflect the task structure

# Towards minimal manuals

- Guidelines (cont.):
  - Support error recognition and recovery
    - Provide error information when actions are error prone or correction is difficult
    - Provide error information that supports detection, diagnosis and correction
    - Provide on-the-spot error information
  - □ Support reading to do, study, and locate
    - Be brief; don't spell out everything
    - Provide table of contents, index, and glossary
    - Keep the writing style clean and simple

# Organization and writing style

- The primary job in creating a manual is to understand the readers and the tasks that they must perform
- Present concepts in a logical sequence with increasing order of difficulty
- Avoid forward references
- Construct sections with approximately equal amounts of new material
- Should have sufficient examples and complete sample sessions
- Style guides for organizations attempt to ensure consistency and high quality
- Writing style should match users' reading ability
- Classic books on writing:
  - The Elements of Style (Strunk, White, and Angel, 2000)
  - □ Writing Well (Zinsser, 1998)

#### Online manuals and help

- Standard formats: WinHelp, PDF, Windows HTML Help, ...
- Tools: RoboHelp, helpMATIC Pro, ...
- Online Manuals
  - Most effective if manuals are redesigned to fit electronic medium to take advantage of
    - string search
    - multiple tables of contents, figures, etc.
    - hypertext traversal
    - automatic history keeping
    - text highlighting
    - color
    - sound
    - animation

# Online manuals and help

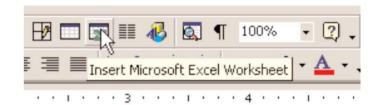
#### Online Help

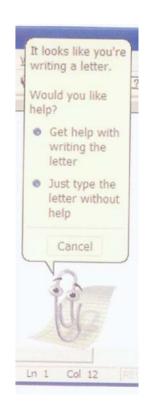
- Concise description of the interface objects and actions
- Most effective for intermittent knowledgeable users; less useful for novices
  - because the terms for search need to be known and the user has to select an appropriate item from a list of articles related to that term.
- An answer wizard can respond to natural language requests

# Online manuals and help

- Context-sensitive help
  - User-controlled, interactive object help
    - Small pop-up box (tooltip)
    - Dedicated portion of the display
    - Pop-up menu

- System-initiated ("intelligent") help
  - users interaction history, and a representation of their tasks to make assumptions about what users want
  - Have generally failed





(Select)

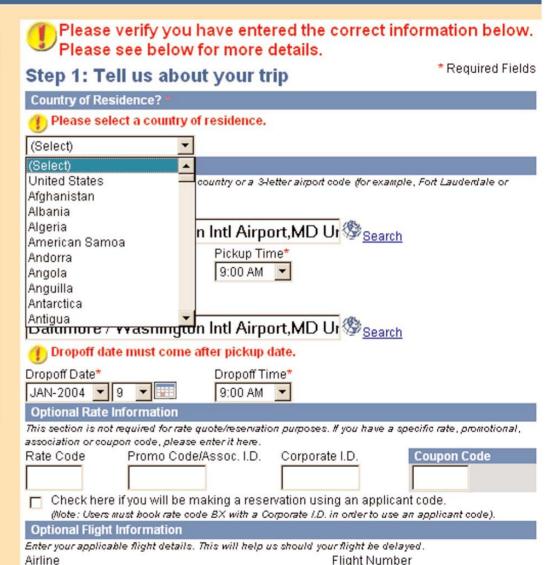
alamo.com

>> membership >> business travel >> programs >> travel tools >> rental policies >> contact us

#### **Helpful Information**

Country of Residence: This is required in order for us to provide you with appropriate products. Depending upon your country of residence the rate you are quoted may include certain coverage options, taxes, and other fees. These products are designed to meet the needs of customers traveling abroad to the US. The base rate you will see on the car availability page will reflect this. You can review the product inclusions on the summary page that comes after the car availability page.

To receive a rate inclusive of appropriate products, non-US citizens should leave the Rate Code field blank, if you prefer a car-only rate, you may use one of the promotional codes advertised on the site.



Contextsensitive help:

Dedicated portion of the display

# Online tutorials, demonstrations, and animations

#### Online tutorials

- Does not have to keep shifting attention between the terminal and the instructional material
- □ Can work alone at an individual pace
- □ Practices the skills needed to use the system
- □ Sample documents, programs, etc. can be of great help
- □ Start-up tips

# ➤ Online tutorials, demonstrations, and animations

- Animated demonstrations
  - □ Show system features using animation, color graphics, sound.
  - Designed to attract potential users
    - Games often have a 30 second demonstration
  - □ Also used to train users as they work.
  - Typical controls
    - automatic or manual pacing
    - stop, replay, skip
  - □ User-interface requirements are to
    - capture and maintain user interest
    - convey information
    - build positive product image
  - □ A screen capture animation is easy to produce with standard tools
  - □ Recorded voice explanation are appreciated by users

### Development process

- Must be managed properly, and staffed with suitable personnel
- Getting started early is invaluable
  - It allows adequate time for review, testing, and refinement
  - Manual can act as a more complete and comprehensible alternative to formal specification for the software
  - Manual writer becomes effective critic, reviewer, or question asker who can stimulate the implementation team
  - □ Enables pilot testing of software's learnability

#### Skipped sections

The following sections have been skipped

- 13.4.2 Use of the OAI model to design manuals
- 13.6.3 Guides
- □ 13.7 Online communities for user assistance

