**Chapter 11 Questions and Answers**

1. Pick a web site and evaluate how well it avoids the top ten mistakes of web-based presentation of information as described in the text (Tullis, 2005).

* Students should evaluate based on these criteria:
* Burying information too deep in a web site
* Overloading pages with too much material
* Providing awkward or confusing navigation
* Putting information in unexpected places on the page
* Not making links obvious and clear
* Presenting information in bad tables
* Making text so small that many users cannot read it
* Using color combinations for text that many users cannot read
* Using bad forms
* Hiding (or not providing) features that could help users

1. Give examples of ways that coordinated windows can help users multitask.

Coordinated windows are windows that appear, change contents, and close as a direct result of user actions in the task domain.

Textbook example: Medical insurance claims-processing application, when the agent retrieves information about a client, such fields as the client’s address, telephone number, and membership number should be automatically filled in on the display. Simultaneously, and with no additional commands, the client’s medical history might appear in a second window, and the record of previous claims might appear in a third window. A fourth window might contain a form for the agent to complete to indicate payment or exceptions. Scrolling the medical-history window might produce a synchronized scroll of the previous-claims window to show related information. When the claim is completed, all window contents should be saved and all the windows should be closed with one action.

1. Describe how role-centered design might improve a user’s efficiency.

Users get information and interface choices tailored the tasks they need to perform for a specific role. This could improve performance and reduce distraction while the user is working in a given role and could facilitate shifting of attention from one role to another.

The personal role manager could simplify and accelerate the performance of common coordination tasks, in the same way that graphical user interfaces simplify file-management tasks.

1. Describe the characteristics of a well-written error message.

**Product:**

* Be as specific and precise as possible. Determine necessary, relevant error messages.
* Be constructive. Indicate what the user needs to do.
* Use a positive tone. Avoid condemnation. Be courteous.
* Choose user-centered phrasing.
* State the problem, cause, and solution.
* Consider multiple levels of messages.
* State brief, sufficient information to assist with the corrective action.
* Maintain consistent grammatical forms, terminology, and abbreviations.
* Maintain consistent visual format and placement.

**Process**

* Increase attention to message design.
* Establish quality control.
* Develop guidelines.
* Carry out usability tests.
* Record the frequency of occurrence for each message.

1. Explain the disadvantages associated with anthropomorphic design. Describe the guidelines for avoiding anthropomorphism.

Attributions of intelligence, autonomy, free will, or knowledge to computers are appealing to some people, but to others such characterizations may be seen as deceptive, confusing, and misleading. The suggestion that computers can think, know, or understand may give users an erroneous model of how computers work and what the machines’ capacities are. Ultimately, the deception becomes apparent, and users may feel poorly treated.

**Guidelines:**

* Be cautious in presenting computers as people, either with synthesized or cartoon characters.
* Design comprehensible, predictable, and user-controlled interfaces.
* Use appropriate humans for audio or video introductions or guides.
* Use cartoon characters in games or children’s software, but avoid them elsewhere.
* Provide user-centered overviews for orientation and closure.
* Do not use “I” when the computer responds to human actions. Use “you” to guide users, or just state facts.

1. Describe color choices that enhance user satisfaction and performance when designing an interface. What color pitfalls should be avoided?

**Guidelines**

* Use color conservatively.
* Limit the number of colors
* Recognize the power of color as a coding technique to speed recognition
* Ensure that color-coding supports the task. Be aware that using color as a coding technique can inhibit performance of tasks that go against the grain of the coding scheme
* Have color-coding appear with minimal user effort.
* Place color-coding under user control.
* Design for monochrome first.
* Consider the needs of color-deficient users. Approximately eight percent of males and less than one percent of females in North America and Europe have some permanent color deficiency in their vision.
* Use color to help in formatting. In densely packed displays where space is at a premium, similar colors can be used to group related items.
* Be consistent in color-coding. Use the same color-coding rules throughout the system.
* Be alert to common expectations about color codes.
* Be alert to problems with color pairings (red/blue, yellow/purple, magenta/green) and lack of contrast (brown on black, yellow on white),
* Use color changes to indicate status changes.
* Use color in graphic displays for greater information density.

**Pitfalls**

* Color pairings may cause problems.
* Color fidelity may degrade on other hardware.
* Printing or conversion to other media may be a problem.
* Users with color vision problems might miss key information or might not be able to user the interface at all

**Important Terms and Concepts**

Role-Centered Design

Anthropomorphic Design

Display Density

Mash-Up

Coordinated Windows