User Interface Design Principles

There are ten general principles for user interface design developed by Jakob Nielsen in the early 1990s. He decided to label them *heuristics* because "they are more in the nature of rules of thumb than specific usability guidelines" ("Ten Usability Heuristics"). These can be compared to the user interface design elements. The following is taken directly from "Ten Usability Heuristics" from useit.com: Jakob Nielsen's Web site.

Visibility of system . The system should always keep users informed about what is going on, through appropriate feedback within reasonable time. status Match between The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order. world · Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo. Consistency and · Users should not have to wonder whether different words, situations, or standards actions mean the same thing. Follow platform conventions. · Even better than good error messages is a careful design which prevents a **Error prevention** problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

Recognition rather than recall

 Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Flexibility and efficiency of use

 Accelerators - unseen by the novice user --may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Aesthetic and minimalist design

 Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Help users recognize, diagnose, and recover from errors

 Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Help and documentation

 Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Work Cited

"Ten Usability Heuristics." Useit, n.d. Web. 19 Apr. 2009.