
About User Interface Design Principles

Apple's **User Interface Guidelines** provides recommendations about how to adapt your application's interface to the Apple Desktop Interface provided with system 7.0. It describes new user interface guidelines and clarifies existing guidelines. It also introduces several user interface topics that you need to consider when you design or redesign an application. Throughout the section are references to places where you can find more information about technical implementation issues.

Your application should maintain the spirit of the Apple Desktop Interface and remain consistent with the guidelines presented earlier here and in *Inside Macintosh*, *Human Interface Notes*, and *Human Interface Guidelines: The Apple Desktop Interface*-which present a complete description of the Apple Desktop Interface.

The **User Interface Guidelines** describes the fundamental principles of the Apple Desktop Interface. It's a brief reminder of the basic premises that you should consider when you design your application for the Macintosh computer.

- **Metaphors from the real world.** Concrete, simple metaphors provide people with a set of expectations to apply to computer environments. Whenever appropriate, audio and visual effects can support the metaphors.
- **Direct manipulation.** Each user action has a perceptible response and the Operating System provides feedback to verify the effect of the action. For example, icons move when users drag them. In the Macintosh interface, people do not have to trust that abstract commands entered in a text-based interface do what they promise. This means that when users choose the Bold command, a word changes immediately to boldface- in comparison to other operating systems in which users type in commands and wait to see the results when the document is printed.
- **See-and-point (not remember-and-type).** Users rely on recognition, not recall, so entities are visible when possible. People do not have to remember anything the computer already knows, such as which commands are available.
- **Consistency.** Effective applications are internally consistent *and* consistent with other applications.
- **WYSIWYG (what you see is what you get).** There is no significant difference between what users see on the screen and what eventually is printed.
- **User control.** Users, not the computer or the application, initiate and control all actions.
- **Feedback and dialog.** Users get feedback about all interactions with the computer, and it is immediate feedback when possible. This communication should be brief, direct, and expressed in the users' vocabulary rather than the programmer's.
- **Forgiveness.** As users explore the interface, their actions should

generally be reversible so that people explore and learn by doing. Users should be able to identify in advance any actions that are not reversible.

- **Perceived stability.** Users feel comfortable in a computer environment that remains understandable and familiar rather than one that changes randomly.
- **Aesthetic integrity.** Visually confusing or unattractive displays detract from the effectiveness of human-computer interactions. Therefore different things, like folders and documents, should look different on the screen. Also, users should be able to control the superficial appearance of their computer workplaces to display their own style and individuality. Messes are only acceptable if users make them. Applications are not allowed this freedom.

For further explanation of these design principles, see *Human Interface Guidelines: The Apple Desktop Interface*.