

# Andrews General Usability Heuristics 2006

(Revised list of usability heuristics based on Nielsen's list <http://www.useit.com/papers/heuristic/>.)

## A01 Feedback

The system should give appropriate feedback within an appropriate time.

For example, for a delay of upto about 10 seconds display a busy cursor, for a delay of more than 10 seconds display a progress bar.

## A02 Speak the Users' Language

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. Make information appear in a natural and logical order. Match the users' mental model. Beware of misleading metaphors.

## A03 Reversible Actions

The user should be free to explore the system without penalty.

Users sometimes choose functions by mistake and need a clear way to back up. Support undo and redo.

## A04 Consistency

The same word, phrase, action, or situation should always mean the same thing.

Follow platform conventions and standards. If there is a standard way of doing something, do it that way unless there is a very good reason to do it differently.

## A05 Error Prevention

Prevention is better than cure. Careful design can prevent a problem from occurring in the first place.

For example: selecting a file from a menu rather than typing in a file name, asking for confirmation before dangerous actions, avoiding modes (or making it extremely clear which mode the user is in), avoiding commands with similar names.

## A06 Recognition Rather Than Recall

Place knowledge in the world. Make objects, actions, and options visible.

For example, provide examples, default values, and easily retrievable instructions. The user should not have to remember information from one part of the dialogue to another.

## A07 Flexibility and Efficiency of Use

Provide accelerators for frequent users, unseen by novice users. Allow users to tailor frequent actions.

For example: abbreviations, command keys, type-ahead, the ability to edit and reissue previous commands, a menu of most recently used files, macros.

## A08 Aesthetic and Minimalist Design

"Less is more".

Dialogues should not contain information which is irrelevant or rarely needed. Every piece of unnecessary decoration in a dialogue competes with the relevant units of information for the attention of the user.

## A09 Good Error Messages

A good error message helps users recognize, diagnose, and recover from errors.

Good error messages should be: *in plain language* (no codes), *precise* (precisely indicate the problem), *defensive* (never blame the user), *constructive* (suggest a solution), and *multi-level* (include a link to further information or the help system).

## A10 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.

Good help and documentation should be: *easy to navigate* (table of contents, index, and search facility), *task-oriented* (focused on the user's tasks), *recipe-like* (list sequences of concrete steps), and *example rich* (make liberal use of examples).