

## 1 Visibility of System Status

Designs should *keep users informed* about what is going on, through appropriate, timely feedback.



Interactive mall maps have to show people where they currently are, to help them understand where to go next.

## 2 Match between System and the Real World

The design should *speak the users' language*. Use words, phrases, and concepts *familiar to the user*, rather than internal jargon.



Users can quickly understand which stovetop control maps to each heating element.

## 5 Error Prevention

Good error messages are important, but the best designs *carefully prevent problems* from occurring in the first place.



Guard rails on curvy mountain roads prevent drivers from falling off cliffs.

## 8 Aesthetic and Minimalist Design

Interfaces should not contain information which is irrelevant. Every extra unit of information in an interface *competes* with the relevant units of information.



A minimalist three-legged stool is still a place to sit.

Nielsen Norman Group

# Jakob's Ten Usability Heuristics

## 3 User Control and Freedom

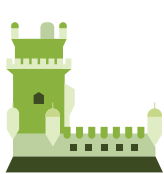
Users often perform actions by mistake. They *need a clearly marked "emergency exit"* to leave the unwanted action.



Just like physical spaces, digital spaces need quick "emergency" exits too.

## 6 Recognition Rather Than Recall

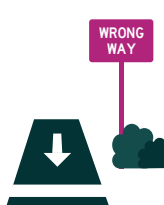
*Minimize the user's memory load* by making elements, actions, and options visible. Avoid making users remember information.



People are likely to correctly answer "Is Lisbon the capital of Portugal?".

## 9 Recognize, Diagnose, and Recover from Errors

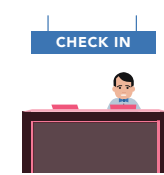
Error messages should be expressed in plain language (no error codes), precisely indicate the problem, and constructively suggest a solution.



Wrong-way signs on the road remind drivers that they are heading in the wrong direction.

## 4 Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. *Follow platform conventions*.



Check-in counters are usually located at the front of hotels, which meets expectations.

## 7 Flexibility and Efficiency of Use

*Shortcuts* — hidden from novice users — *may speed up the interaction* for the expert user.



Regular routes are listed on maps, but locals with more knowledge of the area can take shortcuts.

## 10 Help and Documentation

It's best if the design *doesn't need* any additional explanation. However, it may be necessary to provide documentation to help users complete their tasks.



Information kiosks at airports are easily recognizable and solve customers' problems in context and immediately.