

# Nielsen's 10 Usability Heuristics – Comprehensive Reference

## Background

Jakob Nielsen introduced ten general usability principles in 1994. They remain the gold standard for heuristic evaluation across platforms. This document synthesises NN/g articles, CHI papers, and modern applications in web/mobile contexts.

## The Ten Heuristics in Depth

- Visibility of System Status – Provide real-time feedback, progressive disclosure of loading, toast messages.
- Match Between System and Real World – Use domain language, avoid jargon, mimic physical metaphors only when beneficial.
- User Control & Freedom – Offer undo, redo, cancel; avoid trap states (e.g., un-dismissable full-screen ads).
- Consistency & Standards – Follow platform conventions (HIG, Material), maintain naming consistency across views.
- Error Prevention – Use constraint validation, disabled affordances, inline helper text, confirmation dialogs for destructive actions.
- Recognition Rather Than Recall – Offer dropdowns, autocomplete; persist previous selections.
- Flexibility & Efficiency of Use – Keyboard shortcuts, power-user settings, saved filters.
- Aesthetic & Minimalist Design – Prioritise essential elements; use whitespace to reduce cognitive load.
- Help Users Recognise, Diagnose & Recover From Errors – Plain-language error titles, actionable steps, error IDs for support.
- Help & Documentation – Contextual help icons, searchable knowledge base, onboarding tours.

## Modern Mobile Considerations

- Skeleton screens to satisfy perceived performance (Visibility).
- Gesture parity with platform (Match with real world).
- Swipe to undo (Control & Freedom).

## Applying the Heuristics

Combine expert heuristic inspection with usability testing; rate violations 0–4 severity; track in accessibility backlog.

## References

Nielsen, J. & Molich, R. (1990). Heuristic evaluation of user interfaces. CHI. Nielsen Norman Group Heuristics poster, 2024 update.