

Nielsen Norman Group

Heuristic Evaluation Workbook

Use this workbook to conduct your own heuristic evaluation.

For each of Jakob's 10 Usability Heuristics, look for specific places where the interface fails to adhere to the guideline. Write your recommendations for how to fix those usability issues.

<https://www.nngroup.com/articles/ten-usability-heuristics/>

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**Heuristic Evaluation
Workbook**

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Product: Employee Management System

Task: Employee Management

C1

Visibility of System Status

The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.

- Does the design clearly communicate its state? Is feedback presented quickly after user actions?

Issues

When a user performs an action (e.g., adds a new employee or deletes a record), there is no immediate or clear feedback to confirm whether the action was successful or failed. The page may reload without showing a message, or it may not indicate progress/loading during data operations.

Recommendations

To improve system visibility in the employee management section, clear feedback messages should be displayed after user actions, such as "Employee added successfully," along with loading indicators during longer processes. Highlighting changes, like briefly marking newly added employees, can further confirm successful actions and enhance user confidence.

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. Follow real-world conventions, making information appear in a natural and logical order.

- Will user be familiar with the terminology used in the design? Do the design's
- controls follow real-world conventions?

Issues

The Employee Management section uses technical terms like "Emp_ID" and "Insert Record," which may confuse non-technical users such as HR staff. It also lacks familiar button placements and recognizable icons, making the system less intuitive and harder to navigate.

Recommendations

To make the system more user-friendly, technical labels should be replaced with familiar terms, and buttons should follow standard placement. Using clear icons like a pencil for edit and a trash bin for delete will also improve usability for non-technical users.

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User Control and Freedom

Users often perform actions by mistake. They need a clearly marked "emergency exit" to leave the unwanted action without having to go through an extended process.

- Does the design allow users to go back a step in the process?
- Are exit links easily discoverable?
- Can users easily cancel an action? Is *Undo* and *Redo* supported?

Issues

The employee management system lacks user control and freedom, with no clear cancel options, undo/redo features, or confirmation prompts for deletions, increasing the risk of mistakes and accidental data loss. Additionally, poor navigation flow makes it difficult for users to back out of tasks smoothly.

Recommendations

To improve user control and freedom, the system should include visible cancel buttons, undo/revert options, and confirmation prompts before deleting records. It should also have easy navigation tools like back buttons or breadcrumbs, and warn users if they try to leave with unsaved changes to prevent accidental data loss.

4

Consistency and Standards

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

- Does the design follow industry conventions?
- Are visual treatments used consistently throughout the design?

Issues

The employee management section has inconsistent terminology, visual elements, and component layouts, leading to user confusion. Variations in button labels, icons, form designs, and deviations from industry standards disrupt user expectations and increase the risk of mistakes.

Recommendations

To improve consistency and meet industry standards, the system should use standardized terminology, uniform visual styles (buttons, fonts, colors, icons), and consistent layouts for similar elements. It should also follow common platform conventions, like placing primary buttons predictably and using standard dialogs, helping users understand and trust the system easily.

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Error Prevention

Good error messages are important, but the best designs carefully prevent problems 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.

- Does the design prevent slips by using helpful constraints?
- Does the design warn users before they perform risky actions?

Issues

The employee management system lacks safeguards against errors, allowing submission of incomplete or incorrect data due to missing validation for required fields, formats, and value ranges. It also lacks warnings before risky actions like deletions and does not prevent duplicate entries. The absence of real-time validation leads to generic error messages and user frustration.

Recommendations

To reduce user errors, the system should provide real-time form validation with clear required fields and helpful error messages. It must enforce uniqueness to prevent duplicate records and show confirmation dialogs before risky actions like deletions. Disabling action buttons until inputs are valid and giving immediate feedback will help users avoid mistakes and improve system reliability.

6

Recognition Rather Than Recall

Minimize the user's memory load by making elements, actions, and options visible. The user should not have to remember information from one part of the interface to another. Information required to use the design (e.g. field labels or menu items) should be visible or easily retrievable when needed.

- Does the design keep important information visible, so that users do not have to memorize it? ● Does the design offer help in-context?

Issues

In the employee management section, users often need to remember important details like IDs or codes between steps. If labels, instructions, or relevant data aren't consistently visible, users may struggle and make errors. Hidden functions without clear labels or tooltips and the lack of in-context help or hints can further confuse users, forcing them to rely on memory or external guides.

Recommendations

To reduce users' memory load, the system should display important information clearly near relevant fields, use descriptive labels and tooltips, and provide in-context help like hints or guidance. Navigation and action buttons should be visible and clearly labeled, and error messages should be specific and helpful to guide users in fixing mistakes.

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Flexibility and Efficiency of Use

Shortcuts — hidden from novice users — may speed up the interaction for the expert user such that the design can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

- Does the design provide accelerators like keyboard shortcuts and touch gestures?
- Is content and functionality personalized or customized for individual users?

Issues

The employee management feature lacks shortcuts and customization options, slowing down expert users. There are no keyboard shortcuts for common tasks, no way to personalize workflows, and user preferences like default views or filters aren't saved. This one-size-fits-all design reduces efficiency and frustrates power users.

Recommendations

To improve flexibility and efficiency, the system should support keyboard shortcuts, customizable preferences, and quick-access buttons for common actions, enabling faster interaction for experienced users while remaining simple for beginners.

8

Aesthetic and Minimalist Design

Interfaces should not contain information that is irrelevant or rarely needed. Every extra unit of information in an interface competes with the relevant units of information and diminishes their relative visibility.

- Is the visual design and content focused on the essentials?
- Have all distracting, unnecessary elements been removed?

Issues

The employee management interface has unnecessary clutter like decorative elements, redundant labels, and excessive data, which distract users from key tasks. Overloaded text, varied colors, and too many buttons can overwhelm users, while irrelevant options and poor visual hierarchy make it harder to focus on important content and slow down task completion.

Recommendations

To improve the design, the employee management interface should focus only on essential content, removing unnecessary elements and using whitespace for clarity. Key information should be shown by default with options to view more. Buttons should be clear and limited, with a simple, consistent color scheme and typography. A clear visual hierarchy will help users quickly find important information and actions.

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Help Users 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.

- Does the design use traditional error message visuals, like bold, red text?
- Does the design offer a solution that solves the error immediately?

Issues

The employee management section displays unclear and unhelpful error messages, often using technical codes or vague text without proper formatting or guidance on how to resolve issues, leaving users confused and unsure of how to proceed.

Recommendations

To improve error handling, the system should display clear, simple messages that explain the issue and suggest solutions, use visual indicators like red text and icons near the error, and highlight problematic fields for easy correction, ensuring a more user-friendly experience.

10 Help and

Documentation

It's best if the system doesn't need any additional explanation.

However, it may be necessary to provide documentation to help users understand how to complete their tasks.

- Is help documentation easy to search?
- Is help provided in context right at the moment when the user requires it?

Issues

The employee management section lacks accessible help features like icons, tooltips, and contextual hints, making it difficult for users to understand form fields and button functions. The absence of easily accessible help documentation leads to confusion, errors, and reliance on trial and error.

Recommendations

To enhance user support, the system should add tooltips, inline validation, and field hints in the employee management interface, along with an easily accessible, searchable help section for quick guidance on common tasks, improving usability and reducing confusion.