Usability Evaluation Report – Heuristic Evaluation Using Nielsen's 10 Usability Heuristics

Project Name: Personalized Study Planner
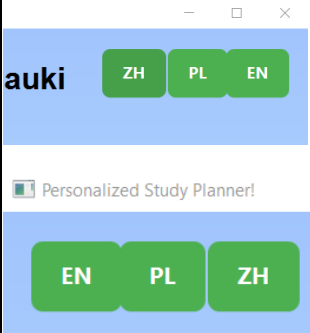
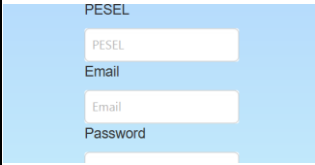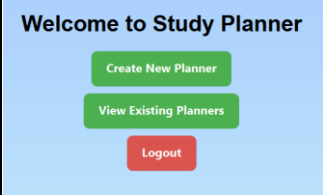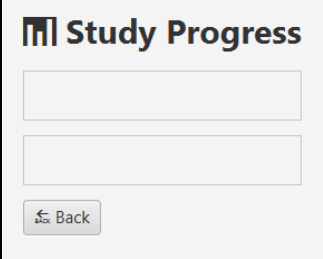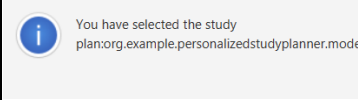**Date**: 28.04.2025

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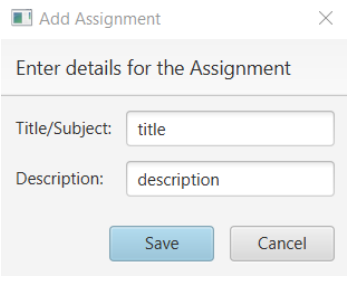
1. Introduction

This report aims to perform a usability evaluation of the Personalized Study Planner application using Jakob Nielsen's 10 Usability Heuristics. Nielsen's heuristics are well-established guidelines that help evaluate the user interface quality and identify usability issues. The report includes an individual evaluation of each heuristic, the severity rating of the issues, and suggestions for improvements.

2. Summary Table of Issues Identified by Heuristic

No	Heuristic	Description of the Issue	Screenshot	Severity	Suggested Improvement
1	H1-1: Simple & Natural Dialog	Language selection buttons (registration/login) are not centered and stretch depending on language length.		2	Center the language selection buttons to improve layout consistency.
2	H1-2: Speak the Users' Language	Inconsistent button placement for language selection across screens (login vs planner view).		2	Ensure consistency in the placement and style of language buttons.

No	Heuristic	Description of the Issue	Screenshot	Severity	Suggested Improvement
3	H1-3: Minimize Users' Memory Load	Some fields during registration don't fit on the screen, requiring the user to scroll.		3	Make the registration fields responsive and fit within screen bounds.
4	H1-4: Consistency	Buttons for changing language change color and size when navigating between screens.		2	Standardize the color, size, and placement of language buttons.
5	H1-5: Feedback	No feedback message after successful login. Users are redirected without confirmation.		3	Add a confirmation message ("Login successful") after user login.
6	H1-6: Clearly Marked Exits	Exit buttons are unclear; some pages lack clear navigation options to exit.		2	Use more intuitive exit icons or buttons with text labels.
7	H1-7: Shortcuts	No keyboard shortcuts are available, making it slower for advanced users to navigate.		1	Implement keyboard shortcuts for common actions (e.g., switching views).
8	H1-8: Precise & Constructive Error Messages	Error messages are vague or overly technical (e.g., displaying entire class name instead of the selected planner).		3	Display clear, concise error messages, e.g., "Planner selection failed".

No	Heuristic	Description of the Issue	Screenshot	Severity	Suggested Improvement
9	H1-9: Prevent Errors	Some fields lack input validation (e.g., assignments in different languages do not display correctly).	Add Assignment ✕ — Enter details for the Assignment — Title/Subject: title — Description: description — Save Cancel	3	Implement validation for input fields and proper language handling.
10	H1-10: Help and Documentation	There is no accessible help section or user manual.		2	Add a Help/FAQ section with a user manual and troubleshooting tips.

3. Detailed Analysis of Each Heuristic

H1-1: Simple & Natural Dialog

- **Problem**: The language selection buttons (used for registration/login) are not centered, and their width varies depending on the language length.

- **Impact on usability**: The inconsistency in the button layout may confuse users, especially when the button text stretches or shrinks depending on the language.

- **Severity Rating**: 2 (Minor usability problem)

- **Suggested Improvement**: Center the language selection buttons and ensure they have a consistent width across all languages for a more balanced interface.

H1-2: Speak the Users' Language

- **Problem**: The buttons for changing languages are positioned in different locations on the login screen and the planner view.

- **Impact on usability**: Users may be disoriented when they expect the language buttons to be in the same place, leading to a less consistent user experience.

- **Severity Rating**: 2 (Minor usability problem)

- **Suggested Improvement**: Ensure the language buttons are placed consistently across all screens for a more seamless user experience.

H1-3: Minimize Users' Memory Load

- **Problem**: During registration, some fields do not fit on the screen and require scrolling.

- **Impact on usability**: Users may have difficulty filling out the registration form if they need to constantly scroll to view and complete the required fields.

- **Severity Rating**: 3 (Major usability problem)

- **Suggested Improvement**: Make the registration form responsive and ensure all fields are visible on the screen without the need for horizontal scrolling.

H1-4: Consistency

- **Problem**: The language change buttons change size, color, and placement when navigating between screens.

- **Impact on usability**: This inconsistency may confuse users and disrupt their navigation experience.

- **Severity Rating**: 2 (Minor usability problem)

- **Suggested Improvement**: Standardize the size, color, and placement of the language buttons across all screens.

H1-5: Feedback

- **Problem**: No confirmation message is displayed after a successful login, and users are immediately redirected without any feedback.

- **Impact on usability**: Users may be unsure whether they have successfully logged in, leading to confusion.

- **Severity Rating**: 3 (Major usability problem)

- **Suggested Improvement**: Display a confirmation message ("Login successful") to reassure users they are logged in and have been redirected successfully.

H1-6: Clearly Marked Exits

- **Problem**: The exit buttons are unclear, and there are no clear options to exit some pages.

- **Impact on usability**: Users may struggle to find how to exit certain screens, leading to frustration.

- **Severity Rating**: 2 (Minor usability problem)

- **Suggested Improvement**: Use more intuitive icons for exit buttons or provide text labels to clearly indicate the action.

H1-7: Shortcuts

- **Problem**: No keyboard shortcuts are available for advanced users.

- **Impact on usability**: Advanced users may find it slower to navigate through the application without keyboard shortcuts.

- **Severity Rating**: 1 (Cosmetic problem)

- **Suggested Improvement**: Implement keyboard shortcuts for frequently used actions (e.g., switching between study planner views).

H1-8: Precise & Constructive Error Messages

- **Problem**: When selecting a planner, the application displays the full class name (e.g., org.example) instead of the selected planner's name.

- **Impact on usability**: The error message is unclear and does not provide helpful information, which may confuse users.

- **Severity Rating**: 3 (Major usability problem)

- **Suggested Improvement**: Display a concise and relevant error message, e.g., "Planner selection failed, please try again".

H1-9: Prevent Errors

- **Problem**: There are issues with displaying assignments in other languages.

- **Impact on usability**: Users may experience issues viewing assignments in the selected language, leading to confusion or a poor user experience.

- **Severity Rating**: 3 (Major usability problem)

- **Suggested Improvement**: Ensure that the application handles multilingual assignments correctly and displays them properly in each language.

H1-10: Help and Documentation

- **Problem**: There is no help section or user documentation available for the application.

- **Impact on usability**: Users may feel lost or unable to resolve issues without any documentation or help options.

- **Severity Rating**: 2 (Minor usability problem)

- **Suggested Improvement**: Add a Help/FAQ section with troubleshooting tips and a user guide for better user support.

4. Conclusion

In conclusion, the heuristic evaluation of the Personalized Study Planner application has revealed several usability issues, particularly related to unclear dialog labels, lack of feedback, and inconsistent button styles. The most severe issues identified should be addressed immediately to ensure a smoother user experience. Implementing the suggested improvements will significantly enhance the application's usability and accessibility for users.