

Heuristic Evaluation

Introduction

Evaluation is a vital process to acquire information to proceed further design and improve current design. In this evaluation, application prototype “Room Raider” will be evaluated. Room Raider is an application that helps study groups of students to manage their meeting locations and time in order to allow group members to work collaboratively.

Method

Since it is a prototype evaluation, focus will be put on interface design and usability of current functions mentioned in the user scenarios. The application will be evaluated by going through user scenarios.

The following Heuristics will be considered when testing the prototype according to the scenarios:

H-1 Visibility of system status: to check if the application provides meaningful feedback after performing an action

H-2 Match between system and real world: to check the icons and text match real-world components and are understandable to users

H-3 User control & freedom: to evaluate if users have the ability to go back to a previous stage after performing an unexpected action

H-4 Consistency & Standards: to check if the actions/functions are indicated/explained using different words or icons

H-9 Aesthetic and minimalist design: to evaluate if the interface design has a negative impact of user experience or contains irrelevant components/information

As the application is a prototype, advanced Heuristics, such as “Flexibility & Efficiency of Use” or “Recognition rather than recall”, will not be used to judge the usability. The function of the prototype is hardcoded to support user scenarios; thus,

“Error messages”, “Help and documentation”, and “Error Prevention” will not be considered as well.

All heuristic violations will be rated according to a severity rating scale of 1-4:

- 1: Cosmetic problem only: need not be fixed unless extra time is available on project
- 2: Minor usability problem: fixing this should be given low priority
- 3: Major usability problem: important to fix, so should be given high priority
- 4: Usability catastrophe: imperative to fix this before product can be released

Findings

Test of the prototype indicates the following heuristic violations:

Overall:

[H-9 Aesthetic Design] [Severity 1]

- The logo and the background image of the interface does not suit the purpose/overall atmosphere of the application since the application is for managing study groups. The background also interfere the visibility of “Log out” button.
- Although the logo and the background is a little depressing, they do little influence the functionality of the application.
- Change more relaxing/encouraging logo and background.

Account Creation:

[H-4 Consistency] [Severity 1]

- In the main page, the button for users to create an account is indicated by the term “Register”; whereas, in the account creation page, such button is indicated by the text “Create an Account”.
- Users are likely to figure out that the two phrases provide the same function, even though the use of terminology is not consistent.
- Change one of the buttons to “Register” or “Create an Account” to maintain consistency.

[H-9 Minimalist Design] [Severity 4]

- After clicking “Create an Account” button, a confirmation message box saying that the account was successfully created will pop up with two clickable buttons: “OK” and “Cancel”. If a user click “Cancel”, he/she will remain in the current page and will have to click back arrow to go back to the main page, and then sign in.
- “Cancel” button is completely unnecessary for a confirmation message box which only tells users that their account creation was successful. Moreover, miskicking the button may result in users to do extra work in order to sign

in. It also cause confusion as users may wonder if clicking “Cancel” would reverse the account creation.

- Remove “Cancel” button.

My Group:

[H-2 Match between System and Real World] [Severity 2]

- The button for logging out is represented by “Exit” sign.
- User may think “Log out” button is used to exit the application rather than signing out as it is represented by “Exit” sign.
- Change an icon or change the notation to text, e.g. “Log out”.

Group Management:

[H-1 Visibility] [Severity 3]

- Although there is a warning message telling the user that leaving a group is permanent, it fails to provide the information relevant to that group, such as the name of the group, to make sure the selected group is the group the user want to leave.
- Without confirmation information, users may accidentally leave a group that they do not want to leave.
- Add relevant information of the selected group to the warning message box to confirm which group the user is trying to leave.

[H-1 Visibility] [Severity 3]

- When leaving a selected group, there is no feedback provided to indicate which group the user left and if the user successfully left the group.
- A user may be confused and may have to search through a list of groups to confirm that if he/she successfully left the selected group. It requires extra work for users if they have huge list of groups.
- Add a message box to confirm which group the user left and if he/she successfully left the group.

Group Owner:

[H-1 Visibility] [Severity 3]

- Although there is a warning message telling the consequence of removing a group member, it fails to provide the information relevant to the group member, such as the name of a group member, to make sure the selected group member is the one the user want to remove.
- Without confirmation information, users may accidentally remove a group that they do not want to remove.

- Add relevant information of the selected group member(s) to the warning message box to confirm which group member(s) the user is trying to remove.

[H-1 Visibility] [Severity 3]

- When removing a selected group member, there is no feedback provided to indicate which group member the user removed and if the user successfully removed the group member.
- A user may be confused and may have to search through a list of group members to confirm that if he/she successfully removed the selected group member. It requires extra work for users if they have huge list of group members.
- Add a message box to confirm which group member(s) the user removed and if he/she successfully removed them.

Group Creation:

[H-2 Match between System and Real World] [Severity 3]

- The button for creating a group is “Send Invitations” in the Group Creation page.
- The phrase “Send Invitations” is ambiguous since it only suggest the function of the button is to send invitations to selected people. “Send Invitation” does not indicate if the button is used for creating a group.
- Change “Send Invitations” to “Create a New Group and Send Invitations”.

[H-1 Visibility] [Severity 3]

- The confirmation message only says invitations sent. It does not mention if the group is created.
- A user may be confused and may have to search through a list of group to confirm that if the group is selected. It requires extra work for users if they have huge list of groups.
- Add conformation message regarding to successful creation of a group into the message box.

Room Booking:

[H-3 User Control & Freedom] [Severity 2]

- When choosing time, if a user has chosen a start time and has proceeded to choose the end time, he/she is not provided the option to go back and change the start time. A user will have to cancel the current time choosing and start again.
- Although there is no option to go back, it does not require too much extra work for a user to re-choose the start time.
- Add back option to time choosing.

[H-1 Visibility] [Severity 3]

- There is no clear indication on the interface telling the user a room is booked by him/her after he/she books the room.
- A user may be confused and may end up booking the room again.
- Add a new color to indicate that a room is booked by the user.

[H-1 Visibility] [Severity 1]

- There is no legend to explain the current color scheme.
- A user is likely to figure out the meaning of the colors as they match with real-world components. Yet, it is more user friendly to add a legend.
- Add a legend.

Summary

Despite some minor cosmetic issues, generally, the application failed to provide feedbacks for several critical actions, such as removing a group member and creating a new group. Moreover, more focus should be put on choosing icons or text that are more representative to the functions they have. The application also does not maintain enough consistency because of some terminology used or offer sufficient user control due to lack of enough back options. Improvement and further design are needed.