

CSC 310: Human Computer Interaction

Usability Evaluation Report Template

Dated
10/25/2022

Prepared By

NAMES: Aaron Prichard

SIGNATURES:

Brief Description of User

User is a mid 20s, white female. She uses Mac devices for college and windows computer for work as a receptionist.

Process Overview

Pre-study:

1. Have you touched the power & sleep settings in Windows 10?
2. Have you touched the power & sleep settings in a different version of Windows?
3. Have you touched the power & sleep settings in a different operating system? (macOS, Linux, iOS, etc.)

If yes to any of these questions:

4. How often do you use the power & sleep settings?
5. When was the last time you used the power & sleep settings?
6. What was your experience last time?
7. What prompts you to change the power & sleep settings?
8. What settings do you change the most?
9. What settings do you search for the most?
10. What problems did you encounter when changing the power & sleep settings?

Post-study:

1. Which of these settings have you changed before?
2. Of the settings you haven't changed before, are there any settings you would now change on your own computer?
3. What settings were you satisfied with the process of changing?
4. Which settings were the hardest for you to change?
5. What improvements would you suggest to the power & sleep settings?

Script

Hello [subject], my name is [surveyor]. Thank you for participating in our study. I am a Computer Science student at the University of Michigan Flint. I am a member of a group working on a project for our Human Computer Interaction course.

We are studying the Windows power and sleep settings and hope to improve the user experience. To do this, I'm going to ask you to perform some tasks that will help us determine any issues with the system.

Before we begin, I'd like to ask you some questions about your experience with Windows power and sleep settings.

1. Have you touched the power & sleep settings in Windows 10?
2. Have you touched the power & sleep settings in a different version of Windows?

3. Have you touched the power & sleep settings in a different operating system? (macOS, Linux, iOS, etc.)

If yes to any of these questions:

4. How often do you use the power & sleep settings?
5. When was the last time you used the power & sleep settings?
6. What was your experience last time?
7. What prompts you to change the power & sleep settings?
8. What settings do you change the most?
9. What settings do you search for the most?
10. What problems did you encounter when changing the power & sleep settings?

End of Pre-study

Thank you for your answers. We are going to move on to the tasks now.

I'm going to ask you to perform some tasks. I will only tell you what to do and not how to do it. We will not be judging your performance. Our goal is to find issues with the system so any difficulty you have performing the tasks is actually what we are looking for. This means we can work on improving that component of the system. Please feel free to talk through your thought process to give us as much insight as possible. This will help us to be more effective in improving the system.

We have pulled up the Windows 10 Power & sleep settings for you.

First, change the screen to turn off after 1 minute.

Now change the PC to go to sleep after 1 hour.

Can you set the hard disk to never turn off?

I'd like you to change playing video to optimize video quality.

Great. Can you set the power plan to High performance?

I'd like you to customize your own power plan.

Then, can you set the power plan to your custom power plan?

Now change the power button to put the computer to sleep.

Can you turn on fast startup?

Now allow the Hibernate option to show in the Power menu.

Thank you for going through those tasks. Now I have some final questions to ask you about your experience.

Post-study

1. Which of these settings have you changed before?
2. Of the settings you haven't changed before, are there any settings you would now change on your own computer?

3. What settings were you satisfied with the process of changing?
4. Which settings were the hardest for you to change?
5. What improvements would you suggest to the power & sleep settings?

Thank you for participating in this study. This is very helpful feedback for how we can improve these settings for our project.

Transcript

Intro and questionnaire.

[User estimates they use the settings every few months to adjust wake and sleep times]

[no problems with screen sleep or pc sleep]

Okay, can you set the hard disk to never turn off?

Okay.

Okay, sleep settings and...

[User went to power button settings and needed direction to look at advanced power settings]

Okay, Now, can you change playing video to optimize video quality

Would be under default. settings.

[user looked under default settings and then had to look through every menu to find video quality.]

Oh, no, it'd be under advanced again.

can you set the power plan to the default high performance plan. Yes, i'm going to the default settings and so change.

Can you turn on fast startup?

That'd be under the advanced power settings again.

[User changed the default power plan again]

I wanted you to turn on Fast startup? Oh, sorry!

Hmm I'm not sure

[User checked shutdown settings last.]

Oh, it'd be under the shutdown settings. Right here.

Okay, Now allow hibernate option to show in the power menu.

[User found hibernate immediately in the same menu with no difficulty changing the setting]

[User commented in post questionnaire that the power settings under default settings was the most difficult to find.]

Feedback & Critical Incidence << Record your observations in the table on the following page, based on your observations and notes taken during the usability evaluation

Description of columns in the table are as follows:

Prototype Screen/Page:

Which screen of the user interface the user was evaluating at the point of feedback/critical incidence/problem.

Reference:

This column should be used to relate an item back to a specific point in the session. The reference can be to a specific line number in the transcript above or a time code.

User feedback / critical incidence / problem:

This column may contain :

- Feedback (positive or negative) given by the users, **or**
- Critical incidences (breakdowns or problems encountered by users) and/or mistakes committed by users.

Reason for negative feedback / breakdown:

Briefly explain the reason for a breakdown or any negative feedback.

Scope:

Describe the scope of the feedback or the problem; include whether the scope of the issue is throughout the system/device or within a specific screen or screens. If the problems are specific to a page, include the appropriate page reference.

Severity (H/M/L) :

Your assessment as to whether the implication of the feedback is *low*, *medium*, or *high* severity, and the **justification** for that rating.

Way(s) to rectify:

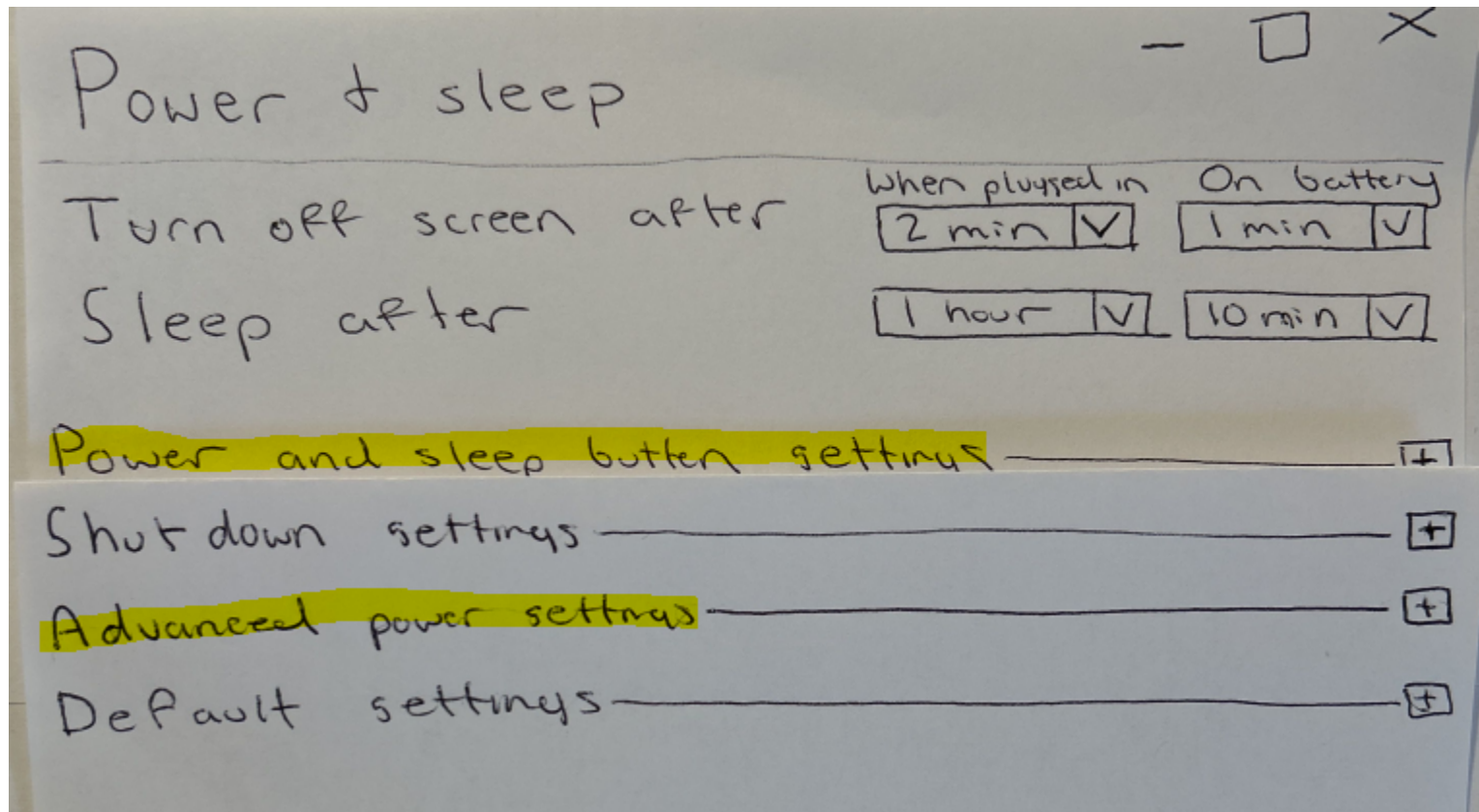
Suggestion for the modifications that might be made to the user interface to address the issue or issues in this row. You **MUST** include trade-offs to be credible. If you can't think of some bad trade-off, say so.

Usability Evaluation Feedback Analysis

#	Prototype Screen	Reference	User's feedback/ critical incidence/ problem	Reason for negative feedback / breakdown	Scope	Severity (High/ Medium/ Low) and Justification for giving that rating	Way(s) to rectify and any Tradeoffs (i.e., why the fix might not work)
1	See Picture 1	Line 7	Looked under power button settings for hard disk turn off time.	User seemed to lock on to first couple words of power and sleep button and not notice it was just for the buttons	Minimal scope. Specific problem with that wording	Low. It becomes quickly apparent that this setting is just for buttons and the user moves on in good time.	Finding a more explicit name could work with no trade off. Or recategorizing the settings with a risk of doing more work to end up with similar problems for other settings.
2	See Picture 2	Line 10	User looked through every menu to find video settings	Being under the generalized advanced settings does not tip the user to what settings are there.	Potentially widespread.	Medium. There are several options that are buried but couldn't have their own category because they are one offs	Maybe listing examples of the settings in each category in a parenthetical or in a dialog box on hover. No trade-off there except the risk that the top menu becomes overly verbose.

3	See Picture 3	Line 15-18	User went to default settings before finding the setting in shutdown settings last.	User thought shutdown would be the last place to find a 'startup' option.	Minimal.	Low. This specific problem could be remedied with minimal wording change.	Changing the title to 'startup/shutdown options' might be enough to fix it with no trade-off.
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Picture 1:



Picture 2:

Advanced power settings	When plugged in	On battery
Turn off hard disk after	Never <input checked="" type="checkbox"/>	20 minutes <input checked="" type="checkbox"/>
When sharing media	Prevent sleep <input checked="" type="checkbox"/>	Allow sleep <input checked="" type="checkbox"/>
Video playback quality bias	Performance <input checked="" type="checkbox"/>	Power-saving <input checked="" type="checkbox"/>
When playing video	Optimize quality <input checked="" type="checkbox"/>	Optimize power <input checked="" type="checkbox"/>
Default settings		

Picture 3:

