

CSC 310: Human Computer Interaction

Usability Evaluation Report

Dated
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Prepared By

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SIGNATURES:

Brief Description of User

User is a 19-year old white college female. She has experience with Windows through personal use and for school, but primarily on desktop. She was chosen because while she does have experience with windows, she uses it in a way where she might be less familiar with the power and sleep settings

Transcript

1 **Ella:** Hello [User], my name is Ella. Thank you for participating in our study. I am a Computer Science student at the University of Michigan
2 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
3 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
4 with the system. Before we begin, I'd like to ask you some questions about your experience with Windows power and sleep settings. Have you
5 touched the power & sleep settings in Windows 10?
6 **User:** Yes
7 **Ella:** Have you touched the power & sleep settings in a different version of Windows?
8 **User:** No
9 **Ella:** Have you touched the power & sleep settings in a different operating system?
10 **User:** No
11 **Ella:** How often do you use the power & sleep settings?
12 **User:** Not very often
13 **Ella:** When was the last time you used the power & sleep settings?
14 **User:** about a month ago
15 **Ella:** What was your experience last time?
16 **User:** A tiny bit confusing, but it wasn't that bad
17 **Ella:** What prompts you to change the power & sleep settings?
18 **User:** To learn about it
19 **Ella:** What settings do you change the most?
20 **User:** How long until it goes to sleep
21 **Ella:** What settings do you search for the most?
22 **User:** To prevent it from going to sleep
23 **Ella:** What problems did you encounter when changing the power & sleep settings?
24 **User:** Finding advanced settings

25 **Ella:** 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
26 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
27 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
28 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
29 pulled up the Windows 10 Power & sleep settings for you. First, change the screen to turn off after 1 minute.
30 [User successfully finds the setting]
31 **Ella:** Now change the computer to go to sleep after 1 hour.
32 [User successfully finds the setting]
33 **Ella:** Can you set the power button to put the computer to sleep?
34 [User successfully finds the setting]
35 **Ella:** I'd like you to turn on fast startup
36 [User finds the setting after checking advanced power settings and default settings first]
37 **User:** Startup is the absolute opposite of shutdown. Why?
38 **Ella:** Great. Can you allow the hibernate option to show up in the power menu?
39 [User finds the setting in the same place]
40 **Ella:** I'd like you to set the hard disk to never turn off.
41 [User successfully finds the setting]
42 **Ella:** Then, can you change playing video to optimize video quality?
43 [User finds the setting, but was unsure of difference between playing video and optimize video quality, and second guessed herself]
44 **Ella:** Now set the settings to the high performance default settings.
45 [User finds the button and clicks it]
46 **Ella:** Thank you for going through those tasks. Now I have some final questions to ask you about your experience. Which of these settings have
47 you changed before?
48 **User:** I think I did the power button thingy
49 **Ella:** Of the settings you have changed before, are there any settings you would now change on your own computer?
50 **User:** Maybe high performance for video
51 **Ella:** What settings were you satisfied with the process of changing?
52 **User:** The power button for sleep, because its easy to get to
53 **Ella:** What settings were the hardest for you to change?
54 **User:** Probably the startup thing because the shutdown is the opposite of startup. Why are they correlated?
55 **Ella:** What improvements would you suggest to the power and sleep settings?
56 **User:** Probably have a separate one for startup and shutdown

Usability Evaluation Feedback Analysis

#	Prototype Screen Provide link to images and circle relevant part with optional annotations	Reference include line number(s) in specific transcript for the identified issue	User's feedback/ critical incidence/ problem	Reason for negative feedback / breakdown	Scope which interface /function is impacted	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	36	User had trouble locating fast startup	User was confused on why fast startup is under shutdown when shutdown is the opposite of startup	Shutdown settings	Low: The user was able to find the setting after spending not too much additional time searching	It may be helpful to rename that section. The tradeoff here is that the name would be longer requiring the user to read more.
2	See Picture 2	43	User could not tell the difference between video quality playback bias and when playing video	The two settings seemed to have really similar effects	Advanced power settings	Low: The user was still able to change the setting	It could be helpful to merge the two settings into one. This would remove options from the user. Additional clarifying text or rewording could also work, but would affect users used to the precedent.

Picture 1:

Power & sleep - □ ×

Turn off screen after when plugged in on battery

Sleep after 2 min ✓ 1 min ✓

Sleep after 1 hour ✓ 10 min ✓

Power and sleep button settings - □

① When I press the power button when plugged in on battery

Sleep ✓ Shut Down ✓

② When I press the sleep button Sleep ✓ Hibernate ✓

Shutdown settings - □

☒ Turn on Fast startup (recommended)

☒ Show Sleep in Power menu

☒ Show Hibernate in Power menu

☒ Show Lock in Power menu

Advanced power settings - □

Turn off hard disk after when plugged in on battery

Never ✓ 20 minutes ✓

When sharing media Prevent sleep ✓ Allow sleep ✓

Video playback quality bias Performance ✓ Power saving ✓

When playing video Optimize quality ✓ Optimize power ✓

Default settings - □

Set to default settings (balanced) Change

Set to high performance settings Change

Set to power saver settings Change

Picture 2:

Power & sleep - □ X

Turn off screen after

When plugged in	On battery
2 min ✓	1 min ✓

Sleep after

When plugged in	On battery
1 hour ✓	10 min ✓

Power and sleep button settings - □

① When I press the power button

When plugged in	On battery
Sleep ✓	Shut Down ✓

② When I press the sleep button

When plugged in	On battery
Sleep ✓	Hibernate ✓

Shutdown settings - □

☒ Turn on Fast startup (recommended)

☒ Show Sleep in Power menu

☒ Show Hibernate in Power menu

☒ Show Lock in Power menu

Advanced power settings - □

Turn off hard disk after

When plugged in	On battery
Never ✓	20 minutes ✓

When sharing media

When plugged in	On battery
Prevent sleep ✓	Allow sleep ✓

Video playback quality bias

When plugged in	On battery
Performance ✓	Power saving ✓

When playing video

When plugged in	On battery
Optimize quality ✓	Optimize power ✓

Default settings - □

Set to default settings (balanced)

Set to high performance settings

Set to power saver settings