November 2019

INTUITION POWER SLIDER CHANGE

HP INC

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Problem:

Current Windows operating systems (OS) have provided a power slider function on notebook (NB) systems so that a user can change their power setting immediately, without clicking into the power options for further power plan setting. However, as a user, I found I cannot detect that any change is happening when I change the bar on the power slider function.

In current OS design there are four levels in DC mode from which a user may select: 1. Best Performance, 2. Better Performance, 3. Better Battery, and 4. Best Battery. But in fact, options 1, 2, and 3 look similar and only with option 4 the backlight appears a little darker. Therefore, a user may only feel that power settings may have changed when selecting option 4 (Best Battery).

Objectives:

Provide direct feedback to a user following a movement of the slider bar to make the user aware of the power setting change.

Solution:

What is an effective way to make an end user aware that moving the slider bar has changed the power setting? The most intuitive way is to alter what they feel or see, like the display backlight.

Here we provide two algorithms that can be applied. The first one provides a way to adopt the current user setting as a base line, and once the user moves the power slider up (right side) or down (left side) we can increase or decrease the backlight by 10% for each step change. This makes the user aware that the current change will affect the power consumption of the system and lets the user more easily understand what that change will be.

The second algorithm sets the backlight at 100% for the best performance setting, 90% for the better performance setting, 80% for the better battery life setting, and 70% for the best battery life setting.

The display brightness changes that the above algorithms cause only occur when a user moves the slider bar to change their power setting. However, the user can still override the new display brightness setting that was set when the power slider was moved. The purpose of this solution is to easily understand that a power setting change will increase or decrease power consumption, and also that the battery life will change also.

Figure 1. Flow Chart – Algorithm 1

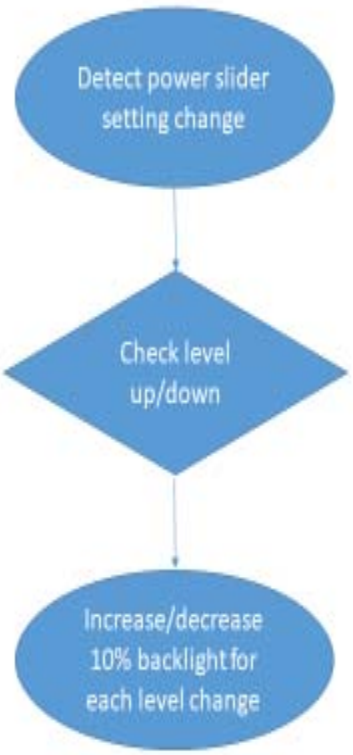
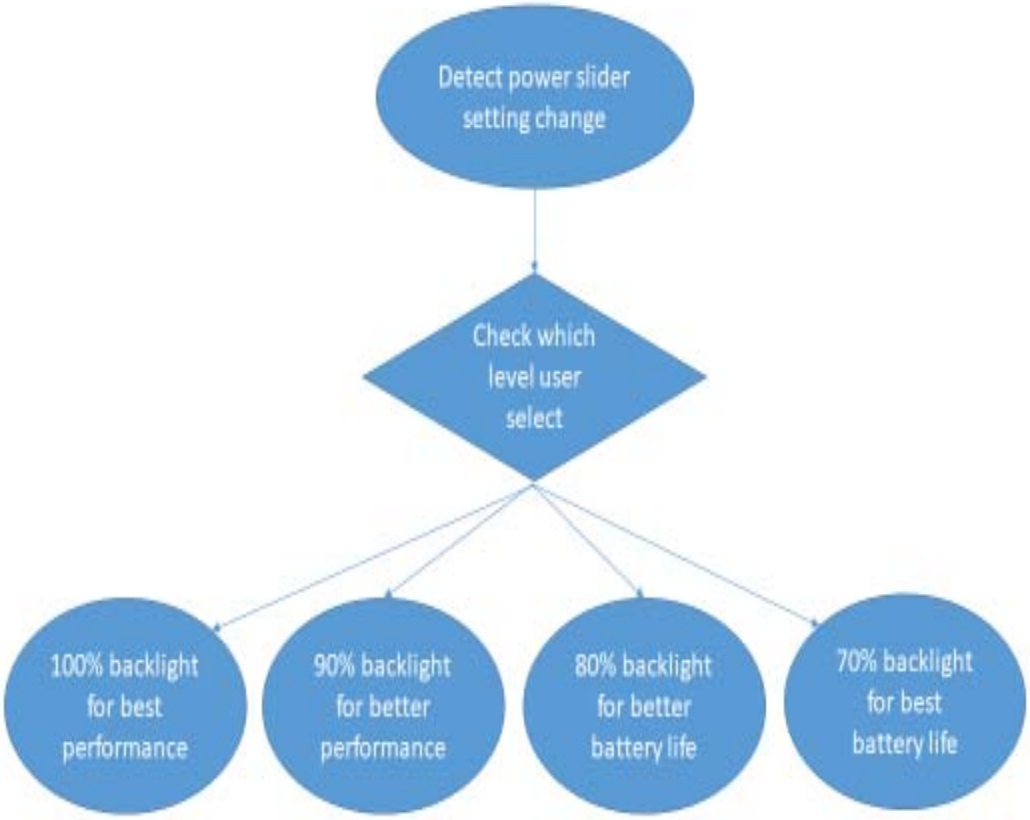


Figure 2. Flow Chart – Algorithm 2



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