

Control Function Confusion



Gulf Of Execution

In this example user plans to perform certain actions using the television remote control. However they cannot achieve their desired results due to the non-user-friendly design of the remote control.

We can clearly see its functions not being clearly stated. The connection between the buttons on the remote control and their functions is unclear; This causes the user to experience unexpected results when using the remote control. The user presses the on-off button to turn on the television and then uses the round button to navigate between channels. They plan to adjust the volume by pressing left and right on the round button, and to change channels by pressing up and down like they are used to do on their previous remote control.

However, this button on the remote control only allows the mouse cursor to move. Channel changing operations and sound operations are carried out by moving the two rectangular gray buttons on the remote control up and down. Failure of the user to achieve the desired results as planned causes "Gulf Of Execution".

To solve this problem, the function of each button on the remote must be clearly stated. It should be clearly written that the round button acts like a mouse cursor, while the rectangular buttons are for channel switching and volume control. Giving the user a short training in the form of a manual can be provided to ensure that users understand the functions on the remote control correctly. Also showing clear feedback to each of the actions that user takes can help reduce undesirable consequences.

Gulf Of Evaluation

When the user wants to use this illuminated ceiling fan they see two string to operate it but no indication about which one does what. The string on the left operates the light itself. They can just pull that string to open/close the light easily and understand clearly if the light is on or off. The other works as a controller to the fan itself. However it is not clear how it works at all. When the fan is not turning first pull to the string turns it on. This being mod 1, each time the string gets pulled the mod changes and speed increases but when it reaches to the maximum speed it the fan stops absurdly there are no indicator on what speed or mod the fan is turning currently or how many mods there are or after which mod the fan stops. In this case the user has such a hard time understanding anything about the mods and the speed of the fan and most times fail to get to the speed they want. Therefore, gulf of evaluation occurs because the user does not have the necessary information to perform the desired actions.

To solve this gulf of evaluation problem, a feedback system should be used where the consequences of each action taken by the user are clearly displayed. For example, as the fan speed increases and the mod changes, they can be visually indicated like little lights for each mod when the fan is at the mod 1 only one of those little lights would be visible. There should also be clear labels on each arm. For example, "On/Off" for the light and "Speed Adjustment" for the fan.

Illuminated Fan Interface

