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CptS 543
Assignment #1
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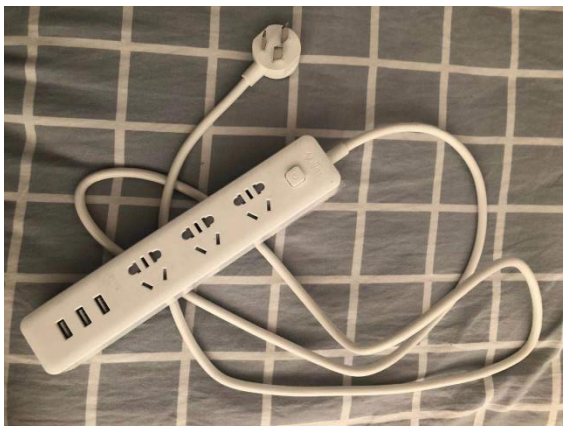
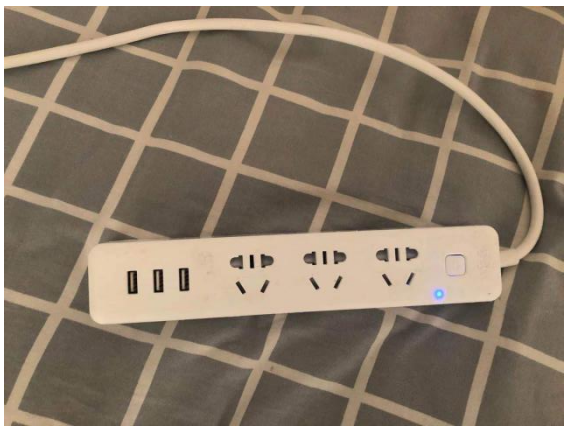
Good Design: BULL GN-B403U Power strip





BULL GN-B403U Power strip meets all my expectations of a power strip. Firstly, it has a main switch for controlling power flow. Further more, it has 3 outlets/sockets and 3 USB outputs, which allows you power 3 electric devices and charge 3 low power consumption devices such as cell phones. Since 2-prong and 3-prong outlets are different in China, it provides alternative options for users. Also, this feature can limited its total power for its limited the number of outlets/sockets as 3.

Conceptual Model: After users provide the power strip with power and turn on its main controller, plugging the plug of devices into sockets can power devices. It is easy to guess its usage through its appearance. 2-prong plugs should be plug into the two bigger holes; on the contrary, the 3 smaller holes only be provided for 3-prong plugs. USB outputs can power electric devices when plug in USB plugs.

Affordances: This power strip offer one main switch to control whether work or not. Also, 3 outlets/sockets and 3 USB outputs are also provided for plugging.

Mappings: There is no obvious mappings on this strip.

Signifier: On the main switch, there is a power prompt for notifying the switch is a power switch. This can let the user clearly know that the switch can power the strip.

Feedback: Pressing the main switch will give immediate feedback. When pressing down the switch, the switch would make a sound and also would light the blue light. When we press it the second time, the light would be turn off , and it means power has been cut off.

Bad Design: GREE NSJ-8 Electric heater

This electric heater can heat up the temperature in from of it. I choose this as bad design because its mapping trouble me a lot . For instance, I am confused that what is the meanings of the O and I on the switch.

Conceptual Model: The Electric heater has two switches which are related with two heat pipes. Turning on one of the switches, the corresponding heating pipe will heat up. However, according to its appearance, it is difficult for us to classify it as an electric heater instead of an electric fan.

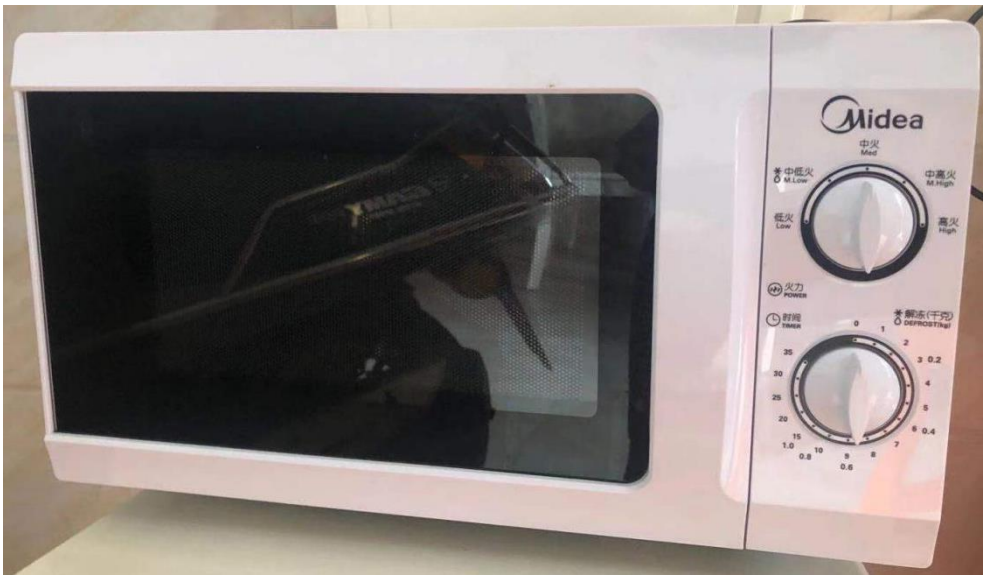
Affordances: The Electric heater only offers two switches to turn on of turn off the heat pipes. The two switches control the two pipes.

Mappings: The Electric heater has a terrible mapping system because it does not match the natural mapping principle. To explain, we can see this machine has a switch on the left side and right side, but the two heat pipes are installed as the top one and the bottom one. This would cause confuses that users could not figure out which switch control the top pip as well as the bottom pip. Hence, changing the location of the switches as top and bottom will be a better mapping choice.

Signifiers: The switches have two pressing options; one is O(Output) and the other is I (Input), which reflects to turning off and turning on. However, GREE, as a Chinese brand, most of his customers are Chinese. This means that many users don't understand what O and I means. Therefore, I suggest it need to change signifiers for switches such as their colors (Green for turning on and Red for turning off) or using Chinese characters.

Feedback: The Electric heater has a simple feedback when user turn on or turn off . When press down one of the switches, there will be audible feedback when you press the switch. Moreover, the associated heat pie would become red gradually.

Augmented Design: Midea M10l213B Microwave



This microwave has two switches that control the cooking power and cooking time(or defrost). It only has two switches to turn, so it is easy to be used. However, it has terrible notifiers to classify power and time(or defrost). Therefore, the microwave should be associated with more clear instruction to make it be more usable.

Conceptual Model: The Microwave has two switches. One is for power and the other one is for time(or defrost). Turning the switch can increase the power intensity and length the time(or defrosted food's kg). Also, there is a cooking contain with a door. Putting food inside as well as closing the door, users can cooking food with alternative time (or defrosted food weight)and power by using the two switches.

Affordances: Both of the two switches are afforded to be turned. Moreover, the door is afforded to be opened or closed.

Mappings: The two switches of microwave can control power and time.Top one maps with power; bottom one maps to time. There are four states for top switch; when it points at left, it means low power. As the switch turn right, power would increase. Considering the bottom switch, when the switches point to right above, it means off. As we turn right the switches, power would be increased or time would be lengthened.

Signifiers: The microwave has bad signifers. Firstly, the switch signifiers of power and time are both in between the two switches; this would bring confuses to users. I suggest that the signifiers should be put above the switches. Also, the bottom switch has another option for defrosting; there are two dials represent time and defrosting (weight of food). However, there is no instruction telling the which dial represents time or (kg of food). Therefore, I think the company need to add more instructions or signifiers to make it easy to be used.

Feedback: When we turn right the switches, the microwave would make sound like clock. Also, when the microwave finishes its work, it would make sound like "Ding"。