Homework 3 By Dan Wu

Don Norman's design principles is influential in human-centered website design. We need to consider these principles when we design a website. In this homework, I choose 2 websites to analyze its positive and negative aspects refers to these principles.

Applications:

The website 1 I choose: B&H (https://www.bhphotovideo.com/)

The website 2 I choose: Best Buy (https://www.bestbuy.com/)

Both of them are websites who sell digital products, which are very popular in the United States. They are also two competing applications for shopping online.

Representative Task:

A boy wants to buy a pair of earphone, whose price is between 100 to 200 dollars, and at last to use a student coupon to pay online.

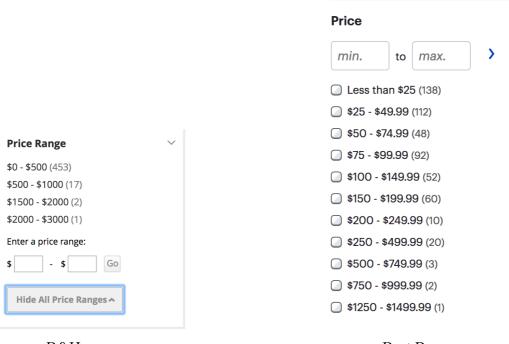
This task is really interesting, because it includes lots of interactions, such as search for the target item, select the region of prices and use the coupon, which will help me a lot on critique.

Design Principles:

Affordances

Affordance refers to the perceived or actual attributes of an object that enable users to know how it could be used. For the object with strong affordance, it is simple for users to make sense how they can use it.

After searching the earphone in the searching bar, for B&H, there is a selection box on the left side, as showed in the figure.



B&H Best Buy

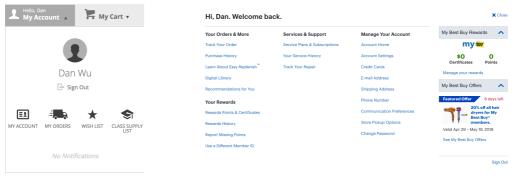
If he would like to choose earphone whose price is between \$100 to \$200, in the B&H website, he can fill in 100 and 200 in the blank manually. In the Best Buy website, he can choose two sections \$100-\$149.99 and \$150-\$199.99 or fill in the price section manually too. So, the Best Buy is more convenient for users. This function is with strong affordance since it is simple for users to make sense how they can use it.

Visibility

Visibility refers to the essential principle that everything important should be visible for users.

A website with good visibility should have all commands, modes, navigations and states be visible for users.

In the user account part, B&H and Best Buy have a lot of differences. As we can see in the screenshot, Best Buy has more details on what users can do on their account, orders or rewards. However, for B&H website, the boy would spend more time on finding how to update the shipping address.

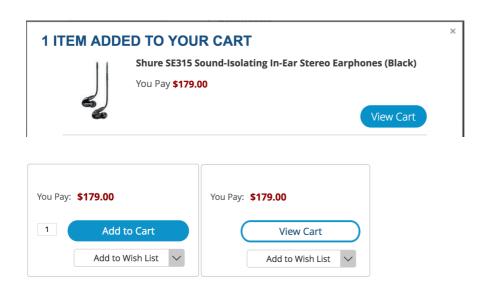


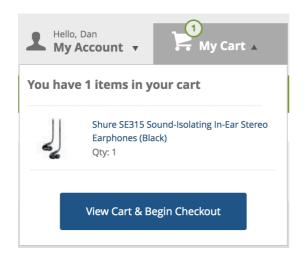
B&H Best Buy

Feedback

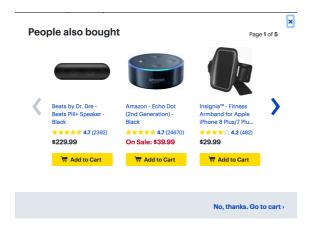
Feedback refers to the principle that when a user performs an action, what the system reacts. For the website with great feedback, when the user takes an action such as click a button, the webpage should respond clearly what has been accomplished.

In the B&H website, after the boy has chosen a pair of earphone that he loves most, then he clicks add to cart. Then a window pops up which is showed in the figure. It is a great feedback. In the meantime, the status of this item can become to "View Cart" instead of "Add to Cart". And also, on the upper right of the shopping cart icon, there will be a signal there and show what item is in the shopping cart.





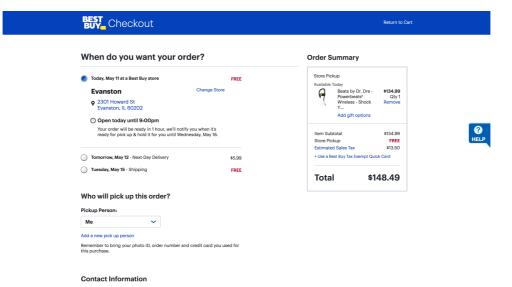
However, in the Best Buy website, when an item is added in the shopping cart, there is no feedback on the item itself but some recommended items, as we can see in the figure below, which is a negative aspect in Best Buy website.



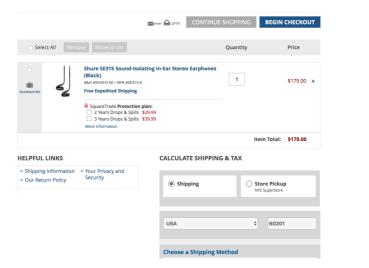
Conceptual models

Conceptual models are models that a composition of concepts that used by the system to let users understand the system and operate. A website that supports effective conceptual model can be smart enough to let users predict results of their actions without any guide and handle different unexpected problems.

Both websites have good conceptual models. When he wants to check out, in the Best Buy website, basic information is asked, and there are also "Order Summary" and "Return to Cart" part, which is smart enough to let users predict results of their actions without any guide and handle some problems, such as when he finds out that he has mistakenly chosen a wrong color of the earphone, he can come back to the cart and choose it again. If he has some problems, he can click the HELP button on the page.



In the B&H websites, some basic order information has also been listed. But, there are some differences. For example, this website shows some helpful links below the item detail information, which could better handle different unexpected problems by the user himself, especially when the customer service staffs are off-line.



Mappings

A good natural mapping, by which I mean taking advantage of physical analogies and cultural standards, leads to immediate understanding."

As we can see the layout of billing address in Best Buy, this perfectly matches how we write the addresses.

Billing Address

First Name	Last Name	
Address	Military (AFO.FPO) International Custome	
Apt #, Suite, Floor (option	nal)	
City	State	ZIP Code
	Select ~	

And as in the B&H, since they are breaking for the Shabbos holiday, I choose another mapping example as below. From the process of the orange bar, he can immediate understands how much time available for the Deal Zone.

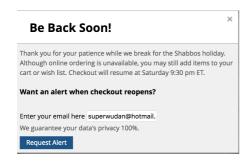


Constraints

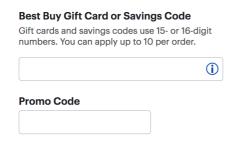
A constraint can make it clear what you can and cannot do. If a user shouldn't do something, don't let them! Add a constraint to restrict options.

In the B&H website, since they are breaking the Shabbos holiday, they are not allowed to check out today, so as the screenshot shows, the BEGIN CHECKOUT is gray now. When I click on BEGIN CHECKOUT, a window pops out.





For the Best Buy website, when he would like to pay, he even cannot input the letters in the first blank, but only numbers. And also, if he has input 16 numbers, he cannot input any more.

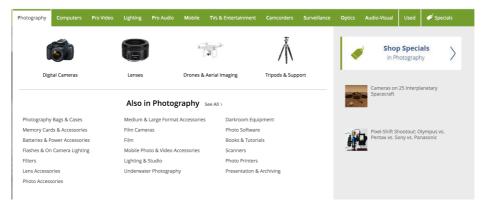


Consistency

Consistency refers to the principle that similar objects and similar operations should perform similar tasks. A website with high consistency should have elements and operations for the similar usage look similar to make users experience far easier.

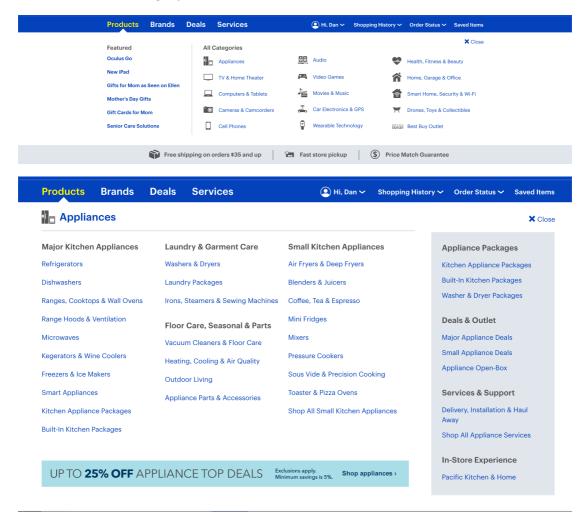
As for the positive aspects in B&H and Best Buy:

B&H: The top navigation is the categories for different kinds of products, such as Photography, Computers and Pro Video. In the drop-down list, they all list some popular products with pictures. And then many other products with a black bold font title and some links with light black font.



Best Buy: It is also consistent. The drop-down list of the heading bar, in the all categories, every category consists of a simple black and white icon with blue font

words after it. And when we click each of the category, it is separated into some subcategory with the deep gray bold font, and many small blue font categories below each subcategory.



But I have also found the inconsistency in the B&H website, which is at the bottom of the website. The link should all be Light Gray, however the weekend hours are Deep Gray, which makes the users feel a little bit uncomfortable.