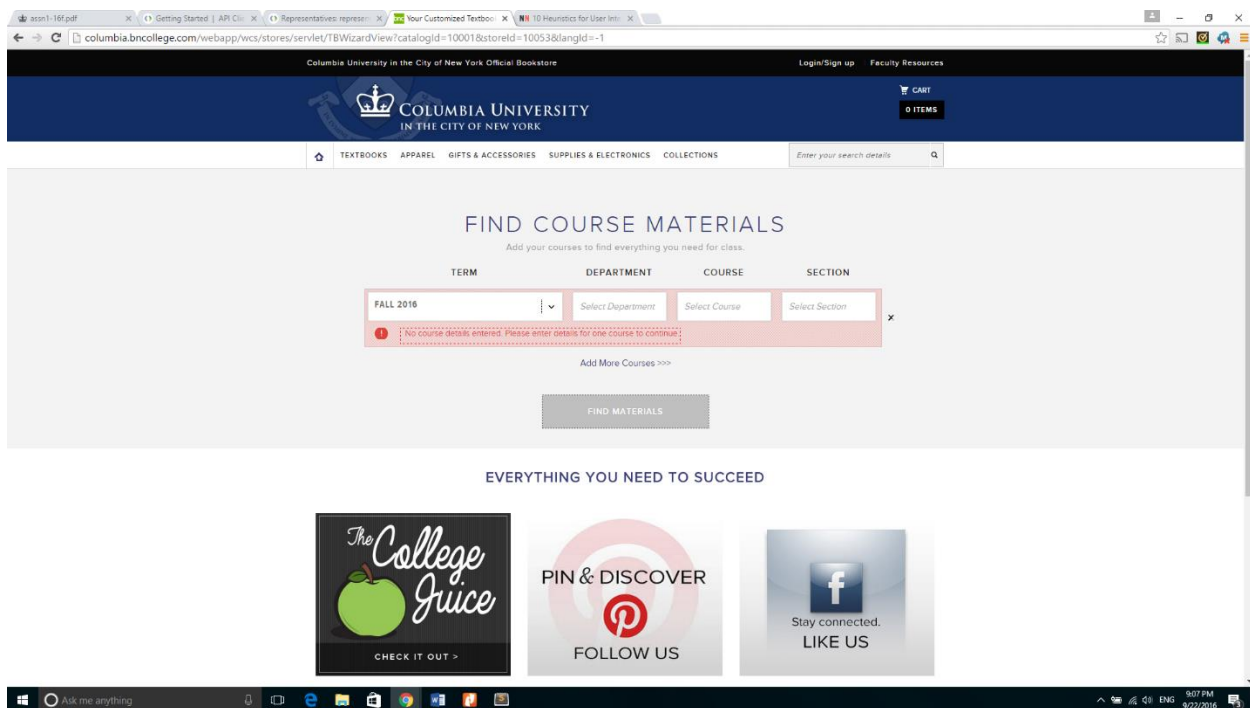


Part 1: Usability Analysis

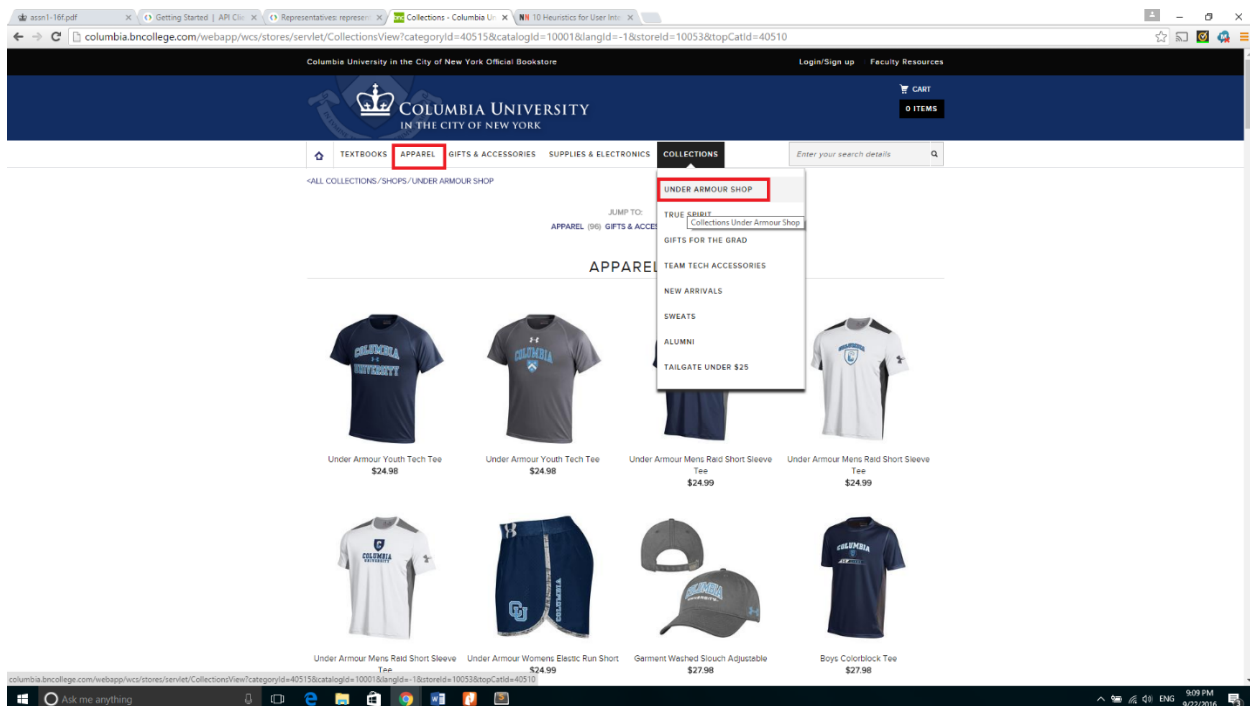
Five specific usability problems:

When conducting the heuristic analysis on the Columbia bookstore I approached their interface from both a mobile and a desktop perspective to better understand the usability of the site for all users. However, since I am limited to discussing five specific usability problems I observed with the site I will tend to focus my discussion on the desktop. This is in part that I am assuming that the majority of the users would most likely be visiting their site via desktop.

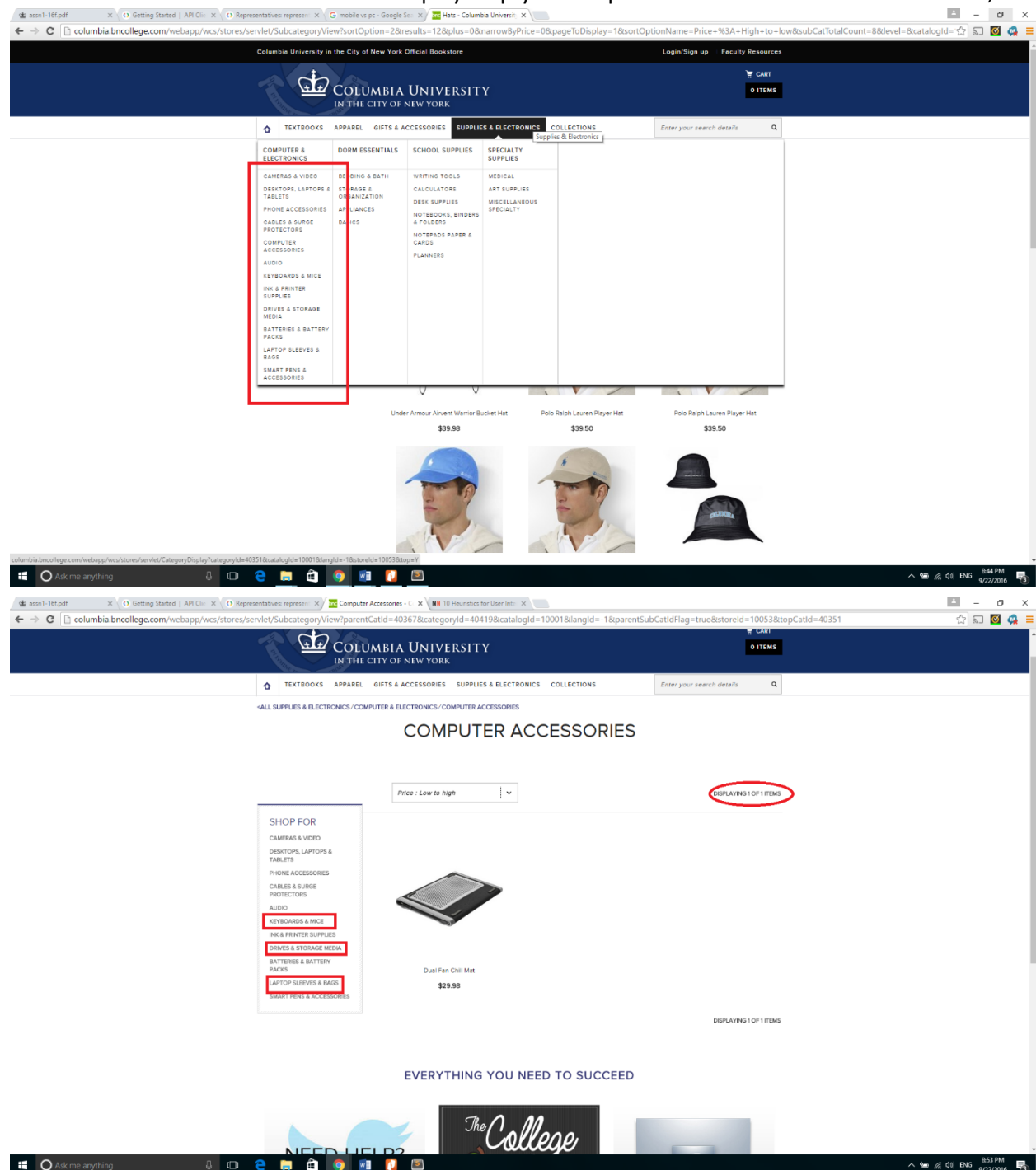
I will start with the ugly; the screenshot below I see as a serious issue and hindrance to users who are outside of Columbia who are looking to purchase a textbook. The feature below is meant guide Columbia students to find their textbooks for respective classes more easily by allowing them to search for their specific courses. This window is simply found by clicking “textbooks” on the main page, or hovering over the category textbooks then clicking “find textbooks”/“textbook rentals”. I do think that the feature itself is very useful for students, however, it prevents any other user who is not a student to search through their directory of textbooks. This I believe is a part of the heuristic of user control and freedom. At the very least the site should allow non-students to be able to browse through the textbooks, it is a book store after all. I would give this a 3 for severity, due to the impact this has on clients as well as the frequency that this may occur.



Another issue I found I do not think is nearly as severe as the previous one. It is in regards to the organization and placement of the “under armour shop.” As you can see below, this was found underneath the collections category; I as a user would have expected under armour to be considered part of the “apparel” category. Once you click on “under armour shop” it navigates you to a window with the top reading “Apparel” as well. I would suggest moving it under the category “Apparel” where it belongs. This is an issue with the heuristic of consistency and standards. I would give the severity a 1 due to it not being a problem frequently seen, it only increases the amount of time a user will take to find under armour.

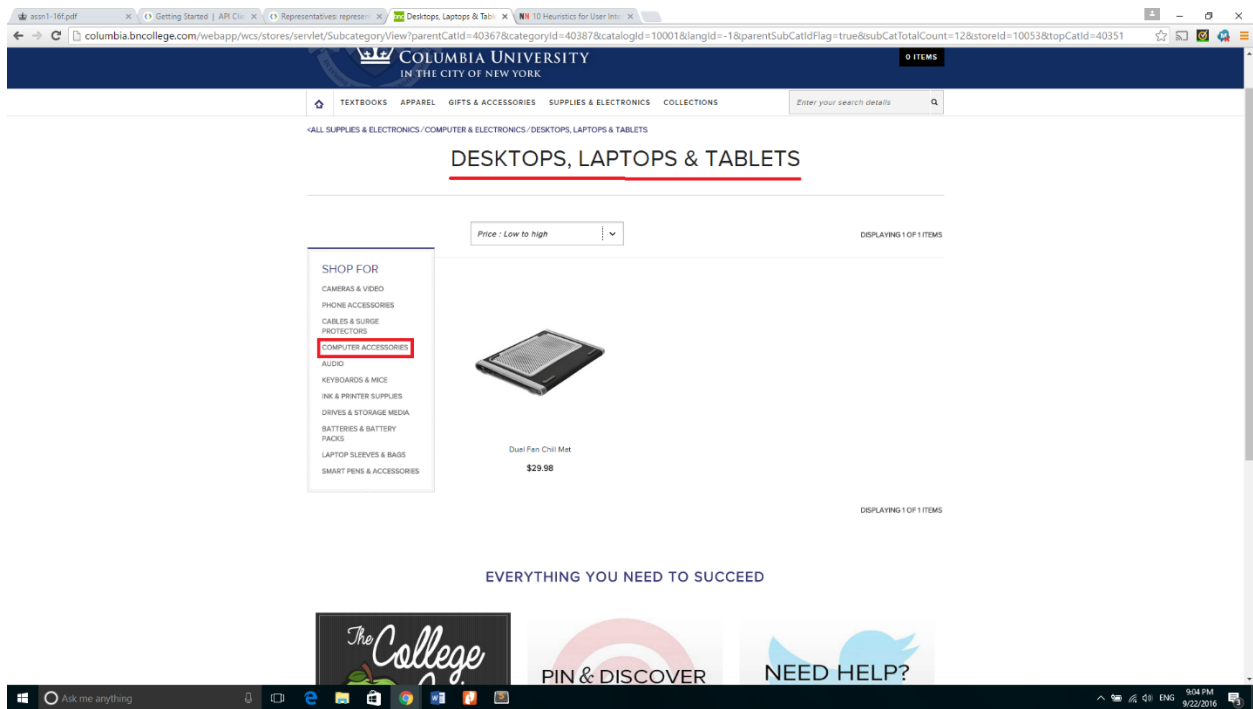


The next issue I found involves an excessive amount of categories located under “supplies & electronics”->“Computer & Electronics” section. When you hover over the head category of “supplies & electronics” much of the screen is taken up by empty white space that covers much of the site. Also,

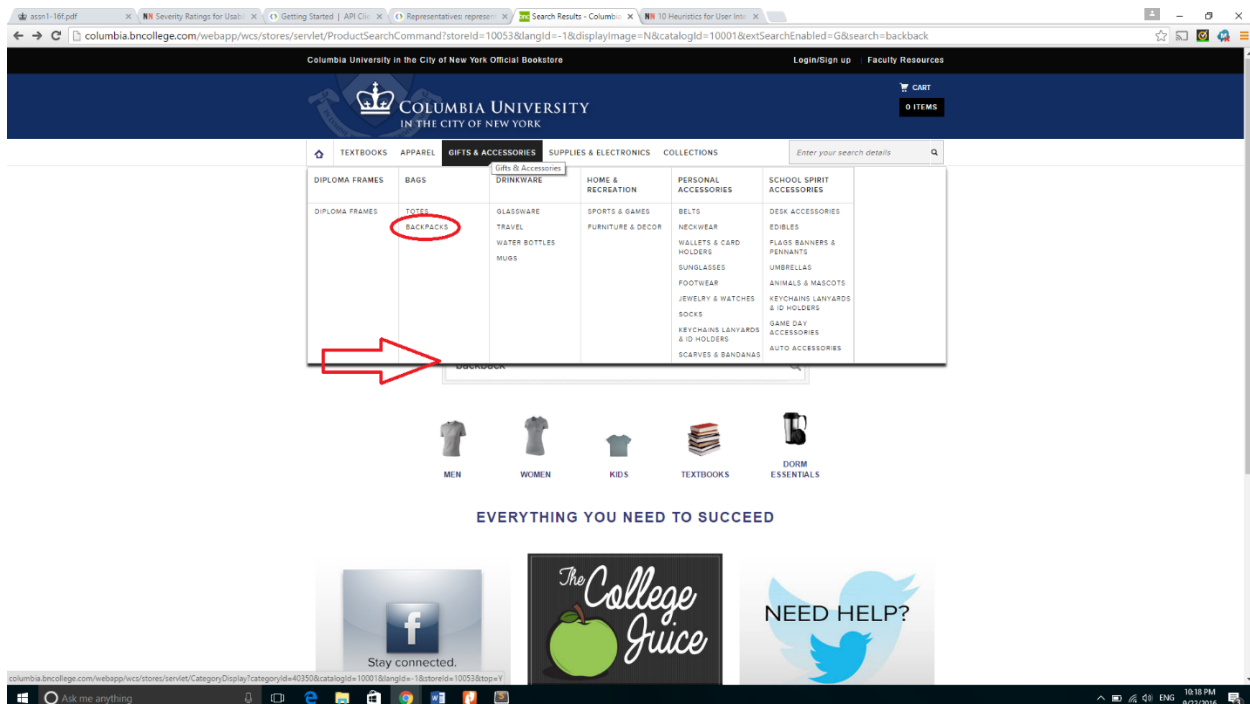


many of these sub categories are also useless. As shown above, many of these sub categories can be condensed because “computer accessories” can include: “Keyboards & Mice”, “Drives & Storage Media”, and “Laptop Sleeves”. On top of it each of these categories carry very few items anyway (example above contains one), including both “Computer Accessories” and “Desktops, Laptops &

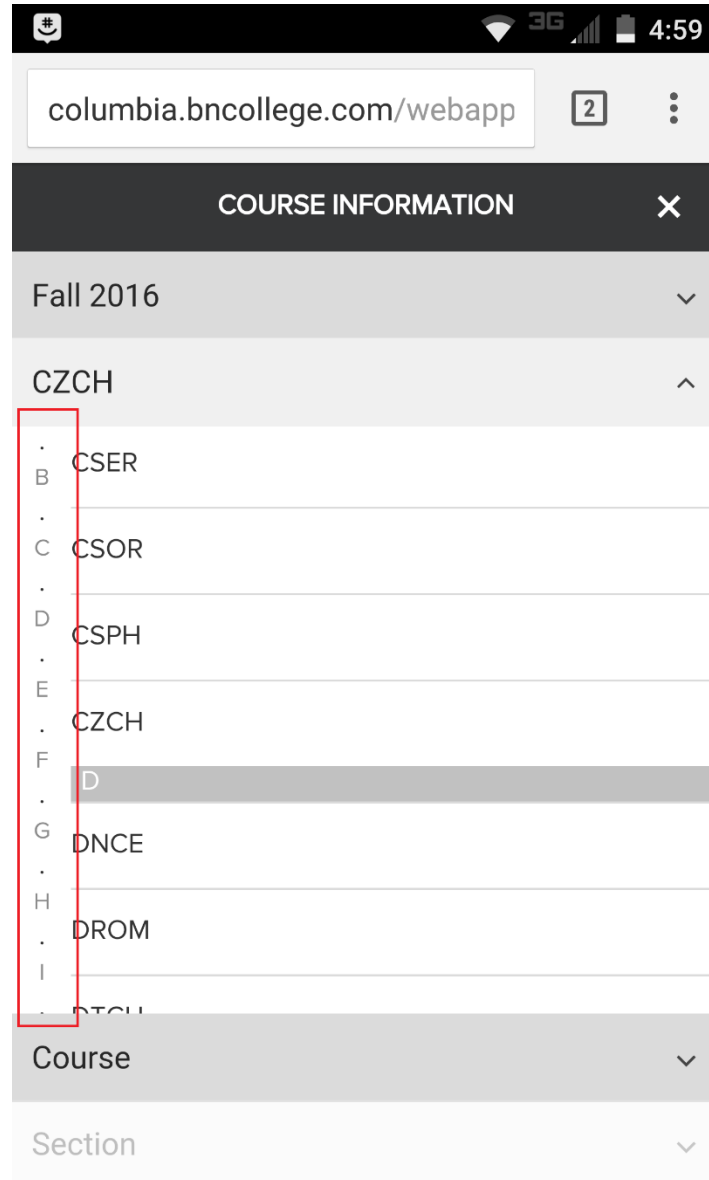
Tablets” which are identical with what is found inside the subcategory as seen above and below. I would rate this issue as a 2 on severity because it effects multiple heuristics such as: aesthetic and minimalist design, and consistency and standards.



The next issue is in regards to their search functionality. I searched multiple times different sub-category names where nothing came up saying they “We’re sorry, we couldn’t find any items that matched your search.” The example below is one of my searches, I have circled the sub-category “backbacks”, and I have searched backbacks as well. Yet the search failed. They do give helpful links for if your search comes up with nothing, so this is not an issue with error prevention. Rather this is an issue with flexibility and efficiency of use. A search functionality that actually works to some degree would greatly increase efficiency. I am giving this issue a heuristic severity rating of 1 because it does not create any direct problems with the site, and users can always navigate through other means, yet it could be a great addition for usability.



The last issue I would like to point out about the site is in regards to the mobile site. When typing in search information for textbooks (this is the same functionality of the very first issue I discussed) it is difficult as a user to get to the class you want. The red portion is supposed to allow the user to thumb down and scroll quickly but it is not wide enough to be effective. Also, there is no ability to just type in the class and you must click on it. Both of these problems could be solved fairly easily and make the usability better. I am giving this a severity of 1, because the user can just scroll if they are unable to use the sidebar. This belongs to the heuristic of flexibility and efficiency use.



Summary of Heuristics:

1. Visibility of system status:

A user interface should be able to inform users and provide feedback about what is going on in the system. One example is progress bars for a download, etc. I believe that the system at the book store does a good job for this heuristic, I never felt that I was unaware of what was going on in the system.

2. Match between system and real world:

This means that the system should be similar to what is expected in the real world. If it's a Vegas casino website include a lot of flashy graphics however if it is a highly technical website it should also provide the information in a formal manner. I believe that the interface of the Columbia bookstore does portray the image of a bookstore shopping center. Blue color schemes adhering to the Columbia blue, as well as the fact that the darker colors seem to give an intellectual vibe of a library.

3. User control and Freedom

This means that the user is able to search through the user interface easily as well as find pages or products they are browsing for. And if there is a mistake on their part they have ability to understand how to backtrack. I believe that for the most part the site does a good job of this. However, the freedom of users who are not part of Columbia to browse the bookstore is seriously hindered by how they have set up their search for textbooks by class functionality. They should provide some method of being able to see all the textbooks regardless of class. Without this, it disables all consumers who are either unsure of their classes or are not part of Columbia from purchasing any technical books on their site.

4. Consistency and Standards

This heuristic means that a user interface should be similar to other sites in aspects such as how certain actions the user can take will cause user interface to behave in a certain expected manner. Similar labels are important to this as well; otherwise you could end up getting your user lost in a nonstandard organization of a website. I think that I pointed out some errors that suffered on the site with consistency and standards. Mostly in regards to how they organized their site with some of the subcategories (under armour not in apparel) not making sense, or seemed to be out of place from conventional organization.

5. Error prevention

A user interface should provide methods for the user to not create errors easily. There should be easily navigable messages in case an error is thrown for the user to be able to understand how things went wrong. For example, asking a user to validate something that you cannot take back once the action has occurred in the system. This is done by giving clear instructions to the user of what they may be doing wrong. I encountered no problems such as these in the user interface.

6. Recognition rather than recall

This heuristic is meant to prevent users from forgetting an important piece of information that they will need later on. I found no instances where I felt like I had to go back to a previous page to obtain a piece of information to continue on with my user experience.

7. Flexibility and efficiency use

This involves making an experienced user be able to navigate the site faster. It provides the user with other means to complete the same task but by a quicker and easier method. I thought that if they improved the search functionality this could really increase efficiency with the locating certain items in the site. (The search bar is on the home page.) Also, I believe that on the mobile app if they were to allow for a user to type in their class info for finding a textbook or be able to easily scroll on the side to the chosen letter quicker they would be able to do the same tasks easier and quicker.

8. Aesthetic and minimalistic design

All user interfaces should be kept clean, simple, and should reduce clutter. The user interface should be made to be easily understood by the user as well as portray elements of being bold while not getting in the way of the function of the user interface. I believe that the excessive use of sub-categories under the "computer & electronics" category makes the interface not clean and it appears cluttered when the category pops down. However overall, the website does do good job of having a minimalistic design.

9. Help users recognize, diagnose, and recover from errors

This is slightly different from error prevention. Rather instead of preventing from errors from occurring with the interface, this heuristic talks about how a user should be able to go back or recover from a problem as easily as possible. An example would be filling out credit card information form and highlighting the areas that are incorrect after submitting. I did not encounter any substantial errors in regards to this heuristic for the website.

10. Help and documentation

This heuristic involves giving guidelines to using the interface to the user. This includes help icons, and tutorials which should be concise and give specific answers to specific and frequently encountered problems. The bookstore website did not have a lot of help documentation, but there was at no point where I felt like the user interface was too complicated to navigate. I never felt like I needed any help or a tutorial to find what I was browsing for. If I were to redo this heuristic examination I would attempt to see it through the lens of someone who does not understand website navigation as well. Maybe then I might find useful areas to add additional clear labels or pop up help. Overall, with my experience I felt like the website was clear enough to the user of how to use the interface.