CSC428 Assignment 1: Heuristic Evaluation and Usability Study of Bestbuy.ca
Liying Liu

Section 1: Introduction

The system being evaluated is Best Buy's main website (bestbuy.ca). The website allows customers to browse and purchase goods and learn more about the company's stores, services, and policies. The goal of the study is twofold: firstly, it evaluates the current website against the set of heuristics criteria as described by Jakob Nielsen; secondly, it investigates problem areas faced by members of a likely customer demographic (web-literate university students) whilst using the site to complete basic tasks. The report will recommend solutions for the pain points identified in the study. Since e-commerce is a rapidly growing field, it is important for websites to be user-friendly in order to remain relevant and competitive. The work described in this report aims to give insight into overlooked design flaws in the "real world" and guide future implementations of similar websites.

Section 2: Heuristic Evaluation

1. "Best Buy only" toggle (*Image: Appendix 2.1a*).
When the user goes to item listings, there is a toggle switch with the label "Best Buy only". It is unclear what is meant by this - since the website is Best Buy, a user would naturally think that all items belong to Best Buy. Upon further investigation, I discovered that the product listings include products from independent sellers, and the toggle switch presumably eliminates these listings when activated. Thus, a new or inexperienced user would likely not understand the function of the toggle switch.

   This issue violates Heuristic #2 because "best buy only" would be an unfamiliar term to a new user. I would give this issue a severity rating of 2 (minor usability problem). It is not too severe, because it is possible to browse the item listings without ever using the feature. However, a user might click on it by accident and not realize how it had affected the visible listings. Thus, the feature is irrelevant at best, and a potential cause of confusion and inconvenience at worst.

   To solve this problem, I recommend placing a question mark icon on the left of the label, which the user can either hover over or click on to get an explanation of the feature. This extra documentation would make it more clear and user-friendly for new users.

2. The system accepts a maximum of two filters applied for each category (*Image: Appendix 2.1b*).
The user is limited to choosing up to two filters for each filter category. For instance, if the user has selected to view "Dell" and "HP" brand laptops and want to see "Asus" brand laptops, the user must deselect either "Dell" or "HP".

   This issue violates Heuristic #7 because it makes browsing inefficient. The user is unable to easily tailor their browsing preferences. I would give this issue a severity rating of 3 (major usability problem). It greatly limits flexibility of use and there isn't really a reason why the system can't accept any amount of filters.

   To solve this problem, I would simply make the system allow the user to apply any amount of filters.

3. Price filter is inflexible (*Image: Appendix 2.1c*).
The price filter is in set increments. Coupled with the aforementioned Heuristics violation #2, this can be a major inconvenience for customers who have a budget that either has a large range, or a very specific range. An example of the first case (a large-range budget) would be if the user has a budget *up to $800*. In order to eliminate products outside of this range, the user would have to check four filter boxes. An example of the second case (a specific budget range) would be if the user wants to find an item in the $1200 to $1499.99 range. The system at present would allow the user to narrow down the results to items within the $1000 - $1499.99 range. That still gives the users irrelevant products that cost between $1000 and $1199.99.

   Like the previous issue, this issue also violates Heuristic #7 because of inefficiency of use and inability to allow users to tailor their browsing experience. I would give this issue a severity rating of 3 (major usability problem). It greatly limits flexibility of use and there isn't really a reason why the system can't accept an arbitrary price range.

   In addition to the suggested price ranges, I would add a function that allows the user to input a minimum and maximum price to filter the results by. This would greatly increase flexibility of use because it would not force the user to keep selecting filters in order to achieve their desired price range.

4. After you select a filter, the whole page refreshes, and you start at the top of the page (*Image: Appendix 2.1d*).
Whenever the user adds a new filter, the page refreshes and the user sees the top of the page. It is annoying for the user to have to repeatedly scroll down to the item listings every time a new filter has been applied. It also hinders the user's ability to see how the product results have changed (for instance, if the page did not refresh and reset, the user could easily compare the number of products displayed before and after a filter has been applied - *Appendix 2.1d*).

This violates Heuristic #7 because it slows down the user (the computer would have to reload each image, including the headers and links, costing browsing time). I would give this issue a severity rating of 2 (minor usability problem). It impedes on ease of use, albeit not drastically, and discourages the user from using the system for a long period of time.

To fix this heuristics violation, I would make the system refresh only the inventory section of the webpage, and keep the page at the same place, rather than scrolling back to the top.

5. Odd placement of recommended products section in specific product information page (*Image: Appendix 2.1e*).
When the user goes to the product page for a specific product, the recommended products are shown between the product overview and details/specs. The user, who has come to the page to view the specified product, would likely find the product-specific information more important than recommended products. Thus, the placement of recommended products makes learning about the specific product more difficult.

This violates Heuristic #8 because the recommended products section diminishes the visibility of the more relevant product specs section on the page. This design does not correctly prioritize the information shown. I would give this issue a severity rating of 2 (minor usability problem). It forces the user to scroll up and down in order to see all of the product-specific images and information, which can be tiresome. However, it does not actually prevent the user from accessing information.

To fix this heuristics violation, I would place the recommended products section below the product specs. Additionally, I think it would be helpful to put the product overview in the same section as the product details/specs (as the first tab in the section), so that the user can do even less scrolling to access different product-related information.

6. "Yellow Tag Sale" label (*Image: Appendix 2.1f*).
The "yellow tag sale" designation is confusing to new users. It is unclear whether it is a specific type of sale, or simply a term that Best Buy uses for all its sales.

This violates Heuristic #2 because it does not match conventional sale categorizations. A store typically has a regular sale section and a "clearance" section where more extreme sales are. Any other kind of sale label should come with an explanation for the user. It also violates heuristics #4 because users are left to wonder whether or not "yellow tag sale" means the same as a regular or clearance sale. I would give this issue a severity rating of 3 (major usability problem). I believe that it significantly impedes the user's ability to distinguish between various sale categorizations of products. Without understanding the different sale categories, users would not be able to efficiently search for products. The user might click on "yellow tag sale" thinking that all sale items would show, when in fact that is not the case.

To solve this problem, I recommend placing a question mark icon on the left of the label, which the user can either hover over or click on to get an explanation of the label. This extra documentation would make it more clear and user-friendly for new users.

7. Mismatch between category labels (*Image: Appendix 2.1g*).
On the item listings page, the system invites the user to select a product category by picture (with an accompanying label underneath). However, there is another category selection sidebar underneath with slightly different link names. This causes confusion for the user.

This violates Heuristic #4 because the slightly different link names cause the user to wonder if they mean the same thing and lead to the same results. I would give this a severity rating of 2 (minor usability problem) because it causes confusion for the user, but doesn't actually heavily impede on the user's ability to complete tasks.

I would recommend deleting the upper section where users are prompted to choose a category by picture. It is simply redundant and takes up space.

8. Give Specific Feedback function (*Image: Appendix 2.1h*).

Once the user clicks "Give Feedback > Give Specific Feedback", it doesn't let the user exit the feedback section (it would keep highlighting the part of the webpage you hover over) until they have clicked on something.

This issue violates Heuristic #3 because an undo option isn't being shown. I would give this issue a severity ranking of 2 (minor usability problem) because it mildly confuses and inconveniences the user, but does not catastrophically hinder site navigation. The user will likely click on something on the page in order to try to exit (which will then reveal a pop-up window that lets you exit "give feedback") or manually backtrack with the browser's previous page function (which will lead the user to the previous page and not the same page before the user clicked "give feedback", so the user will have to take an additional step in pressing the forward button on their browser). Additionally, it is a low-priority task because the "give feedback" function is not expected to be used as much as the other areas of the website.

To fix this problem, I recommend showing a translucent screen over the page when the user chooses to give specific feedback to show that it's in the "give feedback" mode. The part of the site the user hovers over should be outlined and highlighted (not greyed out). However, the screen should have an opaque grey "X" on the top right corner of the page that the user can click on to exit the "give feedback" mode. This will clearly show the user when they are in the "give feedback" mode or not and allow the user to easily exit if they clicked to give feedback by mistake.

9. Online support chat box (*Image: Appendix 2.1i*).
When the leftmost symbol is pressed, the chat box slides down to the bottom. This action doesn't match the icon, which represents minimizing the window size around its perimeter.

This violates Heuristic #4 because the symbol fails to represent the action the system takes, thus failing to follow conventional symbols. I give this a severity rating of 1 (cosmetic problem only) because it's a fairly minor graphics issue. It's certainly not the most used function on the site, and the icon does not lead to dire consequences if misinterpreted.

I recommend changing the icon to a downward-pointing arrow when the window is visible and can be pushed down, which will change to an upward-pointing arrow when the window is hidden and can be pulled up.

10. The home page (*Image: Appendix 2.1j*).
The home page has so many rows of products and information, that it's overwhelming to the user. There are deals and more deals (i.), a seemingly random list of recommended products (ii.), and repeated information (iii.).

This violates Heuristic #8, which calls for a well-thought-out and minimalist design. I'd give this issue a severity rating of 2 (minor usability problem). Information overload can discourage a user from using the site; however, it is not overly severe considering that users are unlikely to spend too much time on the home page because they have specific goals in mind.

I recommend deleting some of the sections on the main page. I would delete the repeated section with the shipping info as well as the second deals section labeled "more amazing deals". I would also delete the row of random products because 1) they are unrated and thus not very enticing, and 2) they are too varied to be relevant (products should be recommended after the user has browsed some items so that they're more relevant to the user's browsing history). I would also delete the "most popular categories" section because it 1) just lists the categories that a user already *expects to see from a tech products website* and 2) the categories are already visible in the Shop dropdown tab. Thus, the section is redundant, takes up space, and contributes to information fatigue.

Section 3: Usability Study Methodology

For this study, two participants were selected to participate in a private user testing session lasting no more than one hour. Each session commenced with the investigator reading the Study Protocol aloud, asking the participant if they have any questions, and collecting the participant's signature on the informed consent form. Next, the participant was asked to open bestbuy.ca and start a screen-recording device on their own laptop. The decision to have the participants use their own laptops, rather than the laptop of the investigator, was made on the belief that allowing them to use the laptop they were already familiar with would reduce stress and confusion. After the screen-recording device was turned on the participant's laptop, the investigator commenced the "active intervention and conceptual model formation" part of the study. Here, the participant was asked to navigate freely through the bestbuy.ca site and comment on their first impressions and expected results of their interactions, while the investigator made observations and took notes on her own laptop. After the participant felt satisfied with their exploration of the site,

the investigator gave the task sheet to the participant, commencing the "task completion" part of the study. The investigator made further observations and notes on her laptop. Once the participant completed all the tasks, the screen-recording device was stopped. Next, the investigator read the post-study exit interview questions, which were prepared on a Google Docs word document, and transcribed the participant's answers onto the document. Next, the investigator asked some session-specific questions and recorded the answers at the bottom of the document. The investigator concluded the session by thanking the participant and asking them to send the screen recording via Facebook, in case they need to be examined further.

The five tasks in the "task completion" part of the study are as follows (the task instruction sheet given to the participants is provided in *Appendix 2.2c*):

1. The user must place a product in the shopping cart that satisfies the given specs. I chose this task because purchasing items is one of the main tasks performed on an e-commerce website. This task would allow me to observe whether or not the product categories and filters are intuitive and easy to use.

2. The user must find the lowest reviews of a popular item. I chose this task because customers often want to read reviews before buying a product. I purposely instructed the user to find negative reviews of a popular item in order to see if it was easy for them to locate all of the item's reviews (rather than just looking at the select positive reviews shown on the product page) and to sort the reviews from worst to best.

3. The user must find the return policy of a specified item type. I chose this task because it's a typical task. Additionally, it forces the user to scroll to the bottom of the homepage to find the customer support links. I wanted to check that the placement of these links is intuitive for the user.

4. The user must put a gift card in their cart. Ordering a physical gift card online probably isn't the most common task. However, I wanted to include this task to see where the user would intuitively go in order to perform this task. When surveying the site on my own, I noticed that there's a link to the gift card page at the very bottom of the homepage, under "customer support". I thought the placement of this link was odd and decided to use the user testing session as an opportunity to find a better place for the link.

5. The user must find the location of the nearest store to their current location. I chose this task because store location is a typical piece of information potential customers are interested in. I wanted to see if the "stores" link was easily understood by the user to mean store locations. Additionally, I wanted to observe how users like to input addresses into a blank field (if they type the city, postal code, etc). Knowing this information would improve automatic location suggestions. Lastly, I wanted to test the effectiveness of the arrow button next to the search bar. The arrow button automatically detects the user's current location. The function of the button was not obvious to me, and I wanted to check with other users whether it was obvious for them or not.

Section 4: Usability Study Observations

The observations for each part of the study are as follows:

Active intervention and conceptual model formation: Both participants understood the shopping links and layout of the site. They expressed confusion at some labels on the homepage, such as "sponsored products", "certified open box" vs "open box", and "best buy for business". Participant 2 strongly disagreed with the recommended gifts links, which were separated by gender but showed nearly identical types of products. Both participants expressed some discontent with the visual appearance of the homepage (Participant 1 said the visuals were ugly, redundant, and inconsistent, whereas Participant 2 remarked that the homepage was too long).

Task 1: Neither user struggled with accessing the laptop category, which was a good start. Once they got to the laptop page, Participant 2 was confused about the banner shown above all of the product listings - when they saw the banner, Participant 2 initially thought that they could not filter the results, but later found that the filters were further down the page. Both users seemed perplexed at the fact that only two price filters can be selected. Participant 2

wanted to narrow down the results further by selecting "sale" and "open box" filters, and was disappointed to discover that this action did not successfully eliminate "refurbished" products from the results.

Task 2: Both participants successfully used the search box to search for the game. Participant 2 remarked that they were unsure of the difference between some of the listings, and chose the one with the most reviews. While Participant 2 had no problems with sorting the reviews from lowest to highest, Participant 1 scrolled past the sorting box and seemed to struggle with finding a negative review.

Task 3: Participant 1 efficiently found the correct return policy; the only difficulty they seemed to have was locating the correct link for the laptops category. Participant 2 was thrown off track from clicking the "common return and exchange questions" link from the return and exchanges page. After reading that page, Participant 2 remarked that the questions did not seem common at all. Eventually, Participant 2 was able to find the correct returns information without any help from the investigator.

Task 4: Participant 1 completed this task successfully by utilizing the search bar. Participant 2 initially tried finding the gift card category in the product category dropdown, to no avail. They then tried using the search bar, which gave them the desired results.

Task 5: Both participants successfully navigated to the store locator page from the homepage (Participant 2 thought it was strange that a new tab was opened). Participant 1 immediately clicked the arrow icon that detected our current location, successfully completing the task. Participant 2 used the search bar to type in the postal code. They struggled to find the nearest store because the map did not indicate current location. They did not seem to notice that the store listings were ordered by decreasing proximity to current location (with distance indicated in kilometres. After noticing the arrow icon, Participant 2 remarked that they did not know its function. After clicking it, they understood that it simply detects the user's present location.

Post-study interview: Participant 1's interview answers suggested a neutral to negative experience with the site. They stated that they were unlikely to use it again unless they had a specific product in mind. The issues Participant 1 had with the site seemed to focus on the organization of site content and visual appearance.

Participant 2 seemed to have a more positive experience with the site. The primary complaint they had was the choice and placement of links and tabs.

Interestingly, both participants commented negatively on the large banner ad that appeared above the list of products and filters.

Section 5: Interpretation - System strengths and weaknesses

1. The site's greatest weakness is its ability to organize information. The participants were frequently confused by the product categories/labels and found it difficult to distinguish between certain categories. For instance, Participant 2 didn't find the categories "gifts for him", "gifts for her", and "gifts for tech lovers" to have clear and significant meanings. This problem violates Nielson's 4th heuristic, which states that the system should not make the user wonder if words have the same meanings.

2. Another issue is the visual design of the site. The placement of the banner ads on the main page and product listing ages distract and confuse the users, and the images shown in them are not engaging and exciting. The volume of information makes the main page too long. This violates Nielson's 8th heuristic, which states that systems should adopt a minimalist design.

3. One of the site's strengths is its search function, which successfully recommends relevant products and pages. It's proven to be a good starting point to find specific products (e.g.: the Pokemon game and gift card).

4. Another strength is the site's product pages (besides the issue of the large banner ad). Each product is clearly listed with their ratings, prices, discounts, and availability. It is organized in a similar way to other e-commerce sites.

The filter function is generally easily understood, although there's room for further improvement for efficiency of use.

Section 6: Suggested improvements

1. I would decrease the number of product recommendations on the main page. During the free-browsing session, both participants expressed confusion at why there were two sections of deals. The current layout shows too many products and is overwhelming to the user, which violates Nielson's 4th heuristic of minimalist design.

2. I would delete the "Best Buy gift card" link under the Customer Support label at the bottom of the page. Neither participant looked to the bottom of the page to complete Task 4. I would instead put a link to the gift cards page at the bottom of the shop by category drop-down, where it could be accessed faster.

3. I would delete the banner ad that would occasionally appear before the product listings on a product results page. Both users thought it was confusing and irrelevant. Removing it completely would make the page more minimalistic and easy to navigate.

4. Although this was already mentioned in my independent heuristics evaluation, the usability study further proves that the system could allow the user to choose more than two filters per category and also allow the user to filter products with a price range. Both participants expressed confusion and frustration at the current price filtering function, which only allows two price ranges to be selected at a time.

5. I would make the reviews section more user-friendly by adding a section for distribution of reviews, where the user can click to filter reviews by star rating. Rather than a "show more" button, I would add pagination to the reviews so that the user can jump between reviews of different star ratings. Following Participant 1's suggestion, I would move the sort reviews function closer to the overall star rating. Lastly, the cursor changes to a hand when the user hovers over the stars, but the stars are not in fact clickable. Since the hand typically indicates a clickable feature, the site's coding should be fixed so that it does not change on the star reviews, which aren't clickable.

Section 7: Conclusion

The work described in this study reveals that the Best Buy website is generally functional and intuitive, but could be improved to enhance flexibility of use and visual appeal. Overall, the site seems to prioritize sales, with its excessive product recommendations, aggressive banner ads, and its subpar product reviews section. These tactics end up.confusing and irritating the users. The majority of the recommendations aim to decrease clutter on the pages. Some issues, such as ambiguity of label and icon meanings, cause additional confusion to new users, but could be overcome and understood with trial and error. These issues therefore have a lower priority than the information architecture issues.

<u>Appendix 1: Lesson learned - Comparison of different techniques</u>

When I conducted the "silent observer method" with Participant 1, it was more difficult to identify specific grievances the participant had with the system. I had to deduce the participant's struggles from their facial expressions and on-screen cursor movements (for example, when facing difficulty, a user's cursor movements may become more frantic). Thus, notes were more sparse. Additionally, mere observation of these signs can lead to misinterpretation (for example: is the user frowning because they actually have difficulty with the system or did they see an offensive picture?). Without the participant's direct feedback, the silent observation results run the risk of reflecting the investigator's own bias. The advantage of this method is that the participant is less likely to lose focus in the middle of the task by conversing with the investigator.

The "think aloud method" conducted with Participant 2 was less stressful and garnered more detailed notes. Because the participant was able to vocalize how they felt about each step of the simulation, I could easily record their frustrations and opinions. I think the advantage of this method is being able to get more detailed opinions from the participant. One potential downside (which I fortunately did not experience), is that the user may go on a rant about irrelevant opinions or waste time by asking the investigator too many questions that they're not allowed to answer.

Appendix 2: Raw data

Appendix 2.1: Heuristic Evaluation screenshots

a)

b)

The filter sidebar, when one filter is applied:

bestbuy.ca/en-ca/category/laptops-macbooks/20352?path=category%253aComputers%2B%2526%2BTablets%253bcategory%253aLaptops%2B%2526%2BMacBooks%253bbrandName%253aASUS

U of T Library   ACORN   Quercus   Campus Maps   G Google   Bing   W Wikipedia

Brands (1)

- [ ] SAMSUNG (4)
- [ ] APPLE (571)
- [ ] HP (3,370)
- [x] ASUS (1,341)
- [ ] ACER (315)
- [ ] LG ELECTRONICS (4)
- [ ] LENOVO (2,686)
- [ ] DELL (1,698)
- [ ] MICROSOFT (90)
- [ ] TOSHIBA (42)
- [ ] GOOGLE (9)
- [ ] PANASONIC (42)
- [ ] MSI (615)
- [ ] GIGABYTE (259)
- [ ] LENOVO GROUP LIMITED (114)
- [ ] HP INC. (106)
- [ ] DELL TECHNOLOGIES (85)
- [ ] HP BUSINESS (38)
- [ ] ACER INC (36)
- [ ] ALIENWARE (36)
- [ ] EUROCOM (35)
- [ ] PANASONIC TOUGHBOOK (27)

ASUS VivoBook 15.6" Laptop - Slate Grey (AMD Dual Core R3-3200U/512GB SSD/8GB RAM/Windows 10)
☆☆☆☆☆ (0)
$649.99
✓ Available online
✓ Available at nearby stores

ASUS C202SA 11.6" Chromebook - Dark Grey (Intel Dual-Core Celeron N3060/16GB eMMC/2GB RAM/Chrome OS)
★★★★☆ (4)
$199.99 SAVE $50
✓ Available online
✓ Available at nearby stores

ASUS ZenBook 14" Touchscreen 2-in-1 Laptop - Grey (Intel Core i5-10210U/512GB SSD/8GB RAM/Windows 10)
☆☆☆☆☆ (0)
$1,199.99
✓ Available online
⊘ Sold out in nearby stores

ASUS 14" Laptop - Star Grey (Intel Celeron N4000/64GB eMMC/4GB RAM/Windows 10 S) - English - Only at Best Buy
★★★☆☆ (12)
$349.99
⊘ Sold out online
⊘ Sold out in nearby stores

ASUS Zephyrus M Thin 15.6" Gaming Laptop (Intel Core i7-9750H/512GB SSD/16GB RAM/NVIDIA GTX 1660Ti)
★★★★½ (13)
$1,799.99 SAVE $200
✓ Available online
✓ Available at nearby stores

ASUS Chromebook Flip 14" Touchscreen 2-in-1 Laptop (Intel Cm3-8100Y/64GB eMMC/4GB RAM/Chrome OS) Eng - Only at Best Buy
★★★★½ (16)
$699.99
⊘ Sold out online
⊘ Sold out in nearby stores

ASUS C223NA 11.6" Chromebook - Grey (Intel Celeron N3350/32GB HDD/4GB RAM/Chrome OS)
★★★☆☆ (13)
$249.99 SAVE $50
✓ Available online
⊘ Sold out in nearby stores

ASUS ZenBook 14" Laptop - Royal Blue (Intel Core i5-8265U/512GB SSD/8GB RAM/Windows 10)
★★½☆☆ (3)
$999.99
✓ Available online
⊘ Sold out in nearby stores

The filter sidebar, when two filters are applied (notice how the other filter options are no longer visible):

c)

Recommended solution (from kijiji.ca):

Price

from - to Update

d)

The appearance of the screen immediately after clicking the "less than $300" filter from the screen in *Appendix 2.1c* (notice how the user is taken to the top of the page):

e)

📖 U of T Library   🌸 ACORN   ⭕ Quercus   🗺 Campus Maps   G Google   Ⓑ Bing   W Wikipedia

Home › Computers & Tablets › Laptops & MacBooks › Laptops › Product Details

HP 15.6" Laptop - Silver (Intel Core i5-1035G1/256GB SSD/8GB RAM/Windows 10)

★★★★☆ (2)   Write a Review ›   Model Number: 15-dy1035cs   Web Code: 13992163

SAVE $150
$649⁹⁹
SALE ends: February 8, 2020

⚙ **4 Special Offers Available**
- Get an HP DeskJet 3755 (Seagrass colour) printer for $29.99 (save $60) when you buy any laptop, desktop, or tablet.

Show More Offers ⌄

Add to Cart

Reserve In Store

Sold and shipped by Best Buy

✓ Available online
This will be delivered on February 4, 2020

Reserve & Pick Up
Showing stores near Toronto

✓ Bay & Dundas   Reserve
✓ Yonge & Eglinton   Reserve
✓ Keele & St. Clair   Reserve

Check Other Stores ›

Geek Squad Protection Plan
See Benefits ›

| No Plan $0.00 | 2 Years $159.99 | 3 Years $219.99 |

4 Years $259.99

1 of 4

Overview

Be productive or stay entertained anywhere with this HP 15.6" laptop. Its 10th generation Intel Core i5-1035G1 processor and 8GB DDR4 SDRAM are sure to offer smooth and lag-free performance. The 256GB hard drive amply meets your file storage needs, and the expansive display delivers a crisp and clear picture.

You Might Also Like

HP OMEN 600 Optical Mouse - Black
★★☆☆☆ (14)
$61.98 SAVE $3

HP 2m (6 ft.) USB C/C Cable (2UX18AA#ABB)
☆☆☆☆☆ (0)
$29.99

Microsoft Office Home & Student (PC/Mac) - 1 User - English
★★★☆☆ (5)
$169.99

Kingston DataTraveler G3 64GB USB 3.1 Flash Drive - 2 Pack
☆☆☆☆☆ (0)
$26.99 SAVE $2

🛒 Add to Cart   🛒 Add to Cart   🛒 Add to Cart   🛒 Add to Cart

More Information   Details & Specs   What's Included   Reviews   Return Policy

- 1.0GHz quad-core Intel Core i5-1035G1 processor and 8GB DDR4 SDRAM allow the computer to smoothly run applications, stream videos, and handle daily multi-tasking
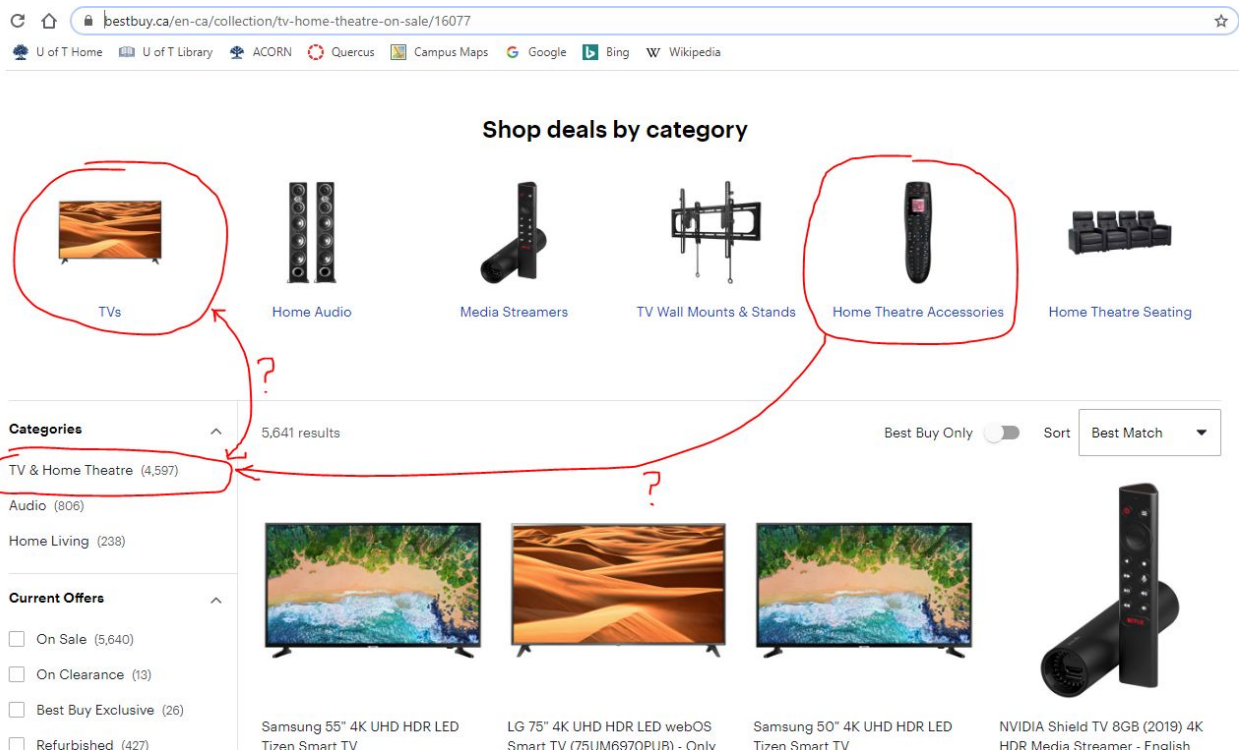- 256GB solid-state drive offers ample space for storing software and files with quick read and write times

f)
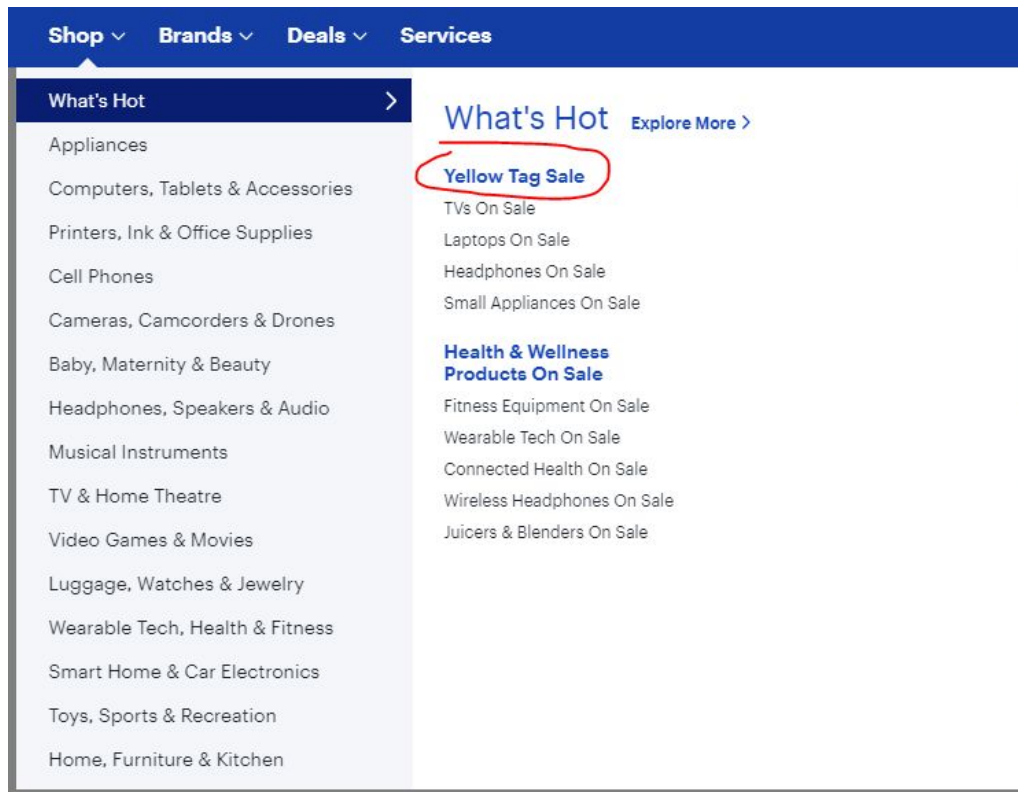
g)

h)

Steps to replicate: Give feedback screen > Give specific feedback:

U of T Library   ACORN   Quercus   Campus Maps   G Google   Bing   W Wikipedia

Shop deals by category

TVs   Home Audio   Media Streamers   TV Wall Mounts & Stands   Home Theatre Accessories

BEST BUY   ×

I'd like to give...

Specific feedback   General feedback

on a part of this page   on my overall
                          experience, or Best Buy
                          in general

Powered by Usabilla

$488.99 SAVE $111 $1,299.99 $429.98 SAVE $70 $169.99

✓ Available online   ✓ Available online   ✓ Available online   ✓ Availab
✓ Available at nearby stores ✓ Available at nearby stores ✓ Available at nearby stores ✓ Availab

What the user sees on the "Specific Feedback" screen (note the highlight around the area the cursor is located):

Recommended solution:

i)

j)

BEST BUY

Search Best Buy

Big game.
Bigger savings.
Kickoff your weekend with a new home theatre setup.

Shop Now

Fast, free shipping
with orders over $35

Low Price Guarantee
We won't be beat on price

Reserve and Pick Up
Get your order in as little as 20 minutes

Our hottest deals

Save up to $200 on select laptops.
Plus get a 1TB Seagate hard drive for $60 (save $20) with any laptop purchase.
Shop now ›

Get a free Harman Kardon Aura speaker (value of $400) when you buy select headphones.
Shop now ›

Get astonishing deals on the latest unlocked phones.
Shop now ›

Save up to $250 on select Roborock vacuums.
Shop now ›

Find the perfect gift for your special someone.

Explore Valentine's Day Gift Ideas

Save up to 50% on select jewelry.
And treat your special someone, or just treat yourself.
Shop now ›

Get up to $500 off when you purchase 2 or more major kitchen appliances.
Conditions and exclusions apply.
Shop now ›

Score amazing savings on Amazon Echo smart speakers and displays.
Shop now ›

Score more and save with great deals on memory and storage devices.
Shop now ›

Like-new products at like whaaat!? prices.

Save a ton on mint-condition products that have been inspected and certified by Geek Squad agents.

Shop barebones deals

More amazing deals

Samsung 55" 4K UHD HDR LED Tizen Smart TV (UN55NU6900FXZC)
★★★★☆ (30)
$498.99 SAVE $101

Lenovo Yoga C930 2-in-1 Laptop 13.9" FHD Intel Core i7 8GB RAM
☆☆☆☆☆ (0)
$1,199.99 SAVE $100

Canon Rebel T7 DSLR Camera with 18-55mm Bag & Memory Card
☆☆☆☆☆ (0)
$599.99 SAVE $100

KitchenAid Artisan Design Tilt-Head Stand Mixer - 5Qt (KSM150) - Aqua Sky
★★★★★ (78)
$549.99 SAVE $50

Samsung Galaxy Watch Active2 44mm Smartwatch & Galaxy Buds Truly Wireless Headphones - Black
★★★★★ (2)
$409.98 SAVE $100

Dell XPS DDD Full HD 128g Laptops with CLP 8GB Screen & Wi-Fi
$80.99 SAVE $40

Harmony Flex 8 for Essentials Plus Set - Black - Only At Best Buy
★★★★☆ (26)
$63.99 SAVE $50

Sony WH700 Noise Blocking Headphones - Black
★★★★☆ (17)
$120.99 SAVE $70

Acer Nitro Gaming PC Intel Core i5-9600K/8 8GB/GB AMD Radeon GTX 1060...
★★★★★ (19)
$999.99 SAVE $100

Linksys Velop AC2200 Whole Home Mesh Wi-Fi System (WHW0303) CA - 3 Pack - Black
★★★★☆ (327)
$399.98 SAVE $100

Shop some of our most popular categories

Shop new and exciting

Sponsored products

Cool tech from top brands

SAMSUNG   dyson   fitbit   Google   ASUS   Canon

Customer Support   Account   Services   Be the first to know

Appendix 2.2: Usability study data

a) Study Protocol Sheet

STUDY PROTOCOL

Project Title: "Interviews and Observations of University Students' Navigation of Best Buy's Main Site (bestbuy.ca)".

Investigators: Liying Liu (liying.liu@mail.utoronto.ca)

Background and purpose of Research: The purpose of our study is to understand how computer-literate university students navigate bestbuy.ca to complete common tasks associated with online storefronts. The study will identify problem areas with the current site design and help us derive requirements for the design of interactive computational media that are intended to be useful to this demographic.

Participant selection and eligibility: Participants will be chosen from University of Toronto's undergraduate student body. They will be identified via Facebook and selected according to mutual availability. In general, they will be characterized by age (18-23 years old), occupation (current university students), and geographic location (Toronto). They must also be regular users of the computer and the Internet.

Procedure: We will brief participants about the purpose of the study, explain the attached consent form to them, and ensure that they consent to participate and sign the consent form. We will then engage the participants in a semi-structured site-navigation session and interview lasting no more than one hour. We will also, with their permission, make observations as follows: the investigator will make observations and take notes on her laptop and the participant will be required to record their computer screen while they navigate bestbuy.ca. The study will be conducted in one of the university's private group study rooms.

Voluntary Participation & Early Withdrawal: The participation in this study is entirely voluntary, and participants are free to cease participation at any time, for any reason, without the need to give any explanation. At their request, we will delete any of their data and it will not be used in our analysis or any subsequent reports or presentations.

Relationships: The participants are friends of the investigator.

Risk and benefit: There are no anticipated risks associated with participation in this study, beyond those associated with everyday use of computer (e.g. eye strain and back pain). The only benefit will be to contribute to the education of the investigators.

Compensation: Participants will receive no compensation.

Information sought: The information to be sought is described in the attached task instruction sheet and post-interview question form.

Privacy and confidentiality: Information will be kept confidential by the investigators. Names or other identifying or identified information will not be kept with the data. The only other use will be to include excerpts or copies in the assignment submitted, but names and other identifying or identified information will not be submitted.

b) Consent forms

Consent Form: Interviews and Observations of University Students' Navigation of Best Buy's Main Site (bestbuy.ca)

I hereby consent to participate in a study conducted by Liying Liu for an assignment in University of Toronto Computer Science 428, Human-Computer Interaction.

I agree to participate in this study the purpose of which is to identify weaknesses in Best Buy's current website, and to better understand good design practices for the implementation of similar applications.

I understand that

- the procedure involves a free-exploration session, a task-completion session, and a post-study exit interview, during which the investigator will record notes and observations.
- I will receive no compensation for my participation.
- I am free to withdraw before or any time during the study without the need to give any explanation.
- all materials and results will be kept confidential, and, in particular, that my name and any identifying or identified information will not be associated with the data.

Lesley Hwang_____   _____   2/31/2020_____
Participant's Printed Name   Participant's Signature   Date

Liying Liu_____   _____
Experimenter Name   Experimenter's Signature

Consent Form: Interviews and Observations of University Students' Navigation of Best Buy's Main Site (bestbuy.ca)

I hereby consent to participate in a study conducted by Liying Liu for an assignment in University of Toronto Computer Science 428, Human-Computer Interaction.

I agree to participate in this study the purpose of which is to identify weaknesses in Best Buy's current website, and to better understand good design practices for the implementation of similar applications.

I understand that

- the procedure involves a free-exploration session, a task-completion session, and a post-study exit interview, during which the investigator will record notes and observations.
- I will receive no compensation for my participation.
- I am free to withdraw before or any time during the study without the need to give any explanation.
- all materials and results will be kept confidential, and, in particular, that my name and any identifying or identified information will not be associated with the data.

Cheryl Lao
Participant's Printed Name

2/31/2020
Participant's Signature   Date

Liying Liu
Experimenter Name

Experimenter's Signature

c) Task instruction sheet

Interview Tasks

Task 1: Add a laptop to your shopping cart.
You're looking to buy a new laptop. Since your old laptop was made by Dell, you decide to stick with the same brand. You want to find a laptop that has a screen size of at least 15 inches and costs less than $800. Try to find a laptop that satisfies your requirements and put it in your shopping cart.

Task 2: Finding the customer reviews of a specific product.
Your little brother has been bugging you to buy him the "Pokemon Ultra Moon" game for Nintendo 3DS. However, you're pretty broke and you know he has a lot of unplayed games. Using the site, find some disheartening feedback from past buyers that would help you convince your brother why you shouldn't buy the game for him.

Task 3: Find the return policy of a specified item.
You bought a laptop three days ago, and are thinking of returning it. However, you misplaced the receipt. You're sure it's in one of your many purses. Using the site, find the number of days you have to find the receipt before you're no longer eligible for a refund.

Task 4: Order a gift card
You want to get your PEY manager a present for his birthday. He has been raving about the latest gaming system, which you obviously can't afford with your meager salary. You think that ordering him a $25 Best Buy gift card is your next best option. How would you do that on this site?

Task 5: Find the details of your nearest store.
You're doing Liying's usability study when, suddenly, her phone malfunctions and is unable to record the interview. You advise her to go to a Best Buy store to get the phone examined right away. Use the website to check the details of the store that's closest to your current location

d) Participants' screen recordings:

Participant 1: https://drive.google.com/file/d/1EmwDuw0dwQwjY0daJO3DuU-wWCP-Lf7o/view?usp=sharing
Participant 2: https://drive.google.com/file/d/1qw2ZzddGGqPpjpQfaRDJ1VQs6kLkUymS/view?usp=sharing

e) Usability Testing and Interview Data:

Participant 1 - Usability Study Observations

Active intervention and conceptual model formation (5:41 pm)

"They have jewelry"
If i don't click anything

"Shop now" -> take me to specific product or more product"

Click "on sale" -> filter and give me the on sale items

Arrows -> intuitive expansion of filters

Advertising ("shop now" and "arrows" are interactive) -> main screen
Advertisements are kind of ugly

Is weekly flyer the stuff they send by mail?

Search bar: search "speaker" and then click "speaker bluetooth" suggestion

How does it compare to indigo: usable but not pretty.

deals , recommended products -> confusing; more confusing deals: ambiguity, not consistent

"What do you think sponsored products means?" -"good question"

"Cool tech from top brands": The fitbit is under fitbit (lesley would click the image): unnecessary; redundant

Task 1 (5:49 pm)

Brands > dell

Seems to have hesitated when realized that only 2 price filters can be chosen

Task two (5:52 pm)

Found via search box

Kept scrolling through reviews trying to find a negative one

Task 3 (5:55 pm)

Go down to returns and exchanges

Seemed to have trouble finding the right category

Task 4 (5:56 pm)

Completed successfully by using the search bar right away

Task 5 5:57

Completed successfully by clicking arrow icon, automatically detected location

Participant 1 - Post-Interview Questions

1) **How would you describe your overall experience with navigating the website?**

It was interesting. Best Buy is kind of bland and boring. Lots of content that's not organized well.
Hated the homepage
I would only use the website if i knew specifically what i was looking for - To check prices on
specific products

2) **What did you like about the site?**

I like when you search you can filter. Filtering by category will help you decide. I like the card
style of the shopping cart

3) **What didn't you like about the site?**

Homepage, browsing method is hard (rather use the search), seeing advertising-things in the
front confuses you. Apple ipad section: too many steps to get to what you want to look at.
Search to find it is annoying. Filter by price is bad

4) **Was any part of the interface or site behavior confusing or unclear to you?**

Deals - didn't know if you clicked on specific product or not (did not expect list of products)
More amazing deals -> leads to specific thing (consistency error)

"Cool tech from tech brands"

"Fast free shipping" - didn't think it was clickable until hovered over

5) If you could change one thing about the website, what would it be and why?

Ad section before you search product (put it on the side/bottom)

Participant-Specific Questions:

6) What do you think of the appearance of the item browsing page?

Advertising new stuff is irrelevant when you browse products

Shop by category shows up twice - heuristics

7) What do you mean ads are ugly?

Not aesthetically pleasing, not eye catching.
Inconsistent advertisement aesthetic. Instead of just having products, make it look more fun

8) You seemed to have struggled with sorting reviews (Task 2). How do you think the site could be designed to make this task easier for you?

Make the sort function a different colour or put it closer to the star rating

Participant 2 - Usability Study Observations

Active intervention and conceptual model formation (9:02 pm)

Ppl are trying to buy stuff

Go to shop to see

Idk what "what's hot is" marketing ploy???? Didn't expect gifts and don't understand gendered gifts

Standard tech products in men's

Literally the same except for womens watch

Basically they're trying to get u to click on sig other and it shows almost the same things

Nutrition from tech store????

"Give your inbox a workout" segment in health section

- Brands sus why its such a big tab. I wouldnt not look for product by brand
- Deals make sense
- In outlet: certified open box vs open box
    - Are they separated so you don't compare them side by side?? Is certified better?

Idk what services would be…. Geek squad. Makes sense
Best buy for business… wholesale?? Nope.

"Pages are very long"

Task 1 (9:10 pm)

Start with shop, not brands tab

Shop laptop deals (click)

"Can't filter" oh i can but i gotta scroll down extra

"Oh i can only choose two filters and it has to refresh every time?"

High to low salient??

Clicked on sale and open box and still gave refurbished - sad!

Task 2 (9:14 pm)

Using search box
Not a youth so idk the diff bw ultra moon edition

Clicked on the one with more reviews

I thought i could scroll down and find reviews

Task 3 (9:16 pm)

Goes to bottom "usually has help'

Common return and exchange questions - clicked first "not common at all!"

Go back - go back to another page of general help

Good bc same categories as main menus

Task 4 (9:18 pm)

"Where do u order gift cards?? Is that category"

Then search gift card in search bar

Click physical gift card image and it didn't do anything

It seems common to be able to reserve gift card in store but you can't

Task 5 (9:20 pm)

Takes to new tab which is weird

Type in postal code

Shows giant map so idk where i am

Idk what that icon is at all - oh it's just give location

Participant 2 - Post-Interview Questions

1) How would you describe your overall experience with navigating the website?

It was ok, pretty standard; not a terrible experience. Able to find most things. Search bar took me to the right place when i was looking for gift cards; pretty good

2) What did you like about the site?

I guess it's good that the shop tab had everything you could shop for in reasonable categories. And when i couldn't find smth the search bar helped

3) What didn't you like about the site?

The distribution of the things I wanted to use…. No point for other tabs?? 98% of the time i would use the shop tab. I wouldn't go to deals

So many subcategories and clickable headers!

4) Was any part of the interface or site behavior confusing or unclear to you?

Not really… confused when i was looking for the laptop and it showed me the laptop deals first (that forced you to scroll down before you can filter)

5) If you could change one thing about the website, what would it be and why?

I would move some of the small font things (about, customer support) move up to tabs next to shop. And get rid of brands altogether. Taking up prime real estate

Participant-Specific Questions:

6) For Task 4 (buying a gift card), you initially looked for gift cards in the shop by category drop down. In fact, there's a link to the gift card page at the bottom of the homepage. What do you think of the placement of this link?

Shouldn't be under customer support

Credit card maybe put under services… unless it's support for your gift card

Im also confused why you can't choose the amount for your gift card

7) What do you think of the appearance of the sorting functions for products and product reviews?

They are fine.

8) What do you think about the visual appeal?

It's not unappealing given the colour scheme of the brand; it's not overwhelmingly blue