# Title: Analysis and Design User Interface Project 2 Final Report

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University of Ottawa

Course Number: SEG3125

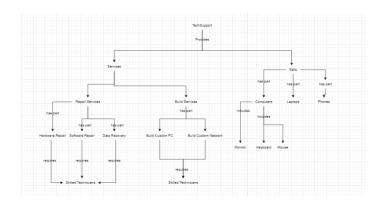
# Appendix:

- 1. General Information
- 2. First Iteration
- 3. Second Iteration
- 4. Code for final Version
- 5. Interactive Processes
- 6. Your own heuristic evaluation of your site
- 7. Internationalization and Accessibility
- 8. References
- 9. Appendix 1 Personas Contributions
- 10. Appendix 2 Heuristic Evaluations
- 11. Additional notes and resource (Special Case)

## 2. First Iteration:

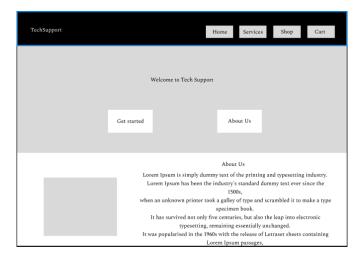
a.

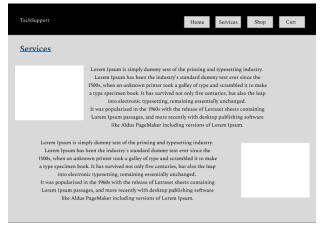
## Semantic network

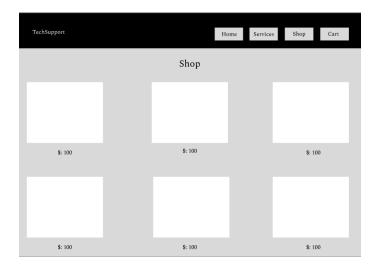


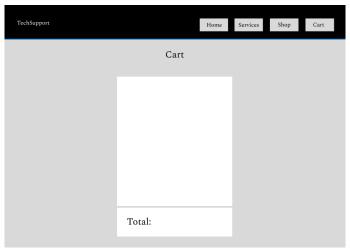
b.

# **Original Mockup/sketches**









# TechSupport

## Expected Delivery: 2 weeks

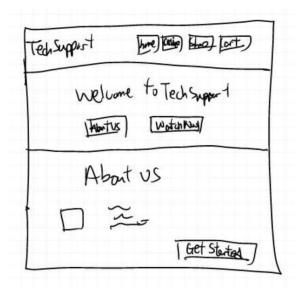
Thank you for shopping with us Your order will reach you on 21

Jan 2023.

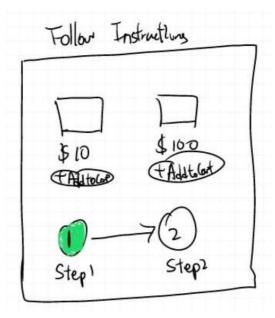
Home

# **Interactive Process Sketches:**

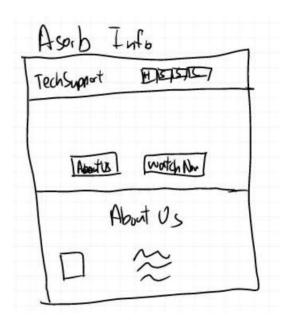
# Homepage:



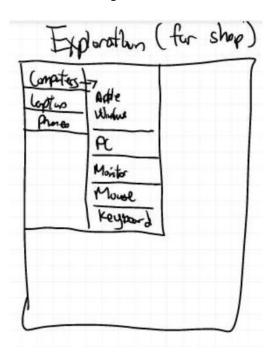
# **Follow instructions:**



# **Absorb Information:**



# **Exploration:**



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c. A description of the two personas/goals provided by your colleagues that you

chose to take into consideration in your UI.

Persona 1:

Name of persona: Bob

Characteristics:

Empathetic Nature

Curious and inquisitive

Resilience

Persona Name: Sarah Todd

Intrinsic Characteristics:

Tech Enthusiast: Sarah is passionate about technology and enjoys staying up-to-

date with the latest trends and advancements.

Research-Oriented: She invests time in researching and comparing different tech

products to make informed purchase decisions.

Quality Conscious: Sarah prioritizes the quality and reliability of products and

seeks detailed information and reviews before making a purchase.

Relation to Technology and Domain: Sarah has a strong affinity for technology and is

knowledgeable about various tech products, their features, and their use cases. She

actively seeks out reliable sources of information to stay informed about the latest

developments in the tech industry.

Goal and Associated Interactive Process:

Goal: Sarah wants to compare different models of a specific product category to

make a well-informed purchase decision.

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Associated Interactive Process: Perform a monitored activity - Comparing and analyzing product specifications, reviews, and prices to determine the best option.

#### Persona 2:

Persona Name: Emily Watson

Intrinsic Characteristics:

Tech-Challenged

**Detail-Oriented** 

Patient and Persistent

Relation to Technology and Domain:

Relation to Technology:

Limited knowledge and confidence in using technology, often seeks assistance.

Relation to the Domain:

Relies on tech support services or websites for guidance and solutions.

Goal for Emily Watson:

Implement a review section, that has simple reviews of customers that can be displayed in order to build confidence in the services and also be an interactive process.

## 3. Second Iteration (JavaScript draft & Heuristic Evaluation)

Primary Link: <a href="https://axeltwc.github.io/">https://axeltwc.github.io/</a>

Description of elements that are changed:

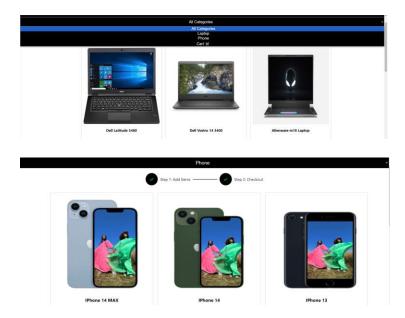
- Overall Revamping the website with better design given more time.
- Add A Review Page (New Interactive Process)
- Enhance the Faceted Search Feature in Shop
- Have a better interactive process "Follow Instructions" for shop
- Redesign the Progress Step Bar with more functionality
- FAQ page for users to communicate (New Interactive Process)
- Change with Bilingual system
- Perform a monitored activity
- Implement Book Service ( Does not work only on github pages for some reason but on localhost, attachment will be applied )
- 4. Code for final version ( Please note that Book Form somehow does not work in gh-pages but in local host , I will attach extra information below )
  - a. https://humblexservertemp.github.io/
  - b. <a href="https://github.com/HumblexServerTemp/humblexservertemp.github.io">https://github.com/HumblexServerTemp/humblexservertemp.github.io</a>

# **5. Interactive processes**

- **a.** A list of the 5 interactive processes contained in your site (your 3 original ones + 2 suggested) and instructions (navigation necessary) for the TAs to be able to go through each one.
- Follow instructions
- Absorb Information
- Exploration (Divergent/convergent)
- Review Page
- Perform a monitored activity
- Communicate

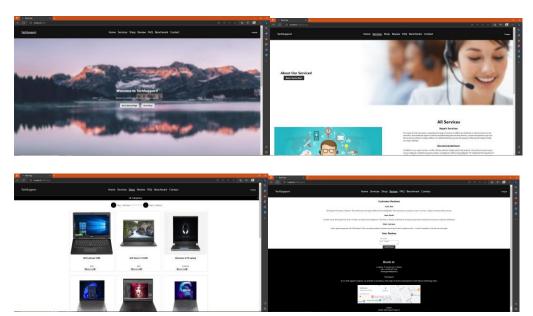
#### b.

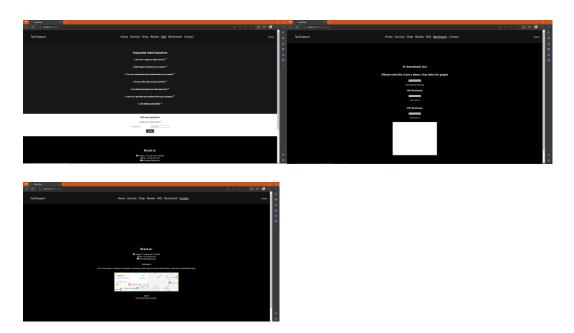
The faceted search on my website is simple, its categories the shop into different categories. More could be added, but for the simplicity of the website, only two categories are implemented.



# 6. Your own heuristic evaluation of your site

- a. For each of the 10 heuristics, describe and illustrate with screen shots what you have included in your site to comply to such heuristic. Your self-evaluation done in peer grade was a good practice to do this.
  - Heuristic 1 Consistency | Consistency refers to the consistency and coherence in the design of a product. All elements and actions are presented within a consistent manner.
     Consistent on all pages, have the same color theme across all different sections/pages.
     Try to keep it black navigation bar and picture below, then more information below the picture.





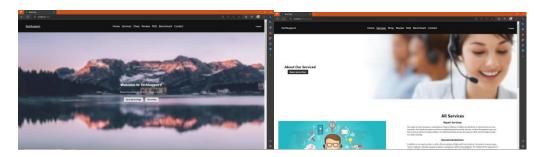
Consistency is applied with the general theme of black and white. Making it easy for users to look for and knows that they are within the same page.

**2.** Heuristic 2 - Familiar Language and Metaphors | Familiar Language and metaphors refer to the use of language and metaphor that are familiar for the users which are using the website. Uses familiar languages across pages without using difficult words to understand.



These two are the longest descriptions in the entire website and they follow metaphors and languages which are simple to understand to the user.

**3.** Heuristic 3 - Simple, Aesthetic, Functional Design | Simple, aesthetic, functional design focuses on the importance of clean visualization and the appealing designs, making it easy to understand and no cluttering. First picture, then information, keep all the design simple and have a warming aesthetic.



I mostly try to keep this design whenever it is description needed. With good quality animations whenever loading the page and such.

**4.** Heuristic 4 - Freedom and Control | Freedom and control refers to the importance of giving users the sense of freedom and control over the system. There is freedom and control for this site as there is a navigation bar for the user to navigate to different places if needed



TechSupport Home Services Shop Review FAQ Benchmark Contact Français

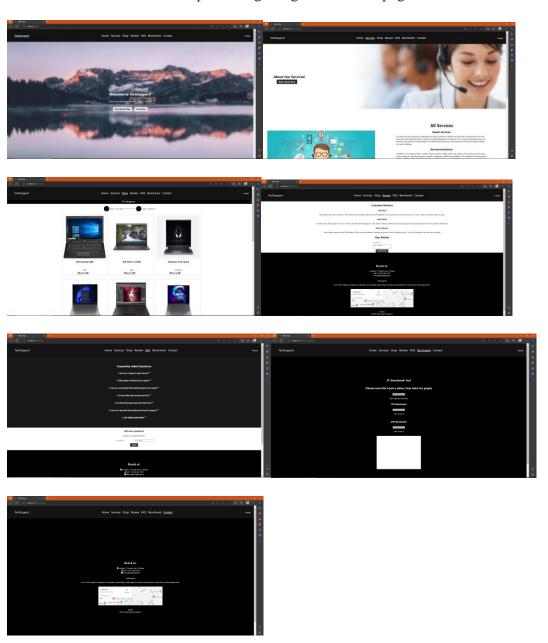
Created the navigation bar across all pages to ensure user have the freedom and control.

**5.** Heuristic 5 - Flexibility and Efficiency of Use | Flexibility and efficiency of use refers the need of the system to be able to accommodate both novice and experienced users. Same with freedom and control, since there is a navigation bar per page, the flexibility is there for everyone to hover around different pages and should be easy if its a novice or experienced user



TechSupport Home Services Shop Review FAQ Benchmark Contact

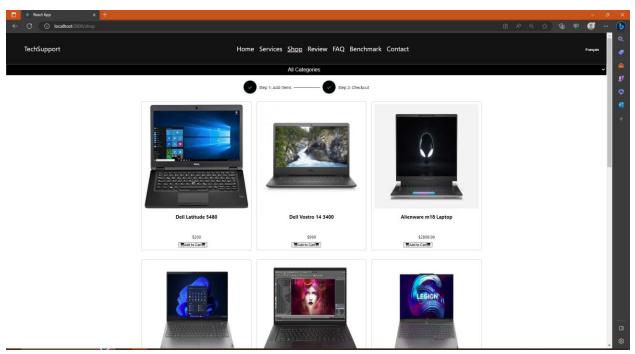
**6.** Heuristic 6 - Recognition over Recall | Recognition over recall refers to the system being able to minimize the user's memory load and make it easier for users to recognize stuff being seen before rather than trying to recall it from memory. Recognition is applied in the website as there is a header/navigation bar per page, there is not much hovering around needed as one scroll up is enough to go to the next page



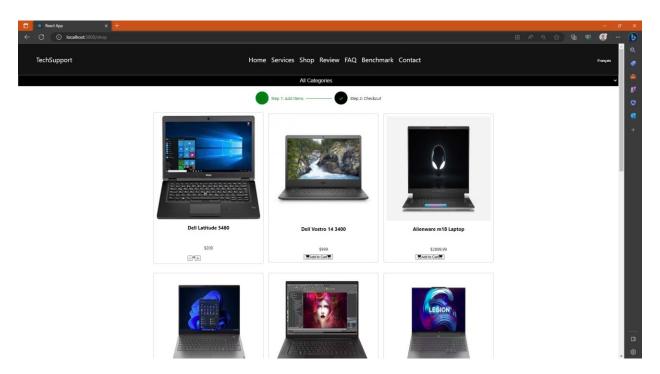
All of the webpages are set to be short and simple, allowing users to recognize where information are instead of trying to recall where should be where with a navigation bar usage too.

**7.** Heuristic 7 - Clear Status | Emphasizing the importance of providing users with clear and concise information about the current state of the website. Making it easy for users to be aware of what is happening in the website, which stage or element they are in and what actions are being done next. It involves with appropriate visual cues like progress bars and loading indicators. In this website, there will be progress bar in shop showing what to do.

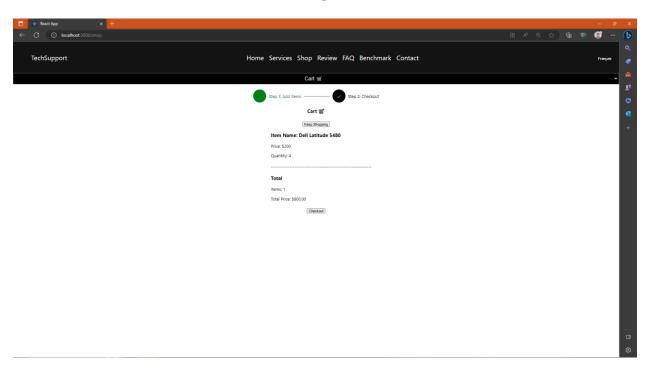
# Original Shop with no steps added



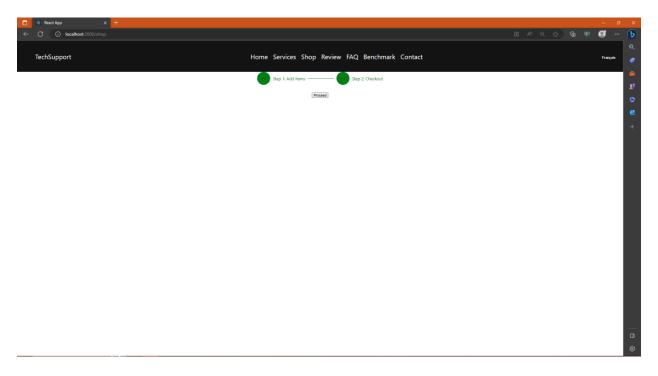
# On Item Add



# **Cart Page**

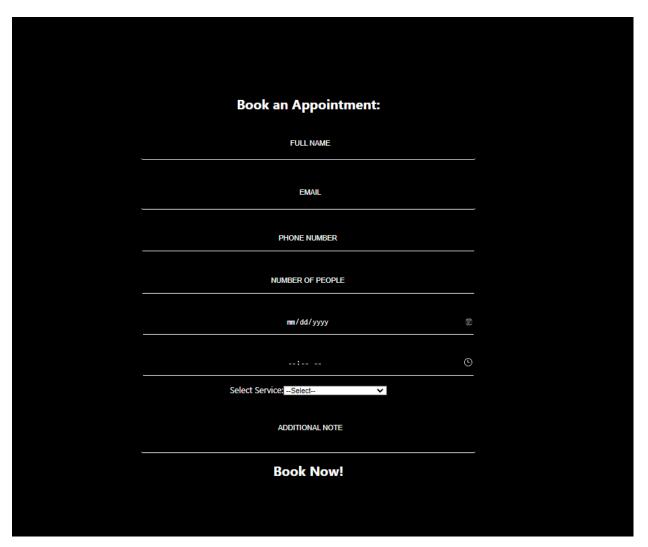


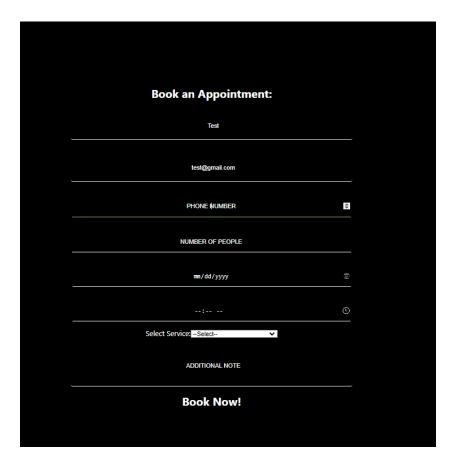
# **After Checkout is pressed**



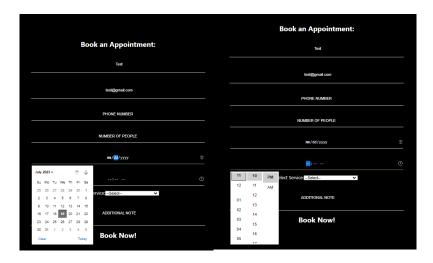
This simple process bar on top of the Shop allows users to understand the steps to purchase an item from the store without the need of understanding by themselves with more complexity and such.

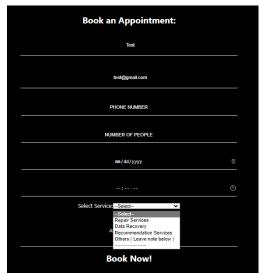
**8.** Heuristic 8 - Error Prevention | Focusing on minimizing user errors within the website. By anticipating potential user mistakes such as user input or unambiguous languages, it forces to prevent errors. In this website, the form for booking an appointment for services includes a validation. If github-pages does not show the form, I will attach extra resources for TA/graders to test it out.





This simple Book Form Prevents Users from typing characters into the phone number field and number of people field , it also allows users to directly input the date and clock with a simple design.





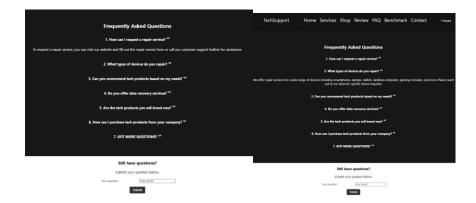
Please note that I have already send a support request to github regarding the issue of Booking form not visible although working in localhost. It should be a bug on their end and is trying to get it to be resolved. If it still does not work, I will include a video of demonstration and a google drive link of the entire code to npm start the website in localhost.

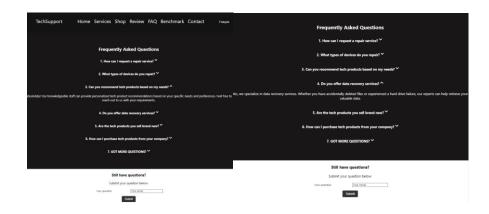
**9.** Heuristic 9 - Error Recovery | The error recovery heuristics states that errors might still occur despite preventive measures, therefore should always design an effective error recovery process. I have made the icon TechSupport and the header to be always available in all pages in case of any error popping out that wasn't tested.

<u>TechSupport</u> Home Services Shop Review FAQ Benchmark Contact Français

On click for the TechSupport button will automatically bring back to the main page in case of any error popping out. Navigation bar will be visible across all pages in case for any other unknown issues.

10. Heuristic 10 – Help | Emphasizes the Availability of contextual relevant support that users would usually ask through interactions or tooltips or user guides. When users are stuck or have general questions that are unknown, there is a FAQ page for them to question or find questions and answers towards their confusion or enquiries.





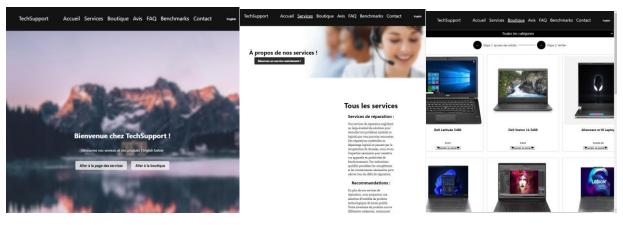
#### Still have questions?

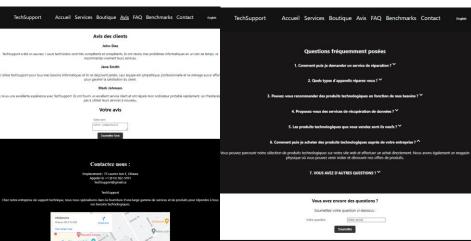
Submit your question below:

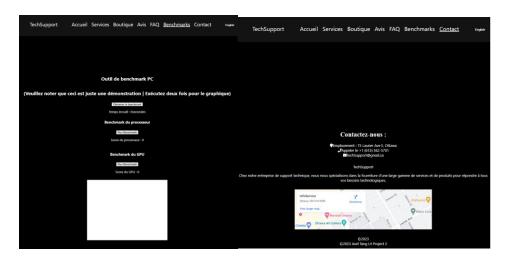
How does this work [test@gmail.com

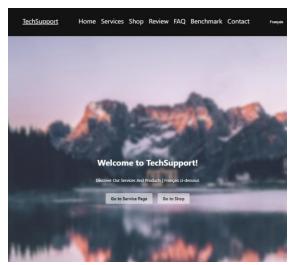
# 7. Internationalization and Accessibility

a. Describe and illustrate with screen shots what you did for internationalization and accessibility.









User are allowed to press English or French on the header at any page or the footer at the main page and will automatically translate everything into the respective language. It also saves the language and the user would not need to change the language per page.

#### 8. References

## a. Provide links to sites that inspired you

https://www.uber.com/ca/en/

The black and white theme was based off Uber's webpage and Application, the design is simple and minimalistic especially for a tech product. Since my website is aimed towards the tech industry, it would be good to aim for a similar style too.

b. Give the titles and links to the images, sounds, videos, or texts that you have used (in fact any resource that does not come from you must be referenced).

#### **Images:**

https://www.google.com/search?hl=en&gl=US&sxsrf=AB5stBjd7VfpFqa\_lMJE977

Z0fNMx8G10A:1689823491009&q=Speech+Bubble+Headphones+Logo&tbm=isch
&sa=X&ved=2ahUKEwikrqiHq5yAAxXSq4kEHbuDBFsQ0pQJegQIDBAB&biw=
1182&bih=658&dpr=1#imgrc=xUHRE61uJfOdzM



https://www.pexels.com/photo/brown-rocky-mountain-across-body-of-water-2437295/



https://www.flexjobs.com/blog/post/technical-support-job-description-salary-skills/



# https://www.saint-gobain-abrasives.com/en-us/customer-service



All product images could be found by searching for their buy links

- ThinkBook 15 Gen 4 Intel (15")
- ThinkPad P1 Gen 5 Intel (16") mobile workstation Black Carbon Fiber Woven Cover
- Legion 7 Gen 7 AMD (16") with Radeon RX 6700M
- Dell Latitude 5480 14 inches Laptop, Core i5-6200U 2.3GHz, 8GB
   Ram, 256GB SSD, Windows 10 Pro 64bit
- Dell Vostro 14 3400 Core i3 11th Gen 14" HD Laptop
- Alienware m18 Gaming Laptop, AMD Ryzen 9 7845HX(12-cores,23 threads, up to 5.2 GHz Max Boost), RX 7600M XT 8GB GDDR6,
   16GB RAM, 1TB SSD

For Iphone, I Cropped from the official apple store

https://www.apple.com/ca/iphone/

## c. Provide titles and links to all bits of software found online that you use in your UI.

I have used all these dependencies to make my UI work, from react to generating a graph for benchmark, prettier icons, bilingual support etc.

```
"@fortawesome/fontawesome-svg-core": "^6.4.0",
    "@fortawesome/free-solid-svg-icons": "^6.4.0",
    "@fortawesome/react-fontawesome": "^0.2.0",
    "@testing-library/jest-dom": "^5.14.1",
    "@testing-library/react": "^13.0.0",
    "@testing-library/user-event": "^13.2.1",
        "chart.js": "^4.3.0",
        "phosphor-react": "^1.4.1",
        "react": "^18.2.0",
        "react-dom": "^18.2.0",
        "react-il8next": "^13.0.2",
        "react-router-dom": "^6.4.4",
        "react-scripts": "^5.0.1",
        "react-vis": "^1.12.1",
        "web-vitals": "^2.1.0"
```

## 9. Appendix 1 – Personas contributions

#### Site 1:

a. At the end of your report, add an appendix in which you describe the personas that you suggested to your peers. You have done 3 reviews, so for each, mention the title and purpose of the site under review, as well as persona + goals you suggested for that site.

Website Title: Hub LLM

Description: Hub LLM is an online repository of AI tools, including chat bots and image generators. It is designed to cater to users who are curious about AI and those who want to learn how to integrate it into their lives. The site aims to help users understand and effectively use Language Models (LLMs) and chat bots. The website was created to

address the challenges of learning how to use LLMs to their full potential and to explore

the different AI technologies available.

a) Max Well

b) Empathy: Able to understand others, Perseverance: Have determination to overcome

obstacles, Integrity: Have strong moral principles and set rules of himself constantly

c) A long term internet user who is always interested in new technology. Especially

coming across AI tools which is quite new to him, have a keen interested in using the

website.

d) The user would like to know what is the new technology and what is so special about

Artificial Intelligence where he would like to find what such tools could offer him.

Site 2:

Website Name: "Pawsome Pet Care"

Description: Sitters at Pawsome Pet Care offer pet sitting services, such as dog boarding,

house sitting and dog walking. My persona, Oliver, wants someone to walk his dog while

he's at work and is considering a sitter at Pawsome Pet Care to do it. He wants to know

who the sitter is and their experience level before committing to their services. Oliver is

worried that the sitter will be careless and not take good care of his dog. He would like to

be able to communicate with someone from Pawsome Pet Care to have a better sense of

security with leaving his dog with someone new.

a) Bob Jack

b) Curiosity, resilience and creativity.

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c) Bob Jack is a pet owner who does not really use the internet too often and is more of a

outgoing person, he is seeking for a website which offers day care services for his pets

for a one way trip for his working purposes

d) His goal is to ensure his pets are safe and can track progress if needed

Site 3:

Title: uOttawa ExtremeMileage \*

Description: \*For project purposes uOttawa ExtremeMileage is a fictitious organization.

This website if for a uOttawa student engineering team. The goal is to show people what

the team is all about and make it easy for current team members to show someone what

the team is without having to pull out pictures from their phone. This way they can

redirect people who are interested about the team to the website to learn more about it

and to potentially join.

a) Micheal John

b) Courage, Humility, Optimism

c) Micheal is an active internet user in terms of the development of Electric Vehicles, he

is hovering around the internet and saw that his university offers an Electrical Vehicle

team and would like to join the club.

d) His goals are to join the club and in FAQ session, he already could find his answer.

## 10. Appendix 2 – Heuristic evaluations

a. At the end of your report, add an appendix in which you describe elements of heuristic evaluation done in step 4 for your colleagues. Give only 3 examples of suggestions for each of the 2 sites you examined. It is not necessary to provide the full evaluation.

#### **First Site:**

## **Consistency:**

Consistency refers to the consistency and coherence in the design of a product. All elements and actions are presented within a consistent manner. Great consistency, across all the tabs the color palate and theme sticks to be the same. With the usage of black, grey and white, users are able to see the website with ease and have a consistency feeling that he/she is still within the site.

## Simple, Aesthetic, Functional Design:

Simple, aesthetic, functional design focuses on the importance of clean visualization and the appealing designs, making it easy to understand and no cluttering. Very simple website, includes good functionality in the design and is visually appealing, no unnecessary complexity. The aesthetics looks really clean!

## **Recognition over Recall:**

Recognition over recall refers to the system being able to minimize the user's memory load and make it easier for users to recognize stuff being seen before rather than trying to recall it from memory. The website aims to minimize the user's memory load by having little text and more pictures. The system provides clear and visible cues, labels and options to assist users.

#### **Second Site:**

## **Consistency:**

Consistency refers to the consistency and coherence in the design of a product. All elements and actions are presented within a consistent manner. The designer have a certain amount of consistency while designing the website, there are so many different colors per different tab/session/site, would be nice for it to be more consistent.

#### Freedom and control:

Freedom and control refers to the importance of giving users the sense of freedom and control over the system. The Freedom and control of the site is really efficient, I could just scroll down to check for stuff I would like to see and/or just press the navigation bar to travel me to the category that I would like to view.

## **Recognition over Recall:**

Recognition over recall refers to the system being able to minimize the user's memory load and make it easier for users to recognize stuff being seen before rather than trying to recall it from memory. There could be a bit of recalling element being used, the user who needs to long scroll to the destination he/she want is a part of recalling if she wants to go to another page, maybe separate some of the pages/sections

#### 11. Additional notes and resource:

Upon this submission, GitHub still didn't resolve the issue for my Booking

Appointment form page although it should be working perfectly as it was routed
corrected and deployed correctly, in addition, it works with localhosting proving the
code should not have any significant errors regarding not showing the webpage.

Therefore I have attached a video for TA/graders to look at. Apologies for such
inconvenience, until now I still didn't manage to figure out where went wrong but on
github's side as I spent a very considerable amount of time trying to tackle the issue
down but I find it impossible to work on everything including local hosting and
moving the button around for GitHub pages but yet didn't work as expected. I
appreciate for the generosity towards this situation. Thank you!

Here is a youtube video showcasing how it should look like without the github page error: <a href="https://youtu.be/G0JjSY4H9ZE">https://youtu.be/G0JjSY4H9ZE</a>