Reprinted from "Lucifer (2015-2017) Vol. 1: Cold Heaven (p.8), by L. Garbett, H. Black, 2016, DC Comics.

Design Report

Website Design & Implementation

Introduction to Web Design (DECO1400/7140)

Semester 1, 2019

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PART A

1. Introduction

This design report has been produced as part of a course deliverable in the course DECO7140 Introduction to Web Design at the University of Queensland. The intended purpose of this report is to show my development process and to show considerations and choices made throughout the process.

The report is structured into two parts, A and B respectively, whereas part A will be looking into the planning and decision phase of the project, and part B will continue from the decision phase onto implementation and the evaluation phase.

1.1 Who am I?

My name is Sigurd, a 27 years young Norwegian who is currently studying master of interaction design at the University of Queensland.

As for my formal background, I have a bachelor's degree in international marketing and a year study in IT and Information Systems. This background has given me a solid understanding of how to construct high-level strategies and product positioning and foundational knowledge of programming and systems development. Combined with my experience in voluntary positions such as project manager or chairman of the board, in addition to my interest in entrepreneurship, I have developed a foundational background in running projects and achieving results. As for my current studies in interaction design, I aim to utilise this study to fill the gap of graphic design, user experience and front end web design.

My interests are mainly learning new technologies, as an example, having just learned Vue.js this summer and have started learning about game development using C++ and mobile application development using Dart and Flutter. I also enjoy playing games, be it tabletop or digital, and I enjoy to play the guitar and draw on occasion.

In terms of learning strategy, I believe that every developer needs to learn the skill of perseverance. My approach, therefore, is to push ahead and bang my head against the wall until I bang through it and achieve my goal of learning what I set out to learn. As this already is part of how I work, I found that I need to balance it out, as sometimes I never give up. Therefore, I find that I need to take more breaks to keep my mind fresh, and to swallow my pride, stop what I'm doing and pivot instead.

2. Getting to Know Stakeholders

2.1 Target Audience

Although the brief specifies the target audience to be between four and twenty-five years old and that this project falls closer to the latter part of that spectrum, that segmenting based mainly on age is not always the right thing to do. In terms of a target audience for this project, a situational segmentation might be just as good if not a better method of choosing a segment. In JTBD.info, Alan Klement highlights the benefits of situational segmentation in the following way:

> "By focusing on situations and not 'markets' or 'customers', you can more effectively execute marketing, build better products and launch more powerful promotion." (Klement, 2014)

With this as a foundation for the segmentation process, the essential aspect shifts from an age group to shared situations, which in turn is derived from the jobs-to-be-done. Because of this, this section will first of all look into the personas and from there looking towards what situational segment is the correct one to target and create a segment based on these factors.

2.1.1 Persona #1

Name: David Fisher

Age: 22

Gender: Male

Bio   David is a postgraduate student who is currently learning about web design. David enjoys spending his free time playing games or reading books and comic books, mainly in the fantasy genre. However, as of late David has not been able to do many recreational activities as his studies and his part-time job takes up all his time.

Goals:	-	David wants to spend more time being entertained by watching movies or reading some fantasy.
	-	He wants to find a way to make his studies easier and less time consuming to avoid burnout.
	-	Aims to get high marks on his assignments and exams which will help him land a top job.

Pain Points:	-	David knows he should, but he does not feel like spending all his time working on assessments for his courses, as it can become quite tedious and boring.
	-	He can't seem to find enough time to relax during the semester.
	-	He hasn't found an efficient enough study routine that he finds motivating enough.

2.1.2 Persona #2

Name: Natalie Skinner

Age: 17

Gender: Female

Bio Natalie is a high school student who enjoys spending her time after school reading comics and listening to music in her room. Natalie is having some issues of figuring out what she wants to work as when she finishes school.

| Goals: | - | Natalie wants to spend her time at home reading up on the latest comics and listen to music in her room to unwind from a stressful day at school. |

| Pain Points: | - | Natalie doesn't know what career path is right for her and doesn't feel she have any skills or areas of particular interest that is valuable in the job market. |

2.1.3 Persona #3

Name: John Carpenter

Age: 38

Gender: Male

Bio   John is a man in his late 30's who is currently changing his profession. John is married and have two kids and therefore wants to get into his new profession as quickly as possible to attain a stable income again.

Goals: -   John has just recently started a career change into web design due to health conditions that won't let him keep doing his old job, so John wishes to learn of his new field quickly so that he can start working again and get a stable income.

Pain Points: -   Among working and studying, John can't seem to find much time for entertainment. John often likes to read comics, books and watch movies and dream that he is in another universe and explore the beauty of that world. However, he can't seem to find much time for that anymore and the lack of break tears on his motivation in other aspects of his life.

Based on the personas above, the common jobs-to-be-done is to learn a new skill and to unwind. We can also see that even though there is an age difference, the situations they all have in common, although other aspects of their lives are relatively different, does still form a segment; Just not based on demographics or psychographics alone, but also situations. The common thread of wanting to learn a skill but also to have more spare time to unwind forms the basis of this segment. With that said, the situational segment does still suggest certain demographic and physiographic aspects to be considered in forming a target audience. The segmentation below has been done according to how often the personas would spend time learning, unwinding and seek entertainment in the fantasy genre.

2.1.4 Demographics

Age:	14 - 45
Gender:	Both
Occupation:	Changing Career Path, Students, High-school Students
Marital Status:	Married, Single, Partnerships, and so on.
Life-stage:	Young single, Young and married, Older and Single, Older and married
Family size:	0 - 4
Income bracket:	Low/no income to midrange
Educational Level:	Undergraduate or above University degree, self-taught
Home Ownership:	Renting, Living with family, Owning with a mortgage
Language:	English speaking

2.1.5 Psychographics

Introvert / Extrovert	Introvert - Inbetweeners
Values:	Competence, Transparency, Lawfulness, Right and Wrong
Purchasing Habits:	Regularly and on Occasions
Benefit Sought:	Convenience, Accessibility and Quality
Frequency of Use:	Daily - Weekly
Frequency of Purchase:	Weekly - Quarterly
Loyalty:	Loyal if valued

2.2 Implications for Design

Even though the target audience listed above is a representation of an assumption based customer base where the demographics and psychographics have yet to be validated, it will in its current shape inform certain design principles and decisions. Although there are many more considerations to take, the ones below are the ones that are considered to be most

relevant to keep track of that is not bound to happen throughout the design process automatically.

Jobs-to-be-Done. According to the jobs-to-be-done, what the personas need is to learn a new skill, but still, have time to relax and be entertained. These factors inform the decision of having the web application be a fun and interactive way of learning that incorporates elements of the users' means of unwinding, making it a far more pleasurable method for learning that should not feel like work.

Age and Life-stage. Due to the age group consisting of a wide spectre of people in different age groups, it is essential to keep the web application to uphold PG-13 standards.

Gender. As the application targets both men and women, it's necessary to facilitate accessibility for both genders in the design.

Values. The web application should be clean and professional looking to convey competence and transparency. As for this lawfulness and right and wrong, these factors will, of course, be strengthened by a professional, trustworthy looking design, but would mainly be rooted in the website's terms and policies which are not to be included in this deliverable.

Benefit Sought, Loyalty, Frequency of Use. The site has to be accessible both for new and returning users and to provide convenient quality content.

2.3 Chosen Educational Content

Although the educational content for this project in a macro perspective is how to design for the web in general, it has in terms of project scope been focused around the micro perspective on best practices of designing a web form. The educational sources that will be used are (Taylor, 2019) and (Birkett, 2017).

The reason for which the above mentioned educational content is appealing for people to learn about is that designing proper forms are directly tied to user conversion, which makes it an important feature for business purposes. Also, forms are a common part of websites that web designers will come across sooner rather than later. Although some might not be interested in learning about how to structure and layout forms in plain text or imagery, this project aims to make it more fun and interesting to learn about interactively.

2.4 Chosen Story

The story chosen for this project is 'Lucifer (2015-2017) Volume 1 - 3'. The story is a graphic novel (comic book) in the fantasy genre which follows Lucifer, also known as 'the Devil', in his life on earth. I found and chose this story after having landed on the concept of the website, which is 'The Devil Teaches Bad Web Design'. Due to this, it was essential to find a good representation of the Devil, which ended up in the older comic books which have inspired the new tv series named Lucifer.

The story will most likely be enjoyable, not because of the story itself, but the context of which it is presented. Initially, the website was meant to showcase Lucifer as a trickster who 'tortures' people with horrible user experiences. However, after further development, this has changed into you as a user following Lucifer into hell to defeat the demons of who lurk there, and by doing so learning about bad web design in the process. This change was made to incorporate a better story in the website, but also to better portray Lucifer in the same light as the comic book does, first and foremost as an angel and not an evil being. The website will easily be able to visually set a divide between what is considered good and bad in web design, and teach good web design by showcasing what's bad. For an audience who enjoys the fantasy genre combined with the absurd interactions in the lessons, learning about web design will not be felt as tedious or boring, but instead like joyful and ridiculous.

3. Navigation & Organisation

3.1 Card Sorting

Card sorting was a tool used during the planning phase of the website to have users show how they structurally think about the content of the site, which should be considered in setting up a site map and navigation on the website.

3.1.1 Testing Plan

Content

- Landing Page
    - Navigation (routes)
    - Unique Value Proposition (UVP)
    - Call to Action (CTA)
    - Background Pattern / Image
    - Sitemap
- Lecture Page
    - The Devil (Lucifer)
    - (component 1) Form (good UX/UI)
    - (component 2) Form (bad UX/UI)
- Lecture Analysis Page
    - The Devil (Lucifer)
    - Selection of form elements/images of form elements
    - Explanatory and informative text explaining each bad UX/UI move

Keywords

- Navigation
- Unique Value Proposition
- Call to Action
- Why you should use this website
- Who is this website for
- Sitemap
- Lecture Overview Dashboard
- Lecture
- Lecture Walkthrough

- References

Type of Card Sort

Type:
Open card sort

How:
I will place all prewritten cards on the table facing in the direction of the user. Also, I will put a stack of blank cards for the user to write down any suggestions on if or when they come up with any and then have them sort that as well. I will then prompt the user to sort these cards into categories and name these categories. These user-created notes and categories will be marked with a colour to distinguish between what user suggested it, to aid in remembering what that user was like when analysing it later on.

Intent and Meaning

I am going to ask the participant to speak out loud when thinking or have them explain to me the steps they take.

While the user is sorting, I am going to write down notes on what they say and why they choose to sort the cards as they do.

After the user finishes the card sorting, I am going to take a picture of it to look back at when I am analyzing the card sorting.

3.1.2 Reflection

The Card Sorting exercise did not present any unexpected results, nor did it give any new insights. This is most likely due to how the website has been structured to feel similar to well-known learning platforms such as Udemy and Udacity to serve the user, something that feels familiar to use. Moreover, the website has been structured into two very distinct parts, the landing page and the lessons, which the Card Sorting participants noticed rather quickly and sorted thereafter. With that said, I found that the Chinese participant did use prolonged time to place the cards, which might suggest that that user-group is accustomed to different visual layouts, or that the difference in English reading skills made the users spend more or less time to understand the words written on the Cards.

3.1.3 Organisation Systems

Navigation

The navigation bar will be layout in a metaphorical-scheme to group content in a familiar way for the user, as terms like about, home and dashboard are familiar terms for people where they mostly know what to expect.

Dashboard

The dashboard, in general, will be displayed using a personal scheme, as all the content in the dashboard is going to be specific to the user.

→ Chapters

The chapter overview will be structured in a task scheme by considering what prerequisites a user have finished ahead of continuing to the next chapter.
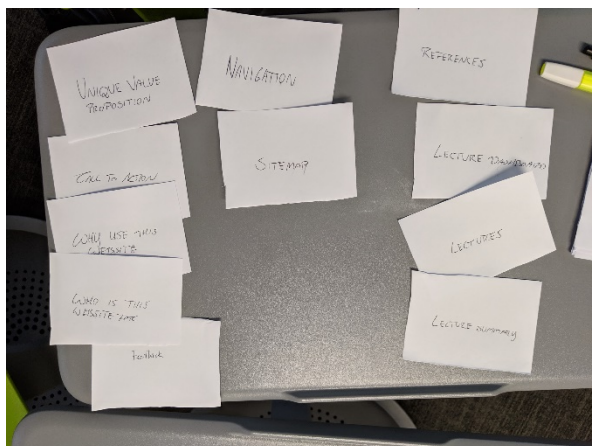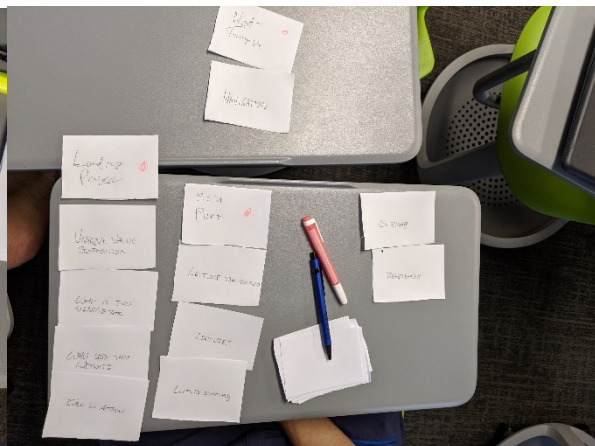

Figure 1: (Appendix A - Card_Sorting)   *Figure 2: (Appendix A - Card_Sorting)*

3.2 Navigation Systems

To be perfectly candid, I did not learn anything that I didn't already know from the navigation systems group discussion. I found the discussions to be a waste of my time, as someone who does not understand what navigation systems are themselves were tasked to prepare and oversee a discussion on the topic, which guarantees that they won't touch upon the most critical aspects of the topic as they don't know enough about it.

3.2.1 Guiding Questions

Good Example → StackOverflow (n.d)
StackOverflow uses a combination of primary navigation and what I would deem supplementary navigation.

Why? People have specific issues that they are going to try to search for an answer to. StackOverflow knows this, and thus emphasises their search bar which is located on the top of the page and is stretched to cover most of the header. The supplementary navigation allows users to only look through content that is relevant to them.

I believe this is effective because they know how their users think and how they land on their website and thus structure their website around that habit.

Bad Example → Git (n.d)
Git uses primary, secondary and something I would deem supplementary navigation.

The navigational systems themselves are not a bad way of navigating, but the placement and layout of the navigations make it so that the users don't notice them right away, and the way they look makes the user not want to interact with it.

How they could improve upon this is to place the navigation in a more familiar place that users expect and put emphasis on the CTA by moving that to the middle and make it visually pleasing.

3.2.2 Navigation Systems for this Project

The website of this project will include primary navigation, which is the global navigation and local navigation. As for the primary navigation, this will be found in the navigation bar, which will act as global navigation of which content changes whether the user is logged in or not. The local navigation will be present in the dashboard where the user can select the correct lesson from a horizontal list of lessons. These systems have been chosen due to simplicity

and familiarity to the user group and to feel similar to other teaching platforms or web applications with a dashboard.
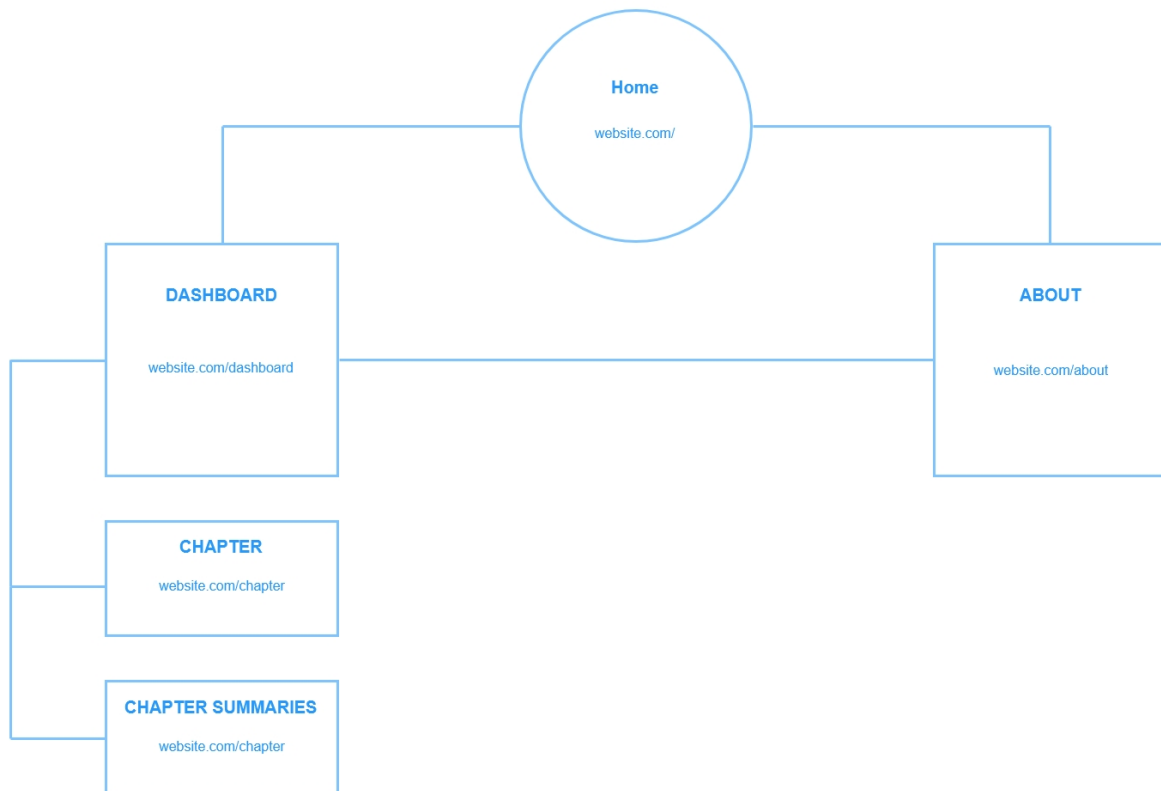
3.3 Site Map

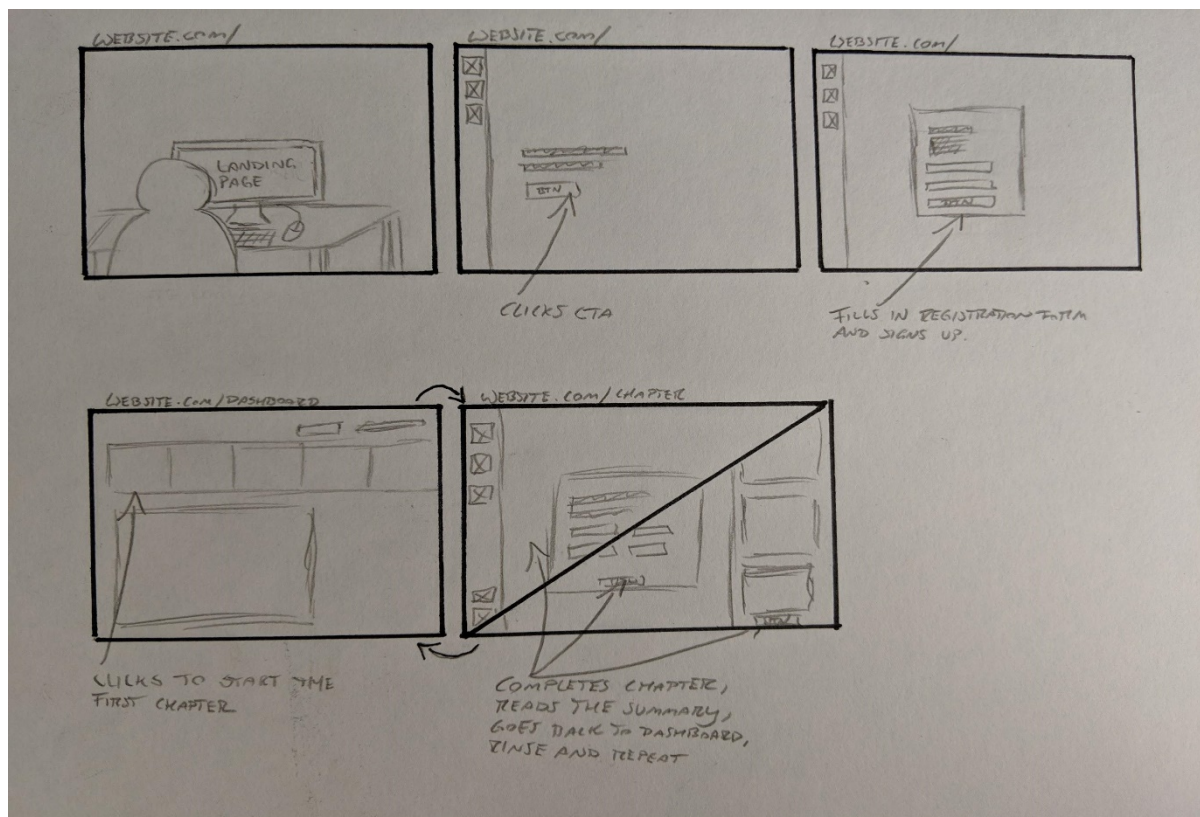

Figure 3: (Appendix B - Site-map)

Figure 4: (Appendix C - Storyboard)

Because the site map is quite small and easy to understand, most users, not only the chosen persona, will navigate the application similarly. With that said, the persona chosen here is David Fisher. David navigates to the landing page and scrolls through it while he scans the content before he scrolls back to the top of the page to sign up or use the repeated sign up CTA on the bottom of the page. After this, he is met with a signup form which he fills out. After having done so, Davis lands on the dashboard page, which is personal to his account. Seeing that most content here hints towards him starting the first chapter, he clicks the button to begin the first chapter. David completes the first chapter and reads the learning summary before he is returned to the dashboard, which now displays some statistics and hints that he should continue to chapter two. At this point, it is rinsed and repeat until he takes a break from learning about bad web design.

3.4 Visual Organisation

As with the navigation systems discussion, here too I did not feel like I learned anything and it is because of the same reason, that the person presenting does not know enough about visual organisation to have an insightful discussion on the topic. This will most likely be the case for myself as well when I'm going to host a discussion later on.

<u>Large Scale Website</u> → [Komplett (n.d.)](#)

Proximity

The website uses proximity in, for example, the navigation where everything is perceived to be in proximity because of the bottom border. Moreover, they display elements in the navigation in two horizontal lines with some white space between to showcase that they are both navigations, but still separate. Also, they utilise font weight and symbolism, placement and elements like the logo and search bar to emphasise further that they are different lines.

Alignment

The more significant elements or containers are structured in a vertical flow, whereas the sub-elements are structured to be displayed horizontally to show a clear shift.

Emphasis

Contrast and size have been used to emphasise the logo and search bar on top, in addition to the website using bright colours and larger banners to emphasise the content they consider essential to showcase.

Consistency

All sizes and alignments are consistent in terms of being based on what seems to be a standard bootstrap 12 column grid to represent 100% of the container width.

3.5 Interactivity & Functionality

This section looks into the interactivity of the website, on how most interactions will be used, how they will be implemented and how they serve the purpose of engaging with the user and promote the educational content.
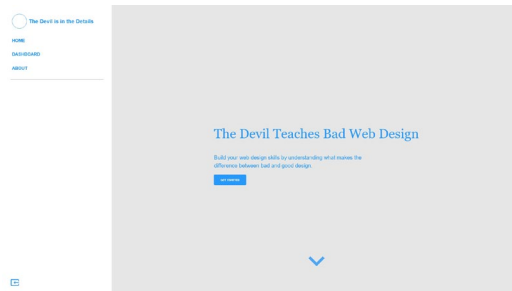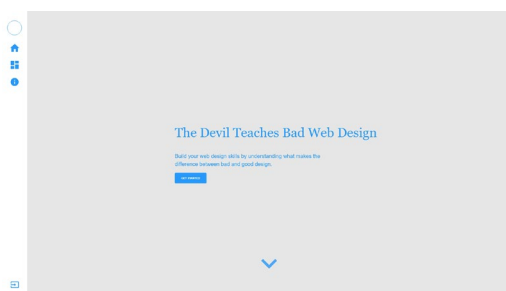
Figure 5: (Appendix D − Wireframes)

Figure 6: (Appendix D − Wireframes)

home & home_navbar_collapsed

Navigation buttons, Collapse button and Call to Action
→ Clickable; routing functionality (except for Collapse button).
→ Not designed to be engaging or strengthen the educational content as they are simple navigation buttons. However, they are designed to be simplistic and easy to use.
→ Implemented using Vue, Vue Router/JS, CSS and HTML.

Collapse button
→ This button is a placeholder as I have yet to find a better icon to symbolise expand/collapse.

Arrow
→ Will not be, at least in its current form, be present in the final implementation as it was mainly used for the wireframe to illustrate scrollable content.
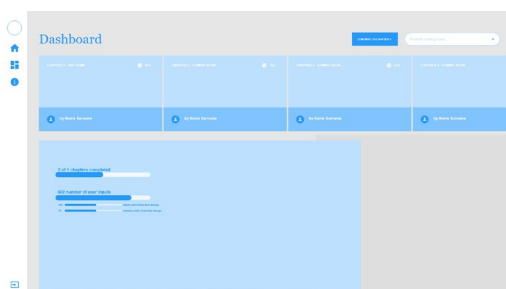
Figure 7: (Appendix D − Wireframes)

dashboard

Continue button, Chapter cards, Searchbar
→ Clickable; sends the user to the next chapter.
→ Standard navigational functionality not designed to be engaging or strengthen educational content.
→ Implemented using Vue, CSS and HTML.

Chapter cards
→ Using images from the story to create immersion.

Searchbar
→ Disabled; will not be functioning. Placeholder element for future feature expansion of the website.
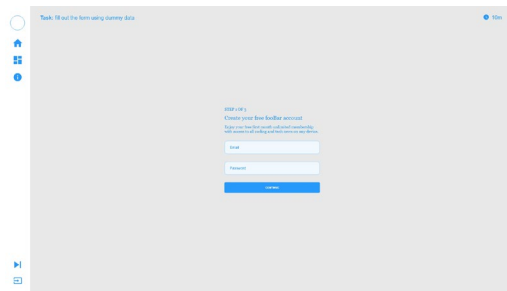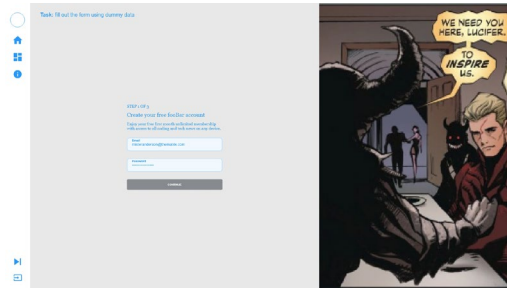
Figure 8: (Appendix D - Wireframes)

Figure 9: (Appendix D - Wireframes)

chapter_one & chapter_one_lucifer_appears

Input fields
→ Clickable(or Disabled) and allows user keystroke input; JS 'eventListener' listens to deselect on input fields, starts a function when the input field is deselected, and both fields have been filled out.
→ Showcases a proper form layout and how labels, body, inline warnings and inline validations should look like.
→ Implemented using HTML, CSS, JS and Vue.

Call to Action
→ Clickable(or Disabled); displays validation errors on click and is disabled when certain conditions are not met.
→ Shows how visual cues can be delivered with colour alone.
→ Implemented using HTML, CSS, JS and Vue.
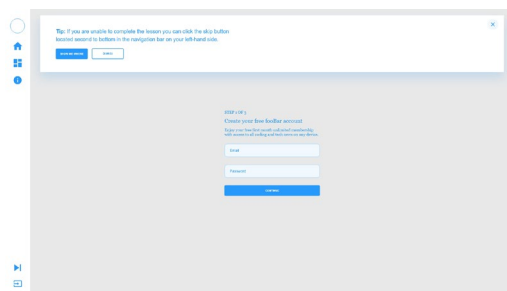
Figure 10: (Appendix D - Wireframes)

chapter_one_tip

Cross, Dismiss
→ Clickable; removes the tip popup card.
→ Does not promote educational content. These interactions are placed here to give the user agency to remove the tip if they wish.
→ Implemented using HTML, CSS, JS and Vue.

Show me
→ Clickable; will start an animation on the skip button.
→ Does not promote the educational content other than being part of the user experience to guide those who need help, which some may take learning from.
→ Implemented using HTML, CSS, JS and Vue.

Skip button
→ Clickable; takes the user back to the dashboard and saves the statistics from the chapter.
→ Does not promote the educational content, nor does it engage with the users as it is merely a navigational tool.
→ Implemented using HTML, CSS and Vue.

Figure 11: (Appendix D - Wireframes)

Figure 12: (Appendix D - Wireframes)

chapter_one_new_form &
chapter_one_luficer_dissapears

all interactions below
→ The user will be provided with a set of fake credentials and tasked to use these while filling in the form.
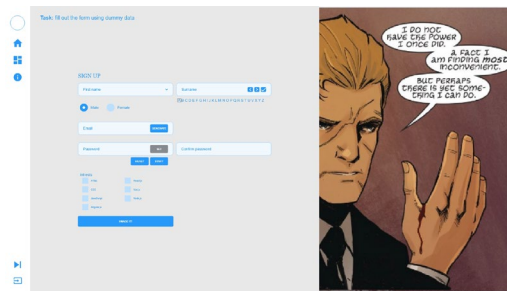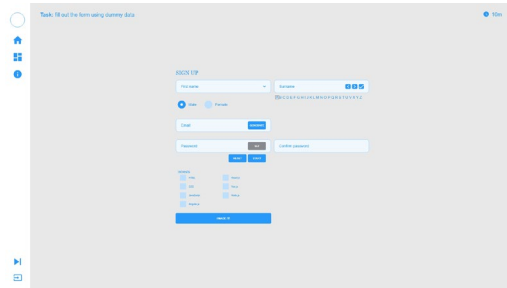→ Engaging to the audience as they are absurd and bizarre ways of interacting which makes interacting tricky and tedious, and therefore will be perceived as a bad way of doing web design.
→ Promotes the educational content by being weird ways of interacting with something mundane, to show that much thought goes into even the most mundane in web design.
→ Implemented using HTML, CSS, JS and Vue.

first name
→ Clickable; shows a dropdown menu with first names.

Surname
→ Not Clickable itself, has to be controlled using the three small buttons on the right-hand side. These buttons are clickable.
- *Button 1 (left):* Writes the selected character to the input field.
- *Button 2 & 3 (mid & right):* Moves the character selector either left(*mid*) or right(*right*) to the previous or next character in the alphabet.

Gender
→ Clickable (single- and double clicks). On a single click, the selection moves back to the previously selected within a second. On double click, acts as one would typically expect.

Email
→ Not clickable itself, email has to be generated using the 'generate' button, which is clickable.

Password
→ Not clickable, has to be controlled using the three surrounding buttons: 'SET', 'RESET' and 'START/STOP'.
- *Button 1 (top):* The 'SET' button writes the selected character to the input fields and jumps one step to the right.
- *Button 2 (bottom left):* The 'RESET' button

removes all text from the input field and starts the process from scratch.

- *Button 3 (bottom right):* The 'START/STOP' button is used to start and stop the process of having the input field loop through all ASCII characters quickly.

Confirm Password
→ Clickable and fillable. The field converts lower case character to upper case characters and vice versa, by converting the character to an integer, adding or subtracting 32 and converting back to ASCII.

Interests
→ Clickable. A random function is run that decides whether or not the input should move, be toggled or not. If moved, a new random function is run to decide where to.

Call to Action
→ Clickable (or Disabled). Takes the user to the summary page and saves the statistics from the chapter.

chapter_one_summary

Finish chapter button
→ Clickable. Takes the user back to the dashboard.
→ Does not promote the content or engage the user as it is just a navigational feature.
→ Implemented using HTML, CSS and Vue.
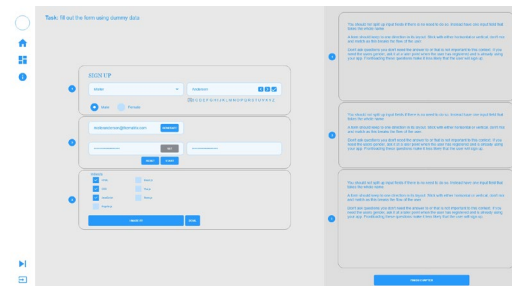
Figure 13: (Appendix D - Wireframes)

3.6 Paper Prototyping

Photos of the prototype can be found in (Appendix E - Prototype_Paper). However, I was unable to take pictures of the testing session running as taking notes and making the prototype functional for the user took up all the time, so images of the prototype session are not included.

3.6.1 Testing Plan

<u>General</u>

<u>Scope and Limitations</u>

This prototype is a paper-based prototype which takes into consideration only a small number of user interactions. The prototype will not include the about page with referenced material, nor will you be able to scroll as you would typically be able to on a regular website. Almost all text inputs have been predetermined, which is why you will be handed some core user details to use as it does not take into consideration personalia of all the testers.

<u>Information</u>

For this prototype, to make the prototype functional for more than one test user, your name and email is going to be as shown below; except for this, you will still be yourself.

<u>Your Persona</u>

- First Name: Mister
- Surname: Anderson
- Email: misteranderson@thematrix.com

<u>Testing</u>

<u>Scenario</u>

You are currently studying web design as part of your postgraduate degree at the University of Queensland. You know that you should work hard to get a good grade in the subject, but you also want to spend more time on entertainment to relax and have some fun between assignments. A fellow student has just recommended that you should try out the website 'The Devil is in the Details', which your friend said was more fun and relaxed way of learning about web design. You have opened up your computer and have just opened up the webpage in your browser and see the following in front on you.

<u>Tasks</u>

1. Create an account and start the first lesson.
2. Finish the first chapter

<u>Questions</u>

1. Was there anything that confused you with the tasks?

2. (if navbar was used) Did you find the options you needed in the navigation bar?
3. Can you tell me what you think is good or bad about the layout on the dashboard?
4. Did your interactions with the website give you appropriate feedback and guidance?
5. Is there any feedback or guidance you would have wanted the website to give you?
6. Did you find anything confusing?
7. Do you find this an interesting way of learning about web design?
   a. Why do you find it [interesting / not interesting]
8. What do you think about the interactions on the last form

3.6.2 Feedback

<u>Observation</u>

The user thought that the home button was meant to take him to the dashboard and did not use the expand/collapse navigation bar button as it seemed like a logout button.

<u>Interview</u>

The answers below have been reconstructed from bullet-points written down during notetaking and are therefore a representation of the user's answers but not exact citations.

Q1: Was there anything that confused you with the tasks?
A1: I was confused that I had to create a second account.

Q2: You did not use the navigation bar, but looking at it now, can you tell me what you see?
A2: A home button that takes me to the dashboard? A second button that, wait does this take me to the dashboard? And an info button. What does that do?

Q3: Can you tell me what you think is good or bad about the layout on the dashboard?
A3: It is organized and easy to use.

Q4: Did your interactions with the website give you appropriate feedback and guidance?
A4: Apart from the obvious ones, yes.

Q5: Is there any feedback or guidance you would have wanted the website to give you?
A5: That this is not a real signup page.

Q6: Did you find anything confusing?
A6: Apart from the lesson, no.

Q7: Do you find this an interesting way of learning about web design?
A7: No better way of learning than experiencing shitty solutions.

Q7a: Why do you find it interesting?
A7a: I like to learn by doing, learning how not to do things is an effective way of learning.

Q8: What do you think about the interactions in the last form?
A8: They are horrible and fun.

General:
I did not learn anything.

3.6.3 Reflection

<u>In general</u>

The most important part of the prototype is the weird interactions which on the prototype became small and tedious to switch around quickly. My prototype consisted of many small and medium-sized pieces which had to be moved around rapidly of which I found to be rather difficult, which in turn made me forget about some details as I was too focused on moving the pieces around. Had I done it again, I would have used 'blu-tack' to give the smaller bits something to grab on to which would also have the added benefit of providing the prototype with some depth.

Moreover, given that the tables we tested on were too small to keep the prototype organised, I would have chosen to use a larger table if possible, or fewer bits and pieces if not possible. These changes would also allow me to test the prototype with more than one user, even though it was a great in-depth test, which could have presented me with some outliers in the feedback. Also, even though the prototype was of high quality and did include many things, I was unable to cover the learning summary at the end of the prototype. Mostly though, the prototype testing turned out to be good, it validated many of my assumptions and gave me some details to fix to avoid confusion.

<u>Feedback</u>

<u>Observation</u>

As for the feedback itself, I already suspected that the collapse/expand button could be misinterpreted, as I have yet to find an icon that works and the current one is meant as a placeholder. This goes to show that I need to keep looking for a better icon.

A1, A5

→ I was confused that I had to create a second account.

→ That this is not a real signup page.

This is one of the more interesting things that were uncovered. To solve this, task information will be presented at the beginning of the lesson. This will indicate that this part is only for learning purposes and then provide the user with some fake credentials to use in the form to further emphasise that they are not going to fill out the form with their information and that it is not just another sign-up form.

A2

→ A home button that takes me to the dashboard? A second button that, wait does this take me to the dashboard? And an info button. What does that do?

I did not expect to see the user confused on what was home- and dashboard buttons as I use google's material design icons to avoid this type of confusion. However, this might be because of when you log in on some websites, the new 'home' becomes the dashboard instead of the landing page. Moreover, there is no reason for the user to go back to the landing page after having logged in, so the simplest solution would be to discard the dashboard button and retarget the home button after the user is logged in. Although, this should also be tested to see whether it confuses more or if it works as expected. As for the info button, that takes the user to the about page, which was not part of the prototype. I have not found a better icon to symbolise the about page than the info icon. Also, the navigation bar will be expanded when the user first visits the website allowing the user to read the different navigation links before the navigation bar is collapsed as they scroll down or navigate to a separate page.

A3

→ I did not learn anything.

This has a simple answer. For the prototype, I was unable to include the learning summary at the end of the lesson, as I spent all my time working on the different interactions which I deemed to be the make or break part of the website. The actual learning will, of course, be a part of the complete site and how it will be implemented can be viewed from the wireframes. (See Appendix D - Wireframes)

Part B

4. Aesthetics

4.1 Style Guide

4.1.1 Theme

The theme of this website will be a mixture of clean professionalism and comic book aesthetics to give a sense of immersion towards the story aspect of the site. The site will use a single fixed-position background on all pages to ensure immersion and similarity throughout the entire application. This background image, as seen below, have been put together from two pictures and altered to blend into the background colour.

(Garbett and Black 2016, pp. 38-39)(Garbett and Black 2016, p. 82)

This background image is focused on providing the aesthetic look of the fantasy genre, more specifically in a comic book style, which aligns with the target audience's field of interest. This is part of what makes the website feel less like work and more like a place inviting the user to unwind and enjoy the experience of learning about bad web design. To balance out the comic book aesthetics, the website incorporates several elements which give it the look and feel of a professional learning platform. This is done through implementing certain aspects from the material design framework such as cards, material icons, a structured layout, call to action buttons and a dashboard.
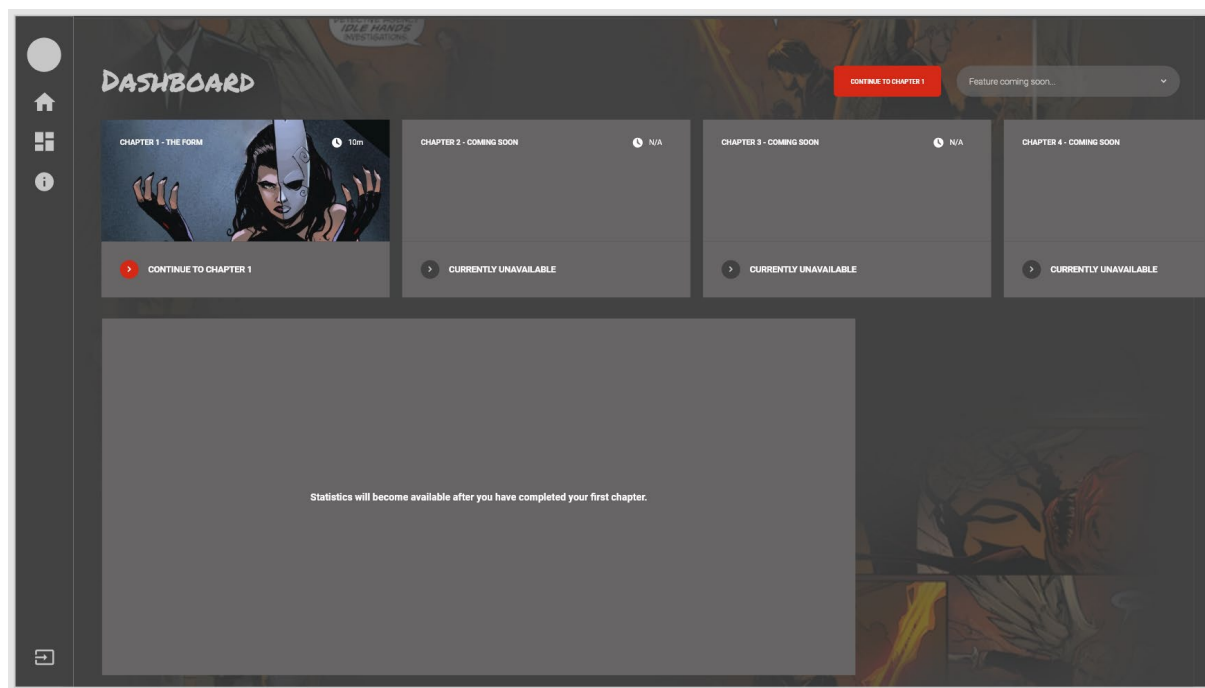
Figure 14: (Appendix F – Aesthetic_Mock-ups)

The image above shows this usage of cards in a structured grid format and icons on a sidebar which gives the website a neat and pleasant structure for the user's eyes to follow.

4.1.2 Typefaces

To further build on the professionalism aspect of the application and to cater to a wide range of age groups, the sans-serif typeface 'Roboto' was chosen as the main typeface for the majority of all text presented on the site. A sans-serif typeface is a standard choice for many companies as it looks both modern, reads easily and gives a professional look. To give the website some character and have it pop a second typeface was introduced. The 'Permanent Marker' typeface aligned well with the general look and feel of the comic book and also provided a nice visual hierarchy to the body on the site. The table below shows in detail the

main choices on font sizes, font weight and letter spacing. These styles were put together using the material design framework to ensure good readability and scaling. There are exceptions to the rule, where some of these styles have not been used yet but is still included for future development and some specific cases where either responsiveness or one-time circumstances altered the logical choice. With that said, these styles constitute the majority of use cases on the website and are considered the style guide to follow.

```css
body { font-size: 1rem; font-weight: 400; letter-spacing: 0.5; color:
#fff; }
h1 { font-size: 6rem; font-weight: 300; letter-spacing: -1.5; }
h2 { font-size: 3.75rem; font-weight: 300; letter-spacing: -0.5; }
h3 { font-size: 3rem; font-weight: 400; letter-spacing: 0;
    font-family: 'Permanent Marker', cursive; opacity: .7; }
h4 { font-size: 2.125rem; font-weight: 400; letter-spacing: 0.25;}
h5 { font-size: 1.5rem; font-weight: 400; letter-spacing: 0; }
h6 { font-size: 1.5rem; font-weight: 500; letter-spacing: 0.15; }
.subtitle-1 { font-size: 1rem; font-weight: 400;
            letter-spacing: 0.15; }
.subtitle-2 { font-size: 0.875rem; font-weight: 500;
            letter-spacing: 0.1; }
.body-2 { font-size: 0.875rem; font-weight: 400;
        letter-spacing: 0.25; }
.button { font-size: 0.875rem; font-weight: 500;
        letter-spacing: 1.25; text-transform: uppercase; }
.caption { font-size: 0.75rem; font-weight: 400;
            letter-spacing: 0.4; }
.overline { font-size: 0.625rem; font-weight: 400;
            letter-spacing: 1.5; text-transform: uppercase; }
```

4.1.3 Colours

The colours picked for this website was selected to emphasise a feeling of 'grimdark' and reflect the colours of hell and the devil as the user ventures into hell when accessing this website. In going for the grimdark 'hell' theme, it came naturally to go with a dark mode website, meaning blacks and greys as the primary colours. Red was chosen as most of us, at least in the western world, see the devil as red and hell as a dark place engulfed in scorching hot red flames. This colour

#676565

#FFFFFF

#D52916

#424242

is considered the brand colour and will appear in areas such as buttons and border to contrast

with the black and grey primary colours and provide some colour to the mix. White is mostly used as a font colour to contrast with the dark colours and the red brand colour. Although these are the primary colours of the website, there are slight variations of these, such as different opacities of the colours.

4.1.4 Elements

There are certain elements through the website that consistently changes appearance on user interaction. How these elements are changed on interaction is walked through in this section.

Buttons
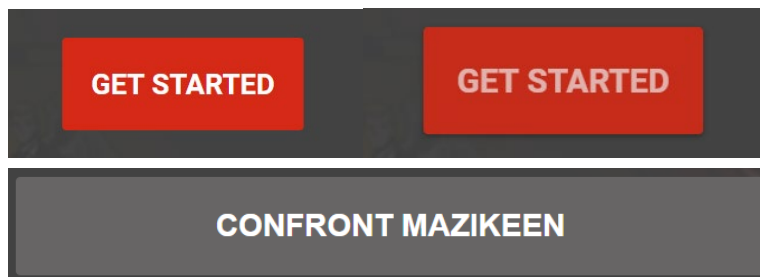
Buttons will as a default use a white (#fff) text colour in all uppercase. The background of buttons is red (#D52916) as default and light grey (#676565) for disabled buttons. With that said, there are some cases where these colours hinder accessibility, such as when the background colour is too similar to the disabled button colour. In these cases, the dark grey (#424242) can also be used. When hovered over, buttons will lower the opacity of the white colour to give a strong indication of change and a more subtle change in adding a box shadow to illustrate that the button comes closer towards you in line with how depth on a website is portrayed by the material design framework.

```
button:hover, a:hover {
  box-shadow: 0 1px 3px rgba(0,0,0,0.12), 0 1px 2px
              rgba(0,0,0,0.24);
  color: rgba(255, 255, 255, .7);
  opacity: .9;
}
```

Buttons as a standard are set with a 1em padding on all sides, which should be equivalent of 0.875rem. There are circumstances where this padding is too much, which is why two other button sizes have been made to facilitate for these situations.

```
.button {
  padding: 1em;
```

```css
  border-radius: 2px;
  outline-style: none;
  border: none;
  background-color: #D52916;
  color: #fff;
  font-weight: bold;
  text-decoration: none;
  cursor: pointer;
}
.button-small {
  padding: 0.2em;
  margin: 0 0.2em 0 0.2em;
}
.button-medium {
  padding: 0.6em;
  margin: 0 0.2em 0 0.2em;
}
```

Inputs and Selects

Inputs and selects use a white (#fff) text colour, a grey (#676565) background, and a dark grey (#424242) border with .5 opacity as default. The border will turn red (#D52916) when hovered over to indicate that it is a selectable element. Input fields also have a label positioned inside of the field which moves up when the field is focused.


```css
input, select {
  padding: 1em 0 1em 1em;
  border-radius: 2px;
  border: 1px solid rgba(66, 66, 66, .5);
  background-color: #676565;
  outline: none;
  caret-color: #fff;
  color: #fff;
}
```

```css
input:hover, select:hover {
  border: 1px solid #D52916;
  outline: none;
}
input:focus, select:focus {
  border: 1px solid #D52916;
  outline: none;
}
```

Cards

There are three types of cards implemented into this website, two static types and one that is interactive. All three types use a grey (#676565) background colour and have a box shadow to create the illusion of depth. The box-shadow on the interactive card is equal to the box shadow of the two other card types depending on whether it is in a default state or hover state.

```css
.card, .card-action {
  background: #676565;
  position: relative;
  margin: 1rem;
  border-radius: 2px;
  box-shadow: 0 1px 3px rgba(0,0,0,0.12), 0 1px 2px rgba(0,0,0,0.24);
  overflow: hidden;
}
.card-action:hover, .card-popup {
  box-shadow: 0 14px 28px rgba(0,0,0,0.25), 0 10px 10px rgba(0,0,0,0.22);
}
```

The interactive cards also have a section that appears when hovered over. This section is coloured red (#D52916) as default with a white (#fff) body or grey (#676565) if the card action is disabled.
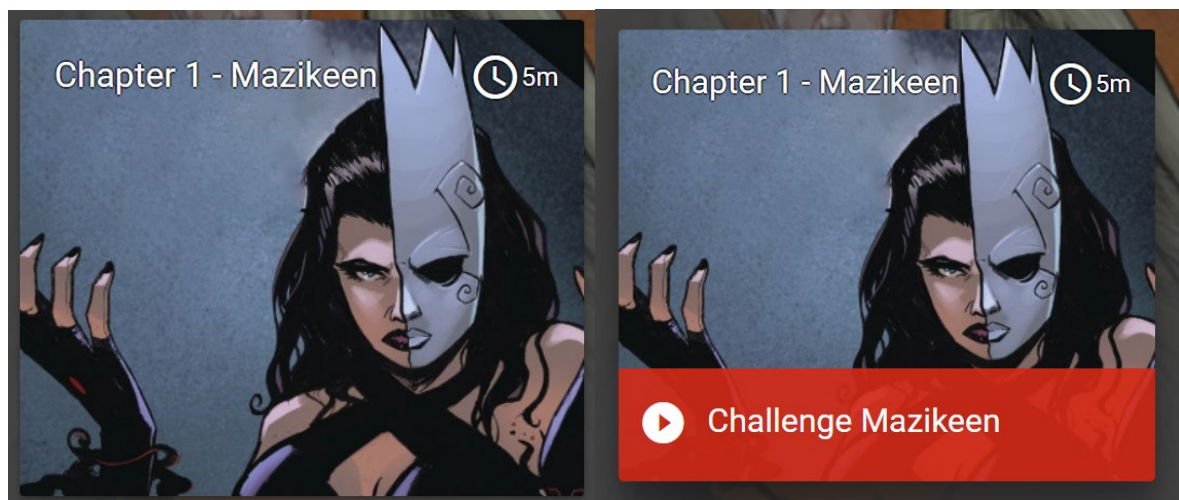
Icons

Icons on this website are by default coloured white (#fff) with a .7 opacity, except for on the interactive cards where active cards have white (#fff) coloured icon and disabled card icons are coloured dark grey (#424242). The cursor changes to a pointer on hover and no other effects have been added as this is not meant to be the centre of attention.
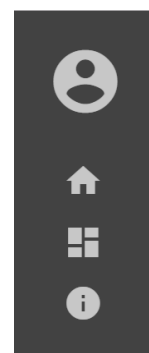
4.2 Aesthetics User Testing

4.2.1 Testing Plan

General

Scope and Limitations

This test considers the website's aesthetics, as in sensory stimuli presented by the site in the forms of amongst other typography, colour and layout and how these factors visually communicate the concept to the user. This test does not include sensory stimuli in the categories of hearing and smell or similar, as the website is focused on the visual aspect.

Feedback Goals

As a goal for this testing session, I aim to receive constructive feedback in terms of first and foremost, the overall aesthetics and how it aligns with the target audience in mind. Secondly, I aim to receive input in the choice of typography, colour and imagery, and if the current choices

communicate the theme and feel of the website. Also, I aim to receive some feedback on whether or not the chosen layout presents a good user experience.

<u>Testing</u>

open-ended discussion in the group where the website is placed on the table and the group are asked to discuss.

Questions

Q1: can you explain to me what you believe the website is about?

Q2: How does this website communicate the combined theme of being a professional learning platform that uses comics to teach.

Q3: Do you find any aspects of the website confusing? Why?

Q4: What elements of this page do you believe provides a good or bad user experience?

4.2.2 Website Mock-ups

For the aesthetic prototype testing, a total of three mock-ups were created. These mock-ups were selected as they would introduce most of the elements the website would include in a finished state and would, therefore, be a good representation of the rest of the site and be sufficient to receive valuable feedback.
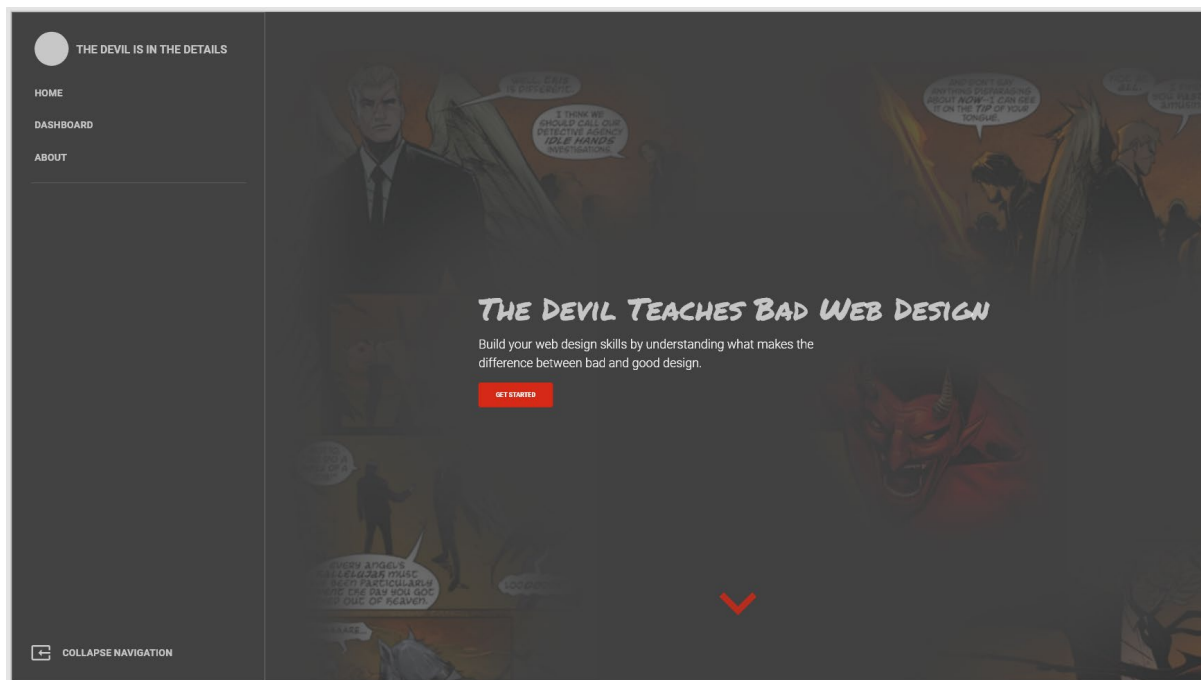
Figure 15: (Appendix F - Aesthetic_Mock-ups)
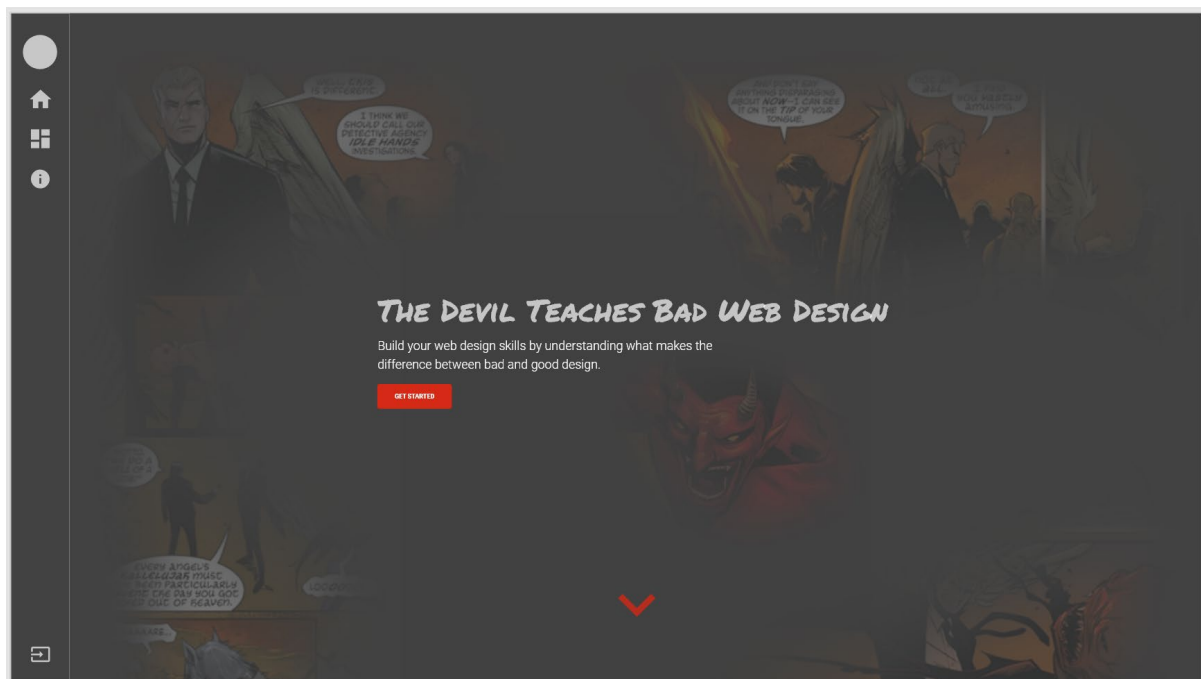
Figure 16: (Appendix F - Aesthetic_Mock-ups)

The first and second mock-ups are off the landing page, showed in two different states: navigation expanded and navigation collapsed. These pages were planned to provide feedback on the general aesthetics and choice of theme. Moreover, they include both typefaces and a call to action button, which is in the centre of attention and two different navigation bar formats. In choosing these pages, the test could focus on each element

present on the screen as there is a limited amount of items for the user to focus on and give feedback on.
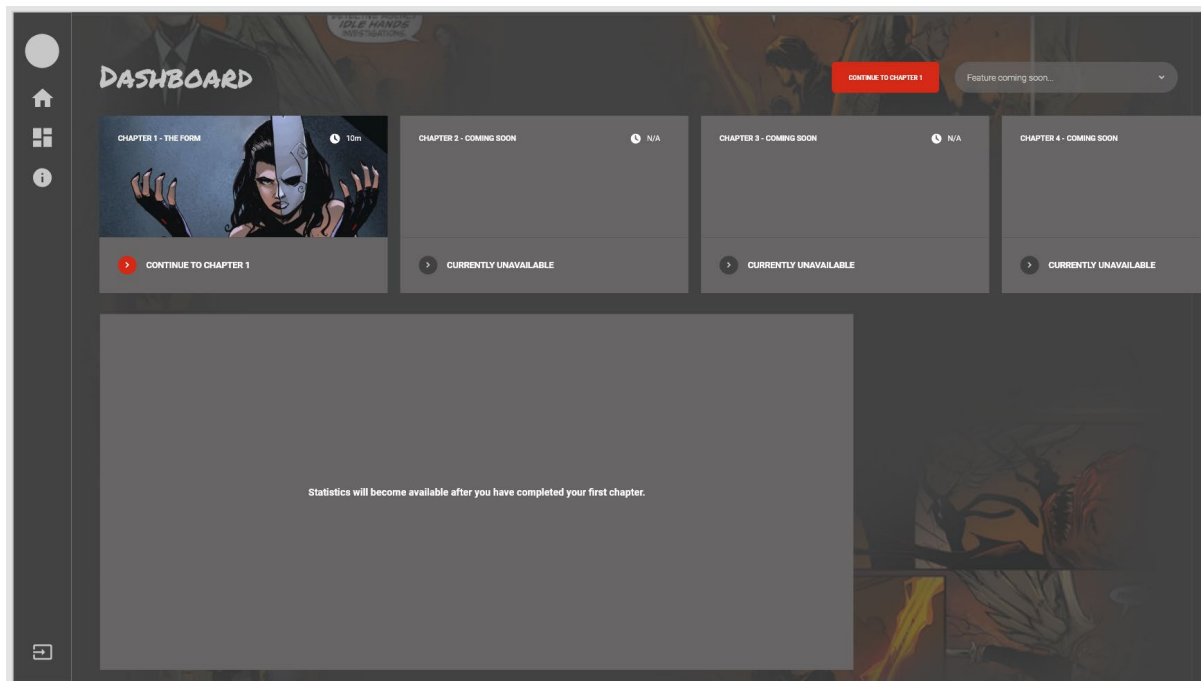
Figure 17: (Appendix F - Aesthetic_Mock-ups)

The third mock-up is of the dashboard page, which includes a better understanding of the visual layout and cards, which is an integral part of the website. This page was chosen to understand better if the visuals aided the structure in guiding the users to find their next step and how to find the information they seek.

4.2.3 Testing Feedback

As for the feedback, I only kept the response from the second test as the first time did not provide any value due to the participant having trouble speaking English which made the participant unable to answer the questions asked and unable to read the body text on the mock-ups.

Q1: Can you explain to me what you believe the website is about?

A1: Bad web design integrated with a story.

Q2: How does this website communicate the combined theme of being a professional learning platform that uses comics to teach.

A2: It is interesting.

Q3: Do you find any aspects of the website confusing? Why?

A3: Not really. Easy and clear.

Q4: What elements of this page do you believe provides a good or bad user experience?

A4: I like how the colour show available chapter.

General Feedback

The design scales nicely. Nice faded background. Too small font size on the chapters. The red buttons are prominent and show the next step.

Implications for Design

The most valuable information came from general feedback, where it was mentioned that the font size on the chapter cards was too small. As the aesthetic test responses were mostly positive, there does not seem to be any need of change at this stage of development except for minor details such as the font size.

4.2.4 Reflection

As with most of these prototype tests, the number of respondents is too few if one aims to uncover most usability and aesthetic issues, so these tests do not provide realistic data on how the aesthetic is perceived by a larger audience. Moreover, the testers that are present might not be in the target audience of this site. One of the major issues of conducting these testing sessions seems to be language barriers which hinder communication with the test users and often have showed to result in less valuable data than expected. With that said, from the data received in this testing session, keeping the current design and improving upon it seems to be the right direction to move in.

5. Website Implementation

5.1 Accessibility, Graceful Degradation & Progressive Enhancement

For The Devil Teaches Bad Web Design, I have chosen to use JavaScript as it is core to how the Vue.js framework works. As a former Java programmer, I enjoy using computer logic to create interactions and improve upon the user experience. Moreover, to have the web move forward, we have to keep using new technologies to force older technologies to keep up or to make room for the new ones. This is not only for convenience but also for security reasons and accessibility. The newer types of technologies and frameworks give both the user and developer a better user experience and provide an added layer of security through the code of the framework. In using Vue.js, although somewhat limited by the restrictions given for this project, I can use the strengths of JavaScript to write faster and better HTML and CSS. This is done through the components where all HTML and CSS can be specific to that component if you so wish, which reduces the risk of writing code that disrupts other parts of the codebase.

5.1.1 Accessibility

For the accessibility exercise, I chose Byron Bay Bluesfest (n.d.).

Perceivable: In terms of being perceivable, the website falls short for those who are visually impaired. As a person with colour vision deficiency myself, although the illustration was cool, the background image hurts to look at, and the various buttons that are laid on top of the background blend into the background. With that said, it is not a horrible experience, only somewhat unpleasant. Moreover, there is a lot of information available for web crawlers to scan through, but curiously enough, all of the content in the website is wrapped inside of a form tag which might confuse the web crawlers in terms of website hierarchy and layout, or it might be a trick to rank better in terms of SEO.

Operable: Although a bit more cluttered, the website seems to be easier to operate in mobile view, and somewhat simpler in pad view.

Understandable: The top section, header and navigation is clear on what the website is about and easily navigational, however, when scrolling further down, some users would quickly become confused and overwhelmed by the shear about of content laid out in front of the user.

Robust: The website uses both webkits and specified code for certain browsers, which indicate that they indeed do focus on being able to render the content on every browser. However, the code is a mess to read and everything is wrapped in a form, which is rather odd.

I did learn some from the discussion of Accessibility as accessibility involves so much more than you would initially think. Also, in knowing about the guidelines that exist, it will be easier in the future to create websites with many types of accessibility issues in mind.

5.1.2 Graceful Degradation & Progressive Enhancement

Most modern websites use the graceful degradation method, whether the developer knows it or not. This is due to many websites today being made using large scale frameworks such as Angular, React and Vue, which includes technologies such as Babel and Webpack. These technologies will compile the code the developer writes into code that includes webkits and older versions of JavaScript. With that said, few of these modern websites work where there is no JavaScript enabled as you simply remove most interactivity when doing do. As an example, we can see Google's firebase, which doesn't even scroll when JavaScript is disabled (Google Developers, n.d.). However, this site is for developers, and few of those deactivate JavaScript. Looking at Google's search engine, we get another example of graceful degradation, but this time a working website without JavaScript (Google, n.d.). Looking at the <noscript> tag one can see that the user is redirected if JavaScript is not used, which means that you are no longer on the main page, but on a separate degraded page when you don't use JavaScript.

It's difficult to confirm whether or not a website uses progressive enhancement, but there are some indicators that point towards it being used. In the examples of Git and StackOverflow, one can see that both these websites work properly with no JavaScript enabled and the <noscript> tag does not include much at all, if it even is there at all (Git, n.d.)(StackOverflow, n.d.). This suggests that the website is fully functional without the need of a <noscript> tag and that JavaScript makes for a better user experience if it is enabled.

The Devil Teaches Bad Web Design is being made as a single page application, which means that it will not work at all without JavaScript enabled. Due to the target audience is younger people with interests in learning web development, an assumption has been made that these people would normally not deactivate their JavaScript. Due to certain restrictions on how Vue.js is being used for this project, the website will not include graceful degradation automatically as Webpack and Babel have not been included. In other words, the website has to manually implement graceful degradation.

I had never thought about graceful degradation and progressive enhancement before being introduced to them here. It was always more of a nuisance having to use webkits and write code that used an older syntax. However, the reason for which I never gave it much though is

because I have written code using Babel and Webpack for some time now, which does this job for me. With that said, it is good to know what goes on behind the scenes, and in the future, now being aware of it, I might come across a website that specifically should do it one way or another.

5.2 Security & Privacy

5.2.1 Security

This section will be a recap of my responses and examples to the guiding questions in security as I was one of the presenters during this session (Appendix G - Security).

The website I researched for this topic was MSY Technology Pty Ltd (n.d.).

Figure 18: (MSY Technology Pty Ltd, n.d.)

Throughout hosting this discussion, I asked the participants the following questions:

Q1 - What about this website make it appear less trustworthy, and could potentially affect the website's security?

Q2 - What could be done to have this website appear more trustworthy to visitors?

Before hosting the discussion, I answered these questions myself to be able to compare the findings through the discussion and my findings before the discussion. My findings were as follows:

Where the website succeeds

The website:
- does have a SSL certification.
- has implemented payment gateways.
- provides ways(chat and phone) to speak directly to the company.
- uses embedded social media.
- has updated its copyright in the footer.
- is price transparent
- Provides a good amount of privacy/ rights/ warranty etc information in the footer.

Where the website falls short

The website:
- although, it is SSL certified, is not considered secure by chrome.
- chat function or images could be manipulated by hackers as a result of the above reason.
- is sloppy in terms of visuals, as in layouts, colour choices, alignment, whitespace.
- is using unprofessional widgets, with internal jargon.
- has a lot of advertisements.
- reroutes you to unexpected places.
- is not mobile friendly.

Other Unsecured websites

http://myshopify.com/
http://www.ctrip.com/ (Chinese version only)
http://go.com/
https://www.lingscars.com/
http://www.espn.com.au/

Figure 19: (Appendix G - Security)

Throughout the discussion, most of these were founds and discussed by the participants as well, except for some issues that I brought into the discussion towards the end. Interestingly

enough, one of the issues, that was not discovered was the info icon in the URL field which indicates that the website is not secure even if it has an SSL certificate.

As for how security is considered in the website of this report, a simplistic authentication system will be included as a means of route guarding. However, there is no data validation or other means of security measures implemented into the website. As with most other discussions, I did not feel like I learned anything from the security discussion either as this is general information I have come by earlier in my life by being interested in computers.

5.2.2 Privacy

The website I chose to analyse in terms of privacy was BBC (n.d.).

As for BBC's privacy policy, they have done a great job in making it human readable by adding a layer on top of the actual privacy policy which explains in layman terms the most frequent asked questions. There is, of course, always room to improve. BBC could have a table view or an infographic that does not lose people interest as quickly as simple text does, but then again, those people who would want to read the privacy policy would have to expect some sort of reading.

BBC explains their use of cookies as either strictly necessary, functional or performance cookies, whereas the former is required for the website to function properly and give you access, and the second type is used to remember preferences and the former is to make sure the website works properly. Moreover, they provide a list view of how these are used in general, which is to: analyse your usage of BBC, to give you a personal experience, authentication and redirecting to international versions of the site.

In terms of whether the trackers on the website contributes to the user experience is entirely dependant on the user. Some users enjoy receiving tailored ads, while others don't, and some users don't like analytic tools to track your every move on the website while others feel that they contribute to creating a better site for their future usage. With that said, most trackers were advertisements with a few analytics trackers.

5.3 Hi-Fi User Testing

Due to the way I develop websites, one page at a time, when the Hi-fi user testing came about, a lot of the core functionality and styling had been implemented, but the actual educational content and story had yet to be included. As a result of this, there were only so many tasks I could prompt the user to perform. However, the sections of the website that was completed up to this point were still important to test to see how users would interact with the website and whether they understood what the website was about or not.

5.3.1 Testing Plan

<u>Task 1:</u>

DO: Create an account

WATCH: How quickly users understand where to sign-up, how to fill in

                information and create a finished account.

ASK: Did you have any issues signing up on the website?

                If yes, what issues did you encounter, and why was this an issue to you?

<u>Task 2:</u>

DO: Start Chapter One

WATCH: Which method of starting chapter one users prefer to use.

ASK: Why did you choose to use that button instead of the other one?

Questions

Q1 - Did this website guide you to what you needed to do?

Q2 - Where there any places where you struggled to understand what to do next?

Q3 - What does this website make you think of?

Q4 - Do you find the aesthetics of this website visually pleasing?

Q5 - How did the navigation work for you?

Q6 - Can you tell me what this website is about?

Q7 - Do you believe that this website reflects the target audience of young adults interested in the fantasy genre and who are learning web design?

5.3.2 Testing Feedback

<u>User #1</u>

Task 1 – The user navigated straight to the CTA button and started the process of account creation, which was done without any hassle. When asking the user if the user had any problems signing up, the response was no.

Task 2 – After having glanced over the interface, the user chose to click the interactive card, which leads to chapter 1. When asking why the user responded that the user reads from left to right, so it was the closest one to press. The user also added that the user could not understand what the chapter was about just by looking at the card, indicating that some more detail should be added to the cards.

Q1 - Did this website guide you to what you needed to do?

A1 – "Well, yes."

Q2 - Where there any places where you struggled to understand what to do next?

A2 – "No"

Q3 - What does this website make you think of?

A3 – "Comic Books"

Q4 - Do you find the aesthetics of this website visually pleasing?

A4 – "Yes, although quite gory, not suitable to children."

Q5 - How did the navigation work for you?

A5 – "As expected except for side-scrolling not an option on chapters."

Q6 - Can you tell me what this website is about?

A6 – "Somehow learning to be a good web designer from the devil.". "Comic books based on the art".

Q7 - Do you believe that this website reflects the target audience of young adults interested in the fantasy genre and who are learning web design?

A7 – "Yes"

General Feedback:

More information on chapters, just some, not a lot.

Having to log in each time using the button on the home screen is tedious.

<u>User #2</u>

Task 1 – The user does not wait to be given a task and starts using the website. The user clicks around a lot and tries out every button using both touch and touchpad. The user does not read any body that comes up, instead option to click buttons until one works. After the user has signed up several times, I manage to reach through and ask my question. Where the user says it went fine, but that he would like not to have to log in each time.

Task 2 – The user navigates to the image each time the user tries to enter the chapter. When asking why the user says that the image comes more naturally than the button.

Q1 - Did this website guide you to what you needed to do?

A1 – "Yes", "Not include login step."

Q2 - Where there any places where you struggled to understand what to do next?

A2 – After asking what the user means several times, I'm able to understand that the user does not understand what the body text on the statistics panel says.

Q3 - What does this website make you think of?

A3 – "Superman, Hulk"

Q4 - Do you find the aesthetics of this website visually pleasing?

A4 – "Definingly not."

Q5 - How did the navigation work for you?

A5 – "Easily"

Q6 - Can you tell me what this website is about?

A6 – "Difficult to understand" user reads the body on the website and says "aaah"

Q7 - Do you believe that this website reflects the target audience of young adults interested in the fantasy genre and who are learning web design?

A7 – The testing session was over at this point, so I never got to ask the user the last question.

5.3.3 Reflection

Although, I was unable to test the main interactivity of the website, I was able to test whether or not the current flow was up to standards and if the content was understandable or not. As with most of these tests, the testing group is too small to establish what is outliers and what are themes, so it is difficult to say what data to take into consideration or not. However, based on the answers from user #1, there are some users who have no issue with the website, except for that login and side-scrolling, while other users do not find it pleasing or the content to be good enough. This might be a cultural difference in how different cultures prefer information to be presented, or it might be the difference of one user being in the target audience while the other is not. However, some issues were raised that should be looked into moving forward.

6. Conclusion

This report has been a journey through the planning of the website The Devil Teaches Bad Web Design and the various thoughts and design principles that have been used in planning the design. This report showcases decision made from the very beginning in choosing a target audience and works through topics such as prototypes, visual layout, navigation and aesthetic design, to a high-fidelity prototype at the end. This report shows the evolution of the website and how feedback has been analysed and, in some cases, implemented. The drawback of this process and the response of it is that all rounds of prototype testing have focused on short user testing sessions with few users. This selection of users is not representative of the target audience and thus might have led the design astray. However, in doing user testing, one discovers issues that the designer not necessarily would have noticed on his or her own, which indeed is of great value. In terms of how the final website responds to the brief, there are both some areas it responds above average and in others below average. In general, the website is a functional minimum viable product that hopefully one day would see further development as it is an interesting concept that could grow to shine much brighter than it does today. In terms of future work on this website, I would strongly suggest converting the codebase into how Vue.js is meant to be used, as the limitations on this project have resulted in using the framework in a less than optimal way. In doing so, one would be able to better structure the code and adhere to coding conventions made by the Vue community and also reap the benefit of Webpack and Babel for graceful degradation. Also, as a next step for the site, I would suggest implementing more chapters and the statistics view, followed by a proper mobile version through Ionic or similar frameworks.

6.1 Course Reflection

Since I'm taking this course on the second semester of my master's degree, I have already been through other ways of developing an application that better suit my role in a future project, such as HCI and Design Thinking. Although I'm thankful for the opportunity to use Vue.js instead of plain vanilla JavaScript, I'm sad that certain restrictions had to be put in place. Due to these restrictions, I was unable to push my existing knowledge to a new level as I instead had to focus on learning to use the framework inefficiently. Looking back now, I would not have used Vue.js in this course again, as the grade does not account for a lot of JavaScript, and due to spending more time creating a single page application, my project fell short in other areas, such as responsiveness and degradation. One major issue with the course is the tutorials which are marked on participation. This is an issue as many of the international students are struggling with the English language, which makes this tutorial a waste of time as most of the tutorial is about communicating with your peers. UQ is failing these students, where they do not support these students in learning the language and let students who are below par in the language have entry. This negatively affects the rest of the students who have to do more work because what has been discussed in class is not up to standards or is difficult to understand due to language barriers. If I were to take the course again, I would not attend the tutorials, and I would create a more simplistic website using regular HTML, CSS and JS as there is no real incentive to go above and beyond in learning something new and exciting. With that said, I did enjoy the knowledge of both the tutors and lecturer and how easy it is to reach out to them. One of the strongest aspects of this course is the structuring and the lecturer. The structure is easy to follow and to understand and the lecturer cares about the students and wants to see them succeed.

7. References

7.1 Books

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7.4 Wireframes and Aesthetic Mock-ups Specific References

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https://www.behance.net/gallery/55462459/Wires-wireframe-kits-for-Adobe-XD

7.5 Website Specific References

See Content.pdf in Appendix H – Website_Sourcecode.

8. Appendix

https://drive.google.com/drive/folders/1-EbJV0iXpn-iVIVzeR245sATxwChws7t?usp=sharing

Appendix A - Card_Sorting

https://drive.google.com/drive/folders/19X_SXYgkbhz2V79h6V8xNlc12j5lH9yD?usp=sharing

Appendix B - Site_Map

https://drive.google.com/drive/folders/1ZJuhuzSckHnRSy1G2SuAp1AbjKTMFbXQ?usp=sharing

Appendix C - Storyboard

https://drive.google.com/drive/folders/1LxTlVcq6_IRQ65y-sc1VbfG9qYnVug84?usp=sharing

Appendix D - Wireframes

https://drive.google.com/drive/folders/1ysYQGbmvFMH5a43KKuIIFulBg1FPavmr?usp=sharing

Appendix E - Prototype_Paper

https://drive.google.com/drive/folders/1FnAb-mlMsWVZzAdkwaVvW-zl414pPNYE?usp=sharing

Appendix F – Aesthetic_Mock-ups

https://drive.google.com/drive/folders/1ccXubIlDTUY2cehmw1DgrjjAOx291LOe?usp=sharing

Appendix G – Security

https://drive.google.com/drive/folders/1k5q_y7_9J5INvcpMEvD-gVAYSw9drDf4?usp=sharing

Appendix H – Website_Sourcecode

https://drive.google.com/drive/folders/1zoBF_KLGx0a-anqGCPzLsk4Sv143FGpW?usp=sharing