DESIGN REPORT

WEBSITE DESIGN & IMPLEMENTATION ASSESSMENT

Introduction to Web Design (DECO1400)

Semester 1, 2020

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PART A

INTRODUCING THE DESIGN REPORT

Going into this design report, I was given an open brief by the client. For this project, my client is an innovative and daring entrepreneur, who is creating a unique new experience at an undisclosed yet unusual location and wants to see an example of a modern website developed for this scenario. The brief asked me to create a themed resort website that should be based at an unusual location and feature an activity that is the main calling card of the resort. Fortunately, this allows for a great deal of flexibility and gives space to explore my own ideas and designs, as it neither specifies the target audience, location or activity. The only requirement imposed by the client is that the website should be engaging, showcasing a modern and creative website standard that features more creative and interactive elements than a typical corporate website.

To reflect this creative freedom, this report will showcase my concept iteration and design evolution, with each section detailing parts of my process. It will be a sort of 'design journey' as it follows my entire ideation process from concept creation to website finalisation. The beginning will be an introduction to myself as a design reporter, the website topic, inspirations and the target audience. Next up is several sections that showcase the development of the structure of the website, starting with a card sort user test, a discussion on navigational and organisation systems, followed by a detailed site map and breakdown of the visual organisation of the website with a final paper prototype user test. Finally, the last section will showcase my website development, beginning with the aesthetics before moving on to the technical implementation with a final hi-fi prototype user test discussion before I conclude this design report.

INTRODUCING THE WEB DESIGNER

Before beginning the design report in earnest, it would be wise for me to first introduce myself as the web designer for this project. My name is Lucas Bouwman, I am 19 and I am pursuing a Bachelor of Information Technology. My greatest interest in life by far has always been video gaming, which I have been doing for as long as I can remember. I have experienced all manner of genres and styles and every aspect of my life has, in no small part, been influenced by my love of gaming.

I also have an academic background, receiving exceptional grades for most of my schooling career. This has led to a greater understanding of the development and coding side of website creation instead of the design elements, as I am far more comfortable working through the practical process of coding an already designed project. However, I do possess a creative mindset, as I come from a very artistic family, I just have undeveloped this skillset of mine by instead focusing of my academics.

It is my hope that by going through this design project, I can further develop my design skills. My main strategy that I will use will be more logical and development based. I plan on finding examples of coding either online or through the practicals that I can deconstruct and analysis, as I find it much easier to understand code by having working examples that I can pull apart to understand better. While this does occasionally result in some similarities between my code and examples, I implement it as such after I first breakdown and understand the code, as I refuse to use anything that I do not understand myself.

RESPONDING TO THE BRIEF

INTRODUCING THE WEBSITE TOPIC

After going through a number of ideas and concepts, I ultimately settled on the resort theme being Escape Rooms located at the Chernobyl Nuclear Powerplant near Pripyat, Ukraine. Concerning the location, I feel that the CNPP is a sufficiently unusual and fascinating area to not only comply with the brief but to attract and intrigue an audience. Ever since the Chernobyl Nuclear Disaster in 1986, the power plant and the surrounding $30km^2$ Exclusion Zone has always been viewed with an air of both mystery and morbid curiosity, on account of how devastating the disaster was.

It quickly became a cultural phenomenon worldwide, with a vast array of perspectives evoking all manner of emotional responses. For some, it is a reminder of the harsh reality that was the Cold War era while others use Chernobyl as an inspiring example of nature blossoming after the removal of human intervention. Everyone has an opinion on it, for better or worse. For myself, I have always seen it with mystery and intrigue, fascinated by the desolation and bleakness that perpetuates the area.

This fascination began at first with the Russian sci-fi novel "Roadside Picnic" by Arkady and Boris Strugatsky in 1972 and was centred around a mysterious and dangerous 'Zone' that holds supernatural secrets in the forms of artefacts and deadly mutants. While this was released before the disaster occurred, many parallels have been drawn between the disaster and the book, despite their lack of connection. However, it wasn't until I played the video game "S.T.A.L.K.E.R Shadow of Chernobyl" and the sequels, based heavily on an infusion between "Roadside Picnic" and the real-world Chernobyl disaster, that I truly fell in love with the character of Chernobyl.

In 'S.T.A.L.K.E.R', you traverse through and around an increasingly hostile and dangerous Exclusion Zone, visiting real-world landmarks such as the nearby town of Pripyat and the Chernobyl Nuclear Power Plant itself, all the while battling against mutants, humans and, harshest of all, the Zone itself in the form of radiation and various anomalies. All of this is portrayed as just the struggle to survive. Using a term coined in the academic article "Alone for All Seasons" about the 'S.T.A.L.K.E.R' series, a key element of these games is their "*environmental estrangement*", which is described as the ability to imbue a media piece with "*a wider and subtler spectrum of emotions and an intensely powerful, intensely personal sense of immersion*" (Sakey, 2011).

Figure 1 The Zone, in all its misery

The game invites you into this fascinating world, this "*unnatural, unknowable place, beyond true comprehension, one that is inherently not of Earth*", and then pushes you off a cliff, leaving for dead in a brutal and isolated environment (Sakey, 2011). Throughout the entire experience, you are imbued with a sense of misery and emptiness, knowing only that in this mysterious and beautiful world that you are alone. While this might sound cold and depressing, it is this nihilism that has always intrigued me about Chernobyl, the intense emotion and "*environmental estrangement*", and is something that I aim to try and capture in my website design. I want my website design to not be something to be seen but to be experienced. Fortunately, I feel the choice of Escape Rooms as an activity can help me achieve this goal.

I personally choose Escape Rooms as my activity as I have done them before, consider them an interesting activity and feel that they can help me create the feel of website that I want. Depending on the sort of material they cover, they have the ability to attract a large and varied audience, which also allows me to further narrow down my target audience to a specific group of these people. While you might have some people my age going with friends for a social and cooperative game, you might also have older people who like the history of Chernobyl and are interested in the more difficult puzzles.

I also feel that because each Escape Room is a separate, self-contained environment, it is easier to tell a story and elicit an emotional response from the user. For instance, one Escape Room might deal with devastation of the Disaster, where you have only an hour to prevent it from happening all the while being constantly reminded of what will happen if you fail, while another might be based around the mystery of the Exclusion Zone post disaster. Regardless of what content my fabricated Escape Rooms cover, I am confident that they will be able intrigue and draw in users.

INTRODUCING THE TARGET AUDIENCE

For my target audience, I have chosen 18 to 30-year old's, branching across the late teens to young adult demographics. I believe this is a wide enough audience to properly interest enough people for the design and I feel that these are the age groups most likely to take part in my chosen activities, Escape Rooms. I suspect that they will mostly be adventurous people wanting a unique experience, I also believe there will be quite a large number of users who come more for the problem solving that Escape Rooms require. However, to get a better understanding of my target audience, it is imperative that I construct several personas to represent the varied nature of my audience.
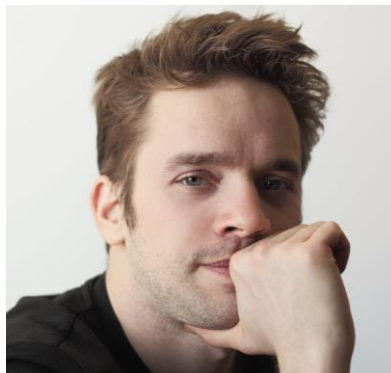
	Henry Janis Dovicha	22	Male
	Part-time McDonald's	Studying to become a History and Geography teacher	

Single, enjoys hanging out with friends in social and engaging activities, has disposable income, interested and passionate about History and Politics.

How they found website

While researching the Chernobyl Disaster for a university research project, they came across the themed resort.

Positives in Life

They like reading about History and don't mind large blocks of text. They like varied options and choices. They also enjoy challenging puzzles.

Negatives in Life

Can't stand losing and doesn't like anything competitive. Also doesn't like low quality living/accommodation.

Scenario

After finding the website, Henry will browse around and explore the general structure. One of the things that will interest him the most will be the various bits of historical information scattered around in the About Us page and the description for each Escape Room, as they have different themed activities, some which are historically based.

Jasmine Heartfer Menilson	28	Female
Human Resource Manager	Completed a Bachelor of Business Management	

In a relationship but focusing more on her career, she is trying to get ahead in life financially before life gets away on her.

How they found website	**Positives in Life**	**Negatives in Life**
They were looking for group activities and found out about Escape Rooms. From there, they found the resort.	They love organisation and structure and when going on activities and such, they always do the planning.	Doesn't like disorganisation and people fighting.

Scenario

In search of a group cooperative activity to further the team building being conducted at her company, she finds out about the cooperative and challenging game of Escape Rooms. When she goes to the resort website, she looks through all the details and starts planning a team group holiday to the resort. Being the HR manager, it is also her priority to examine the Terms and Conditions associated with going to the resort.

Looking at the two personas constructed, several implications can be derived from both. Concerning the first persona, the website should have varying depths of information for the different users. While our persona, Henry, enjoys reading detailed text, I suspect most users would prefer the choice to just read through a small block of vitally important text instead. As such, the website should accommodate both sorts of users, with detailed information provided where appropriate. Another thing to note from persona one is Henry's dislike of low-quality accommodation. While cheaper alternatives are important to include for people on a budget, there should also be higher quality options for those that can afford it.

For persona two, the main implication is the dual functionality of booking for both separate users and users in groups, such as in team building exercises. As such, the website should include the appropriate structure to allow users to book and plan for large groups of people, extending both into accommodation and the Escape Rooms themselves. Because this is a corporate exercise trip, it is also essential to provide the users with the necessary Terms and Conditions and relevant safety information on the website.

NAVIGATION & ORGANISATION

CARD SORT USER TESTING

For the Card Sort User Testing, I prepared a series of 'cards' that would each display a content item or page of the website, with a testing plan to accompany it. For the type of Card Test, I choose an Open Card sort so that I may better understand the typical navigational intent of the user. I will give them remote access to my computer and allow them to move the cards into groups that they believe fit together. After this, I will ask them to name and classify each group and explain why they placed them there and how that would be reflected in the navigation. I will propose changes to their design and see how they are affected. Afterwards, I will evaluate and reflect on the feedback they give.

Test Plan

Content – (In order of high use to low, underlined for essential)

- Home Page (Main thoroughfare)
- Escape Rooms (Info for various rooms)
- Accommodation (Accommodation for visit)
- How to Play (How escape rooms work)
- FAQ (Frequently asked questions)
- About Location (About the special location (Chernobyl))
- News (News about the area/service)
- Events (Events occurring at place)
- Contact Us (Phone numbers, emails, etc)
- About Us (Info about service, history, founding, etc)
- Terms and Conditions

Actions – (In order of high use to low)

- Book (Book rooms and accommodations)
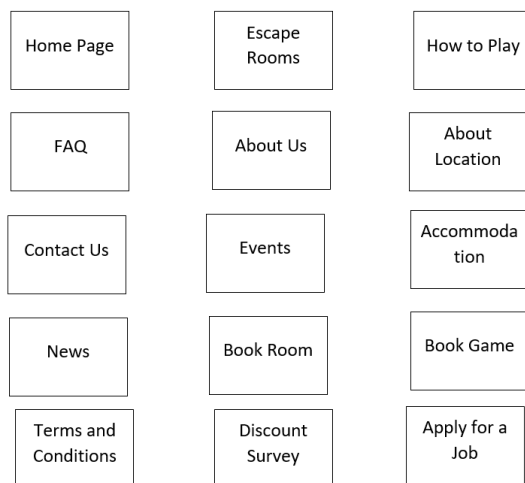- Discount Survey (Do a survey for an easy discount)
- Apply for a job

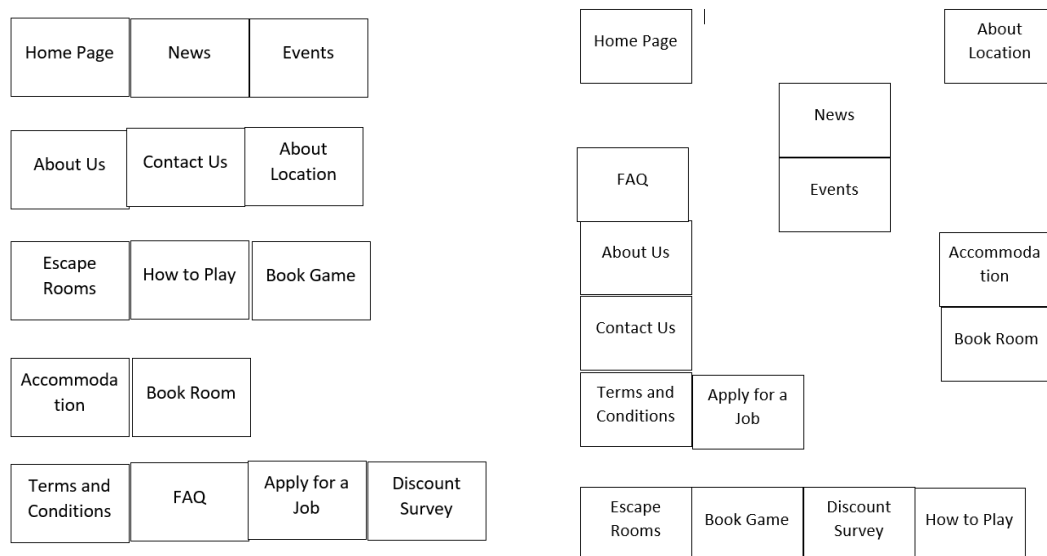Onto the point of differences, there are a number of interesting ideas represented. Firstly, the 'Home Page' sections, which User One believes encompasses both 'News' and 'Events' as well as the 'Home Page' itself. I am uncertain how this would be structured in the final website, as if they are a part of the 'Home Page' section, I don't know whether it be apt to have links leading from the 'Home Page' itself to the two other pages or if it would be best to ultimately include the 'News' and 'Events' content in the single 'Home Page' site itself.

Regardless, I feel more inclined to agree with User Two in this circumstance, as they have the 'Home Page' a separate entity, with 'News' and 'Events' grouped together elsewhere. Continuing with this sentiment, I feel it would be more beneficial to further this grouping and ultimately join 'News' and 'Events' together to create a single page, as the topics are similar enough to warrant inclusion.

The next point of difference is how the two users handled the 'About and 'Legal Information' pages. User One specified these two categories, with the 'About' section containing the information about the resort and location together, with the inclusion of the 'Contact Us' page for further information. Subsequently, their 'Legal Information' section consisted of 'Terms and Conditions', 'FAQ', 'Apply for a Job' and 'Discount Survey', which all feel appropriate together, aside from the 'FAQ', which I would personally place in the 'About' area. Apart from that, I feel this section would be apt to have as a footer for the website, as the information is of no use to the average user and would be best to have out of the way.

User Two on the other hand still has only two sections, but they labelled them as the 'Location' section, which only included the 'About Location' page, and the 'Information' category which contained everything else. I found the separation of 'About Location' rather interesting, as they felt it didn't feel appropriate to be in the 'Information' section. This led me to ultimately join both the 'About Us' and 'About Location' page, as together they can cover the full breadth of information. While I did like the idea of an combined 'Information' section, I instead opted for the separation of the major pages, them being 'About Us', 'FAQ' and 'Contact Us', with the rest of the non-essential information in the footer as 'Legal Information', alongside similar content, like the 'Social Media' connections.

NAVIGATION & ORGANISATION SYSTEMS

After conduction the Navigation and Organisation Systems table discussion and examining real-world resources, there were a number of changes I made to by design. Using my example from the table discussion, I will make use of scrolling menu bar that follows the page, local page navigation links, useful footer links and several smaller features. I like the scrolling menu as it allows the user to navigate to any separate page from anywhere on the current page, reducing user frustration and streamlining the navigation process.

The local navigation will also help with this, while also providing clear categorical sections for the content on the page. Lastly, the footer is useful to reduce general navigation clutter, as anything that doesn't fit anywhere else is usually relegated to the footer, along with legal information that most users are unconcerned with.
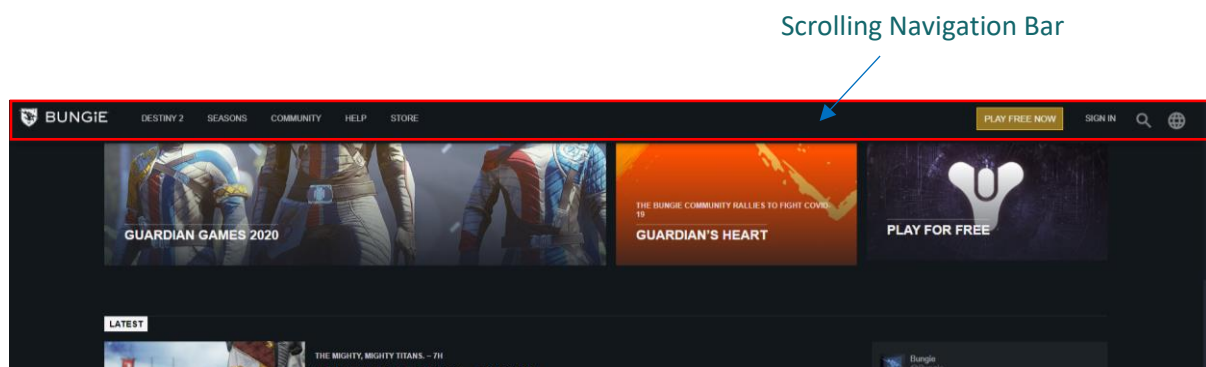
Scrolling Navigation Bar

Figure 4 Nagiation Bar Example
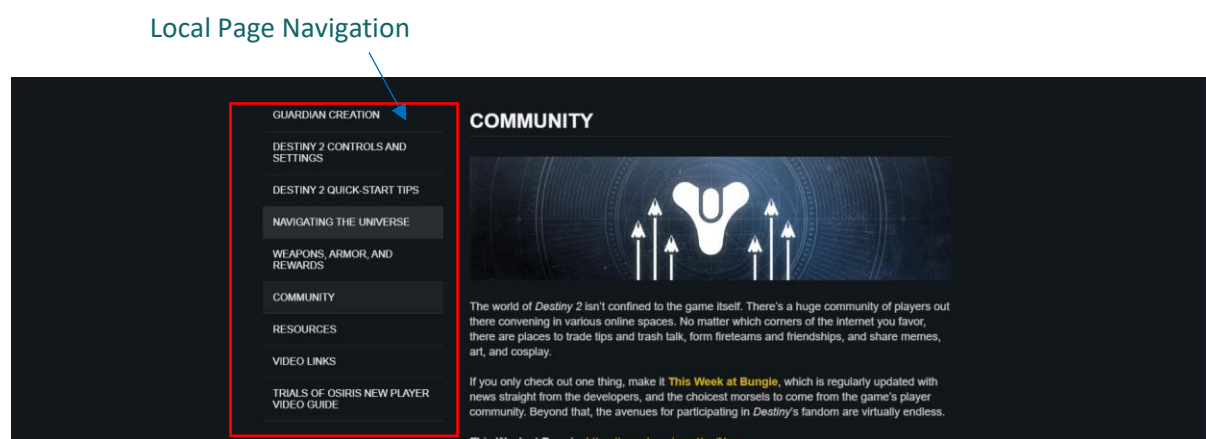
Local Page Navigation

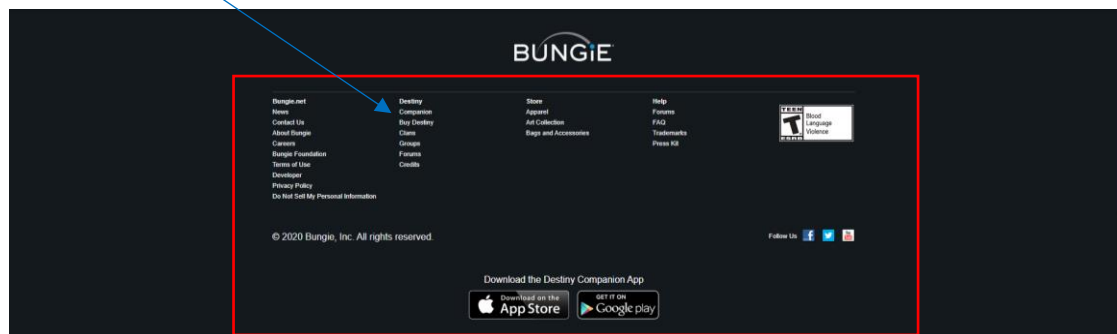**Figure 5 Local Navigation Example**

Footer Links

Figure 6 Footer Example

From the table discussion, I realised that good navigation is essential and that most users assume it to be a given. If a website has bad navigation, it can be very off-putting for the user, hence the importance behind this developmental phase. People also notice a bad design a lot more than they do a good design, which I feel is appropriate as the worse the navigation is, the more intrusive it is. Ideally, a navigation system should blend seamlessly with the website experience and should be instinctive for a user to use, allowing them to effortlessly explore the website. As such, I will do my best in my final design to create a seamless navigation design.

SITE MAP & CONTENT ARCHITECTURE

After previous design iteration, I have created and visually presented my intended site map.
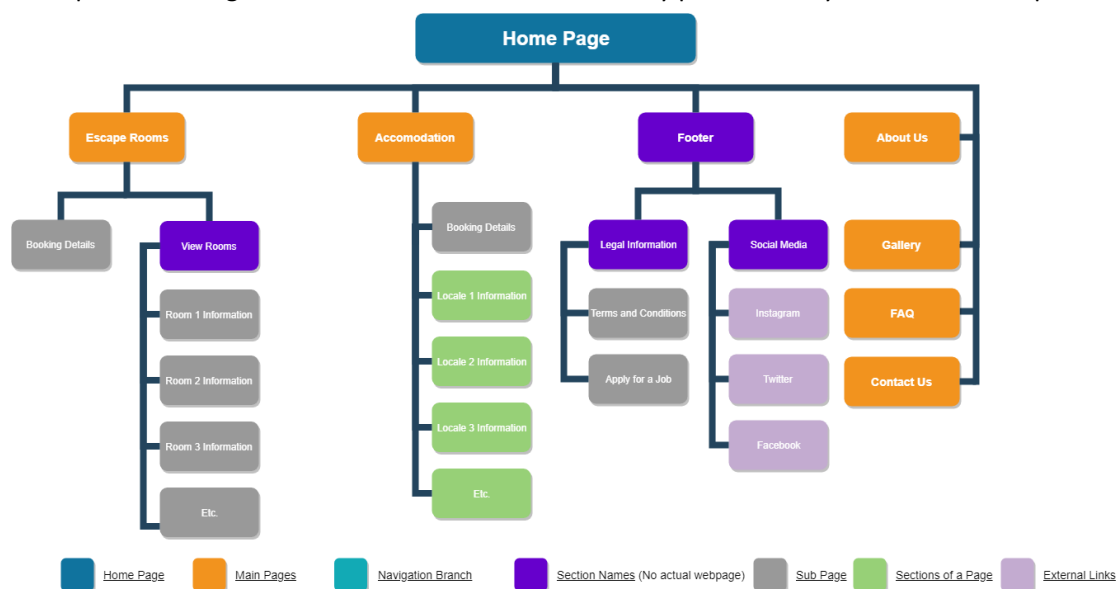

Figure 7 Site Map

VISUAL ORGANISATION & INTERACTIVITY

During my development process, I have created rough wireframes for several of my webpages. My first wireframe is for my home page. The most notable element of my home page is the inclusion of a rotating carousel. I choose this form of visual organisation because the content that they present, my Escape Rooms, are the main focus. As such, by structuring them in the centre of the page, I place added emphasis and weight to them. Having them rotate through the different rooms should also help showcase the website and grab the attention of the user, as the user can manually rotate along the carousel. Each slide will also feature a handy link to the 'product' page of the Escape Room, providing a convenient method for users to find out more about what interests them.
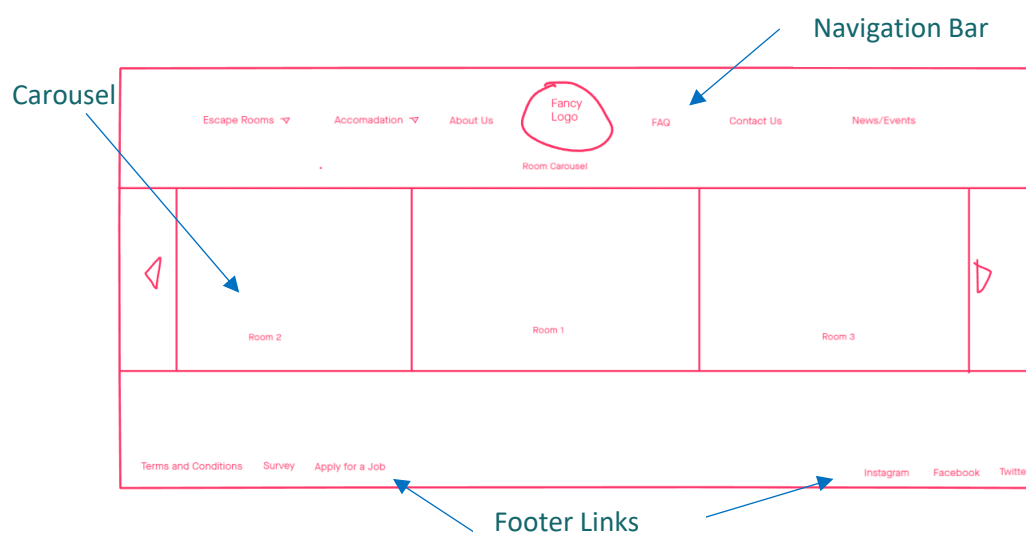

Another feature of my home page is the centralised navigation bar at the top of the page. Once again, this is done to emphasis the content presented. I plan on having the navigation bar 'follow' the user as they scroll down the page, however I might adapt it so that it changes structure when scrolling to limit intrusion with the user. This might be by minimising the links and left aligning them or I might make use of a 'hamburger button' to condense the navigation.

I have also included a footer to the base of not only the home page, but all other pages as well. This will include a variety of rarely used or unessential links, divided into two categories. On the left is the legal information, which includes Terms and Conditions, Survey and Apply for a Job. On the right side is the social media section, with appropriate links to various social media websites. While these links will be functional, they will not link to any page as the resort will not have any social media presence. I've included this footer in all of the pages to maintain consistency and allow a user to access these pages from anywhere.

The last point for my home page is further development. I plan on updating my home page as my design process continues, with the end result ultimately differing from the wireframe. I already have considered adding a large screen-wide image or something similar to the page, before the carousel, to introduce the

concept in a generalised sense. For instance, this might be a static picture or short clip of Chernobyl, so newcomers to the website automatically understand the theme and location.
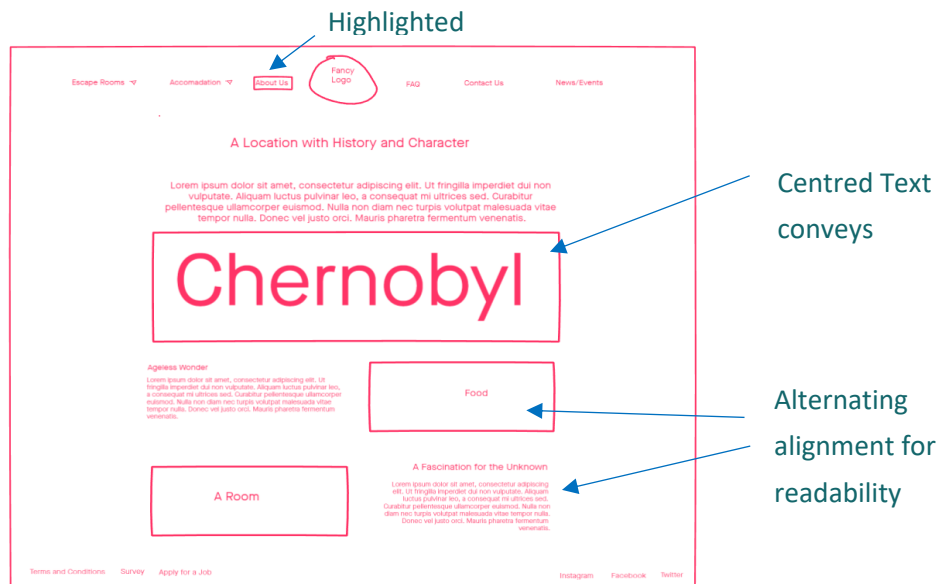

My next wireframe is for the 'About Us' page and features a wide array of information. The main purpose of this page is to inform the user about the website, resort and locale. As such, this page caters to my audience members that are more interested in history, information or just seek a better understanding. With this in mind, I can allow fairly large blocks of text on the page in order to properly inform the user but I already plan on including images to break up the structure.

By having the introduction both centred and larger than the default text, I instantly bring the user's attention to this area, with the accompanying image aiding in this. Then, by having the text and images alternate between being left and right aligned, I effectively section off each individual topic and aid with reducing the monotony of the page. As it stands, I am uncertain how large this page will be as I haven't written any of the text for it, however the page can continue this alternation as long as necessary. The sections should also help the user to identify what information is relevant to them, with each section having its own related image.

Another point of note on the 'About Us' page is how the 'About Us' link on the navgiation bar is highlighted. This is to show the user which page they are currently on and will be used for most of my webpages. On the home page, nothing will be highlighted as there is no text link to the page however the central logo will also act as a link to the home page. None of the footer links will have this either, as it would be inapproriate to highlight parts of the footer, so insead they will feature a prominent title card to inform the user of which page they are on.

The last example I have is of the individual information page for one of the Escape Rooms. Immediately, the bulk of text and large image are noticeable. Because the main purpose of this page is to inform the

user, I already know that the bulk of it will be text and images. For text, I will have to cover a description of the room and other important information, such as difficult ratings, number of people required, etc. For the images, I will have a variety of pictures that showcase what the Escape Room looks like, the location, props, etc, which will be the image gallery present underneath.
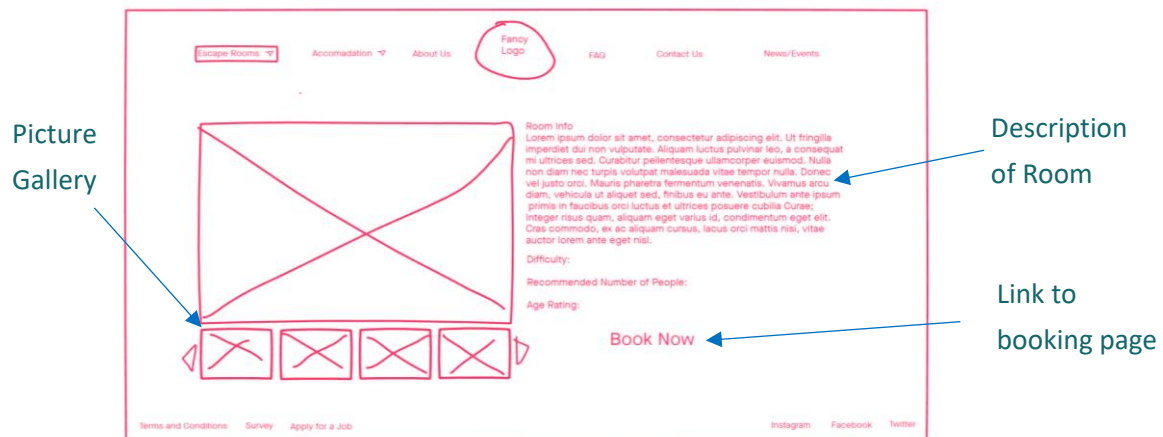
The page will also include the link to the booking page. Once there, the user can go through and select the different specifications of the rooms, people, times, etc. I considered that this would be the best place to link that page as it will be after the user inspects the rooms that they want to do that they will decide to book. I might also however make another separate link to the booking page elsewhere, potentially selectable from the navigation bar or home page.

I made most of these decisions after the table discussion for visual organisation, as this informed me for my choices. From it, I learn that one of the major components of visual organisation and good design is consistency between pages, which I have tried to consider for my pages. This lead me creating a universal footer and navigation bar for each page, as well as a general layout of central image with side text to it. Consistency will also be used for the colour schemes and font choices between my pages, as well as additional elements.

Another principle that I incorporated into my design was emphasis. I showcased this in most pages by the alignment and sizing of important areas, with the more essential information being larger and generally closer to the centre of the page. This is also evident with the use of contrast and spacing between areas, sectioning off and better defining the emphasised areas. The more important parts are also given a buffer space and 'room to breathe' from the other elements of the page., aiding in readability and user prioritisation.

The last principle I made use of was proximity. This is mainly noticeable in the spacing between each element in the website, with nothing ever feeling too cramped. The most obvious example of this is how the content of each page is given a proximity border from the edges of the websites, giving everything the space and room needed. Proximity is also used to convey importance and relevance, as items closer together are more similar while content that demands greater space generally relates to importance.

PAPER PROTOTYPE USER TESTING

For the Paper Prototype phase, I developed a rough website draft using InVision and created a testing plan to accompany it for a user. From this, I got the user to complete a set of tasks and gathered some feedback on my basic structure. I have attached the appropriate screenshots of both my testing plan and feedback.

Testing Plan:

The main feedback I want to get from users is how well organised the site is. As such, I'll ask them if I am missing any pages, if a link should be in a different location and similar things. I was also question them about the flow and visual organisation of the page. If I can get the website template to properly flow, constructing my final website will be a lot easier. All the parts that I'm getting the user to test are purely structural or navigational aspects, as having them critique anything functional or aesthetic at this point is useless. The paper prototype is just to get the overall structure of the website refined.

Tasks:

1. Browse the Escape Rooms. I will watch how efficiently the user can navigate to the appropriate page.
2. Book an Escape Room. I will see how well the user can get from a new starting point (Browsing the Escape Rooms) to their next page.
3. Book a Hotel Room. I will note how well the user comprehends and understands the wording and structure of the booking form template.
4. Complete a survey for a discount. I will watch how the user searches for something when it is in the footer instead of the header.
5. Learn more about the location. I will see how easy it is for the user to find a page that might be classified under several different headings/pages.
6. Contact customer service. I will observe not only the user's preferred way to contact customer service but also which information they think is important for the page. Feedback:

Website Design & Implementation: Design Report   16
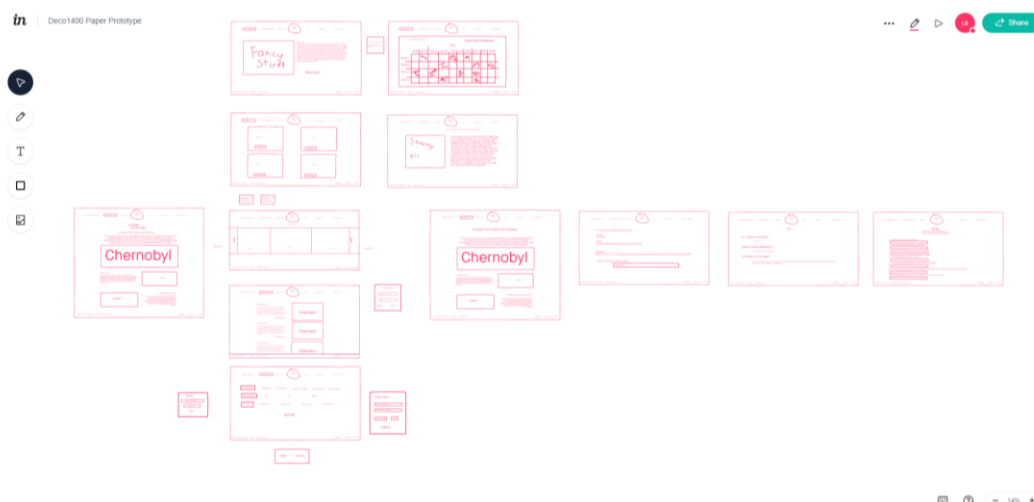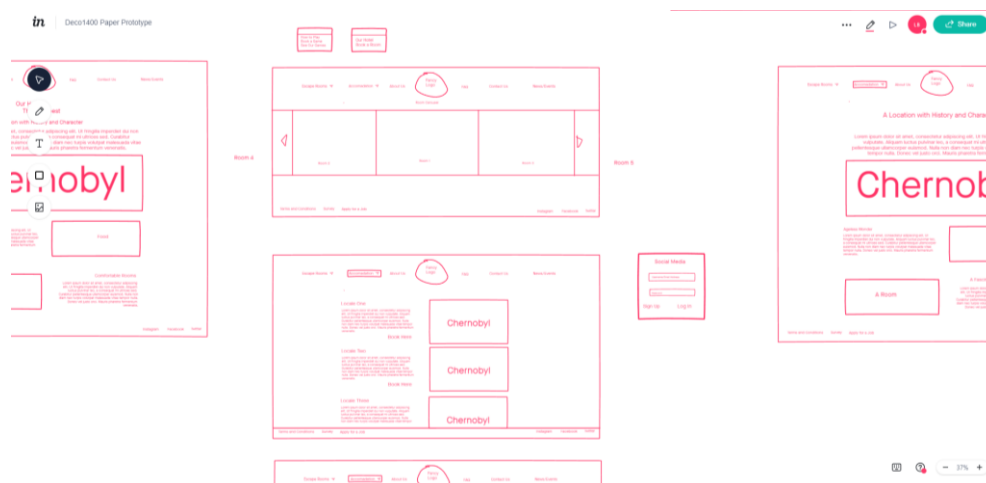
Figure 9 Paper Prototype

Feedback:

How well organised was the website?

1 (Terribly)   2   3 (Average)   4   5 (Very well)

Did the website flow?

1 (Terribly)   2   3 (Average)   4   5 (Very well)

Was it functional?

1 (Terribly)   2   3 (Average)   4   5 (Very well)

Was there anything out of place?

- Can't think of anything out of place
- Initial thought that survey was in the header

Was there anything missing?

- None, there is a large number of sites and content in your website

What would you change?

- Probably not necessary to have choices for accommodation (Bed sizes)

Tasks:

1. Browse the Escape Rooms
    I found the user was able to quickly and efficiently navigate to the 'Browse Games' page and then to see further info on each page.

2. Book an Escape Room
    The user was able to easily move from viewing an escape room to booking it. They were a bit confused with how the booking worked (see the Timetable layout in the prototype) however they did understand the structure of it and they understood that, being a template, the technical details wouldn't be sorted out yet.

3. Book a Hotel Room
    While they were able to navigate to the correct page, they were confused first by the different locales that could be booked (most likely because there was no info text to describe the places) and by how a room was booked. Particularly, they didn't think it worked having the user select what type of bed they wanted, the quality range and any addons. While I suspect most of this is due to the template nature (and lack of details), I will take it into consideration and alter my structure.

4. Complete a survey for a discount
    The user's first impression when searching for the survey was to look in the header but they quickly realised that it would be in the footer. While their initial impression was to look in the main navigation bar, they did agree with its placement in the footer due to the hierarchy of the site.

5. Learn more about the location
    The trouble with this task was that there were two different info pages the user could find. The first was the 'About Us' page, which the user managed to find with ease as it was in the main header. However, the second page, 'Our Hotel', was under the accommodation drop-down, and the user didn't realise this and was unsuccessful in finding it. As such, I will consider condensing the two pages together for a single large 'About Us' page, so that the user can find information about the company, location and hotel all in one place. I could also have it split of into 3 different areas.

6. Contact customer service
    The user was quickly able to navigate here and was thankful for the inclusion of an email address, phone number and postal address.

From this feedback, I feel like I am on the right track. There was little the user said could be improved upon at this stage. They were also able to complete most of the tasks with relative ease. They had some issues with the booking page for hotel rooms, but I suspect this is mainly due to the rough wireframe for the page. As my development process continues, I will better understand what essential information is required for this page and the structure that entails. They also had some issue with finding the 'About Us' page and they were unaware there were two pages for it. As such, I will condense the information into a single page. With these changes made, there is little more for me to take from this feedback.

PART B

AESTHETICS

Before developing my website, a created several rough aesthetic mock-ups to showcase my general design in order to get tailored feedback from users during a prototype test. Coming into development, I already had a good foundation for what I wanted visually from the sources that inspired my topic, namely the S.T.A.L.K.E.R series. To reflect this bleak emptiness, I am making use of a very grayscale colour scheme, with the only noticeable colour being in the images. The idea here is to give the user small but tangible shards of beauty to focus on in an otherwise monotone design, giving them greater emphasis and weight. I see this as a sort of parallel with the small moments of joy and hope that one can survive off when in a desolate or bleak situation.

It is also a way to artificially add a sense of aware and discovery to the website. While I could choose more enticing and visually interesting images, they would lose their value through oversaturation. Instead, I minimise the website design itself, creating a more contrasting juxtaposition between these elements. That is why I will only use sharp and high-resolution images, as a low-quality picture would detract from the experience and heavily impact the theme of the design.
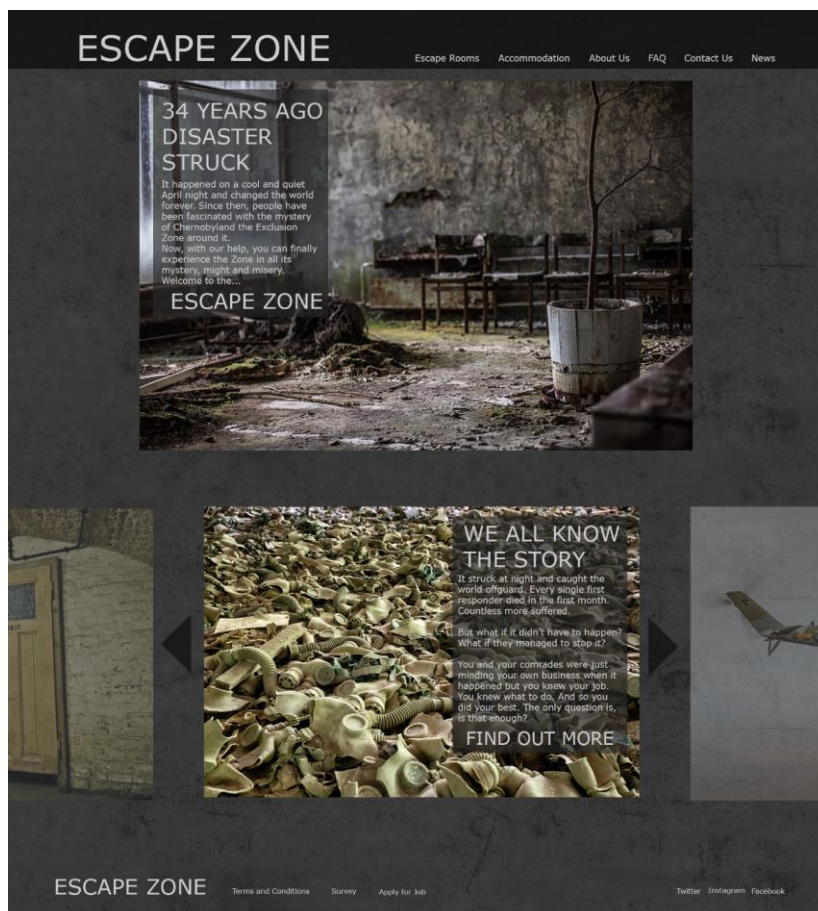

Figure 10 Home Page Mock-Up

Concerning the font choice, I knew I wanted a simple sans serif font. This was similar to my choice behind my colour scheme, as I wanted something more minimalistic so as to not overwhelm the user or clutter the website. My intention was similar with the overall structure of the website, as I use simplistic rectangles and boxes to group items together to create that minimalistic feel while still giving the website hierarchy.
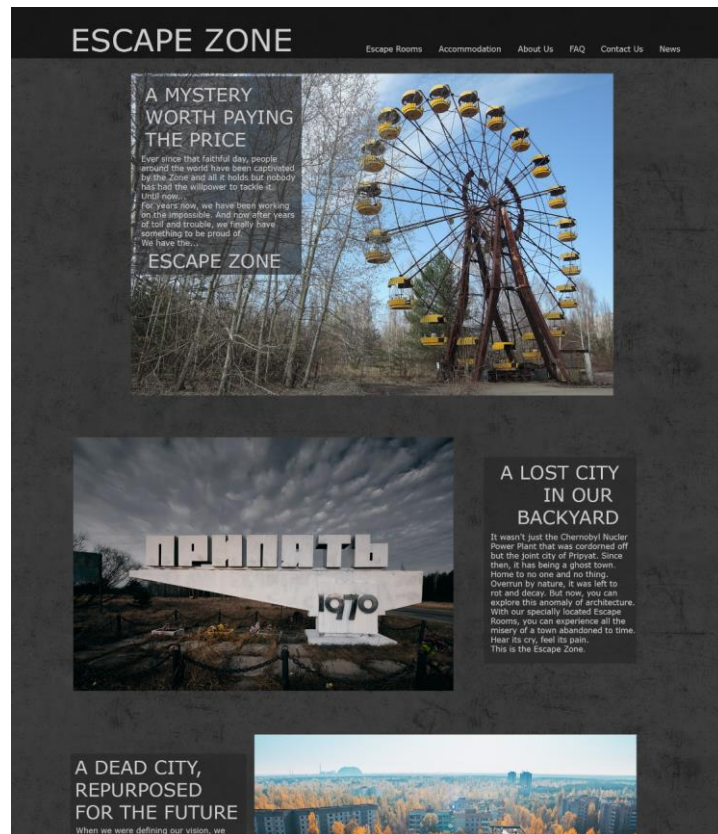

Figure 11 About Us Mock-Up

Additionally, I tried to apply to my audience by catering for two different elements. Firstly, I make use of large blocks of interesting text that I have written up to add mystery and intrigue to my topic. This should appeal to the users who are more interested in the story and theme of the Escape Rooms, as they are given sufficient information to develop curiosity. The other element I make use of is high quality images to appeal to the more adventurous individuals, as the bright and sharp colours will drag them in and develop interest in the adventures that they can go on.

Regarding my website links, my intention was to blend them more seamlessly into the website. This reduces clutter and attempts to remove any intrusive elements from getting in the user's way. However, I feel I might have minimalised them too severely, as now they can be difficult to distinguish from normal text.

This brings me to my aesthetic prototype test, as one of the major issues users found was with the blended links. The users I tested with were impressed by my aesthetic choices and, overall, liked my design. They found the colour scheme and background very well suited and commented on how the

alternation in content in the 'About Us' page worked well in creating a visually interesting design. While it was mostly positive feedback, there were a few issues and recommendations they had.

As mentioned before, they found the links lacked emphasis and should be given better definition so that the user can better distinguish the elements apart. Of course, one of the issues was the lack of means to showcase hover properties, it still does create enough of an issue to warrant change. The other issue users had was with the text overlay boxes over the images. They found that the opacity was too low and that it was hard to read the text with the image in the background. While they did like how the overlay had some level of opacity to it, they recommended that it be raised higher to give the text better distinction and readability.
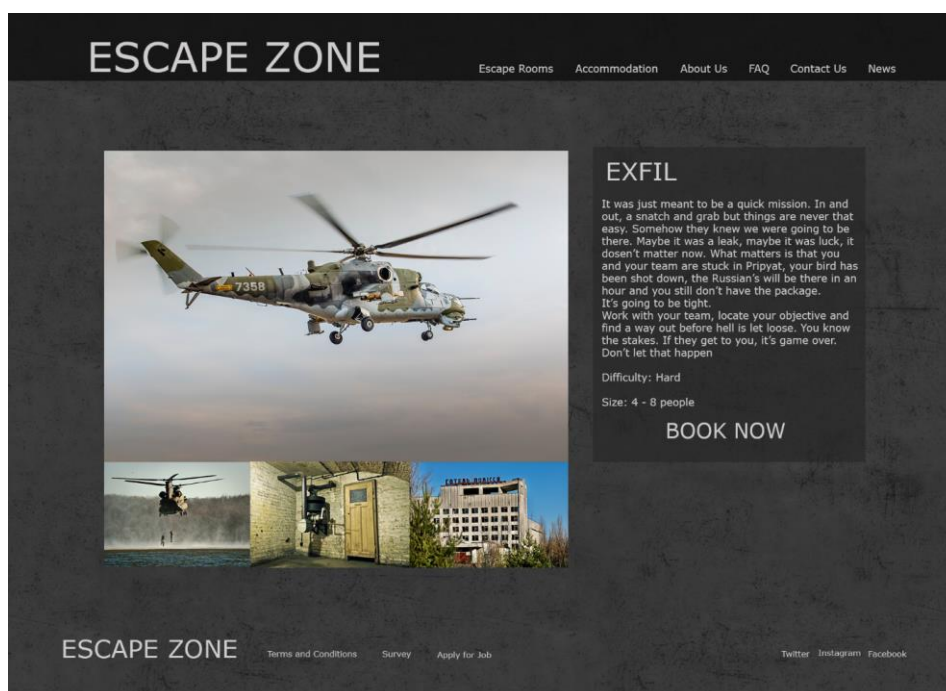
Figure 12 Escape Room Mock-Up

After going through the Aesthetic table discussion, some of my predefined concepts of aesthetics were reinforced. For starters, I can see in hindsight that my colour scheme creates a very effective contrast between the various elements in the website, as well as developing the aforementioned bleak atmosphere.

 I also discovered that one of the most important aspects of a website is making each element clearly defined to give the user clarity. That is to say that a link looks like a link and each element can successfully be identified without having to interact with it or look into the code. This is one area that I would change in hindsight, as I mentioned that my links can be hard to distinguish from the rest of the content. Another aspect I learnt about in the table discussion was the effectiveness of drop-down menus to aid in cluttered navigation. While I don't have any part that would be appropriate to make use of this form of navigation, it would work well for my website as I am already attempting to reduce the clutter and distractions on my website. If I find a place to use this at a later date, I will.

TECHNICAL IMPLEMENTATION

Interaction	HTML	CSS	JavaScript
Trivia Game for 'Apply to Job' page	A form section will be placed in the HTML. In this will be the fieldset that holds the questions. Each question will be in a div classed "form-item" for easy styling. Each question will be answered through either a text/number input or a multi-optioned selector. At the end will be a submit button that checks the answers and a 'p' class that will be used to display the messages.	CSS will be used to style and visually structure the text and forms elements, as well as allowing the use of the 'error' and 'invalid' class to show incomplete forms and change the submit button.	JavaScript will be used firstly to store the correct answers for the trivia questions as variables. Next, it will obtain the users answers from the appropriate forms through jQuery. Then, it will perform a check for each question, showing the final score and a custom message dependent on their score. Additionally, it will perform validation to make certain that the user has supplied an email.

I believe this interaction to be meaningful as it gives users who are interested a way to contact and interact with the company. While obviously it serves little function other than a fun trivia game in its current implementation, if the website were to be fully developed and the resort created, it would properly submit the users email when the complete the trivia. With this in mind, appropriate users would be given a means to further their interaction and relationship with both the company and website, enhancing their experience. While it would not change much for most users, for those it does effect, it offers a fantastic opportunity. Unfortunately, due to the reliance on JavaScript, there would be little functionality without it. As such, while this particular feature would remain JavaScript exclusive, users would still be able to interact with the company by contacting them directly.

Form validation for 'Contact' and 'Booking' form	A form section will be used for the various form elements. These will consist of text and number inputs, textareas, multi-choice selections and a Submit button	Styling will be applied to the elements of the forms, defining the visuals of the interaction.	For this interaction, jQuery will be used to obtain the values from the input forms. Several checks will be put in place after this to make user the user has supplied information in the necessary areas, appending error classes to the forms that they haven't to provide appropriate feedback, with these classes being removed when the information is supplied. The submit button will also change when either invalid or valid information is supplied.

The main intention behind this interaction is to provide meaningful feedback to the user based on their inputs, providing them with a means to troubleshoot any issue they might have when completing the forms. This also ensures they provide the necessary information when contacting or booking through the website, furthering the experience that would have outside of the website, as it would reduce the errors

that might occur when submitting forms. While it wouldn't give them additional content on the website itself, I feel that it would be an apt inclusion in a realistic website.

Automatic Slideshow on 'Home/Index' page	A slideshow div class will be used to contain the entire section, with each image and caption being contain in a separate slide class div, with dot spans underneath.	CSS will be used to create the dots underneath the slideshow as well as define the size and properties of the image. An overlay class will also be used to present the text overlays for the images.	Variables will be set to get the appropriate slide and dot elements from the HTML. A for loop will then be used to remove the display value from the images and add the dots to the slideshow. Then, the appropriate image will be given a display value to allow its visual appearance while the current dot will be set to active. The slideindex will then increase and the function will be called again after 4 seconds.

I specifically choose to implement the automated slideshow on the index page to best enhance the user experience. Due to its automatic nature, the user can experience the content that it has to offer without specifically interacting with it. Additionally, by placing it on the Home Page, where the user will first land, the automatic slideshow will help grab the user's attention and keep them on the page long enough to experience the website. Each slide will have a different image and caption, with a link to an associated major page on the website, either 'About Us', 'Escape Rooms' or 'Accommodation'. While this doesn't specially give them more content on this page, it gives them the opportunity to view the other pages through links outside of the navigation bar. Originally, I intended to integrate the ability to manually cycle through the slides but at the time I was unable to implement it. However, I used what I learnt here later on, in the 'Image Gallery'.

Image Gallery and zoom on 'Gallery' page	The gallery_row div class will be used to display the images horizontally, while each image will be in a gallery_column class div. The next and previous buttons will be links with appropriate format to create the image style. Finally, the zoomed image will have its own imgfocus div class, which itself will contain the galleryzoom and gallerytext classes to add the image and text.	The gallery_row class will be used to hide the overflow of images and disable wrap, thereby allowing the images to order themselves off the page and allow the gallery to be clicked through. CSS will also be used to define the properties of the zoomed image and text, as well as creating the visual 'prev/next' buttons.	First, the location of where the zoomed image and text will be displayed is set to a variable, as well as all the images in the slide. Next, it will go through a for loop that orders the images in the way they are in the HTML. Then, there will be a function for both the next and previous slide to be called when appropriate. They both go through the list of slides, with the next function incrementing the order upwards with the previous slide decreasing the order with each loop. They both also have checks for when the slide is at the end or start of a loop, swapping its position.

This interaction is similar to the automatic slideshow but is a derivative of it, with manual functionality instead of being automated. The reasoning here is that if a user comes to the 'Gallery' page, they have come to either browse through the images at their own pace or they want to see certain specific images.

As such, creating this as an automated slideshow would detract from the user's experience and disrupt the flow of the page. Additionally, with the image zoom in place, an automated slideshow would affect how the images are displayed. One of my key considerations with this feature was accessibility, particularly towards the blind. With this in mind, each image was given an apt alt text description, with this text displaying as a caption underneath the image. This allows a blind or hard of vision user to use text to speech, allowing them to still appreciate and understand the images.

Local Page Navigation on 'About Us' page	A special id will be given to the default navigation bar to distinguish it, while the local navbar will have its own id. Additionally, each link will have its associated hash target for movement. This requires each local section to have an id that equates to the designated hash.	CSS will be used to make the local navigation bar sticky to keep it at the top of the screen. It will also give the default nav bar a position and transition.	Firstly, jQuery will be used to add a click listener to the links on the local navbar, where it will then obtain and set the location from the associated link. This this, jQuery will animate the smooth scroll to that location. Additionally, I will use JavaScript to hide the default navbar and move the position of the local navbar. This is done by checking the current and previous y positions, which translates to either upwards or downwards scroll. If scrolling down the page, the default navbar will be hidden with the local navigation taking its place. If scrolling up, the default navbar will remain in its position with the local navbar underneath it.

This interaction is intended to ease the user experience and increase the functionality of my website. In one of my prototype tests, it was mentioned that my 'About Us' page seemed rather long, especially with the large blocks of text and images. As such, to counter this I will implement a local navigation bar that allows the user to jump between the different sections in the page. This should enhance the experience by reducing the time it takes to find things. User frustration can be a major problem with websites and if a user finds a website too difficult to properly use, they will often leave the website without completing their task. As such, my making the website more accessible, I can ensure the user continues to use the website. An additional component of this is to hide the default navigation bar so that they local navigation bar can take its place, helping to create a structure layout.

Purchase Information on 'Booking' page	The 'Accommodation' and each 'Escape Room' page will have a book button with similar class and a unique value corresponding to its content. Then, the 'Booking' page will have a p1 tag with a 'package' id that corresponds to where	The styling will be applied to the book_item, book_img and book_text to give the styling once the HTML is added.	Firstly, jQuery will be used to add an click event listener to each class instance of 'book', which corresponds to the 'Book' button. On click, it will set the a session storage variable to the value associated with this button and take the user to the 'Booking' page. For the 'Booking' page, there is a check to find the package id, after which it sets the local variable purchase to equal the value stored in the session storage. Then, it goes through a series of checks corresponding to the different content items, setting the local variable to the HTML that is to

	the content will be placed with JavaScript.		be added to the page. Finally, the specific content is added to the page at the 'package' id using innerHTML.

The purpose of this interaction is to customise the user's booking process in relation to their order, showing content specific to their purchase. As such, it makes use of session storage to obtain the order value when they first click the book button, saving this information for when they cross over to the 'Booking' page. The information is reset every time they click the book button again as the user is intended to book orders separately at the time being. This gives users active feedback based on their choices, supplying additional content and enhancing the user experience.

After conducting the table discussion on accessibility, graceful degradation and progressive enhancement, there were a number of new things I had to consider. Concerning accessibility, I wanted to make my website easily perceivable to all users, so I made use of my understanding of Web Content Accessibility Guidelines (WCAG). Fortunately, my website was already in an ideal position to further enhance the experience for accessibility challenged users. My website is already monotone, translating well for colour-blind users while also helping with the contrast. After a previous prototype test, I used WCAG contrast checker to ensure that the font colours I was using met all the requirements, changing them as necessary to meet the guidelines.

For blind users, I made sure to include an alt text for all of my images. Additionally, I made sure that none of my important information was presented in an image, thus allowing blind users to read through and still understand most of if not all of my website. For instance, my 'About Us' page makes primary use of text over images, still allowing blind users to use text to speech to understand the website.

Concerning progressive enhancement and graceful degradation, I focused more on progressive enhancement by first building my website with just the HTML and CSS. With only these two universal elements, I made sure my website was functional for users. After this, I moved onto adding the JavaScript elements, doing my best not to create something mandatory that would neglect users without the appropriate technical setup. While I achieved this in some cases, there are places that would not function correctly without JavaScript, like the 'Gallery' page.

FINAL FEEDBACK

HI-FI PROTOTYPE USER TESTING

Before I finished my website, I ran one final user test, demonstrating a hi-fi prototype of my website. In this, I showcased a rough yet working development of my website, reliant just on HTML and CSS. Before I conducted the user test, I created a testing plan.

The main feedback I want from my users concerns the aesthetics of the website. I'm interested in what my users think of my sizing of images and text, as well as font choice and colour scheme. I'm particularly concerned about the contrast and readability of my font colour, so I will bring the users attention to this.

In terms of content, I will get the user to complete the tasks then I will them if they think anything is missing, whether that be content, functionality or aesthetics. After they have given this verbal feedback, I will get them to fill out a feedback form to get a written copy of their thoughts and opinions.

Tasks:

1. Find the postal address

How easy is it to find the information? What order of pages did they take there?

2. Book an Escape Room of your choice

Can the user easily distinguish between each room?

3. Find information to answer your question

Which page would they first check for their question?

4. Learn about the location and company

Can the user find the information they are after in the 'About Us' page quickly?

5. Browse the lodging arrangements

Can the user differentiate between the different classes of accommodation? (Low, medium, high)

6. Apply for a job (W.I.P)

How easy is it to find information in the footer?
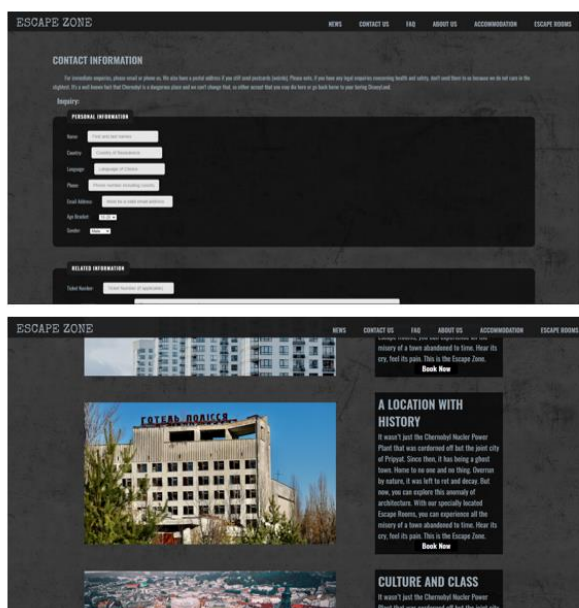
Figure 13 Hi-Fi Prototype Testing Plan

Figure 14 Screenshot of Hi-Fi Prototype

Feedback 1:

How well organised was the website?

1 (Terribly)   2   3 (Average)   4   <mark>4.5</mark>   5 (Very well)

Did the website flow?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was it functional?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was it aesthetic?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was the font colour reasonable? Can you properly read it?

1 (Terribly)   2   3 (Average)   4   <mark>4.5</mark>   5 (Very well)

Were the images appropriately sized?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was there anything out of place?

      Nope

Was there anything missing?

      Address in About Us.

What would you change?

      Check contrast of font.

Feedback 2:

How well organised was the website?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Did the website flow?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was it functional?

1 (Terribly)   2   3 (Average)   <mark>4</mark>   5 (Very well)

Was it aesthetic?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was the font colour reasonable? Can you properly read it?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Were the images appropriately sized?

1 (Terribly)   2   3 (Average)   4   <mark>5 (Very well)</mark>

Was there anything out of place?

      N/A

Was there anything missing?

      Side scroll bar on larger pages (about us, etc)

What would you change?

      Hover the background for nav bar

Figure 15 Hi-Fi Prototype Feedback

Using the feedback from the Hi-Fi prototype test, I made a number of changes. The first issue I discovered was that both users had trouble finding the postal address of the company. While I placed it in the 'Contact Us' page, both users immediately went to the 'About Us' page. This is a good example of the mentality that my users would have and with this in consideration, I added the contact details to the end of the 'About Us' page. While I don't like duplicating the information and having it on two pages, I believe it is a necessary decision to support the user experience. Another point was the contrast of the font colours. Fortunately, the users supplied the link to the WCAG contrast checker, which I made use of to find an appropriate font.

The other recommendation was the inclusion of a local navigation bar in the 'About Us' page. The user who recommended it explained that they found the webpage felt too long without an easy way to navigate between the sections. As such, I will split the 'About Us' page into sections and give each one a unique tag that can be focused on through a local navigation bar. I will also adapt the code so that the default navigation bar will hide so that the local navigation bar takes it place, with it popping up once again when the user scrolls up. Apart from this, all the feedback I received was positive.

CONCLUSION

With the website finally complete, I can look back and reflect on the design process and development. While I know that my website could still be improved and worked on, I am satisfied with the current level of completion in it. In hindsight, I am very glad about my interpretation of the brief, as both my location and activity worked very effectively. Although I do recognise that significantly more work would have to be put into it to polish things up and add more functionality, the time constraints that I encountered limited the overall time I had to work on it. If given more time, I believe there are three areas that I would specifically work on.

Firstly, I would improve the readability of my CSS and create more succinct code, focusing on reducing clutter, redundancies and repetitions. Through proper use of child, parent and similar selectors, I would heavily be able to reduce the need for unique classes. However, with how disjointed my development process was, I normally didn't know what classes I could consider universal until after I finished the specific webpage, at which point I found it more effective to work on the next section.

Additionally, I would point a significant amount of time in creating a more responsive website that is compatible with both desktops and mobile devices. While my current website does support some level of resizing with breakpoints, I do not believe it to be comprehensive enough as it stands, especially when it gets towards the lower screen sizes. The last part that I would work on is ensuring maximum compatibility between internet browsers and JavaScript use, to give users the best experience regardless of their situation.

In regards to my personal strategy, I think the deconstruction and reverse engineering of code worked very well and allowed me to properly understand inspirations and examples of code enough to rewrite them myself but my biggest issue was time mismanagement. I realise in hindsight that I left the website development till too late, as my time available to work on was greatly limited when other assignments were taken into account. As such, if I were to start again, I would keep the same development process but just begin it significantly earlier, giving me the much-needed time to polish my website off that I currently lack.

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