



<Major Film Studios> Project Report

**TU856/TU858
Web Development 1 CMPU1031: 2022-23**

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Declaration

I hereby declare that the work described in this dissertation is, except where otherwise stated, entirely my own work and has not been submitted as an exercise for a degree at this or any other university.

Signed:

Hemant Sundarrajan

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<14/12/2022>

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PROBLEM DESCRIPTION

The website I decided to create was one which displayed information on Major Film Studios. I wanted a simple website which described what Major Film Studios are, and why they have gotten to the position they are in the industry. I wanted to do so by describing the accomplishments of certain Major Film Studios. In my case I decided to go for Universal Pictures, Walt Disney Pictures, and Warner Bros. Pictures.

I thought that these 3 had the most impact on the industry, and I also thought that a lot of people would be curious about the state of the studios both in the past, and today (myself included). I decided to use the bootstrap framework due to the wide variety of responsiveness and utility it provides. For example, the navbar is extremely easy to utilise, and it changes to fit the size of the page no matter how big or small the user makes it. The navbar has a hover effect on it making it obvious which link you are pressing.

I utilised a white navbar to contrast the darker background of the webpages (used a linear gradient to make the background dark while still displaying the image well). The navbar is consistent throughout the pages to offer the user of the website a clean, consistent experience that isn't over complicated. I have a homepage which describes what purpose the website serves and makes it clear where to contact us.

The home page is simple but clean and so provides a nice opening to the webpage. I added content on the history of these Major Film Studios. In each page you can learn about the humble beginning of the studios. I added pictures of the founders of each studio in the pages to ensure that people got a true image of the first people behind the studios. I utilised social media by using twitter embeds in my website to make the website more modern and easier for the average person today to enjoy. It also made the website more interactive and added a nice break from routine content.

I also embedded a YouTube video to increase the interactivity of the website and make it more engaging. You can learn about what the Film Studios individually are special at, and just how successful they are within their industries, and more. The contact form in the website is simply a way of allowing the user to interact with those who created the website. It allows the user the option to learn more about Major Film Studios and ask questions on what they are curious about.

Archetypical Users of the site:

The archetypical users of my website are those who are looking to learn more about just who creates the films they have come to love. It is of course for the film junkies also, but I have made it clear that you could have just the love for movies and want to learn simple things about who creates them to use my website. I didn't want to limit the archetypical user to those who are in depth

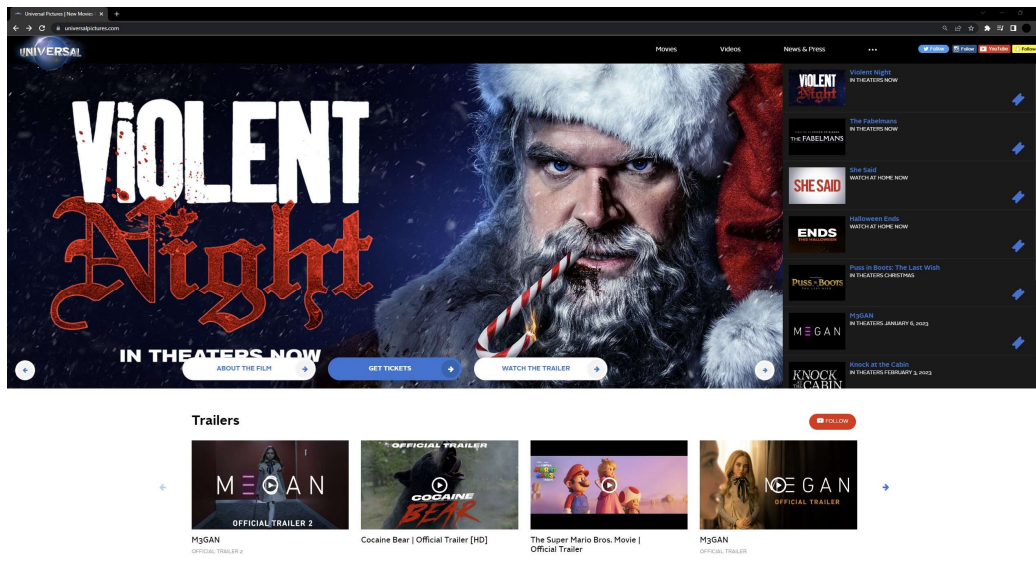
and are knowledgeable about Major Film Studios. I feel like that would have made my website too much of a niche and it would have attracted less overall people. I wanted anyone from a child who loves Pinocchio, to someone who knows every Disney movie actor to enjoy this website.

Problem the Website solved:

When looking for information on Major Films Studios, I noticed that the only information available tended to be large chunks of paragraphs and words. I honestly felt like this was not doing these studios justice. The long paragraphs and lack of visual representation for these studios was appalling considering the impact they have had on people's lives. It deterred people from wanting to figure out who created their films. So, I decided to solve this problem by making a simple website with engaging content and images on these Major Film Studios. I decided to make a website that allowed the user to learn more about these big studios without having to go through the dull Wikipedia pages of just paragraphs after paragraphs. By adding colourful content and simple videos I was able to make the learning process of Major Film Studios change from a gruelling task to an enjoyable one.

Research

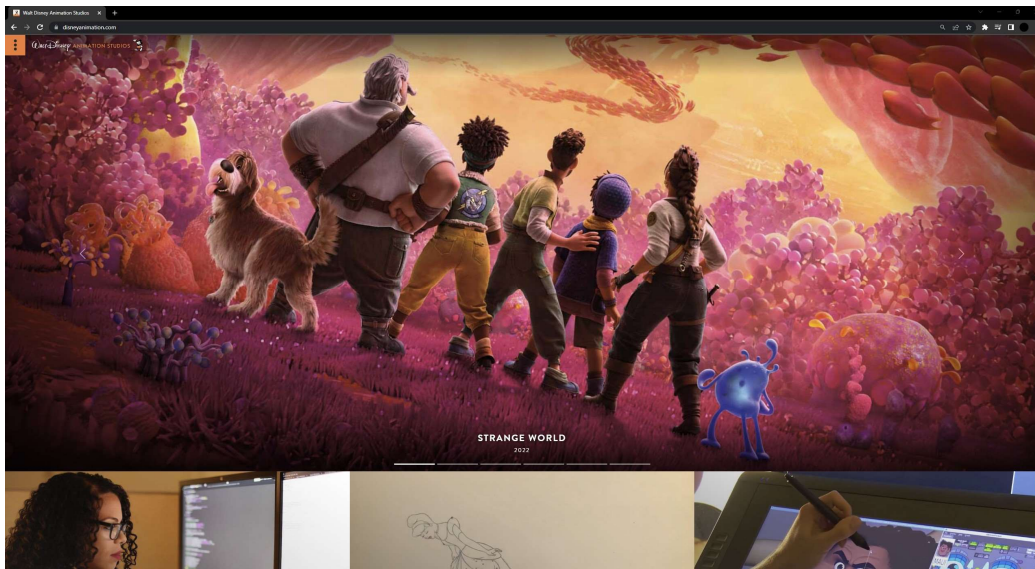
Universal:



As I wanted to make a website on the Major Film Studios Universal, Disney and Warner Bros, I decided to look at how these websites are laid out and planned. Starting with <https://www.universalpictures.com/>, I looked at how the navbar was utilised and how the way the content was described. Something I

noticed about the Universal website (and all websites I researched) was the fixed navbar at the top of the screen. No matter what you did, the navbar would come with you. I wanted to apply the same effect to my website also and so I decided to opt for the bootstrap navbar with an affect to make it fixed at the top. I thought this was a good design choice (especially for my website) as I understood that if I was the user, at any point intime I might want to compare two studios together. Therefore, the fixed navbar could easily accomplish this and also allow ease when switching between websites. I also enjoyed the way in which the Universal images were sectioned and displayed, I found this extremely useful in creating a clean website. Something I struggled with on my website was figuring out if I wanted a home button on my navbar when I was on the home page. After all what's the point of a home navigation button if you are already on the home page! However, upon looking at Universal Pictures' website, I noticed that they had their logo as their home button even on their homepage. This research I found was extremely important in helping me decide to keep my home button on my home page.

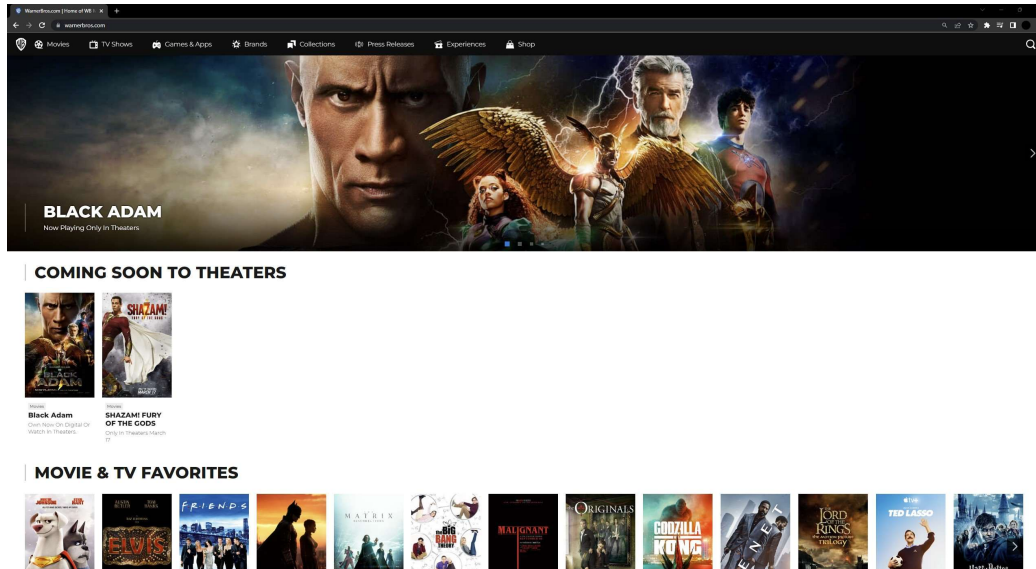
Disney:



When researching my second page <https://disneyanimation.com/>, I noticed how clean the aesthetic of the website was. It wasn't too overcomplicated; however, it still showed a nice amount of description and information. As I knew I wanted to include something about animation on my Disney page, I decided to visit Disney's animation webpage. I liked how the whole screen was nicely proportioned and was responsive to screen changes. However, something I noticed was a trend on these websites was the lack of an option to go back to the top of the page with a button. Especially with big Studios like this, they have a lot of content they display and so it can make the website quite long. However, if you want to scroll back to the top, this can be quite a challenge. To counter-act this on my website, I decided to add a button which

allowed me to go back to the top of the webpage. I found researching this website to be both helpful and useful in designing my website.

Warner Bros:



Finally, I decided to research a Warner Bros. Pictures website: <https://www.warnerbros.com/>. On this website I realised that a lot of things were a necessity to have on your website. The importance of a footer cannot be described in words as it provides important certification as to who created the websites. All 3 of the websites had this common concept. I also noticed that this website had a lot of similarities to the Universal Pictures website. These large studios tend to display their movies that are coming soon, while also displaying their popular movies and shows from the past. I decided to incorporate something similar into my websites. I utilised Twitter posts by the Studios to show up and coming movies or latest releases. I also used a bootstrap carousel to display the film studios most popular movies and show the revenue they generated. I wanted this to be shown as I wanted people to understand just how amazing these studios are in creating timeless classics and amazing movies. The site content of this website also followed a simple pattern on a lot of these websites. They went down vertically, and they were sectioned off with different sections of information (something I incorporated also). These websites also have the common theme of including more specific information at the bottom of the websites in a footer type section. Here you could find the social medias of the studios and links to other websites with more information.

Technology and Site Architecture

When creating my website I ensured that I used HTML 5 and CSS 3. I understood just how important this was in creating my website as to make it compatible with multiple devices and browsers. To ensure that all my webpages were consistent, I used the exact same HTML 5 and CSS3 semantics. I also utilised the right html boilerplate and had the same stylesheet linked with the pages to ensure CSS style reuse was taking place. When placing my java script links, I ensured they were placed at the bottom of the body, this was to ensure that the HTML5 and CSS3 were loaded in first, and the JavaScript functionality last. What this accomplished was a faster load time of the webpage and less user hassle. I tried to use div classes instead of ids as much as possible to truly utilise CSS reuse. I understand that as a developer you do not have the time to individually use ids for every tag. I would only use ids when I needed to use JavaScript validation on forms or adding JavaScript functionality, or if I was using specific styling on a specific tag. I found that I used classes quite effectively in my site architecture and this, in turn, heavily decreased the amount of hard coding I did.

Responsive design was key to my website, throughout the creation of my website I continually checked how responsive my design was. I would bring my website to a larger monitor to see how it would scale up. Did the navbar show issues? did my content lose its centering? These were all simple questions I had to find out to ensure my browser was compatible on multiple devices. I would bring my website to about as small as a phone and see if my navbar was able to format into a way which can be used by phone users. I did this using a bootstrap function to create a menu when there is no space for a full navbar to be displayed. I used a container with a consistent width throughout the majority of my websites to ensure all pictures, tweets, videos, carousels and images were formatted depending on how big or small the screen was. I understand just how important this is as there is no point if my website only works on my exact screen dimensions! I expected the users to view the site through the phone, large monitor, tablet or laptop screen. I used a consistent layout and navbar to ensure there was no problems.

To ensure my websites functions and responsiveness were cross compatible I installed Firefox (chrome being my default browser) and used Microsoft edge also. I rigorously tested my website on these browsers, and if I noticed an image didn't load or video I simply swapped in a compatible one. I had little to no problems with my responsiveness and my webpages worked fine on all browsers tested.

JavaScript Functionality

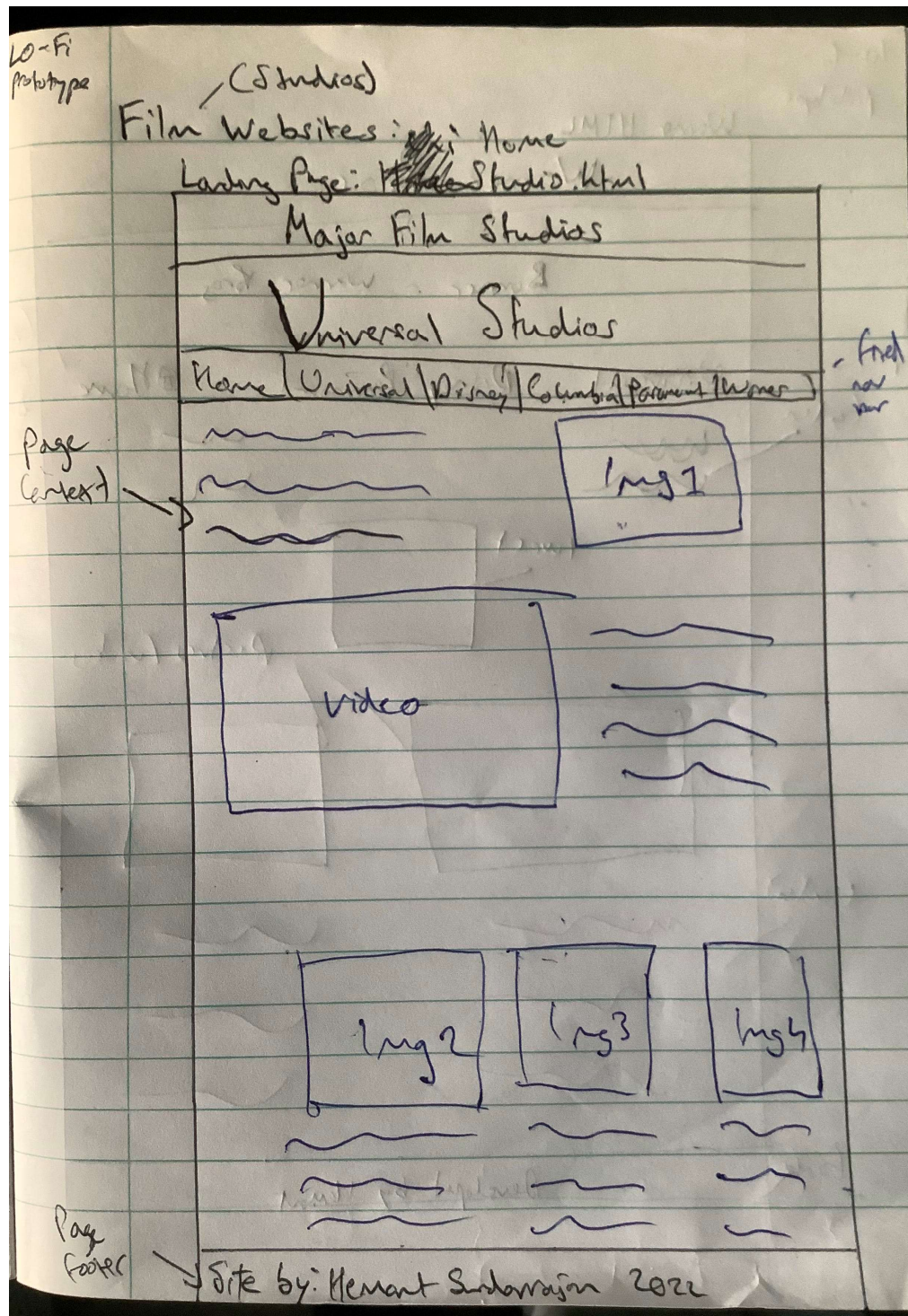
For my JavaScript functionality I added in simple JavaScript functions which would help the user have a better experience.

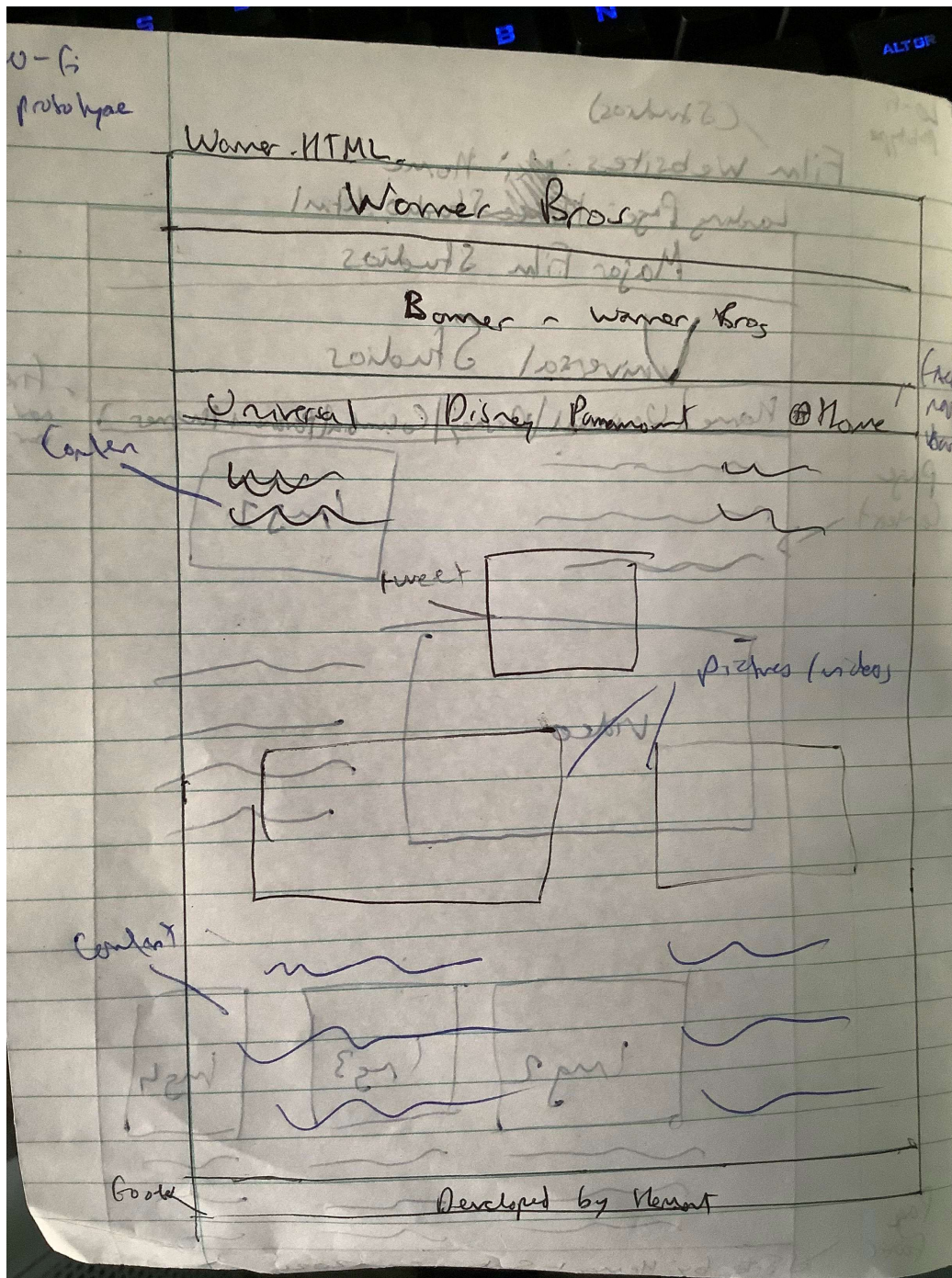
1. For my first functionality I added in a simple button which allowed my user to go back to the start of the page. As I mentioned earlier I realised the websites I researched didn't have this implementation and I, personally find this important. So, I wrote simple code and styled a simple button to allow this function to be present on all of my webpages.

2. For my second functionality I simply coded an easy to understand line of code which allows the website to detect whether a user is using dark mode. It is commonly known that dark mode is a popular way to style browsers. I wrote simple code to functionally tell the page that the preferred colour scheme is dark and then act accordingly depending on the browser type used.

3. My final piece of JavaScript functionality was a countdown clock. As a beginner to JavaScript I wanted to add something fun into my website that's interactive. I decided to code up a countdown clock using a tutorial online. I figured out how to code how many, days, hours, minutes and seconds there was until the release of a movie I had mentioned. I thought this was a fun, easy way to add JavaScript functionality into my website.

Low Fidelity Prototype





Rather than CSS and design, with a Lo-Fi fidelity prototype you can just focus on the interactions, structure and way the website is laid out. I found this to be extremely helpful as it gave me a starting point on the website. It gave me a way to just code and design later. I found that if I hadn't made these prototypes early on in the design process, it would have taken me a much longer time to properly begin my website. I do wish I had done my Lo-Fi prototypes more in depth and with better thought put into them. They aren't

very neat, and I realise that if I were to design a webpage in the future, it would be more effective to spend the extra 5 minutes thinking and planning neatly rather than rushed. I was surprised by how useful the prototype truly was and how putting pen to paper makes it easier to put fingers to a keyboard. I also found that the Lo-Fi prototype was excellent in capturing what I wanted my website to somewhat end up like. Though I didn't exactly go the route of my prototype, there is definitely stylistic elements and interactions I was only able to fully capture due to my prototype.

Development Plan

The first thing I did to create the website was the index.html page and the navbar. I think just getting all 5 pages linked to one navbar was important to start off as it gives you a good basis. Deciding to start with the home page is always a good start when designing, in my opinion, the simpler the home page the better. I made it simple and clean, which also gave me motivation to continue as I had good work done. I then moved page by page with the same navbar to ensure consistency and I tried not to make each page too content and word heavy. I did the contact form and JavaScript validation last as it was what I was most unsure about. It took some time but I believe I made a professional attempt at a form with validation. This was the hardest part of the website for me; however, it was extremely useful in showing the backend of making a form.

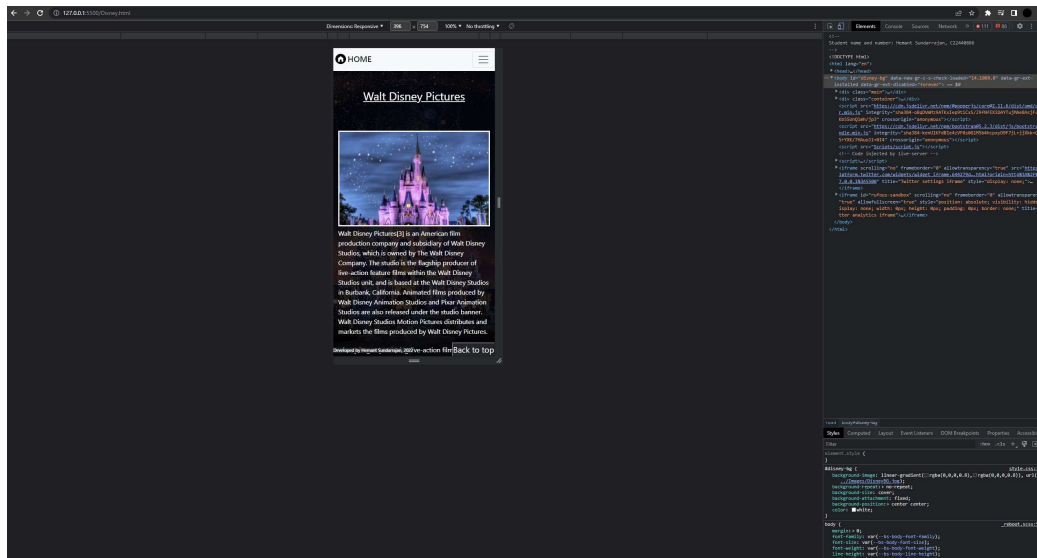
I made sure to use the same CSS rule throughout my pages with pure content on them. Things like my consistent container which I used on almost all my webpages were key for consistency. I ensured static things like my footer, button which brings you to the top of the page and navbar were all reused effectively with the same styling and no extra hard coding. Almost everything on my webpages were consistent, and it shows in how compact but useful my CSS was. I ensured CSS reuse was always in effect to stop myself from wasting un-necessary time, something which is important for a computer scientist. I made sure that my images width, video width and twitter tweet width was consistent to avoid the user having to mess with the browser to see all aspects of the website. Something which I think is key for a website to have.

Testing Plan

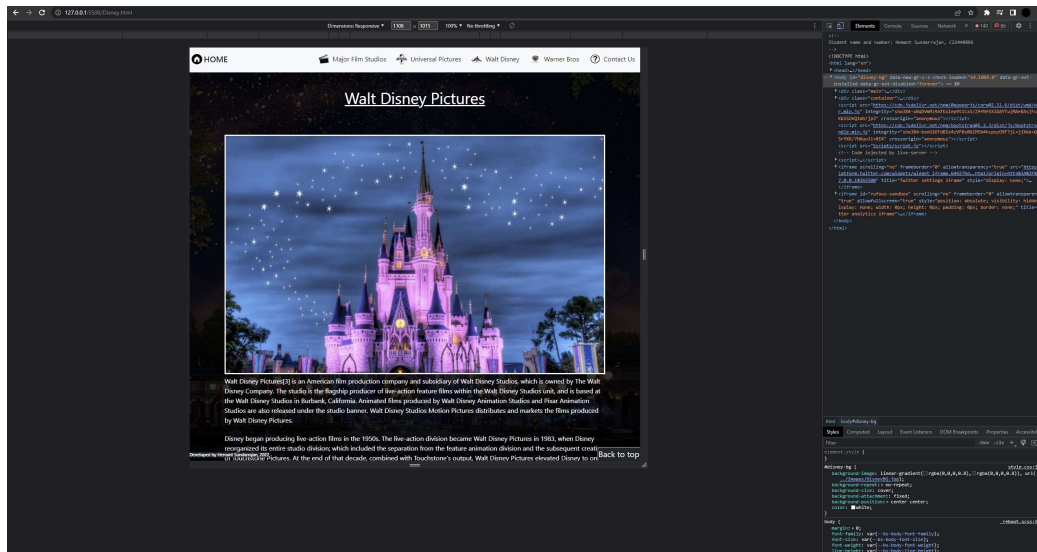
To test both my html and CSS of my websites I utilised online HTML and CSS validators for my project. Within my CSS, I found there was 0 problems with my syntax, curly braces and spacing. I had done a good job in validating my CSS throughout my project. Though my CSS wasn't alphabetically ordered, I believe as a developer it was better to leave CSS that was similar and in the same container together, as alphabetically ordering them didn't seem efficient

at all. I had minor problems with my HTML, some being that I didn't space words, hadn't closed a tag, or had some indentation problems. However, there was nothing major, and with a few quick fixes, my code had little to no actual errors.

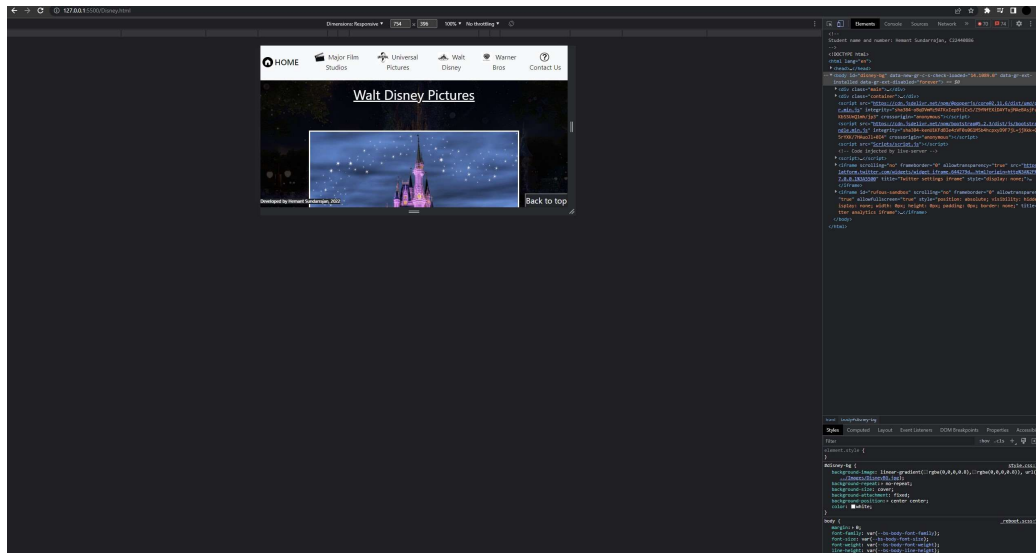
Google Developer:



Phone version of website



Monitor version of website



Tablet version of website

Using google developer I was able to test my website at different sizes emulating what it would be like on different devices. This was extremely important in testing how responsive the website was, and if there were any errors that might be shows on a phone, but on a pc. I found my website had no problems adjusting to the size of a phone, tablet or larger monitor. It was very responsive and easy to use. I had zero qualms about its sizing and structure when flipped and moved both portrait and landscape.

Site Evaluation

I evaluated my site with the help of my brother. My brother is currently a 4rth year student in computer science in the TUD Tallaght Campus. As someone who is quite experienced in the course structure, web development and computer science as whole he was pretty honest about my sites performance.

My brother noted that though the site was very responsive, on a larger scale the whole page could have been used more effectively. He noted that my site was leaving some space around the edges that could have been utilised better.

He thought my navbars responsiveness was quite good. He liked that my navbar was fully functional in all google developer scenarios and he praised the clean hover and transition effect I had used. He also seemed to like the dark mode JavaScript functionality which can help websites understand a user's preference better and act accordingly.

My brother noted that at times my website was a bit lobsided. I had to agree when he said that I swapped topics a bit too much. However, he said that if he were a user who was interested in the topic, it shouldn't have been too much of a problem. He also quite liked the way I had button letting the user go back

to the top. As someone who is constantly on websites, he found that this functionality is quite useful on websites when it's there.

Overall, he evaluated my website as one that is quite good for someone who is interested in the topic of films and those who love films alike. He liked the navbar and JavaScript a lot and he thought the design was quite nice. However, if he had constructive thing to say about the website it would be to handle the layout and actual content a bit better next time.

9. Appendices

Web Dev 1

Weekly Project Report – Week 1

Please provide a brief overview of the research or tasks that were completed on your project this week. (This should take no longer than 10 minutes to complete):

For the first week of the project me and my partner decided to just throw some ideas around as to what we wanted to do with our project. Some websites we thought of making are a video game trading website, a price comparison website, a GAA club page website and more. We simply just brainstormed on what website we might like to do, and what elements we may want the website to have. We also discussed how the workload would be shared and how we wanted the website to progress.

Web Dev 1

Weekly Project Report – Week 2

Please provide a brief overview of the research or tasks that were completed on your project this week. (This should take no longer than 10 minutes to complete):

I decided to do the project solo. In comparison to week 1 as I thought it would be more time efficient for the both of us. In this week I simply created a basic page with a basic form factor and chose my idea which was a website on the biggest film studios. Each web page will have different major film studios and it will highlight each of their greatest creations and contributions to the filming world.

Web Dev 1

Weekly Project Report – Week 3

Please provide a brief overview of the research or tasks that were completed on your project this week. (This should take no longer than 10 minutes to complete):

For this week of the web development project, I put together the navbar on the website using bootstrap. I linked my 5 web pages together and I added CSS to the navbar and the backgrounds of the websites. I also added a bit of content to each website, such as paragraphs, tweets, and videos.

Web Dev 1

Weekly Project Report – Week 4

Please provide a brief overview of the research or tasks that were completed on your project this week. (This should take no longer than 10 minutes to complete):

I styled all my pages with consistent CSS reuse and a container and began my project report. I changed my navbar to be clearer, and I added hover effect to buttons on my contact form, home page and navbar. I cleaned up the web pages ensuring there was little overflow.

Web Dev 1

Weekly Project Report – Week 5

Please provide a brief overview of the research or tasks that were completed on your project this week. (This should take no longer than 10 minutes to complete):

I made sure I had a consistent footer at the bottom of my webpages, and I added a button to take the user to the top on the other side of the footer. I finished adding logos to my navbar, and I cleaned up my spacing around my websites. I made sure my form validation was working properly after completing that webpage and I ensured there was little redundant code and indentation in my pages. I made sure my report was done well and added my name to all my code files.