Integrated Project Report

Design

Initially, I researched many different news websites such as Forbes, RTE, BBC etc. in order to gain a grasp on the design philosophies, layout, typography and colour palettes used. I began by analysing the navigation bar of said websites and thinking about how I could implement my own version of for example a radio button, heading or link. Also, looked at how the nav bar could easily fit or line up alongside the main content because some websites stray from this concept and use a completely distinctive style nav bar to the main content. Next was the footer which I thought of similarly to the nav bar. For me it was important for the user to know that the footer was actually the footer but yet it smoothly transitions from the main content to the footer. Again, some websites I researched implemented this well whereas others did not. The center point of my research was the layout of articles and the typography used. I viewed many websites and learned some news outlets use a much more modern design such as Forbes for their articles, compared to The New York Times who use a traditional newspaper design for articles. Based on article layout research I opted for the traditional newspaper design. The last part of my research was looking at typography design choices and different typography combinations. During the research and design phase I learned how important typography is such as font type, font weight and more importantly font size. As I evaluated font combinations within figma I eventually concluded that my headings for the article would have a newspaper style such as Merriweather which suited well and for the content, I chose Roboto because of its simplicity and readability. More importantly these fonts looked very well paired up alongside each other.

Prototype

After creating my concept in figma, I created a HTML and CSS prototype of the website. I began by using the grid layout for all the articles. I started with the large article, followed by the medium stories and lastly the small side stories. I imported the google fonts I had chosen and applied them where needs be and set size, weight etc. After the homepage was finished, I started working on the article page. This page had the same design and layout and would be opened when the user clicks a story from the homepage. I then made the nav bar which had links to the forms for the CRUD integration that would be implemented at a later date. Undertaking the html prototype was much easier because of the concept I had made in figma, I could always to refer to this and see what I had to do next.

Content

In order for the website to be dynamic I needed store many articles in a database and display them onto the page with php. But first I created an ERD for my database that contained the tables, primary and foreign keys. There were three tables, an articles table, a journalists table and a types table. For example, the articles table had table names such as headline, synopsis, published date and had the foreign keys that linked the other tables. I made this quickly as it was only three tables and did not need to be overly complex. Secondly, I created an excel sheet that would have all the content for my articles table, authors table and types table. I simply got my content from numerous websites, used notepad to format it and then inserted it into my excel. Lastly was to create the actual database that I would be using. I created the MySQL database in phpMyAdmin, created my tables, created the foreign keys, and inserted my excel content into the appropriate columns.

PHP & JS Integration

To make the website dynamic, I used php to display the articles from the database. I started by connecting my website to the database and then creating different variables that get the stories from the database, whether that be by Id, by category or all. Then within the HTML I looped through the stories and displayed them onto the page. For the article page, when the user clicks the heading of an article, the id of the article is displayed in the article.php page and the user may read the full article. I also created forms for functionality such as the user being able to create a new article that will be added into the database, allow the user to update a story, add an author etc. When a user wants to create a new article, there is server-side and client-side validation built in so the user must create within certain criteria. I also used other php functions too such as a function that changes the format of the date to be text or numbers.

Final Thoughts

Overall, I am quite happy with how the integrated project turned out. I found that how careful consideration towards design and prototyping can make the complete process much easier further down the line. As well as that I learned how important good typography decisions and a well implemented layout can help, be better for the user and also much easier to work with. From my time working on this project, I have become much more competent with PHP and JavaScript which also helps me in other modules too. This project certainly helped my other modules because of how it covered many spectrums with a range of languages used such HTML, CSS, SQL, PHP and JS. If I was to do another project similar to this in the future, I would add even more php functionality for the user and validation.