Report

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Introduction:

What is the essential story being told by your site and what type of structure did you choose to implement?

For this project, I have created a fictional news website, which writes news articles for everyone to read. In this news website, news articles are written by the journalists and posted on the website for public viewing. To achieve this general news website, I used a generic article structure for writing articles itself, to ensure that it can be used for any article genres and/or topic.

The name of this fictional news website is called "Newsforest", which is chosen as it implies a wealth of information and knowledge, much like a forest is full of different types of trees and plants. The name suggests that the website is a source of a wide variety of news stories and articles, providing readers with a diverse and rich selection of content to choose from.

The logo design features a stylized tree made up of the letters "N" and "F" to represent the name "Newsforest". The tree is surrounded by a circle to symbolize unity and the idea of a central source for news and information. The green colour represents growth, renewal, and the natural world, while the brown colour conveys strength and reliability.

In this fictional website, their mission is to provide a comprehensive source of news and information to our readers. As the name suggests, "Newsforest" offers a diverse and rich selection of content on a range of topics, much like a forest is full of different trees and plants.

"Newsforest" believes in the power of journalism to inform, engage, and empower their readers, and strive to deliver high-quality journalism that reflects the values of our community. Newsforest provides insightful and informative coverage that helps our readers make sense of the world around them.

Regarding the structure of the website, for the main page, the website is greeted with a hero image on the top depicting a racoon clinging on to a tree in a forest. Below it, the news headlines and highlights are shown in a carousel. Further below, recent articles are displayed in a list view. All of these articles from the carousel and the list can be clicked on and will redirect the user to the article displayed.

Additionally, in the article page, the author's name and profile picture is displayed on the right side of the screen. You can click on the author to be redirected to the author's page, where a short description and their recent articles can be viewed.

Most of the above information can be found in the `README.md` file attached with this project. Additionally, I have committed this project's code into a [GitHub Repository](#) as well. I will make the [GitHub Repository](#) public a week after this project is due.

Inspiration:

State 3 things that have inspired you when creating your website (e.g. guest speakers, websites, artists, blogs).

For the design of the webpage, I was inspired by the image of the racoon clinging on to the tree. Using the image, I utilized the colour green for the border of the header bar. Additionally, the image also inspired the design of the logo that I created for the webpage. The logo was created using [Adobe Photoshop](#), which is used in the header, footer, and webpage icon. The description of the

logo's symbolism can be found in the Introduction paragraph above, as well as in the about page in the website.

To mimic the article page, I started taking articles and pasting them into a plain Microsoft Office Word Document and playing around with the various font sizes and line spacing to figure out what I wanted for my article page. Reading articles from The Straits Times also helped to give me a better idea of what elements were needed, as well as their layout. Later, I then utilized Figma to draw it into a wireframe, including elements such as images and headers. This design is then used for the website itself.

Additionally, I took reference from the [Wild Wild Wet theme park website](#), where they had a carousel display. Although the carousel featured on the website was not automatic scrolling, I really liked the idea behind it, and wanted to use the carousel to display news articles on the website. On top of the carousel, I added a grid below it to display other news highlights that could be featured.

Accessibility:

State 3 ways in which your site is accessible.

Screen Readers

This website uses Accessible Rich Internet Applications' (ARIA) landmarks to support screen readers. The use of such landmarks allows screen readers to better identify important regions of the website, and areas that a screen reader can use. By doing so, this will help the visually impaired to use the website.

Screen Size Compatibility

This website also supports multiple screen sizes, such as laptops, phones and tablets, in different orientations. This allows users to read news articles on all of their devices. A user can use the website on his laptop, and later continue where he/she left off, on his phone.

Easy Visibility

This website uses a simple and clear colour scheme of black text on a white background. This is done on purpose to help the people who have difficulty seeing or distinguishing colours, such as those who have colour blindness. They can read the text and see the key elements of the website without any problems. The website also adapts well to other colour settings that some people might use on their devices, such as filters that change the colours to make them easier to see. This way, people can customize the website to their own preferences and needs

Usability:

State 3 ways in which you considered the usability of your site.

Aesthetic and Minimalist Design

Aesthetic and Minimalist Design is defined as to keep irrelevant information away from the interfaces, to put the main content of the website focused on the essentials. (Nielsen, 1994)

As such, in the Index page, irrelevant details such as the newspaper's details have been moved to the About Us page. Doing so moves the focus to the news articles listed in the Index page, keeping the users distracted from other unnecessary elements. The About Us page can be accessed from the Header or the Footer.

In the Article page, the Social Media Feed has been removed from the right side, allowing the user to focus solely on the article and its content.

Help users recognize, diagnose, and recover from errors

This website uses URL Parameters to fetch and display the articles to the user. However, in the case whereby the URL Parameters are invalid, the website is unable to find and display the article requested. This would commonly be recognized as an Error 404, where a file is not found. As such, the website would redirect the users to an Error 404 page.

To help the users understand the error better, the website gives some basic information regarding the error. The website also automatically redirects the user to the Index page after 10 seconds, for them to find another article to view.

Consistency Standards

The definition of Consistency and Standards refers to maintaining consistency within a single product or a family of products. (Nielsen, 1994) In simple terms, a user should not feel confused when using my website, and should meet the users' normal expectations.

Taking an example, a user commonly expects the headlines of a news website to be displayed with large images and text. This is also done in my website, and is accompanied with a carousel as well to rotate between a few headlines.

Learning:

State 3 things you had to learn or find out to create your site. How did you achieve that?

jQuery

In this project, I wanted to add some form of modularity to the website, by separating the Header, Footer, Social Media elements, amongst many other elements, from the main .html file. By separating them I will be able to code these elements individually. If I had to make any changes to it, I am able to edit just these individual elements' file. I will not need to edit them in every single webpage html file.

To do so, I utilized jQuery, a JavaScript library used for DOM manipulation. Using jQuery, I was able to load the individual elements from their separate html files, into the main webpages html file. Additionally, in an attempt to separate elements from the main html file, I utilized jQuery to load the templates of articles, the carousel news highlights etc. This further separated elements from the main webpage html.

jQuery is a very useful tool, and I will consider using it in my future website projects.

Carousel

As mentioned earlier, I wanted to add a carousel for the news highlights to the webpage. I took this as a challenge to learn and debug it by myself.

It took me awhile to figure out a way to make this work, which was to use 3 layers of grids on the same area, in order to display the carousel buttons on top of the carousel's content. This was later fine tuned into 2 layers as I felt that the original method was not optimal. The 1st layer is used to hold the left, right buttons as well as the buttons on the bottom of it, while the 2nd layer is used to hold the article headers on top of the article image, as the content of the carousel.

For some reason when doing the Carousel, I forgot to complete the code for the carousel's index buttons. Only a week later when testing the website did I notice it. This took me approximately half an hour to resolve.

Despite all the frustration with making my own carousel from scratch, I felt that it was a meaningful experience, which helped me to better understand DOM manipulation using JavaScript and animating using CSS.

Handlebars and Articles

In the middle of this module, we were taught to use Handlebars and Mustache, to create templates and fill it with information to push into the website. Doing so made duplicating similarly structured elements a lot simpler. Note that Handlebars and Mustache both offered very similar features, and I had chosen to use Handlebars for this project.

Most of my articles were compiled into JSON objects, and I was able to use it to populate the article pages as well as news lists using those. But due to the simplicity of certain elements such as the headers and paragraphs, they did not justify the need of making a template just for it. As such, for some of the elements, I took the content and updated it directly using pure JavaScript DOM, without the use of Handlebars.

Handlebars is a very useful tool that can simplify certain repeated workflows. It should be considered when making any website.

Evaluation I:

What aspects of your work do you think were particularly successful? Why?

In this project, I am very proud of my use of jQuery to introduce modularity into this website, and I believe that it is a great success. As mentioned above, jQuery allowed me to split specific elements and templates into their own html files, separated from the main html files. This allows me to modify the header.html file, and its changes will be reflected accordingly across all web pages that use it.

On another topic regarding the articles, due to the limitations of the project, I was only allowed to create a maximum of 5 pages for this project. This would make it almost impossible to hard-code more than 5 articles into this project. As a workaround, I compiled multiple articles, collected from CNA, into a JSON variable, and utilized Handlebars and JavaScript DOM to update the webpage based on the link parameters. This is also mentioned above. With this implementation, I was able to fit 12 different articles into this website, while maintaining the page count. This also freed up the page count, allowing me to add an error page to redirect users, in the case whereby they might have keyed in a wrong URL. As such, I find that this is very successful.

Evaluation II:

What aspects of your work could be improved? How might you do things differently another time?

In the scenario whereby I was assigned to this same project again, I would like to consider a different layout for the index page. As of now, I feel that the layout feels a bit too cramped, and the mobile view for the news highlights looks too big and chunky.

I would consider having only 1 headline to display, and display other highlighted news on the side in a carousel. I will also display recent articles below the headline.

Resources:

What resources did you use in your work? List any sources of information, libraries, plugins, code or tools (you should also indicate inclusions from other sources within your code using comments)

The Hero Image is taken from Unsplash.

All News Articles are taken from CNA.

Most of the Social Media Feeds content is taken from CNA's Telegram Channel. The names are randomly generated, and does not come from CNA.

Applications

- The Logo of the website is designed using Adobe Photoshop
- Wireframe and Mock-ups are designed using Figma

- The [Live Server Extension](#) is used with Visual Studio Code
- The code is committed to [GitHub](#) to help keep my changes tracked.

JavaScript Libraries:
- [Bootstrap](#)
- [Handlebars](#)
- [jQuery](#)

Appendices:
Site map (if useful), wireframes and mock-ups

Please see the following attached files.

Wireframe ("/attachments/wireframe.pdf")

Mock-ups ("/attachments/mock-up.pdf")

References
In this Report

1. Nielsen, J. (1994, April 24). *10 usability heuristics for user interface design.* Nielsen Norman Group. Retrieved March 8, 2023, from https://www.nngroup.com/articles/ten-usability-heuristics/

Library References

1. [Bootstrap Introduction](#)
2. [Handlebars Guide](#)
3. [jQuery](#)