Web Design and Development

4COSC011W

Report

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Group Number: 8

Group Name: G8

Student Role: Student 4

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# Introduction

The website “Wild Pulse” is based on the Sustainable Development Goal No. 15 of the United Nations Department of Economic and Social Affairs: Life on Land. The goal’s mission is to “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss” (United Nations, 2012). The website promotes the awareness of wildlife, nature, and its resources by the employment of a plethora of visually engaging content.

## 1.1 Team Members and Task Allocation

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Student ID** | **Student role** | **Tasks allocated** |
| Sihath Yapa | w2052733/ 20220906 | Student 1 | Splash Screen  Shop |
| Sanuda Wijethunga | w2052741/ 20220982 | Student 2 | Homepage  Feedback page |
| Minthaj Ameer | w2052742/ 20220983 | Student 3 | User Profile  Team Page |
| Radev Perera | w2052745/ 20221004 | Student 4 | Sitemap  Gallery |

## 1.2 Website topic/theme

**Website Topic**

The website, by the name “Wild Pulse” suggests that the website aims to raise public awareness of nature and the values it upholds for the sustainability of billions of species across the world.

**Website Theme**

Following the topic of nature sustainability and awareness, the theme of the website follows through with a sense of liveliness through the employment of vibrant images that catches the user’s attention whilst providing a modern aura to the website with the aid of smooth transitions and high-definition video. A “Shop” page is also dedicated to funding various environmental/nature-based activities whilst further raising awareness through its eye-catching merchandise and other applicable commodities.

## 1.3 Contributions

| **Group Coursework Meetings** | | |
| --- | --- | --- |
| **1** | Date & Time | 27th February 2024 – 9.30p.m. |
| Objective: | General group discussion regarding the topic.  Group allocation |
| Attended: | Yes |
| Your Contribution: | Bringing forth a topic which is collectively agreed on.  Assignment of group members |
| **2** | Date & Time: | 05th March 2024 – 10.00p.m. |
| Objective: | Theme of the website |
| Attended: | Yes |
| Your Contribution: | Discussion on themes: Aiming for a modern look.  Gathering more information regarding the topic. |
| **3** | Date & Time: | 18th March 2024 – 9.45p.m. |
| Objective: | Updated members with personal progress and shared necessary files |
| Attended: | Yes |
| Your Contribution: | Sharing of ideas amongst each other on certain improvements on the website |
| **4** | Date & Time: | 26th March 2024 – 9.30p.m. |
| Objective: | Styling and finalization of the website |
| Attended: | Yes |
| Your Contribution: | Provided ideas for the visual clarity of certain parts of webpages |
| **5** | Date & Time: | 01st April 2024 – 10.00p.m. |
| Objective: | Linking the webpages, functionality checks |
| Attended: | Yes |
| Your Contribution: | Functionality check: Seeking any errors in the functionality, linking of webpages and the functionality other visual aspects of the website (Transitions, Navbars etc.) |

Table 1: Meeting Minutes & Group Contributions

# Technical Discussion

## Implementation.

* + 1. Gallery Implementation

The page gallery has been successfully created and implemented to the website with a myriad of HTML, CSS, and JavaScript techniques.

The header and footer have been successfully applied to the page and formatted accordingly.

A div “slider” is created to accommodate the styling of the whole gallery section apart from the remainders of the body (background, header, page colour and font selection, and footer). Within this <div> “item” are the images that will be displayed, separated individually into their designated “div” tags where it contains the image and their relevant content. The image and content are separated with a <div> “content”. This aids in styling certain aspects of the elements in these sets of content.

Further below are the buttons used to navigate to the previous or next image of the gallery: Denoted by “<” for previous and “>” for next, these elements are stored in a <div> “arrows”.

Moreover, the smaller images (previews to the main images) have applied the same principle as the main pages, as they are distinctly separated between the image and the relevant content for ease of styling.

Lastly, in terms of the application of HTML, the page colour and font changers have been implemented such that the user is provided with three font options (Times New Roman, Open Sans, and Reddit Mono) and any choice of colour for the background through the expanding colour picker.

Furthermore, the CSS implementation ensures engaging visuals for the end user. The page fades in upon opening. This is done using a “fadeIn” method which is executed within 1 second. A transparent background design is added to a black page background for visual impact. Upon hovering over the navigation buttons of the page, the button is highlighted, and the cursor is changed to “pointer”. The same principle is applied to the thumbnails of the images (previews), however, in lieu of highlighting the content, the image is slightly enlarged (zoomed) and dimmed by 0.1. The font and page colour changers have also been styled to provide a modern finish to the setting.

Lastly, the application of JavaScript completes the gallery’s functionality as the user is able to navigate through all images and interact with any image through the thumbnails. The images cycle through automatically every seven seconds. The script further waits for input regarding the colour and font changes and does the necessary changes accordingly through the employment of event listeners.

* + 1. Sitemap Implementation

The sitemap has been successfully created and implemented to the website with the employment of Scalable Vector Graphics (SVGs) in HTML. For this sitemap, the XMLNS (Extensible Markup Language Name Space) has been derived from W3C. The content of the sitemap consists of the <svg> elements contained in a class “container”. This groups the entire sitemap and separates it from the rest of the webpage (background, navbar, footer), thus, allowing the ease of styling. Each node is contained in a class “node-group” where the node is shaped as a rectangle. In the node-group class is also the text belonging to the node which denotes which page it directs to. The nodes are interconnected with each other with straight lines where each end of the line is an arrowhead “marker” depicting the direction of flow from each node.

Furthermore, in terms of CSS application, this page too incorporates the fading-in of the page. A transparent background design is added to a black page background for added visual impact. The header and footer have been imported from student 2 and styled accordingly (The “sitemap” section of the navbar is highlighted). The sitemap container is given a grey transparent background for visual clarity, with rounded edges for a cleaner look. The same principle is applied to the nodes of the sitemap as they are darker in shade and rounded off to adhere to the style theme of the page. These nodes are highlighted in purple on hover and change the cursor to “pointer”. Upon clicking these nodes, they re-direct the user to their designated pages and perform without error.

* + 1. Additional Content Page Implementation

The Additional Content Page provides the user with further information relevant to their interests as the user is welcomed with a plethora of fun facts and other useful data. The HTML for this page is rather simple as it only contains the header, main content (a collection of paragraphs) and the footer. The paragraphs are divided based on the topic discussed by the employment of <div> elements and are linked to the top of the page for the ease of navigation. The background incorporates an engaging video for an impactful visual effect.

The CSS for the page consists of the fade-in of the page as well as key styling principles such as text formatting. As the set of paragraphs are contained in a single <div> element “main”, it provides the ease of styling such that a translucent light grey background with rounded off borders is added to the element for better readability. The video background is set to “fixed” to provide the user with a consistent background.

* + 1. Page Editor Implementation

The page editor has been successfully implemented and functions accordingly. The HTML implemented for this page consists of the student details with an addition of an image. It is further followed by the tasks completed by the student with the relevant links to the pages.

The CSS for the page editor consists of basic paragraph styling with the inclusion of links. The content is divided into three sections with the employment of <div> tags such that the student image and the details to the right of the image are grouped as “content1”, the university as “content2”, and the tasks completed and their relevant links as “content3”. This page also fades in with the employment of the fadeIn element of “@keyframes”.

## Task completion checklist.

**Task 1 – Gallery**

All requirements have been met. Further styling and functionality have been implemented to the page for added overall page quality. The navigation bar also indicates the user of their location in the webpage. Fonts and page colours can be switched throughout the page seamlessly.

**Task 2 – Sitemap**

All requirements have been met. Each node is linked to their relevant destination page and is represented in detail of which page is linked with another. The flow is aided by the employment of arrowheads. The sitemap works seamlessly.

**Task 3 – Content Page**

All requirements have been met. The user is provided with cohesive information of the topic discussed (deserts). The user is also provided with fun facts regarding deserts and the mysteries that lie within. Links are situated at the top of the page which directs to these topics for the ease of navigation.

**Task 4 – Page Editor**

All requirements have been met. The page editor consists of the student details; name, role, student ID and the list of tasks with the relevant tasks linked for the ease of navigation.

# Webpage Validation Statement

All webpages operate as expected. The linking of all pages works seamlessly and the additional elements of the webpages provide the added features without issue.

# Janet

“All organisations connected to Janet are subject to the Janet AUP. This permits Janet to be used for any purpose that is legal, that is socially acceptable to the community Janet serves, and that does not cause degradation of the performance of the network beyond that which might reasonably be expected (JISC Community, -).”

This content abides by both Janet-wide policies and those local to their organisation and is open to cooperate with their organisation and the network operator. The project follows good security practice and does not act in a way that puts the network or connected systems at risk.

# Self-reflection

This section aims to provide a personal perspective on the completion of this coursework and how this experience has contributed to my skills and personal development.

As this is a group project, I was given the opportunity to work with my classmates and enjoy the process of working together to build a website that would meet relatively good standards. I also enjoyed the process of overcoming problems we faced as a team.

However, there were some key areas in which I was not fond of. Some examples being the lack of seamless team communication and not meeting set deadlines. This resulted in many miscommunications and conflict.

I learned a key aspect of working with a team from this project; as a leader, to well assess your teammates and delegate work accordingly, and as a member, to communicate well with the team and bring forth solutions to barriers when needed.

I confidently state that my skills in HTML, CSS and JavaScript have seen improvement and that I am more familiar with the language and syntax. I also improved in my leadership skills and the ability to assess teammates based on their performances.

The ability to focus on a certain task until it is fully completed is one strength I noticed that emerged whilst engaging in the coursework. Another strength that relates to the first is the ability to handle more workload and complete the relevant tasks as required.

Procrastination is a large barrier I face, and it has impacted my workflow in a greatly negative manner. Although less often as I focus well on a task when needed, the procrastination of work takes a large toll on my overall performance.

If I were given the chance to undertake the project again, I would assess my group members based on their skill and comfortability on a certain part and delegate the tasks accordingly. I would also plan a task schedule for my group as to create a certain sense of goal for each member to complete.

# References

JISC Community, -. *Janet Policies and Legal Requirements | Jisc community.* [Online]   
Available at: https://community.jisc.ac.uk/library/janet-services-documentation/janet-policies-and-legal-requirements  
[Accessed 3 April 2024].

United Nations, 2012. *Goal 15 | Department of Economic and Social Affairs.* [Online]   
Available at: https://sdgs.un.org/goals/goal15  
[Accessed 03 April 2024].

**Other References**

*W3Schools online web tutorials*

<https://www.w3schools.com/>

*Stack overflow*

[https://stackoverflow.com](https://stackoverflow.com/)

*codecademy*

<https://www.codecademy.com/learn/introduction-to-javascript>

*javatpoint*

<https://www.javatpoint.com>

# Appendices

## Appendix A: Code

## Appendix B: Screenshots

## Appendix C: Screenshots - Webpage Validation Evidence

## Appendix D: Task Completion Checklist

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student 4 Tasks** | **Completed** | | | **Student Comments** |
| **Yes** | **No** | **Partially** |
| 1 – Gallery | **✓** |  |  | Completed |
| 2 – Sitemap | **✓** |  |  | Completed |
| 3 – Content page | **✓** |  |  | Completed |
| 4 – Page Editor | **✓** |  |  | Completed |
| 5 – Use of the provided navigation bar (adapted) | **✓** |  |  | Completed |
| 6 – Use of provided template (adapted) | **✓** |  |  | Completed |
| 7 – Additional CSS | **✓** |  |  | Completed |
| 8 – Additional Interactivity | **✓** |  |  | Completed |
| 9 – Uploaded to Webserver |  | **✓** |  | Done as instructed |