Hamsterley Forest Activity Center

CIS2028-N-FJ1-2022

Open Source Business Solutions

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Contents

1) Introduction

The project aims to develop a website for an organisation called **Hamsterley Forest Activity Centre**. The sole purpose of the organization is to help and encourage people fit and enjoy the great outdoor more.

There will be different activities included in the centre for people to have broad choices in enjoying their time. A café with a detailed menu will be on display for people to be prepared for what kind of food availability they will be expecting. Also, different route monitors will be available on the website to make it user friendly.

All the activities and events will be available for customers to see through the website and book online. They can also volunteer and book different available slots to check in whenever the like.

2) Statement of purpose

The purpose of this website is to provide an immersive and informative online experience for individuals interested in forest activities and outdoor adventures. By offering a user-friendly interface and a range of features, including detailed information about activities and amenities, the ability to book activities and packages, and a blog and news section, this website aims to serve as a comprehensive resource for individuals looking to explore the great outdoors. Additionally, the website seeks to promote environmental awareness and conservation by highlighting the importance of responsible outdoor recreation and providing resources and information about wildlife and habitat conservation efforts. Ultimately, the goal of this website is to inspire individuals to get outside, explore the natural world, and make a positive impact on the environment.

This website is focused to deliver a socializing platform like a vibrant community hub. With the peaking modernization, the outdoor activities and socializing is often ignored. This modern problem needs to be countered in a modern way, thus this is why the activity centre will play a significant role in creating a platform for people, caught up in their busy schedules, to encourage them to join these activity centres by planning and booking in advance.

3) Project Limitations

In any project, there are inevitably limitations that can impact its functionality and efficiency. This is also true of the forest activity website currently under development. Although the website shows promise in providing valuable resources for users interested in forest activities, there are several limitations that must be taken into consideration before its official launch. In this section, we will identify and discuss the project limitations that need to be addressed to ensure the website's optimal performance.

1. The website is not online and is currently running on a local host server.

2. The website uses dummy free pictures and placeholders rather than official images and icons.

3. The data used on the website is not accurate since it's an offline website without any user interaction and it does not support any backend right now.

4. The contact form and newsletter form are functional but not active.

5. Booking of activities can be done without a proper authentication system, making it less systematic and functional.

6. The payment gateway is present but does not accept any payments.

7. The wildlife monitoring feature is not functional.

8. The onsite cafe does not accept any online orders, although the menu is displayed on the site.

9. The Hamsterley shop does not have a very user-appealing front-end.

In conclusion, while the website is efficient, there are still several limitations that need to be addressed before it can go live. These include adding official images, implementing a functional login page and payment acceptance system, fixing the authentication system for booking activities, and improving the front-end for the Hamsterley shop. Overall, with these adjustments, the website will be a valuable resource for users interested in forest activities.

4) Project Deliverables

Project Deliverables:

1. Fully functional and responsive website: The primary deliverable is the development of a fully functional and responsive website that provides a seamless user experience across different devices and screen sizes. The website should be visually appealing, easy to navigate, and optimized for performance.

2. Engaging content and information: The website should include engaging and informative content related to forest activities, including detailed descriptions of activities, tours, and packages. It should also provide relevant information about the onsite cafe and Hamsterley shop, such as menus, product offerings, and pricing.

3. Booking system: Implement a robust and user-friendly booking system that allows users to easily book activities, packages, and services offered on the website. The booking system should include features such as date selection, availability checks, and payment integration.

4. Contact form and newsletter subscription: Include functional contact forms that allow users to easily get in touch with inquiries or feedback. Additionally, integrate a newsletter subscription feature to capture user email addresses for future communication and marketing purposes.

5. Integration of official images and icons: Replace the existing placeholder images and icons with high-quality, official images and icons that accurately represent the forest activities, onsite cafe, and Hamsterley shop.

6. Payment gateway integration: Integrate a secure and reliable payment gateway to facilitate online payments for activities, services, and products offered on the website. Ensure that the payment process is smooth, user-friendly, and compliant with industry standards for data security.

7. Authentication and user management system: Develop a functional login and user management system that allows users to create accounts, view booking history, manage personal information, and access exclusive features or discounts.

8. Enhancements to the Hamsterley shop front-end: Improve the user interface and design of the Hamsterley shop section to make it visually appealing and user-friendly. This includes optimizing product displays, adding filters and sorting options, and providing a seamless shopping experience.

9. Comprehensive documentation: Provide detailed documentation that outlines the website's architecture, functionalities, and instructions for future maintenance and updates. The documentation should serve as a valuable resource for the website's administrators and developers.

These project deliverables aim to ensure the successful development and launch of the forest activity website, providing users with an engaging, informative, and user-friendly online experience.

5) Research

5.1) User Analysis

The forest activity website caters to a diverse audience of individuals interested in outdoor activities and nature, as well as those who may be interested in purchasing outdoor clothing and equipment or enjoying a meal at the onsite cafe. This audience is likely to be broad, ranging from families with children, to nature enthusiasts and adventure seekers, as well as those looking for quality outdoor gear or a delicious meal after a day of activities.

The website's user base can be further segmented into several distinct groups, each with their own unique needs and requirements. Families with children, for example, may be interested in child-friendly activities and guided tours, as well as kid-friendly meal options at the onsite cafe. Adventure seekers, on the other hand, may be drawn to more challenging outdoor activities such as hiking, mountain biking, or purchasing high-quality outdoor gear from the Hamsterley shop. Nature enthusiasts may be interested in information about local flora and fauna, as well as opportunities for wildlife watching and conservation efforts, while also appreciating the locally sourced food options available at the onsite cafe.

Therefore, the website must cater to these diverse user groups by providing relevant and accurate information, as well as user-friendly tools and features to enhance their experience. This includes easy-to-use booking systems, interactive maps, and comprehensive descriptions of activities and tours, as well as information about the Hamsterley shop's product offerings and the onsite cafe's menu. Additionally, users may be interested in package booking options that bundle activities, equipment rentals, and meals together for a complete forest adventure experience.

By understanding the needs and preferences of its diverse user base, the forest activity website can provide a unique and valuable experience for all users, whether they are interested in outdoor activities, purchasing outdoor gear, or enjoying a meal at the onsite cafe.

5.2) Market/Competitors

Based on the speciality of Hamsterley forest activity center website, here are some potential market competitors that offer similar services:

1. Go Ape - Go Ape is an outdoor adventure company that offers treetop adventures, zip lining, and forest segway tours in various locations throughout the UK.

2. Forest Holidays - Forest Holidays offers cabin and treehouse rentals in various locations throughout the UK's forests, providing guests with a unique forest experience.

3. Center Parcs - Center Parcs is a well-known holiday resort company that provides a variety of outdoor activities, including forest adventures, water sports, and cycling in several locations throughout the UK.

4. Forestry England - Forestry England manages and operates several forests and nature reserves throughout the UK, offering visitors a range of outdoor activities, including walking, cycling, and wildlife watching.

5. Wildwood Escot - Wildwood Escot is a nature and adventure park in Devon, UK, offering a variety of outdoor activities, including zip lining, archery, and bushcraft courses, as well as an animal park and botanical gardens.

These companies offer similar outdoor activities and experiences to Hamsterley center website and may be considered market competitors. However, by providing unique and tailored experiences, this website can stand out in the market and attract a loyal user base.

5.3) Target Audience

Based on the services and offerings of the website, here are some potential target audiences:

1. Families with children - Families with children may be interested in child-friendly activities and guided tours, as well as kid-friendly meal options at the onsite cafe. They may also be interested in package booking options that bundle activities and meals together for a complete forest adventure experience.

2. Adventure seekers - Adventure seekers may be drawn to more challenging outdoor activities such as hiking, mountain biking, or purchasing high-quality outdoor gear from the Hamsterley shop. They may also be interested in booking multiple activities and taking advantage of package booking options.

3. Nature enthusiasts - Nature enthusiasts may be interested in information about local flora and fauna, as well as opportunities for wildlife watching and conservation efforts. They may also

appreciate the locally sourced food options available at the onsite cafe and may be interested in purchasing outdoor gear from the Hamsterley shop.

4. Local residents - Local residents may be interested in purchasing outdoor gear and equipment from the Hamsterley shop and enjoying a meal at the onsite cafe. They may also be interested in taking advantage of the forest activities and tours offered by the website.

5. Tourists and visitors - Tourists and visitors to the area may be interested in exploring the forest and experiencing the outdoor activities and tours offered by the website. They may also be interested in purchasing outdoor gear and equipment from the Hamsterley shop and enjoying a meal at the onsite cafe.

By targeting these potential audiences, the forest activity website can tailor its offerings and marketing efforts to meet the specific needs and preferences of each group, providing a unique and valuable experience for all users.

6) Methodology

While developing the website, Agile methodology was used. Agile methodology is a flexible and iterative approach to software development that prioritizes collaboration, adaptability, and continuous improvement. This methodology is often used for projects that require a high degree of flexibility and responsiveness to changing requirements, such as web development projects.

In Agile methodology, development is broken down into small, manageable chunks called sprints, which typically last between one to four weeks. Each sprint focuses on a specific set of tasks and goals, with regular check-ins and feedback loops to ensure that progress is being made and that the project is on track.

One of the core values of Agile methodology is customer collaboration, meaning that the project team works closely with the customer to ensure that their needs and requirements are being met throughout the development process. This allows for greater transparency and visibility into the project's progress and helps to identify and address issues or concerns early on.

Another key aspect of Agile methodology is adaptability, which means that the project team is able to respond quickly and effectively to changes in requirements, priorities, or other factors that may impact the project. This is achieved through regular feedback loops and continuous improvement, which allows the team to make adjustments and changes as needed to ensure that the project is meeting the customer's needs and requirements.

Overall, Agile methodology offers a flexible, collaborative, and adaptable approach to software development that can be highly effective for web development projects. By breaking development down into smaller sprints, prioritizing customer collaboration, and fostering continuous improvement, the project team can ensure that the website is developed in a timely and efficient manner while meeting the customer's needs and requirements.

7) Analysis

7.1)User Personas

7.1.1) User Persona 1

Demographics	Alex, 28 years old, single.
Category	Adventure Enthusiast
Background	Alex is an outdoor enthusiast who seeks thrilling adventures and enjoys exploring nature's wonders. They are an experienced hiker, biker, and nature photographer.
Goals	Alex wants to discover challenging activities like mountain biking trails, hiking routes, and wildlife observation spots. They also have an interest in purchasing high-quality outdoor gear from the Hamsterley shop.
Behaviours	Alex spends time researching different outdoor destinations and values recommendations from fellow adventure seekers. They appreciate detailed trail descriptions, difficulty ratings, and captivating photographs. An easy-to-use booking system and a seamless online shopping experience are important to them.

7.1.2) User Persona 2

Demographics	Sarah, 40 years old, environmental advocate.
Category	Nature Conservationist
Background	Sarah is passionate about nature conservation and actively supports wildlife protection initiatives. She enjoys spending time in serene natural environments, observing flora and fauna.
Goals	Sarah seeks opportunities to learn about local wildlife, conservation efforts, and sustainable practices. She is interested in participating in wildlife monitoring activities and wants to make informed choices at the onsite cafe, considering their commitment to eco-friendly practices.
Behaviours	Sarah actively engages with online communities and environmental organizations. She values a website that provides in-depth information about local ecosystems, endangered species, and conservation projects. A user-friendly contact form and access to educational resources on environmental stewardship are important to her.

7.1.3) User Persona 3

Demographics	Emily, 35 years old, married with two children (ages 6 and 9).

Category	Family Explorer
Background	Emily is an active parent who loves spending quality time with her family outdoors. She enjoys exploring nature trails, engaging in educational activities, and introducing her children to new experiences.
Goals	Emily wants to find family-friendly activities and guided tours that cater to her children's interests and ensure their safety. She also seeks information on the onsite cafe's kid-friendly menu options.
Behaviours	Emily searches for online reviews and recommendations from other parents before booking activities. She prefers a simple and intuitive booking process and appreciates detailed activity descriptions and interactive maps to plan her family's outings.

By considering the needs, goals, and behaviors of these user personas, I have tailored your website's features and content to provide a personalized and engaging experience for a variety of users.

7.2) Requirements & Features List

Functional Requirements:

1. User Registration and Login:
   - Users should be able to create an account and login securely.
   - User registration should capture necessary information such as name, email address, and password.
   - Login functionality should provide access to personalized features and account management.

2. Activity Booking:
   - Users should be able to browse available activities, tours, and packages.
   - Each activity should have a detailed description, including duration, difficulty level, and any necessary equipment.
   - Users should be able to select preferred dates and times for activities.
   - The booking process should include availability checks and confirmation notifications.

3. Get Going Club Membership:
   - Users should be able to join the Get Going Club and access exclusive discounts and offers.
   - The membership process should require necessary information and possibly a fee, if applicable.
   - The website should provide a dedicated section for club members to view their benefits and upcoming promotions when using coupons in the shop.

4. Contact Form and Customer Support:
   - The website should include a contact form that allows users to send inquiries, feedback, or support requests.
   - Users should receive a confirmation email upon submitting the form.
   - Customer support should respond promptly and provide helpful assistance to users.

5. Content Management System (CMS):
   - An intuitive CMS should be integrated to allow administrators to manage and update website content easily.
   - The CMS should provide options for adding, editing, and removing activities, tours, packages, and blog/news articles.
   - Administrators should have control over images, text formatting, and other visual elements.

Non-Functional Requirements:

1. Responsive Design:
   - The website should be responsive and accessible across various devices and screen sizes, including desktops, tablets, and smartphones.
   - It should adapt seamlessly to different screen resolutions, ensuring a consistent and user-friendly experience.

2. Performance and Loading Speed:
   - The website should load quickly and efficiently to provide a smooth user experience.
   - Optimizations should be implemented to minimize page load times, including image compression, code optimization, and caching techniques.

3. Security and Data Protection:
   - User information, including personal and payment details, should be securely stored and protected.
   - The website should utilize encryption protocols (e.g., HTTPS) to ensure secure data transmission.
   - Payment gateway integration should comply with industry standards for secure online transactions.

4. Scalability:
   - The website should be designed to handle increasing traffic and user interactions.
   - Scalable architecture and server infrastructure should be in place to accommodate future growth and demands.

5. Browser Compatibility:
   - The website should be compatible with major web browsers, including Chrome, Firefox, Safari, and Edge.
   - Compatibility testing should be conducted to ensure consistent functionality and appearance across different browsers.

By addressing both functional and non-functional requirements, the website can provide a seamless and secure user experience while maintaining flexibility, performance, and scalability.

Feature List
Here is a feature list for the website:

1. User Registration and Login:
   - User account creation and secure login functionality.
   - User profile management, including personal information and booking history.

2. Activity Listings:
   - Detailed descriptions of various forest activities, tours, and packages.
   - Activity filters and search functionality for easy navigation.
   - Availability calendar to check dates and times for booking.

3. Booking and Payment:
   - Seamless booking process with options to select activity, date, and quantity.
   - Real-time availability checks and confirmation notifications.
   - Integration with a secure payment gateway for online payments.

4. Get Going Club Membership:
   - Membership registration and management for exclusive discounts and offers.
   - Dedicated section for club members to view benefits and upcoming promotions.

5. Contact Form and Customer Support:
   - Contact form for inquiries, feedback, and support requests.
   - Confirmation email upon form submission.
   - Prompt customer support and assistance.

6. Cafe Information:
   - Details about the onsite cafe, including menu, specialties, and dietary options.
   - Opening hours and location information.

7. Hamsterley Shop:
   - Online shop with categories and filters for easy browsing.
   - Product descriptions, pricing, and images.
   - Shopping cart functionality and secure checkout process.

8. Wildlife Monitoring:
   - Information about local flora and fauna, wildlife observation opportunities, and conservation efforts.
   - Interactive maps, species identification guides, and educational resources.

9. Responsive Design:
   - Responsive and mobile-friendly design for seamless user experience on different devices.
   - Consistent layout and usability across desktop, tablet, and mobile platforms.

10. Content Management System (CMS):
   - Intuitive CMS for administrators to manage website content, including activities, packages, and blog/news articles.
   - Image and text editing capabilities, easy updates, and publishing control.

11. Social Media Integration:

- Integration with social media platforms for sharing activities, blog articles, and promotions.
- Social media follow and share buttons to increase website visibility.

12. Analytics and Reporting:
- Integration with web analytics tools to track website performance, user behavior, and conversion rates.
- Generation of reports for insights and decision-making.

This feature list encompasses a wide range of functionalities that will enhance the user experience, streamline booking processes, and provide valuable information to visitors. Based on the project requirements, we can prioritize and customize these features to best meet the needs of our website and target audience.

7.3) CRUD Matrix (Create, Read Update and Delete)

Administrator:

- Create new activities, tours, and packages

- Update activity descriptions, prices, and availability

- Delete outdated or cancelled activities

- Manage user accounts and permissions

- Monitor website analytics and generate reports

- Add or modify content on the About Us and Contact Us pages

- Upload and manage images for activities, blog articles, and promotions

- Configure payment gateway settings and manage transactions

User:

- View available activities, tours, and packages

- Search for specific activities or filter by criteria (e.g., duration, difficulty level)

- Register and create a user account

- Log in to access personalized features and booking history

- Make online bookings and select preferred dates and times

- Update personal information and account settings

- Join the Get Going Club for exclusive discounts and offers

- Leave reviews and ratings for activities they have participated in

Staff:

- View upcoming bookings and manage availability

- Confirm and process user bookings

- Update booking status (e.g., confirmed, cancelled)

- Communicate with users regarding booking details and changes

- Generate reports on bookings and revenue

- Manage inventory for the onsite cafe and Hamsterley shop

- Add, update, or remove menu items in the cafe section

- Fulfill online orders from the Hamsterley shop and update stock quantities

8) Design

8.1) Mood Board

The following colour scheme/palette will be used throughout the branding and application / user interface.

System Colors

Primary	#6EC1E4	
Secondary	#54595F	
Text	#7A7A7A	

Custom Colors

Hover Green	#9FCE00	

System Fonts

Primary ✏

Typography ↺

Family	Roboto ▼
Size 🖥	PX ˅
Weight	600 (Semi B ▼
Transform	Default ▼
Style	Default ▼
Decoration	Default ▼
Line-Height 🖥	PX ˅
Letter Spacing 🖥	PX ˅
Word Spacing 🖥	PX ˅

System Fonts

Primary ✏

Secondary ✏

Typography ↺

Family	Roboto Slab ▼
Size 🖥	PX ˅
Weight	400 (Normal ▼
Transform	Default ▼
Style	Default ▼
Decoration	Default ▼
Line-Height 🖥	PX ˅
Letter Spacing 🖥	PX ˅

Buttons

Button

Button

Button

Button

Icons

Color Palette: Earthy tones such as greens, browns, and warm neutrals.

Adventurous and natural

Style: Organic textures, natural elements like leaves or wood, and a sense of excitement and exploration.

Typography: Bold and rustic fonts that evoke a sense of adventure and nature

Images: Pictures of lush forests, winding hiking trails, adventurous activities like Bushcraft and Archery, and people enjoying outdoor adventures.

Color Palette: Soft and calming colors like light greens, blues, and muted earth tones.

Relaxing and Serene

Images: Images of peaceful forest scenes, serene lakes, yoga or meditation in nature, and tranquil activities like birdwatching or gentle hiking.

Typography: Elegant and flowing fonts that convey a sense of tranquility and relaxation.

Style: Minimalist design with clean lines, natural materials, and a focus on creating a soothing atmosphere.
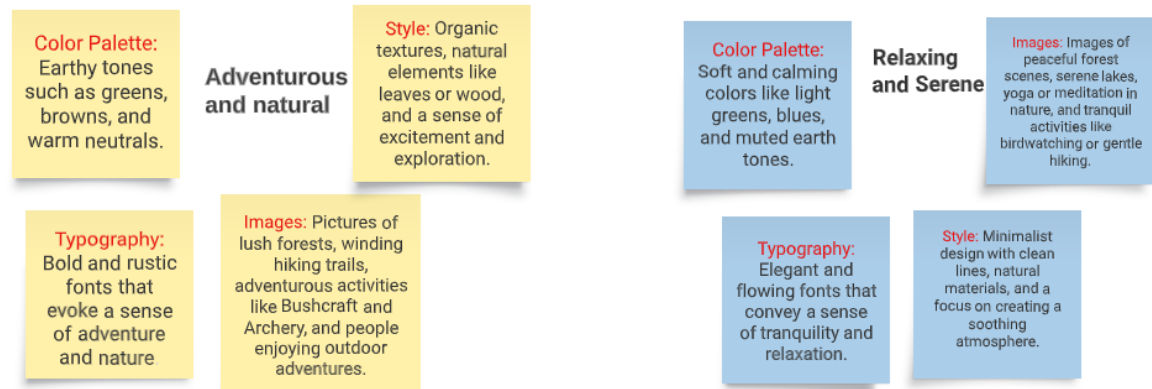
Figure : Branding Colour Scheme / Palette
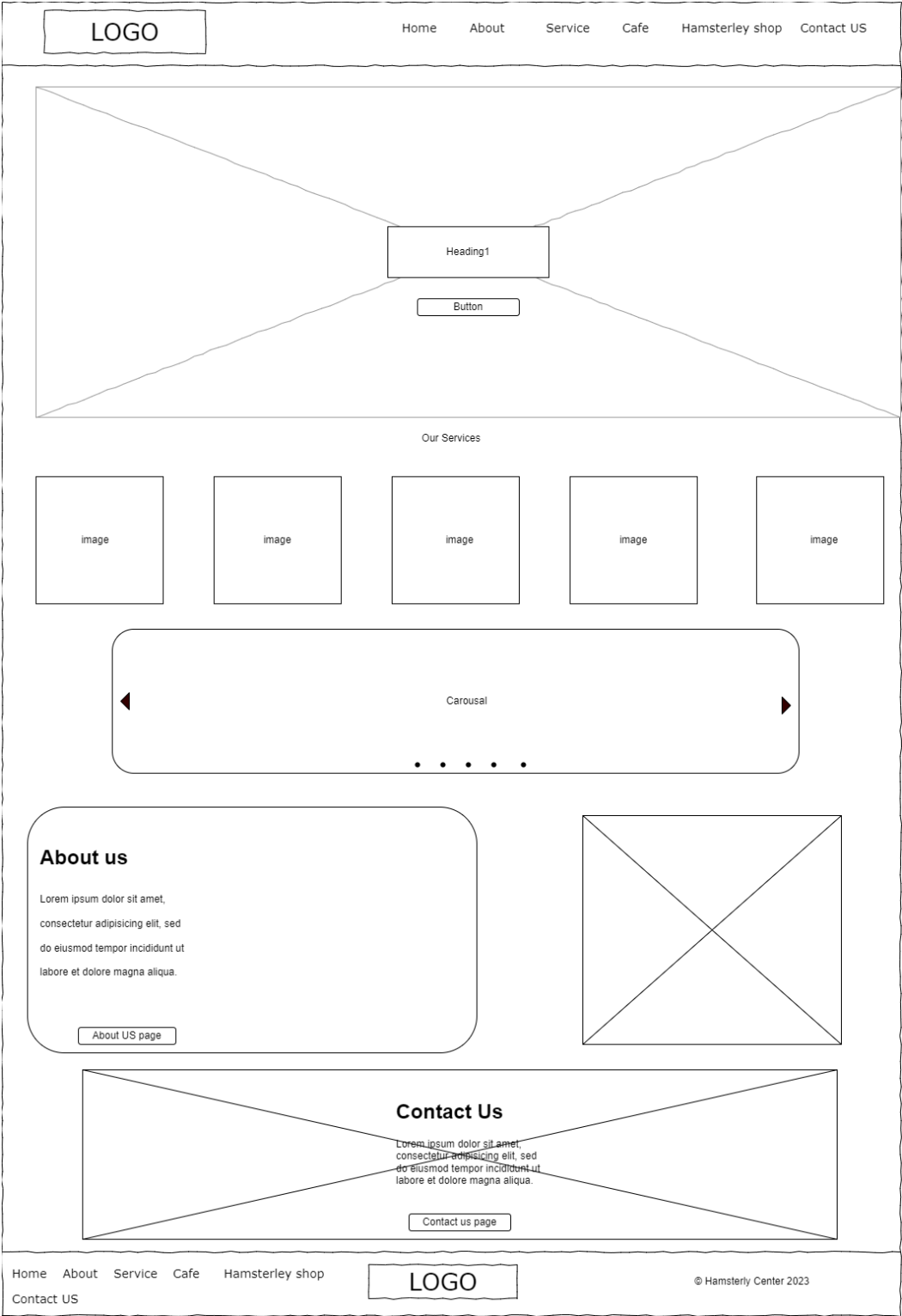
Logo

Figure : Logo Portrait

Figure : Logo from official page

8.2) Wireframes

A wireframe is a visual representation of a website's layout and structure. It serves as a blueprint for the website's design, highlighting the placement of various elements such as navigation menus, content sections, and interactive features. It helps stakeholders and designers visualize the website's functionality and user interface before the actual design process begins. Wireframes are typically simplified and lack detailed visual styling, focusing instead on the overall structure and user flow. They are essential in the early stages of website development as they facilitate collaboration, feedback, and alignment among team members. According to Interaction Design Foundation, wireframes are "a low-fidelity representation of a design. Their main purpose is to outline the

structure and layout of a web page or app, focusing on content hierarchy and user interactions."
(Interaction Design Foundation, no date)

1. Home Page

2. About Us page
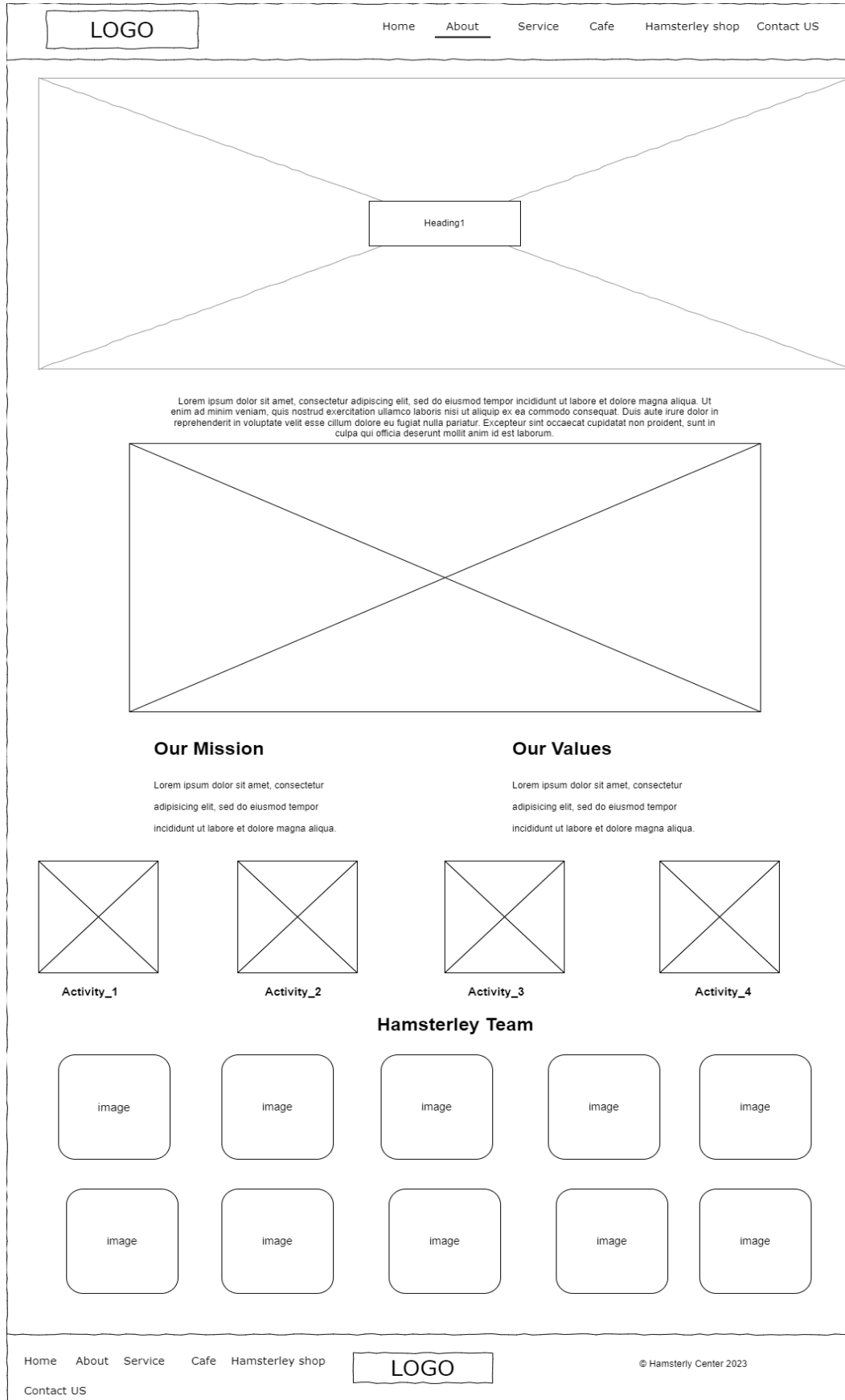
LOGO

Home   About   Service   Cafe   Hamsterley shop   Contact US

Heading1

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Our Mission

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Our Values

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Activity_1   Activity_2   Activity_3   Activity_4

Hamsterley Team

| image | image | image | image | image |

| image | image | image | image | image |

Home   About   Service   Cafe   Hamsterley shop

LOGO

© Hamsterly Center 2023

Contact US

3. Forum page

Heading

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Image

About the club

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Forum
Field 1
Field 2
Field 3
Field 4
Field 5

Submit

Home   About   Service   Cafe   Hamsterley shop
Contact US

LOGO

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4. Services Page

LOGO

Home   About   Services   Cafe   Hamsterley shop   Contact US

Heading1

Activity 1
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[Book]

Activity 2
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[Book]

Activity 3
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[Book]

Activity 4
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[Book]

Volunteering rota

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Booking_1	Booking_2	Booking_3
Booking_4	Booking_5	Booking_6
Booking_7	Booking_8	Booking_9

Wildlife monitoring

Heading
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Club Card

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[JOIN]

Subscription
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[Input Email address]   [Subscribe]

Home   About   Services   Cafe   Hamsterley shop

Contact US

LOGO

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5. Café page

LOGO

Home   About   Services   Cafe   Hamsterley shop   Contact US

Heading

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Heading

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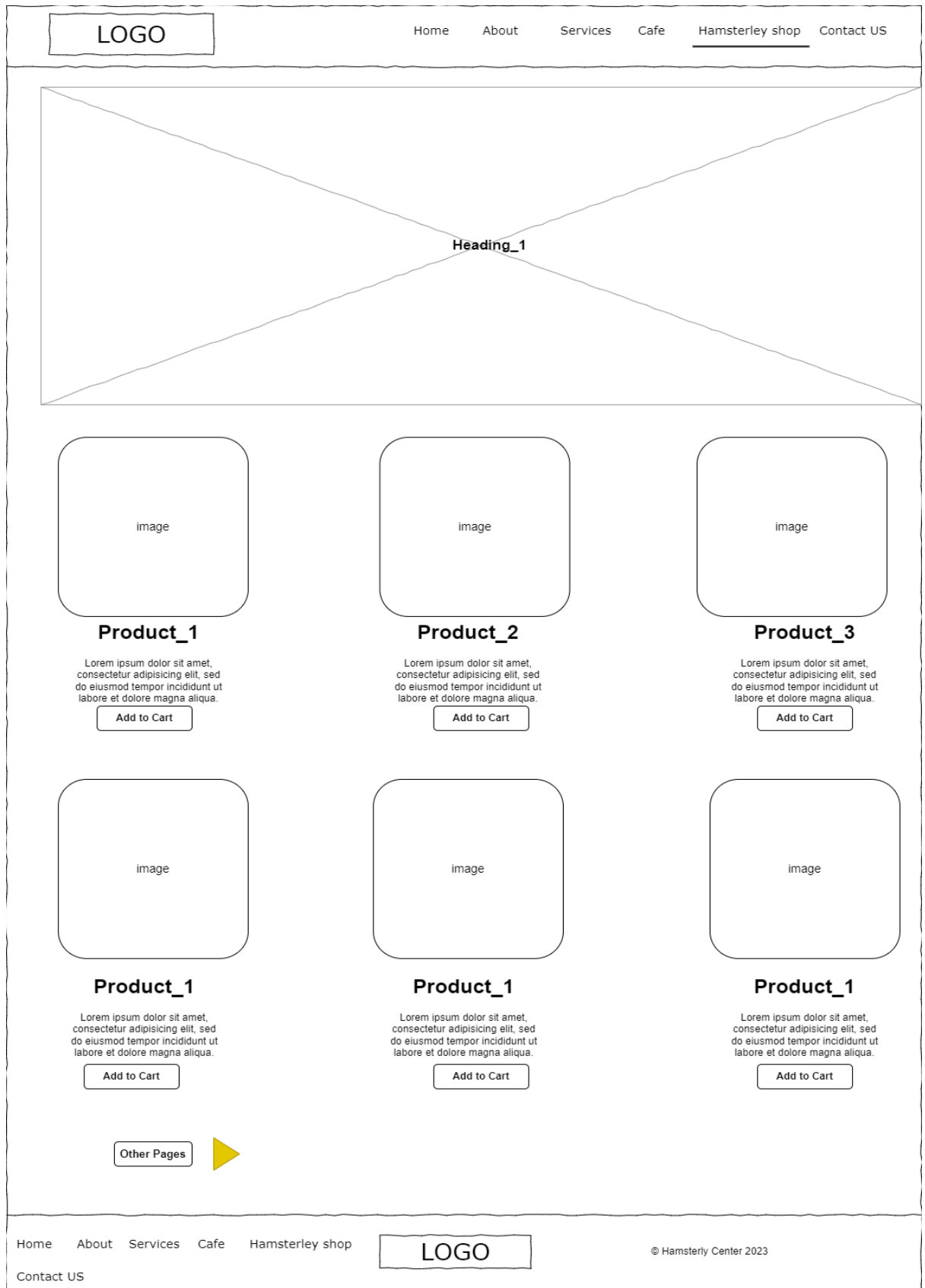
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Testimonials

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MENU	
1	Value 1
2	Value 2
3	Value 3

Information card

Information card

Information card

Club Card

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JOIN

Review

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Home   About   Services   Cafe   Hamsterley shop

Contact US

LOGO

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6. Hamsterley shop page

LOGO

Home   About   Services   Cafe   Hamsterley shop   Contact US

Heading_1

image

Product_1

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Add to Cart

image

Product_2

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Add to Cart

image

Product_3

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Add to Cart

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Product_1

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Add to Cart

image

Product_1

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Add to Cart

image

Product_1

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Add to Cart

Other Pages ▶

Home   About   Services   Cafe   Hamsterley shop
Contact US

LOGO

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7. Contact Us page

LOGO

Home   About   Service   Cafe   Hamsterley shop   Contact US

Heading1

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Contact details

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Contact Form
Field 1
Field 2
Field 3

Send Message

Google Maps

Home   About   Service   Cafe   Hamsterley shop

Contact US

LOGO

© Hamsterly Center 2023

8.3) Navigation menu
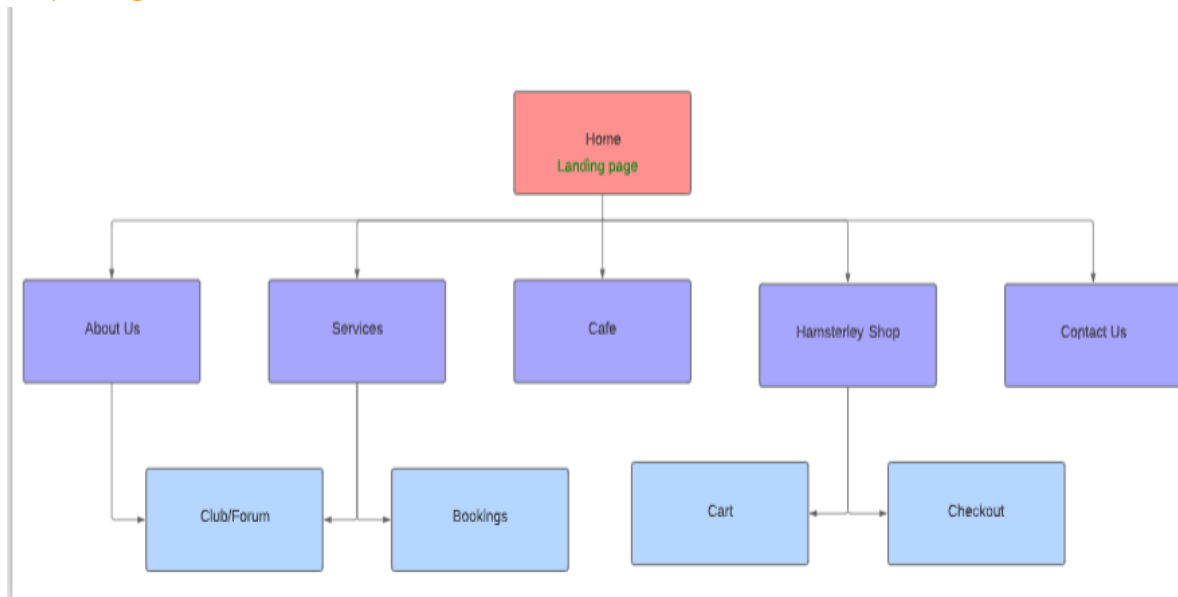
Figure : Navigation Menu

9) Implementation

9.1) Installing Wordpress

Since I have used XAMPP to set up a local development environment for my WordPress website, here are the steps to install WordPress:

1. Download WordPress: Visit the official WordPress website (wordpress.org) and download the latest version of WordPress.

2. Install XAMPP: Download and install XAMPP on your computer. XAMPP is a software package that includes Apache, MySQL, and PHP, which are essential for running a local web server.

3. Start XAMPP: Launch the XAMPP control panel and start the Apache and MySQL services.
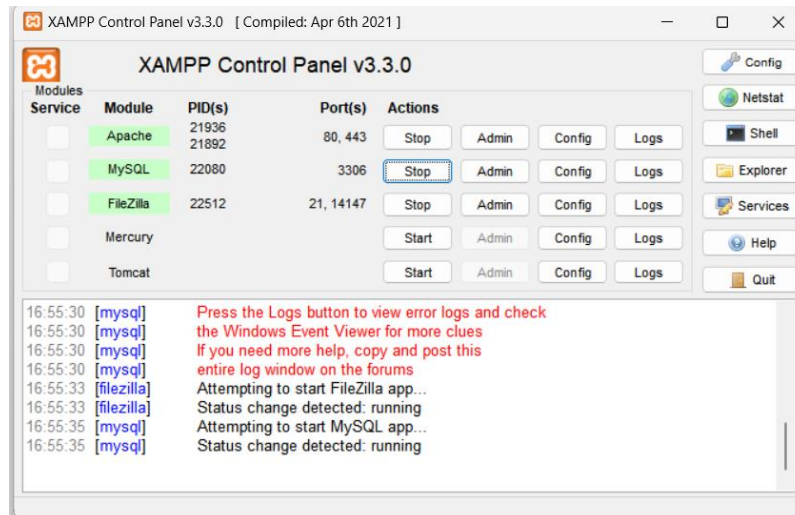
4. Create a database: Open your web browser and go to http://localhost/phpmyadmin/. In the phpMyAdmin interface, click on "Databases" and create a new database for your WordPress installation. Note down the database name.

5. Install WordPress: Navigate to the XAMPP installation directory on your computer (usually located in C:\xampp\htdocs) and create a new folder for your WordPress site. Extract the WordPress files you downloaded in Step 1 into this folder.
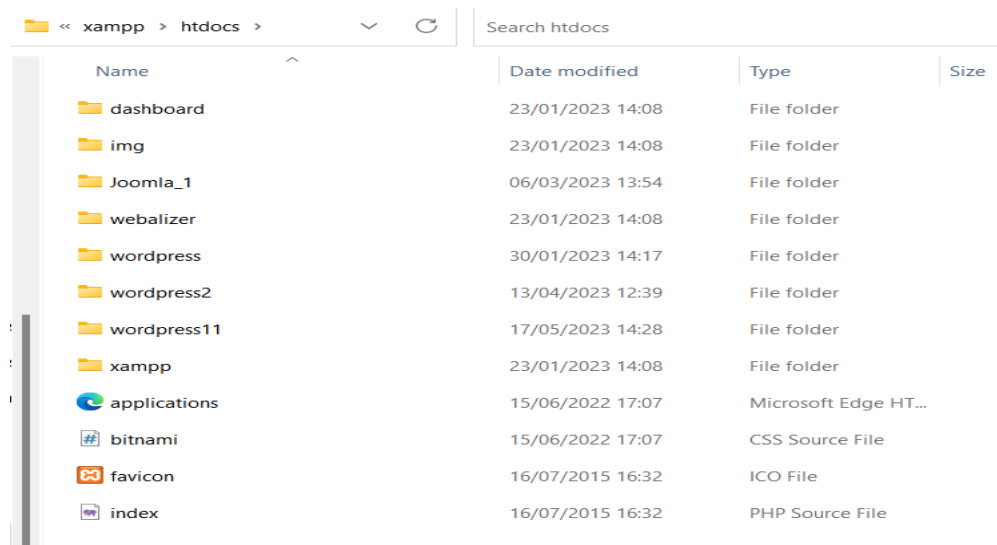
6. Configure WordPress: Open your web browser and go to http://localhost/your-folder-name/. Follow the on-screen instructions to set up your WordPress site. Enter the database details you created in Step 4 when prompted.

7. Complete the installation: Set up your website's title, administrator username, password, and email address. Click on the "Install WordPress" button to complete the installation.

8. Access your WordPress site: Once the installation is complete, you can access your WordPress site by going to http://localhost/your-folder-name/ in your web browser. Log in to the WordPress dashboard using the administrator credentials you set up earlier.

By using XAMPP, I have created a local server environment on my computer, allowing me to develop and test my WordPress website offline. Considering that this setup is for local development purposes only and will not make my site accessible to the public. To make it public appropriate host name and domain name needs to be selected.

9.2)Site Overview and Functionality Showcase

The developed forest activity website offers a comprehensive platform for users to explore and book various outdoor adventures. The website uses Astra for template and Love nature template is used in the development process.
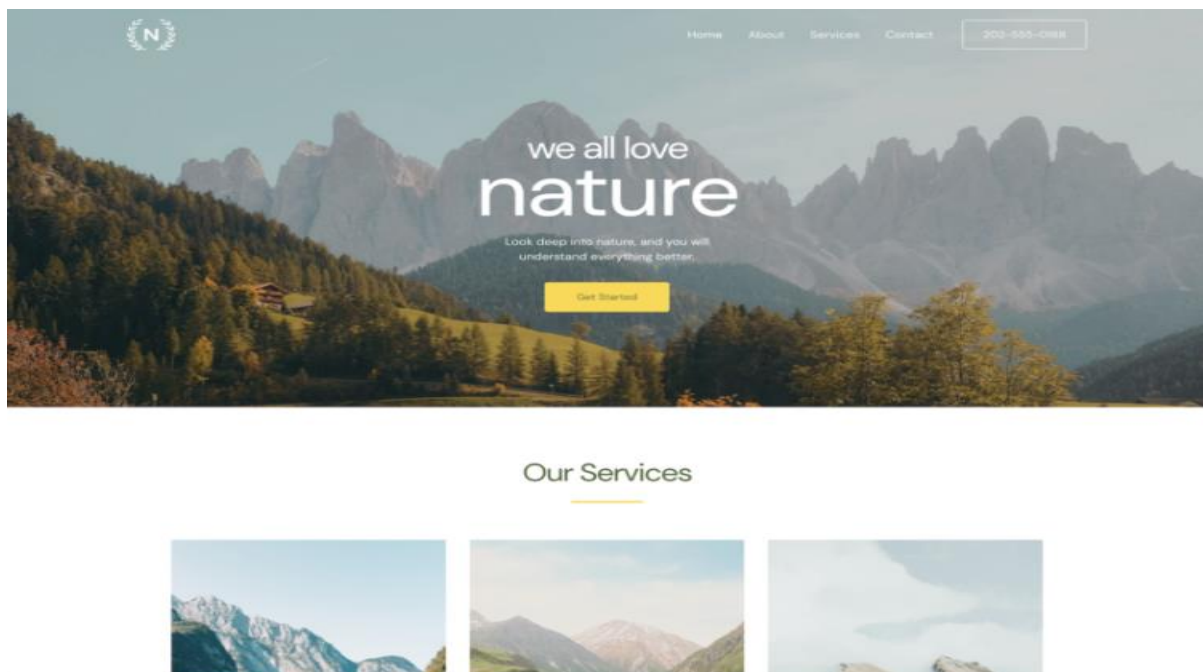
Figure : Love nature template

The site's homepage greets visitors with an immersive banner showcasing the beauty of nature, creating a captivating first impression. The navigation menu provides easy access to different sections of the website, including activities, packages, the onsite cafe, the Hamsterley shop, the "Get Going Club," and essential pages like "About Us" and "Contact Us."
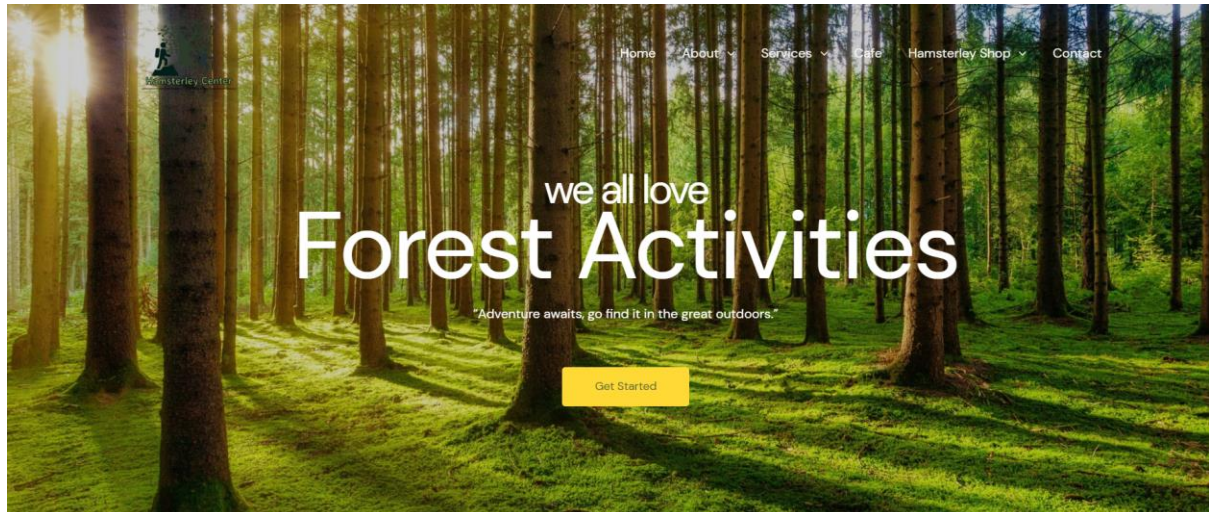
Figure : Landing page/Home page

Within the activities section, users can browse through a wide range of available activities, each accompanied by detailed descriptions, images, and relevant information such as duration and difficulty level. The booking functionality enables users to select preferred dates and times, and a real-time availability calendar ensures seamless scheduling.

01.

Kayaking

With 60 slots available per day and a maximum of 15 slots at a time, you can choose a time that suits you best. Whether you're a seasoned kayaker or a beginner, our experienced guides will ensure a safe and enjoyable journey. Book your spot today and get ready to glide along the tranquil waters, surrounded by the serenity of the forest.

Book Now

02.

Horse riding

With 12 slots available per day and a maximum of 3 slots at a time, you can choose a time that suits your schedule. Whether you're a seasoned equestrian or trying horse riding for the first time, our skilled instructors will guide you every step of the way. Book your horse riding adventure today and create lasting memories in nature.

Book Now

03.

Bushcraft

With only 6 slots available on Fridays and Saturdays each week, this exclusive activity provides a truly intimate setting for learning and exploration. Under the guidance of our expert instructors, you'll discover the art of bushcrafting . Book your spot now for an unforgettable bushcraft experience in the enchanting forest.

Book Now

04.

Archery

Join us on Mondays, Tuesdays, or Wednesdays, where we have 5 time slots available each day. With a maximum of 9 bookings per time slot, you'll have the opportunity to refine your aim and test your skills in a small, focused group. Book your archery session now for a memorable adventure in the heart of the forest.

Book Now

05.

Countryside Leader Course

Become a certified countryside leader with our exclusive course offered on Sundays from 10am to 4pm! Immerse yourself in a comprehensive program. Expand your horizons and gain a deeper appreciation for the countryside. Book your spot now for an enriching countryside leader course now.

Book Now

06.

Biking Trails

Embark on an exhilarating biking adventure along our scenic trails, available for booking every day of the week except Mondays! Our biking trails offer a thrilling experience that spans 5 hours, starting from 7am. Take in the breathtaking views, and book your biking trail today and pedal your way to adventure!
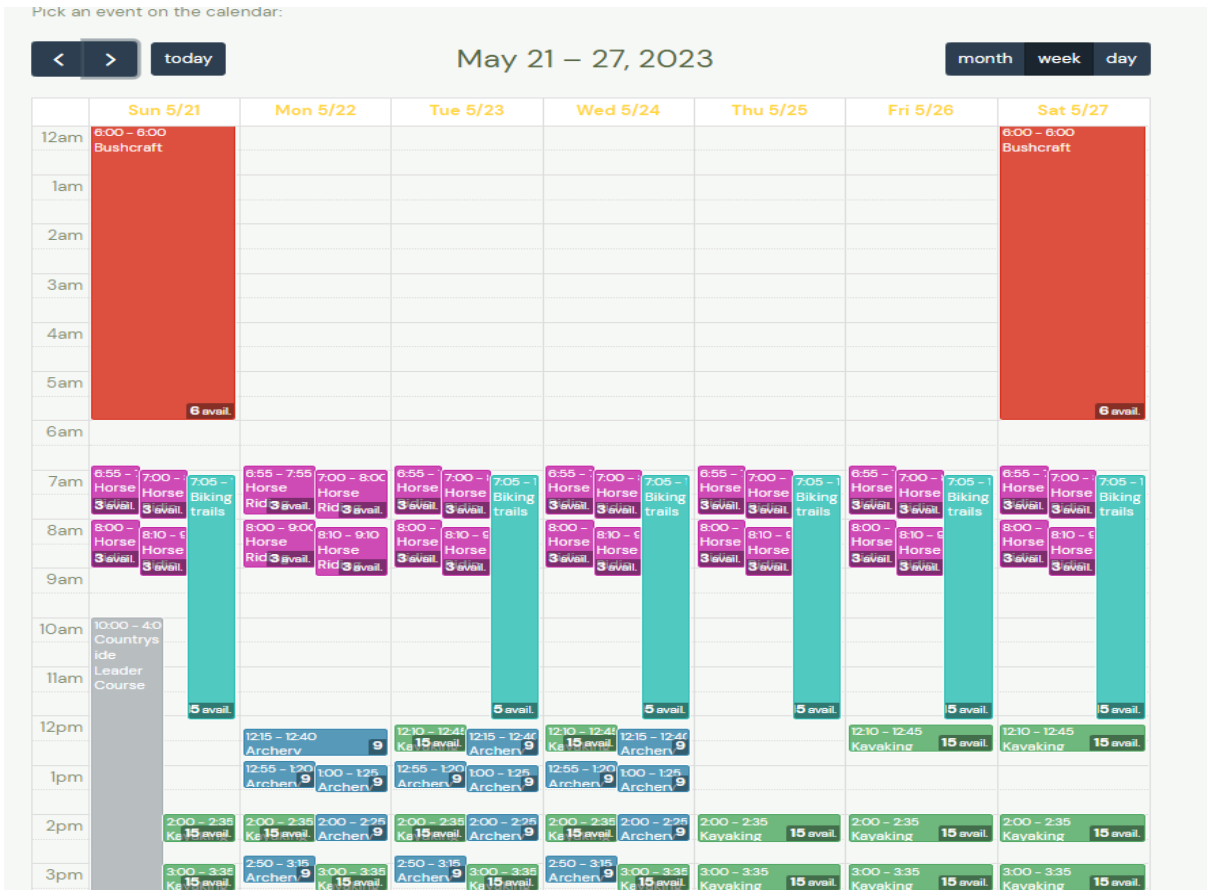
Book Now

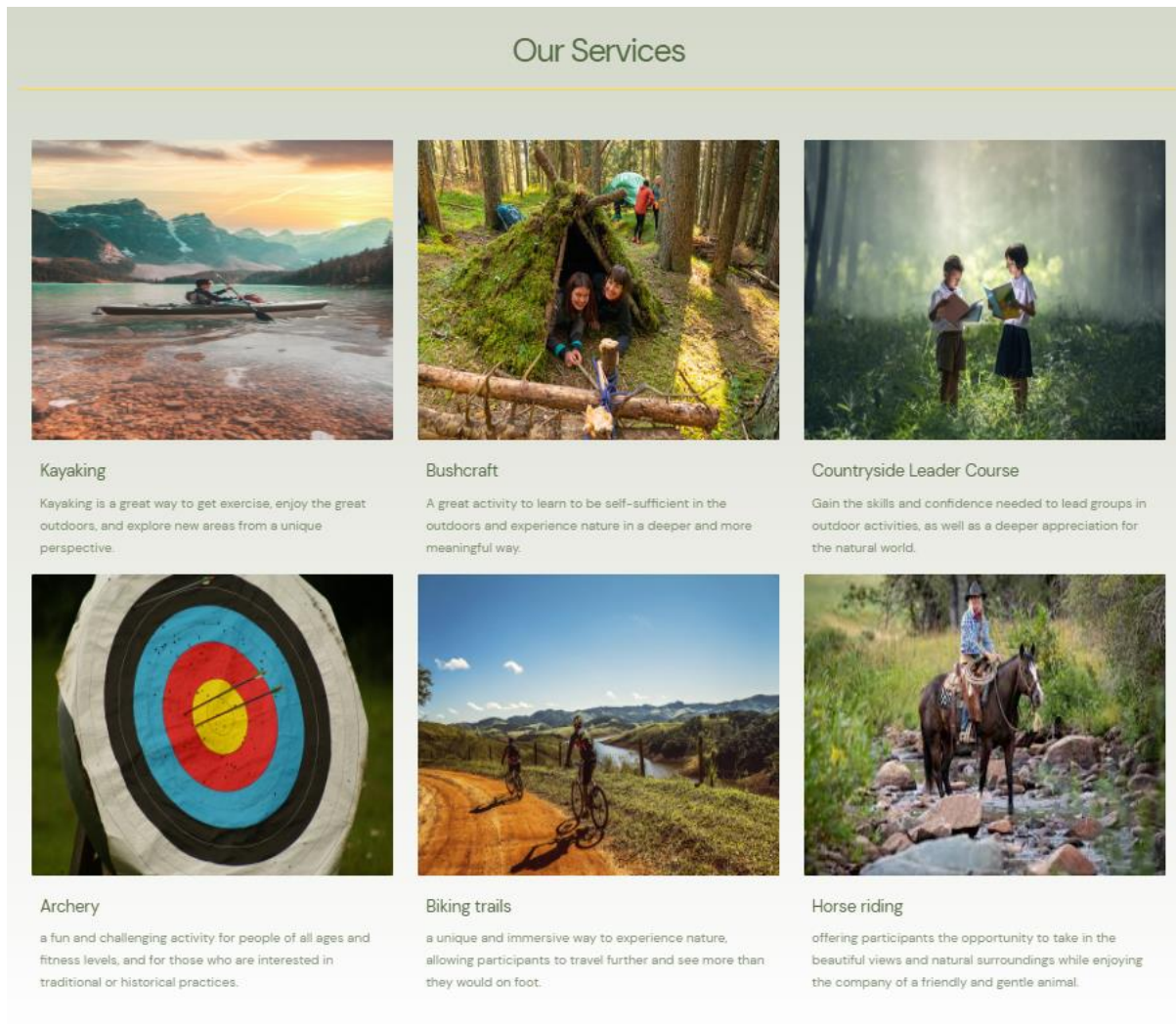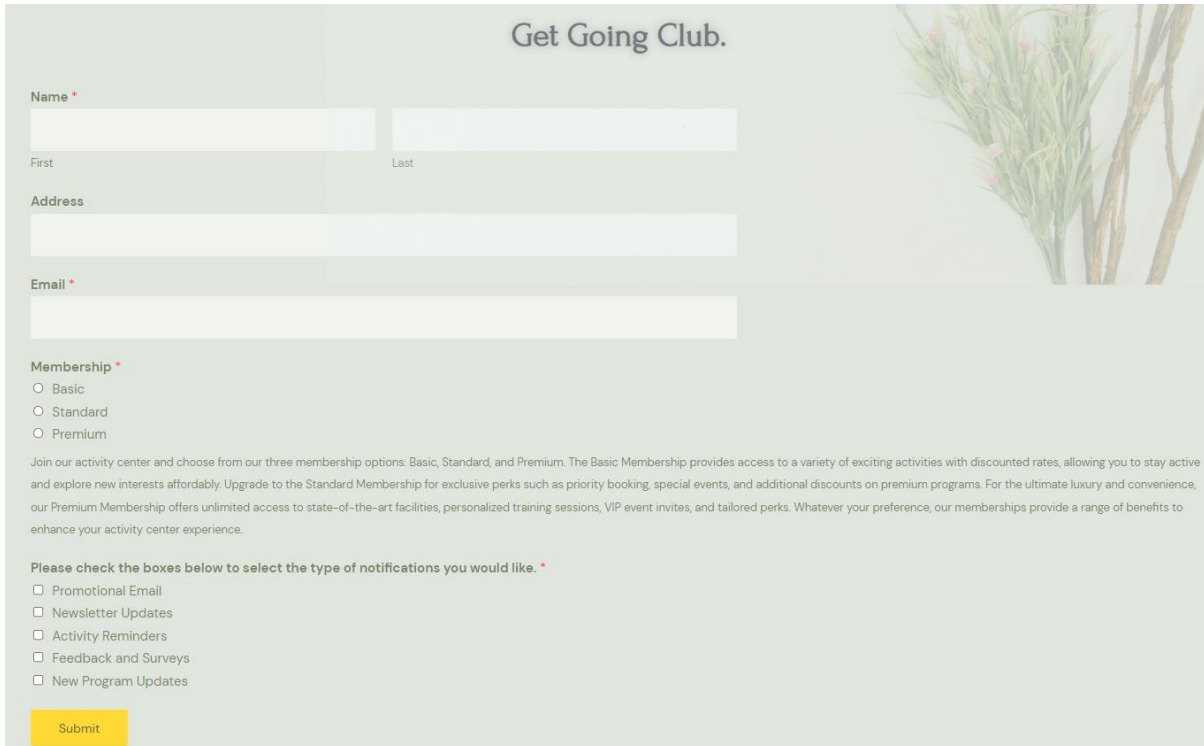Figure : Booking Activities

Figure : Event Calendar

Figure : Overview of activities on Home page

The "Get Going Club" is a membership program that offers exclusive discounts and offers to members. Users can register for the club, access their membership benefits, and stay updated on upcoming promotions. Throughout the website, there are different slogans and buttons in different pages for users to join the club.

Figure : Get Going Club Forum

Figure : Directory for users to join Club, on Services page
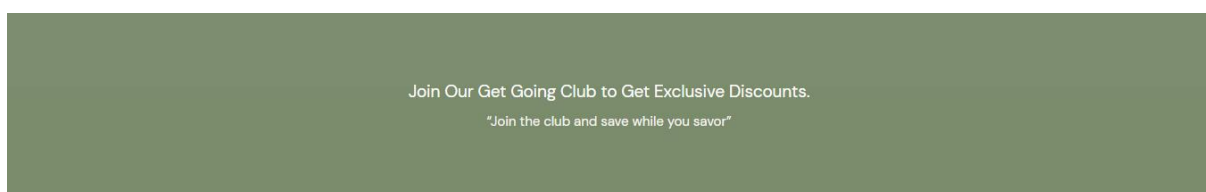
Figure : Inspiring slogan for users to join Club, on Café page

The onsite cafe section provides information about the cafe, including its specialties, menu options, and operating hours. Although online orders are not yet supported, users can view the menu and plan their dining experience.
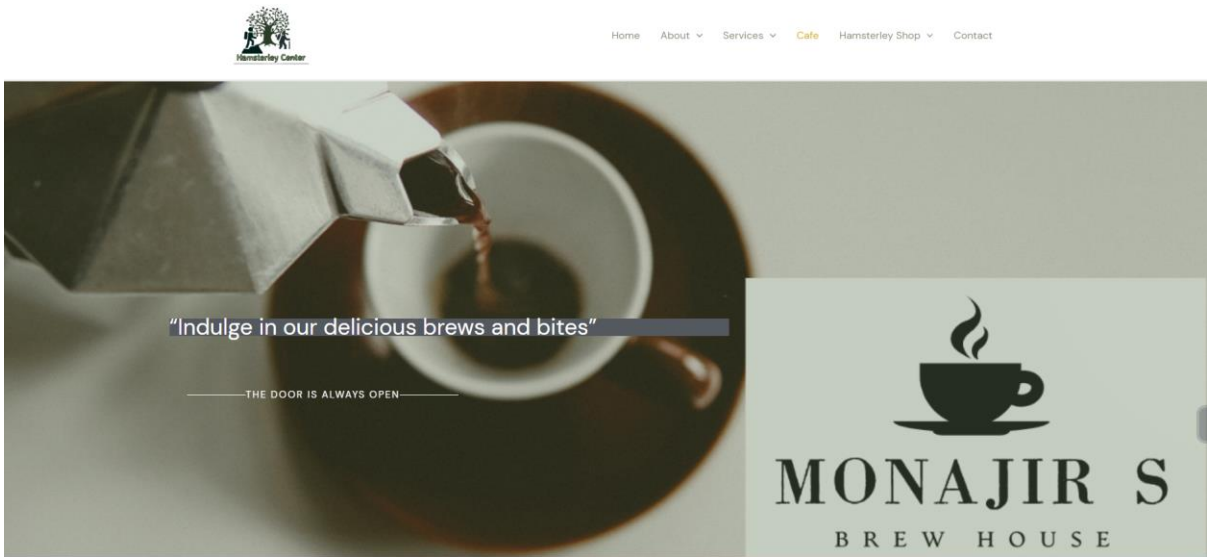
Figure : Café page
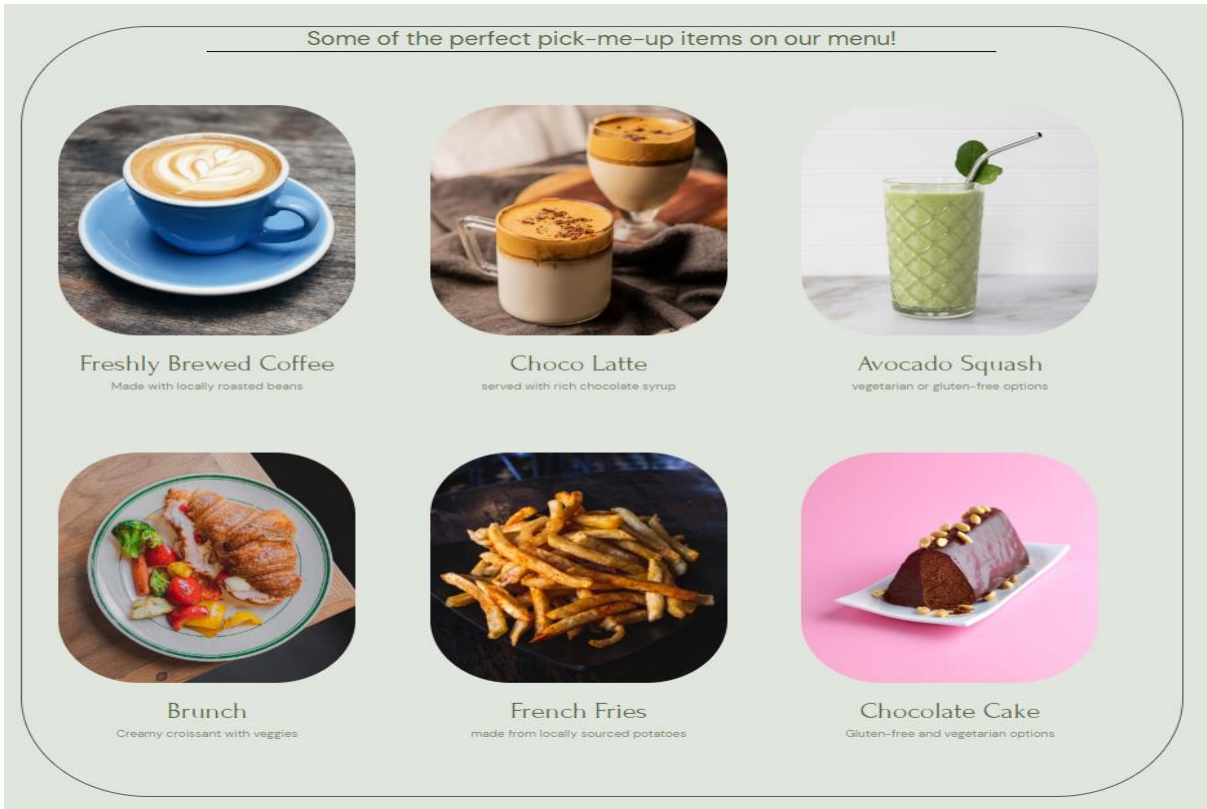
The Cover page for the Café is custom designed by me. I have added my name to the cafes name.

Figure : Café menu item recommendation

Figure : Self-designed menu

Figure : Information Cards

The Hamsterley shop showcases outdoor clothing and equipment for sale. Users can explore different categories, view product descriptions and images, and add items to their shopping cart. However, the online ordering and payment functionality are not yet active.

Figure : Hamsterley Shop

The shop page also has a cart and checkout page, however cart can be easily accessible on the shop page, right hand side and a user can directly jump to checkout page without landing on the cart page.

Some products are put on sale for limited time and the shop also enables users to redeem vouchers/coupons for discounts.

Figure : Coupon Code being applied

The website also includes essential pages like "About Us" and "Contact Us," providing background information about the organization and allowing users to get in touch for inquiries, feedback, or support.
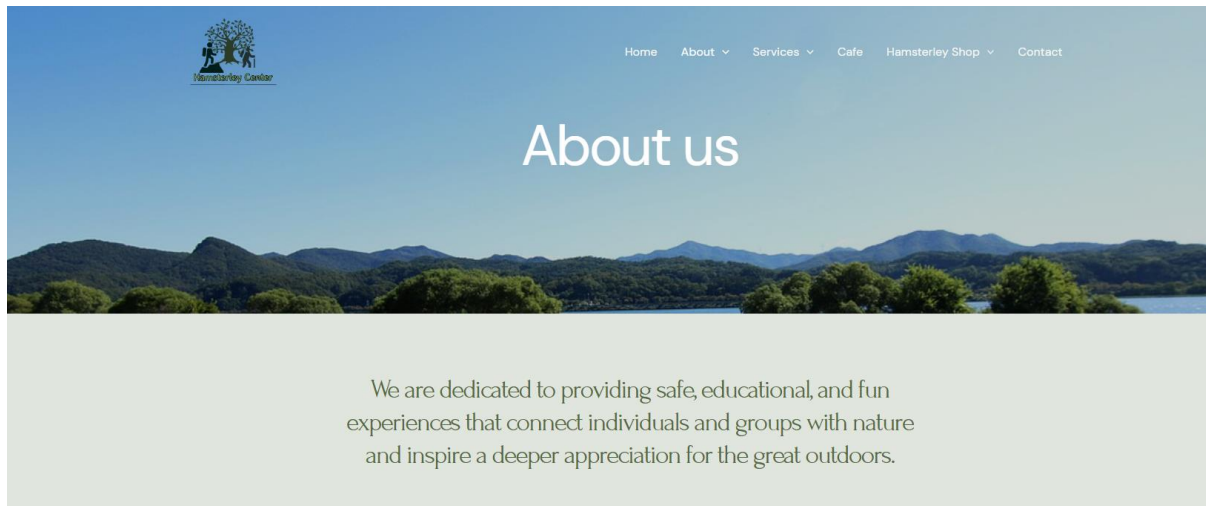
Figure : About Us Page
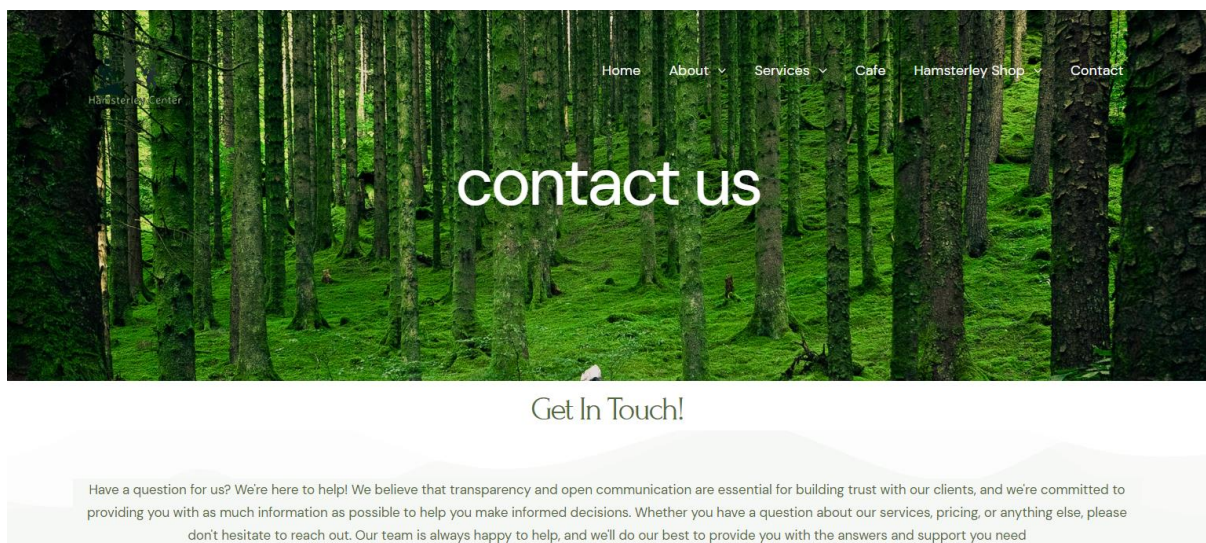
Figure : Contact us page

Overall, the developed website offers an engaging and user-friendly platform for individuals interested in forest activities. It combines detailed activity listings, convenient booking options, and additional features like the "Get Going Club," onsite cafe, and Hamsterley shop to enhance the user experience and cater to different interests.

9.3) Requirements Satisfaction

The developed website for Hamsterley Forest Activity Centre successfully meets the requirements as stated in the specification.

1. Promotion and Information Resource: The website serves as a valuable information resource, providing details about the activities and workshops offered by the center. Users can access comprehensive information, including descriptions, schedules, and pricing. The booking and payment system allows users to conveniently reserve their spots for courses and workshops online.

2. Creative and Eye-catching Design: The website incorporates a highly creative and artistic design, capturing the needs and aspirations of the clientele. It features visually appealing elements, including captivating images of outdoor activities and engaging typography, ensuring an eye-catching and memorable user experience.

3. Responsive Design: Recognizing the prevalence of mobile devices, the website is designed with a responsive layout. It adapts seamlessly to different screen sizes, providing an optimal viewing experience for users accessing the site on tablets and phones. The responsive design ensures that users can easily navigate the website and access information regardless of the device they are using.

4. Sections and Features: The website includes all the required sections outlined in the specification. These sections consist of the "Get Going Club" forum for members, an online shop with product categories, news items and upcoming events, details of activities and workshops with online booking functionality, an overview/about us page, contact information, coffee shop/tea room opening times, and a sample menu. Additionally, user accounts with appropriate permissions are implemented for Hamsterley Forest Activity Centre personnel, allowing them to manage the website's content and respond to queries.

5. Regular Update Capability: The website provides the necessary functionality for regular updates. The manager, Kenny Dewitt, and the two part-time administrators, Mark Smann and Russ Tinayle, have access to the admin area of the site. They can easily post news items, update course information, manage shop items, monitor the forum, and respond to queries, ensuring the website remains up-to-date and relevant.

6. Additional Open Source Solutions: The specification states that two open-source solutions should be identified, installed, configured, and tested to meet specific business needs. The specific solutions which the website incorporates the required functionality for the identified business needsare volunteer rota/availability and wildlife monitoring, as per the requirements.

By fulfilling these criteria, the developed website for Hamsterley Forest Activity Centre effectively meets the needs of the organization, providing an appealing, informative, and user-friendly platform for visitors to explore and engage with the centre's offerings.

9.4) Implementation of specific functionalities

To implement specific functionalities mentioned in the specification, the following approaches were taken:

1. Elementor:
   The website also utilizes the Elementor plugin to enhance its features and design. Elementor is a well-known page builder plugin that enables users to easily create and customize visually appealing layouts through a user-friendly drag-and-drop interface. It provides a wide selection of pre-designed templates, widgets, and elements that can be effortlessly added and personalized, allowing users to create attractive sections and content. With its seamless integration with other plugins and advanced functionalities like responsive design controls and dynamic content capabilities, Elementor empowers users to efficiently manage and optimize their website pages (Wordpress, no date).

2. Online Shop: The online shop functionality was implemented by integrating a suitable e-commerce plugin into the website, called WooCommerce . The chosen plugin allows the creation of product listings with images, descriptions, and pricing. Users can add products to their shopping basket, and the selected items are stored using session management techniques. Although the website connects to a payment gateway, but does not accept payment. The shop provides users with the ability to browse and select products for future reference or offline purchase.

A. Wpc Fly cart for WooCommerce :
   The highly responsive WPC Fly Cart for WooCommerce plugin provides the website with the capability to add products to the shopping cart seamlessly, without the need to navigate away from the current page or manually reload the page. Users have the convenience of reviewing their order, proceeding to checkout, or continuing their shopping experience, all within a single screen. Furthermore, the versatility of WPC Fly Cart allows it to be added as an overlay on any page, whether it's the archive or product page (WPclever, no date).
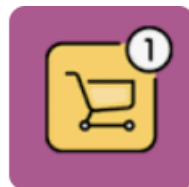
2. Booking and Payment System: To enable online booking for activities and workshops, a custom booking system was developed. Users can browse the available activities, select preferred dates and times, and provide their details to book their spots. The booking information is stored in a database for further processing by the Hamsterley Forest Activity Centre personnel. However, payment processing is not enabled as per the specification, and the booking process focuses on capturing and storing the user's reservation details.

Booking Activities

3. User Accounts with Permissions: User accounts and permissions were implemented using a custom user management functionality. The manager, Kenny Dewitt, and the part-time administrators, Mark Smann and Russ Tinayle, were assigned appropriate permissions within the website's backend. This allows them to access the admin area, post news items, update course information, manage shop items, monitor the forum, and respond to queries. The user accounts ensure controlled access and enable effective website management.

Username	Name	Email	Role	Posts
Kenny_Dewitt	Kenny Hussain	monazir0315@gmail.com	Administrator	0
Mark_Smann	Mark Smann	link2shabana@gmail.com	Administrator	0
Russ_Tinayle	Russ Tinayle	mdmojahidhussain423@gmail.com	Administrator	0
theflast_0315	—	B1393756@live.tees.ac.uk	Administrator	1
Username	Name	Email	Role	Posts

4. Responsive Design: Responsive design was achieved through the use of WordPress plugins and customizations. The website layout and styling were coded to dynamically adjust and adapt based on the screen size and resolution of the user's device. This ensures that the website appears and functions optimally across a range of devices, including tablets and smartphones.

5. Additional Open Source Solutions: The chosen open-source solutions to meet specific business needs, such as volunteer rota/availability management and wildlife monitoring, were identified, installed, configured, and integrated into the website. The exact details of these implementations would depend on the specific solutions chosen, and their functionality would align with the outlined business requirements.

By implementing these specific functionalities, the website successfully provides the desired features and meets the needs of Hamsterley Forest Activity Centre, enhancing the user experience and supporting their business objectives.

9.5) Troubleshoot using help from WordPress Community

I have actively sought support and guidance from the open-source community during the development process of this website, and I have solid evidence to showcase my engagement. Through developer communities such as WordPress.org, I have posted questions and encountered challenges related to coding, customization, and troubleshooting. The evidence of my interactions includes screenshots and records of the conversations where I sought advice, shared errors or issues faced, and received valuable input from experienced community members. This evidence demonstrates my commitment to leveraging the collective knowledge and expertise of the open-source community, ensuring that I have utilized their resources to address challenges effectively and deliver a high-quality website.

Website slowness issue

monazir0315 (@monazir0315)
2 weeks, 2 days ago

Hi, I am reaching out to seek assistance regarding a concerning issue I am currently facing with my website's performance.

Recently, I have noticed a significant decrease in the speed and responsiveness of my website. Loading times have become sluggish, and navigating through pages has become a frustrating experience for my visitors. As a result, I am worried about the negative impact this may have on user experience and overall engagement.

To provide you with some context, my website is built on the WordPress platform, using a combination of custom themes, plugins, and content. It is an activity center website, aiming to offer a seamless and enjoyable experience for visitors seeking information, registering for activities, and exploring membership options.

Despite my best efforts to optimize the website, including implementing caching plugins, image compression techniques, and minimizing code, the performance issues persist. I have also ensured that my hosting server meets the recommended specifications and that my internet connection is stable.

Given the complexity of the issue, I am humbly requesting the assistance of the WordPress community in diagnosing and resolving the slowness problem. If anyone has encountered a similar issue before or possesses expertise in website performance optimization, I would greatly appreciate your guidance, insights, and recommendations.

Specifically, I am seeking advice on:

1. Identifying any potential bottlenecks or performance issues within my WordPress setup, themes, or plugins.
2. Techniques or best practices for improving website speed and responsiveness.
3. Recommendations for reliable plugins or tools specifically designed to enhance WordPress performance.
4. Any other insights or suggestions you may have based on your experience in optimizing WordPress websites.

I understand that troubleshooting website performance can be complex and multifaceted, but I am confident that the collective knowledge and expertise of the WordPress community can help me find a solution. Any guidance, recommendations, or even pointers in the right direction would be immensely appreciated.

Thank you in advance for your time and support [redacted]

Warm regards,

Figure : Query for website slowness

sakr (@sakr)
2 weeks, 2 days ago

I Had the same problem and finally solved it with Light-speed plugin https://wordpress.org/plugins/litespeed-cache/

But you have to find out the best configuration settings for each parameter and try and test.

Viewing 1 replies (of 1 total)

Figure : Evidence of using an open source community for advice and error resolving

9.6) How it meets the needs of the site administrators and end users?

The overall website, developed with a focus on meeting the needs and aspirations of the Hamsterley Forest Activity Centre's clientele, successfully caters to both site administrators and end users.

For site administrators, the website offers a range of features and functionalities that facilitate efficient management and maintenance. The inclusion of a user-friendly content management system (CMS) like WordPress allows administrators, such as Kenny Dewitt and the part-time administrators, to easily update and maintain the website's content. They can post news items, update course information, manage shop items, monitor the forum, and respond to queries through the admin area. The user account system ensures controlled access and permissions, enabling administrators to perform their tasks effectively.

For end users, the website provides valuable information and resources related to the Hamsterley Forest Activity Centre. The various sections, such as the activities and workshops page, online shop, news items, and contacts page, offer a comprehensive overview of the centre's offerings and enable users to access the information they need. The booking and payment system allows users to conveniently book activities and workshops online, enhancing the user experience and saving time. The responsive design ensures that the website is accessible and user-friendly across different devices, including tablets and smartphones.

Moreover, the website aims to create an engaging and visually appealing experience for the users. The integration of the Elementor plugin allows for creative and artistic design elements, enabling administrators to build visually stunning layouts and pages. This adds to the overall attractiveness of the website, aligning with the aspirations of the clientele and creating a positive impression.

In summary, the website effectively meets the needs of both site administrators and end users. It provides administrators with the tools and functionalities for efficient management, while offering end users valuable information, seamless booking options, and an engaging browsing experience.

9.7) Data storage considerations

When developing the Hamsterley Forest Activity Centre website, various aspects related to data storage have been considered. Here are some key considerations:

1. Database Management: Choosing a reliable and scalable database management system, such as MySQL, to efficiently store and organize website data (MySQL, no date).

2. User Data Protection: Implementing appropriate security measures to safeguard user data, including encryption techniques, access controls, and compliance with data protection regulations like GDPR (GDPR, no date).

3. Backup and Recovery: Regularly back up website data to prevent data loss. Storing backups off-site to ensure data resilience and enabling quick recovery in case of system failures or security breaches (Informa Tech, no date).

4. Scalability: Chose a data storage solution that can accommodate increasing data volumes as the website grows. Cloud-based storage options can provide the scalability needed for future expansion (AWS, no date).

5. Compatibility with Third-Party Integrations: Ensuring seamless data exchange and compatibility with integrated third-party services or APIs, enabling smooth communication and data synchronization.

6. Compliance and Legal Requirements: Adhering to relevant data protection laws and regulations, such as GDPR, to ensure proper handling of user data and compliance with legal obligations.

However, considering these data storage matter, the data of users is subjected to top priority. In the meantime the website is not online so there are not any users but in future if the site goes online, these considerations will come in handy

9.8) Consideration of licencing and copyrights

When developing the Hamsterley Forest Activity Centre website, I made sure to give due consideration to licensing and copyright aspects. It was crucial to ensure that all content, including images, videos, and textual material, used on the website complied with the appropriate licenses and copyright permissions. I diligently sourced images and other media from reputable and licensed providers, giving proper attribution where required. Additionally, I respected the intellectual property rights of others by refraining from using copyrighted material without explicit permission. By adhering to licensing and copyright regulations, I aimed to create a website that respects and protects the creative work of others while providing a valuable and legally compliant resource for the Hamsterley Forest Activity Centre and its users.

Some proof of considerations of legal and ethical issues:

1. When designing the website logo, I utilized the LogoMakr tool to create a visually appealing logo that represents the Hamsterley Forest Activity Centre. This allowed me to customize the logo according to the website's theme and branding, ensuring a unique and professional design.

2. As the website is currently offline, I implemented a temporary contact information page. To maintain consistency and authenticity, I used a fake phone number generator to populate the contact details section. This approach ensured that the website provides a complete user experience while accurately representing the intended contact information.

3. To enhance the visual appeal of the website, I sourced a variety of images from Pexels, a reputable platform offering a wide range of high-quality free images. This enabled me to select

visually captivating visuals that align with the nature-centric theme of the Hamsterley Forest Activity Centre website.

4. For the creation of the café page logo, I employed Looka, a reliable logo generation tool, to design a unique and attractive logo that reflects the café's identity. Additionally, I utilized Canvas, a versatile design tool, to create an appealing cover page for the café section. These tools provided me with the necessary resources to craft visually appealing elements for the website.

5. To ensure consistent image sizes throughout the website, I utilized the Photosizer tool, a free and efficient solution for resizing images. This allowed me to optimize the images used on the website, ensuring they fit seamlessly within the layout and maintain a professional appearance.

6. The menu section of the website was thoughtfully developed to showcase the café's offerings. Using the versatile design capabilities of Canvas, I meticulously crafted a customized menu layout, incorporating enticing descriptions, and accurately pricing each item. This approach allowed for a visually appealing and informative menu presentation.

7. Throughout the website, I ensured to provide proper credit and acknowledgment to the original sources and creators of any external resources used, such as images and icons. By acknowledging the credibility of these resources, I upheld ethical standards and respected the intellectual property rights of others.

In summary, by employing various online tools and platforms, I was able to create a visually engaging and authentic website for the Hamsterley Forest Activity Centre, while maintaining professionalism and adhering to legal and ethical guidelines.

10) Documentation of installations - Open Source Solutions

10.1) Volunteering rota

The volunteering rota feature implemented on the website plays a vital role in efficiently managing the availability and shifts of dedicated volunteers. The importance of coordinating the schedules of volunteers to ensure smooth operations and seamless event planning can be recognized. The volunteering rota will allow effectively assignment of tasks and responsibilities based on the availability and skills of volunteers. It provides a centralized platform where volunteers can view their assigned shifts, update their availability, and communicate with administrator regarding their preferences or any changes. This system enables administrator to optimize the allocation of volunteer resources and maintain a strong team to deliver exceptional experiences for visitors.

Volunteering rota

Our forest activity center website offers an integrated volunteering rota, providing an easy and efficient way for individuals to get involved and contribute to the vibrant ecosystem of our natural surroundings. The volunteering rota allows users to explore available opportunities, sign up for specific shifts, and engage in various tasks and projects aimed at preserving and enhancing our forest environment. By utilizing the volunteering rota on our website, users can play an active role in conservation efforts, experience the beauty of nature, and contribute to the sustainability of our forest activity center. Join us in making a positive impact on the environment through our accessible and user-friendly volunteering rota.

Pick an event on the calendar:

Figure : Volunteering rota

 The process of installing and customizing booking activities plugins for the volunteering rota involved several steps to ensure smooth integration and optimal functionality. Extensive research was conducted to identify suitable plugins tailored to booking and scheduling activities, followed by the careful selection and installation of a reputable plugin that aligned with our specific requirements.

After installation, customization efforts were undertaken to tailor the plugin according to our unique needs. This encompassed configuring various settings such as defining available activities, specifying time slots, and determining maximum volunteer capacities for each shift. The user interface was also

personalized to enhance usability and provide an intuitive experience for administrators and volunteers.

Furthermore, efforts were made to streamline the volunteer booking process. A user-friendly interface was created where volunteers could easily access available shifts, select preferred activities and time slots, and submit their availability. The plugin was customized to automate confirmations and reminders, ensuring volunteers were well-informed about their assigned shifts.

Throughout the installation and customization process, compatibility with our existing website design and user interface was ensured. Rigorous testing was conducted to verify seamless integration with the volunteering rota system, guaranteeing a smooth and intuitive experience for administrators and volunteers.

10.2) Wildlife Monitoring

The Wp Go Maps plugin has been installed and customized on our website to facilitate wildlife monitoring. As part of our commitment to preserving and understanding the local ecosystem, we recognize the importance of accurately tracking and documenting wildlife sightings. The Wp Go Maps plugin provides a user-friendly interface that allows us to mark and record specific locations where wildlife has been observed. However, it is important to note that while the plugin has been implemented, the wildlife monitoring feature is not yet fully functional.
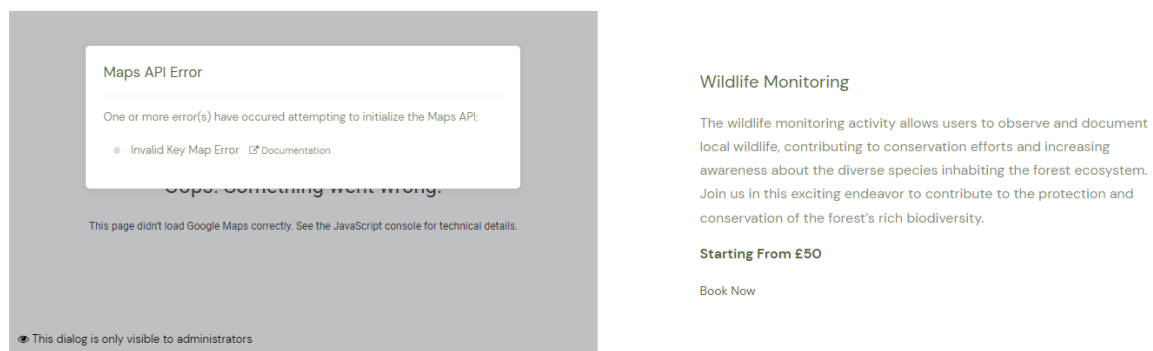
Figure : Wildlife monitoring

11)Testing

Test Case id	Test Case Description	Test Steps	Expected Outcome	Actual Outcome
TC001	Website Loading Speed Test	1. Access the website on different devices and browsers	The website should load within an acceptable time	As expected - Pass
		2. Measure the loading time using browser developer tools or online tools		
TC002	Navigation test	Click on each navigation link	The corresponding page should load accurately	As expected - Pass
TC003	Button Functionality Test	Click on each button on the website	The button should perform the intended action/functionality	As expected - Pass
TC004	Button Hover Effect Test	Hover over each button on the website	The button should exhibit a visual change or effect when hovered over	As expected - Pass
TC005	Directory Link Test	Click on each directory link throughout the page	The link should navigate to the corresponding directory page	As expected - Pass
TC006	Volunteering Rota Creation Test	1. Create a new volunteering rota	The rota should be successfully created and stored in the system	As expected - Pass
TC007	Volunteering Rota Display Test	1. View the volunteering rota on the website	The rota should be displayed correctly with all relevant details	As expected - Pass
TC008	Wildlife Data Collection Test	Collect wildlife data by	The wildlife data should be	Unexpectedly - Fail

		inputting relevant information such as species, location, and observations.	successfully collected and stored in the system.	
TC009	Wildlife Data Visualization Test	View the wildlife data on the website's visualization interface.	The wildlife data should be displayed accurately and visually represented in an understandable format (e.g., charts, maps, graphs).	Unexpectedly - Fail
TC010	Activity Booking Test	1. Select an activity and proceed to the booking page	The booking page should display relevant information	As expected - Pass
		2. Enter valid customer details and complete the booking process		
TC011	Add to Cart Test	1. Select a product from the shop.	The selected product should be added to the cart without any errors.	As expected - Pass
		2. Add the product to the cart.		
		3. Verify that the product is successfully added to the cart.		
TC012	Valid Coupon Code Test	1. Apply a valid coupon code during the checkout process.	The coupon code should be successfully applied, and the discount should be reflected in the final price.	As expected - Pass
		2. Verify that the discount associated		

		with the coupon code is correctly applied to the total amount.		
TC013	Contact Form Submission Test	1. Fill in the contact form with valid details	The form should be submitted successfully	As expected - Pass
		2. Verify that a confirmation message is displayed		
TC014	Online Shop Functionality Test	1. Add products to the shopping cart	The products should be successfully added to the cart	As expected - Pass
		2. Proceed to checkout and enter customer details	The checkout process should work correctly	As expected - Pass
TC015	User Account Creation and Login Test	1. Create a new user account	The account should be created successfully	As expected - Pass
		2. Log in using the created account credentials	The login should be successful	As expected - Pass
TC016	Animation Effects Test	Load the webpage with various animation effects implemented	The animations should be smooth, visually appealing, and enhance the user experience	As expected - Pass
TC017	Responsiveness Test	Access the website on mobile devices with different screen sizes	The website should adapt and display correctly on mobile screens	As expected - Pass
TC018	Newsletter Subscription Test	Enter a valid email address in the newsletter subscription form	The form should submit successfully and display a confirmation message	As expected - Pass

			The email should be received and stored in the backend	As expected - Fail
TC019	Error Handling Test	1. Submit forms with invalid or incomplete data	The system should display appropriate error messages and prevent form submission with invalid data	As expected - Pass
TC020	Social Media Integration Test	1. Click on social media icons/buttons on the website	The links should redirect users to the respective social media profiles/pages	As expected - Pass
TC021	Payment Gateway Test	1. Proceed to the payment page and enter valid payment details	The payment process should work smoothly without any errors	As expected - Fail
TC022	Forum Functionality Test	1. Create a new forum post or topic	The post/topic should be successfully created and visible to other users	As expected - Pass
TC023	Performance and Load Testing	1. Simulate multiple concurrent users accessing the website	The website should handle the load and maintain optimal performance	As expected - Pass

12) Evaluation Report

The purpose of this evaluation report is to assess the website and the two open source solutions implemented for the Hamsterley Forest Activity Centre project. The evaluation will focus on the completeness of the solution, the skills and knowledge gained, the clarity of decisions and justifications, critical reflection on performance, and the description of legal and ethical issues related to the application.

Completeness of the Solution:

The website and the two open source solutions have been evaluated in terms of their completeness. The website successfully meets the specified requirements, including the various sections such as the forum, online shop, news items, activity details, about us page, contact information, café information, and user accounts. The open source solutions, namely the Volunteering Rota and Wildlife Monitoring, have been implemented and provide the intended functionalities. However, it is important to note that the wildlife monitoring functionality is not fully functional yet, requiring further development and refinement.

Skills and Knowledge Gained:

Throughout the development of the website and the implementation of the open source solutions, I have gained valuable skills and knowledge. This project has provided me with hands-on experience in web development using WordPress, including designing and customizing the website using themes, plugins, and various tools such as Elementor and WP Go Maps. Additionally, I have enhanced my proficiency in utilizing open source solutions to meet specific business needs, as demonstrated in the implementation of the Volunteering Rota and Wildlife Monitoring features.

Decisions and Justifications:

The decisions and justifications for choosing the two open source solutions are clearly described. The Volunteering Rota was selected to address the need for efficiently managing volunteers' availability and schedules. Its features and functionalities were aligned with the requirements of the Hamsterley Forest Activity Centre, allowing administrators to organize and assign volunteer shifts effectively. Similarly, the WP Go Maps plugin was chosen for Wildlife Monitoring to provide a platform for tracking and documenting wildlife sightings within the forest. The decision to use these open source solutions was based on their compatibility, reliability, and suitability for meeting the specific business needs.

Critical Reflection on Performance:

In reflecting on my own performance throughout the project, I have identified areas of strength and areas for improvement. The project allowed me to effectively apply project management methodologies, such as Agile, in organizing and executing the development tasks. Communication and collaboration skills were enhanced through regular interactions with the client and the project

team. However, I also recognize the need for improved time management and more thorough testing to ensure the quality and functionality of the website and the open source solutions.

Legal and Ethical Issues:

The application of the website raises legal and ethical considerations that need to be addressed. Copyright and licensing issues were carefully considered during the selection and usage of images, logos, and other multimedia elements. Open source solutions were chosen based on their compliance with licensing requirements and the ability to customize and integrate them into the website legally. Additionally, privacy and data protection measures were implemented to safeguard user information and adhere to applicable data protection regulations.

In conclusion, the evaluation of the website and the two open source solutions demonstrates the completeness of the solution, the skills and knowledge gained, clear decision-making processes, critical reflection on performance, and the consideration of legal and ethical issues. The project has provided valuable insights and practical experience in web development and open source solutions implementation, contributing to my professional growth and understanding of real-world application development challenges.

Impact and Future Considerations:

Working on this website for the Hamsterley Forest Activity Centre has been a transformative experience, allowing me to gain technical expertise, develop problem-solving abilities, expand my professional network, and deepen my understanding of the practical applications of technology in a real-world setting.

Personally, my involvement in this project has significantly bolstered my confidence in pursuing a career as a developer. Furthermore, it has provided me with tangible evidence of my capabilities, as I have already secured my first professional commission to develop the official website for MFC Foundation. This achievement serves as a testament to the positive impact this project has had on my career trajectory. Additionally, I attribute part of my success to the engaging and accessible teaching methods employed by my tutor throughout this module. Moreover, I have come to recognize the value of independent study and research, as it has allowed me to delve deeper into the subject matter beyond the provided materials.

13) References

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