# **Project Documentation: Explore Nature Website**

## **Objectives and Purpose**

The "Explore Nature" website aims to inspire users to appreciate and explore the natural world through stunning visuals and engaging, authentic content. It showcases breathtaking landscapes, promotes nature conservation, and provides a seamless, responsive user experience. The website adheres to professional web development standards, ensuring accessibility, performance, and compatibility across devices. Realistic content about nature’s benefits, conservation efforts, and community engagement replaces placeholder text to create a polished, real-world appearance.

## **Design Goals**

* **Modern Aesthetic**: A nature-inspired design with a consistent color scheme (green, white, neutral tones) to evoke tranquility and professionalism.
* **Responsive Layout**: Utilizes CSS Grid with two media query breakpoints (768px, 480px) for optimal viewing on desktops, tablets, and mobiles.
* **Interactivity**: Features a hamburger menu for mobile navigation, transitions (nav links), transformations (article scaling), and animations (gallery image fade-in).
* **Accessibility**: Employs semantic HTML5, ARIA attributes, and keyboard navigation support for inclusivity.
* **Performance**: Uses optimized images, fluid typography with clamp(), and a single CSS stylesheet for maintainability.
* **SEO**: Includes meta tags for description, keywords, and author to enhance search engine visibility.
* **Content Quality**: Replaces Lorem Ipsum with meaningful, unique content about nature exploration, conservation, and community involvement to enhance authenticity.

## **Milestones and Deadlines**

The project was completed in an intensive one-week sprint from April 9 to April 16, 2025, with tasks efficiently distributed to meet the deadline.

1. **Day 1–2: Planning and Initial Development (April 9–10, 2025)**
   * Formed group and assigned roles, led by Gunpreet Singh.
   * Finalized nature theme and created design mockups.
   * Set up project repository on GitHub (<https://github.com/CodeGuni/advcssgroupproject> ).
   * Developed initial HTML5 structure for index.html, gallery.html, and about.html.
2. **Day 3–4: Content and Styling (April 11–12, 2025)**
   * Sourced optimized images from Freepik.com, coordinated by Gabrial.
   * Authored realistic, nature-themed content to replace placeholder text.
   * Created a single CSS stylesheet with CSS Grid, fluid typography, and hamburger menu.
   * Implemented media queries, transitions, transformations, animations, favicon, meta tags, and accessibility features.
3. **Day 5–6: Testing and Refinement (April 13–14, 2025)**
   * Fixed gallery image sizing to ensure consistency (400x400px) and hamburger menu positioning for mobile navigation.
   * Validated HTML5 and CSS using W3C validators, with testing support from Prince.
   * Tested responsiveness and cross-browser compatibility (Chrome, Firefox, Safari).
4. **Day 7: Deployment and Documentation (April 15–16, 2025)**
   * Deployed website on personal website, **guni.ca**
   * Finalized documentation.
   * Prepared and submitted "Group8.zip" to the course platform.

## **Project Roles and Responsibilities**

* **Gunpreet Singh (Project Lead)**:
  + Took on a leading role, managing the project timeline and coordinating team efforts.
  + Developed the majority of HTML5 structure, CSS stylesheet, and JavaScript for the hamburger menu.
  + Set up and managed the GitHub repository (<https://github.com/CodeGuni/advcssgroupproject> ) for version control.
  + Handled deployment on personal website, guni.ca, and finalized documentation.
* **Prince (Contributor)**:
  + Assisted with CSS styling, focusing on responsive design and visual enhancements.
  + Supported testing for cross-browser compatibility and responsiveness.
  + Provided input on design decisions to maintain a cohesive aesthetic.
  + Authored realistic content to replace placeholder text and ensured content uniqueness.
* **Gabrial (Contributor)**:
  + Sourced and optimized nature-themed images from Freepik.com.
  + Contributed to documentation drafting and content organization.
  + Assisted with accessibility testing and content validation.

## **Hosting Requirements**

* **Server Specifications**:
  + Static hosting for HTML, CSS, and image files.
  + Minimum 100MB storage.
  + HTTPS support for secure browsing.
* **Deployment Procedures**:
  + Package files (index.html, gallery.html, about.html, styles.css, images folder, documentation.md) into "Group8.zip".
  + Deployed on personal website, guni.ca, for live testing.
  + Submit ZIP to course platform’s Group Project submission folder.
* **Domain**: Hosted at guni.ca; no additional domain required.
* **Version Control**: Managed via GitHub repository (<https://github.com/CodeGuni/advcssgroupproject> ) for tracking changes and collaboration.

## **File Structure**

Group8.zip/

├── index.html

├── gallery.html

├── about.html

├── styles.css

├── images/

│ ├── hero.jpg

│ ├── image1.jpg

│ ├── image2.jpg

│ ├── image3.jpg

│ ├── about.jpg

│ ├── favicon.png

## **Notes**

* **Images**: Sourced from Freepik.com and optimized for web use (e.g., hero.jpg and about.jpg at 1200x800px, image1.jpg/image2.jpg/image3.jpg at 400x400px, favicon.png at 16x16px). All are nature-themed with consistent sizing and descriptive alt text.
* **Content**: Unique content about nature exploration, conservation, and community engagement to meet rubric requirements.
* **Hamburger Menu**: Fixed to stay at the top with proper z-index, ensuring mobile-friendly navigation.
* **Accessibility**: ARIA attributes (aria-expanded, aria-controls, aria-current) and .sr-only class for screen readers.
* **Validation**: HTML5 and CSS validated via W3C tools.
* **Cross-Browser**: Tested on Chrome, Firefox, and Safari for consistent rendering.
* **Deployment**: Live on guni.ca, managed by Gunpreet Singh, with version control on <https://github.com/CodeGuni/advcssgroupproject> .