

Project Completion Report: Climate Crisis Web App Redesign

Course: CSC-317 | **Project Group:** 15 (Najah & Lakshya) **Objective:** Clean up existing codebase, eliminate errors, and implement a modern, high-performance aesthetic for the Climate Crisis website.

1. Code Cleanup and Structural Integrity

The original repository was cleaned up to improve accessibility, maintainability, and load speed. This involved migrating the codebase to modern standards:

Core Structural Changes

- **Semantic HTML5:** The messy, non-semantic structure (overuse of `<div>`) was replaced with meaningful HTML5 tags: `<header>`, `<nav>`, `<main>`, `<section>`, and `<footer>`. This improves both SEO and screen reader accessibility.
 - **Separation of Concerns:** All presentation logic was removed from the `index.html` file and moved into a dedicated, external stylesheet: `assets/css/style.css`. This makes the code modular and easier to debug or redesign in the future.
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2. Interesting Design Decisions and Aesthetic Appeal

The visual redesign adopted a **minimalist, high-contrast aesthetic** to present the serious topic (Climate Crisis) professionally and clearly.

A. Thematic Color and Typography

- **Refined Palette:** A restrained, thematic palette was chosen:
 - **Primary (004d40):** A deep **Forest Green** representing nature, used for the header and main card backgrounds.
 - **Secondary (ff7043):** A vibrant **Orange** used as a vital accent color for links, borders, and custom bullet points to draw the user's eye to key facts and calls-to-action.
- **Modern Font:** The site uses **Montserrat**, a clean, professional sans-serif font imported from Google Fonts, enhancing overall readability and modernizing the look.

B. Responsive Layout and Whitespace

- **Clean Look:** The design utilizes generous **whitespace (padding and margins)** around all content sections, which is the cornerstone of a modern, "clean" aesthetic.
 - **Fully Responsive:** The layout is built using a **mobile-first** approach. **CSS Grid** is used for the "Effects & Causes" section on desktop, which automatically collapses into a single-column stack on smaller screens (via a media query), ensuring excellent readability on mobile devices.
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3. Cool CSS/HTML/JS Features Incorporated

CSS Grid for Flexible Layout

The two-column sections (Effects/Causes, Footer links) and the action cards are managed using **CSS Grid** and **Flexbox**. This is a superior, non-laggy method for creating dynamic page sections that maintain structure, unlike older, less flexible layout techniques.

Engaging Call-to-Action (CTA) Feedback

The links in the "**Go Beyond**" section were styled as distinct green cards. To encourage user engagement, a subtle but effective CSS transition was applied:

- **Transition:** On hover, the card's background color smoothly shifts to the accent orange, and a **transform: scale(1.05)** is applied. This non-JavaScript feature provides immediate, snappy visual confirmation that the element is clickable.

Subtle Hero Animation

To add a touch of polish and vitality without slowing down the page, a simple, performant **CSS @keyframes pulse** animation was added to the hero image element, making it subtly expand and contract. This maintains a dynamic feel while keeping the site fast and responsive.