Green Academy Project proposal

Link to flowchart:

https://drive.google.com/file/d/17cuEn_gCRCLM7tK_9UOaQiiwGOpDbciv/view?usp=sharing

Link to the Figma:

https://www.figma.com/design/o8wrd42cuZNJipnjBUnsy0/Green_Academy_Design-(Copy)?node-id=0-1&t=kM7Gxa1UbHzkVYk3-1

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1. Introduction:

The **Green Academy** is a non-profit organization that provides accessible, online education focused on environmental sustainability and conservation. We aim to create an engaging and highly accessible learning platform that caters to learners of all ages, including individuals with disabilities.

The project will focus solely on developing a **static front end** for this platform, emphasizing user-friendly design, responsive layout, and WCAG-compliant accessibility features.

 Team Members:

1. **Dorcus Adich Malony:** HTML, CSS Development, SASS Styling

2. **Abuk Mayen Duot:** UI /UX Design, Style Guide, Peer Responsive Design
3. **Diane Ingabire**:r ReviewsUser Research, Wireframes, Accessibility Testing

2. System Overview

The Green Academy learning platform will feature the following components,

Homepage: An introduction to Green Academy, highlighting its mission and providing links to course categories.

- **Course Catalog**: A dynamic and organized list of available courses, designed for easy navigation with filters like course difficulty, duration, and topics.
- **Course Pages**: Each course will have its page with descriptions, key takeaways, learning modules, and any associated multimedia (videos, infographics).
- **The About Us** section introduces the Green Academy team, mission, and partnerships, alongside key environmental messages.
- **Responsive Design**: All pages will be fully responsive to adapt to various screen sizes (desktop, tablet, and mobile) using **flexbox** and **media queries**.

The front-end will be static and implemented without any backend or database integrations. The focus is on delivering structured, accessible, and responsive HTML/CSS pages with support for interactive elements (e.g., hover states, buttons, and links).

Target Audience

Our primary target audience includes:

- **Students:** High school and university students studying environmental science, sustainability, or related fields who seek to deepen their knowledge.
- **Educators:** Teachers and educators are looking for resources to integrate sustainability into their curriculum.
- **Professionals:** Individuals working in environmental sectors, NGOs, or corporate sustainability roles who want to enhance their skills and stay updated on best practices.
- **General Public:** Anyone interested in learning about sustainability practices, including families looking to adopt more eco-friendly habits.

3. User Research:

We conducted user research via surveys and interviews, which targeted individuals interested in environmental education, including students, educators, and eco-activists. Key findings include:

- **Desire for engaging, multimedia content**: Users appreciate videos, infographics, and quizzes integrated into learning platforms.
- **Ease of navigation**: Users expect straightforward navigation and user flows that make finding courses easy and intuitive.
- **Accessibility needs**: There is a high demand for inclusive design features, such as screen reader compatibility, adjustable font sizes, and keyboard navigation.

4. Competitive Analysis:

We conducted a competitive analysis by examining existing online learning platforms like Coursera, Khan Academy, and Udemy. Although they offer excellent content, there is a lack of focus on **environmental sustainability** as a dedicated learning area, and they often fail to fully integrate **WCAG-compliant accessibility** features.

Green Academy's platform will address these gaps by providing a highly accessible, environment-specific learning experience for a wide audience, from young students to adults seeking to learn more about sustainability.

5. Information Architecture and Design:

5.1. Sitemap:

- **Homepage**: Introduction, highlights of key courses, navigation links.
- **Course Catalog**: List of all courses with filters and search options.
- **Course Pages**: Details about specific courses, including multimedia and learning modules.
- **About Us**: Team details, mission, and sustainability message.
- **Contact Us**: A static contact page with email and social media links.

5.2. User Flows:

- **Homepage → Course Catalog → Course Page**: Simplified navigation for learners to find and start a course easily.
- **Homepage → About Us**: To learn about the organization's mission and vision.
- **Course Page → Next Module**: Clear navigation between learning modules within a course.

5.3. Wireframes:

We will develop **low-fidelity wireframes** for the core pages (homepage, course catalog, course page, about us) to guide the platform's visual design.

5.4. Style Guide:

We will establish a **style guide** with consistent colors, typography, and visual elements to ensure a cohesive design. The guide will focus on readability, simplicity, and user comfort, keeping accessibility in mind.

- **Color Palette**: Earth tones (green, brown, blue) to align with environmental themes.
- **Typography**: Clear, sans-serif fonts that prioritize readability.
- **Buttons and Interactive Elements**: Highly visible buttons with large touch targets for ease of use on all devices.

6. Accessibility and Inclusivity:

Accessibility is a core priority of the Green Academy platform. We will adhere to the **Web Content Accessibility Guidelines (WCAG)** to ensure the platform is fully usable by people with disabilities. Key accessibility features will include:

- **Screen Reader Compatibility**: All pages and components will be designed to work seamlessly with screen readers.
- **Keyboard Navigation**: Users will be able to navigate the platform using only the keyboard, ensuring it is accessible for those with motor impairments.
- **Text Resizing**: We will implement text resizing features to accommodate users who need larger fonts for readability.
- **Color Contrast**: Our color palette will follow best practices for contrast to ensure legibility, particularly for users with visual impairments.

7. Project Scope and Impact:

7.1. Scope:

This phase of the project is focused solely on the static front-end development of the Green Academy platform using **HTML, CSS, and SASS**. No backend integration or database functionality is required at this time. The deliverables will include:

- **Fully responsive static pages**: Homepage, Course Catalog, Course Page, About Us, and Contact Us.
- **WCAG 2.1-compliant accessibility features**: Focus on inclusivity for users with disabilities.

7.2. Impact:

By launching this platform, Green Academy will empower learners worldwide to better understand and contribute to environmental sustainability efforts. The platform's accessibility features will ensure that the knowledge is available to a broad and diverse audience, promoting environmental conservation on a global scale.

8. Success Metrics:

Success will be measured by:

- **Responsive Design**: The platform will be tested across multiple devices to ensure seamless user experiences on desktop, tablet, and mobile.
- **Accessibility Compliance**: The platform will be evaluated using tools (such as Lighthouse or WAVE) to confirm WCAG 2.1 AA compliance.
- **User Engagement**: We will track user satisfaction with navigation, content delivery, and accessibility features through surveys and feedback.
- **Collaborative Efficiency**: Effective teamwork will be ensured through regular **peer code reviews** and version control using **GitHub**.

9 . References:

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