Designing and Developing a Responsive Website Using HTML&CSS

Introduction and Project Overview:

The purpose of this report is to provide an overview of the design and development process of creating a responsive website. The project used various CSS styling techniques and markup skills to create an engaging and user-friendly website. Additionally, the report will discuss the challenges encountered during the process and provide technical recommendations for further improvement.

The Alumni Connect website serves as a platform for university alumni and current students to stay informed about upcoming events. The events are categorized into Professional Development and Campus Events, providing a user-friendly experience.

How we have used CSS in styling our website

CSS (Cascading Style Sheets) played a crucial role in enhancing the visual appeal and user experience of the website. Here's how CSS was utilized:

In styling our website, which is the platform that connects the university alumni and current students, several CSS skills were employed to enhance the visual appeal and user experience. CSS was used to define the layout, colors, typography, and overall aesthetics of the website. Flexbox and grid systems were utilized to create responsive and flexible layouts that adapt to different screen sizes. CSS animations and transitions were implemented to add interactivity and engage users. Additionally, media queries were utilized to make the website responsive by adjusting the layout and styles based on the device's screen size.

We have also selected a consistent and aesthetically pleasing color palette that complements the website's brand identity, providing a polished look.

We have also Incorporated Google Fonts to improve readability and enhance the overall design. Choose fonts that align with the website's visual theme.

How we have used HTML in Markup of our website

In developing the website, various markup skills were employed to structure and organize the content effectively. HTML was used to create the basic structure of the website, including headings, paragraphs, lists, and links. Semantic elements such as <nav>,<section> , and other tags were utilized to provide meaning and improve accessibility. Additionally, forms were implemented using HTML input elements to

capture user queries and facilitate communication. Proper indentation and commenting practices were followed to ensure clean and readable code.

How we have made our website responsive

To make the website responsive, a mobile-first approach was adopted. This involved designing and developing the website, focusing on mobile devices, and gradually enhancing it for larger screens. Media queries were used to apply different CSS styles and adjust the layout based on the device's screen size. We have utilized CSS media queries to define specific styles for different screen sizes, ensuring content adaptability. Fluid and percentage-based widths were utilized to ensure the content adapts and scales proportionally across different devices. Additionally, responsive images were implemented using CSS techniques such as max-width to optimize the loading speed and display of images on various screen resolutions.

We have also implemented the viewport meta tag to ensure proper rendering on mobile devices, allowing users a comfortable browsing experience.
/Conclusion and Recommendations
In conclusion, the Alumni Connect website effectively addresses the need for a platform that facilitates communication between alumni and current students. By utilizing HTML and CSS, a visually appealing and user-friendly website was developed.

1. KAYITESI Liliane: Created the GitHub repository and contributed to the project by working on the contact form section styling, focusing on the visual presentation and layout to ensure consistency and an appealing design. She focused on selecting appropriate fonts, colors, and spacing, resulting in an improved user experience. Additionally, about the contact form, she implemented its functionality using HTML. By incorporating fields for name, email, message, and a submit button, they facilitated user interaction and enabled smooth communication between users and the website administrators.

2. ABUBAKAR Ahmed: He Created & highlighted the technical skills and expertise of the team members in the "About" section of the website. He provided information about each team member's specific technical strengths, qualifications, or experience relevant to the project. This helps establish the technical competence of the team and assures visitors of their capability in delivering a high-quality website.

3. SAMUEL Komaiya: He was responsible for making the website look responsive. He did this by giving us ideas on which media queries the team should use. He also provided the structure of how our website should look by categorizing the events

related to Professional Development and Campus Events into three distinct options under the "Event" category.

4. UMUTONI Gentille: She worked on the CSS (Cascading Style Sheets) for the About Page. They focused on styling the elements, layout, and design of the About Page to ensure visual consistency and an aesthetically pleasing presentation. By utilizing CSS properties and rules, she enhanced the overall appearance of the About page, making it visually appealing and engaging for users. Their work contributed to the cohesive and professional look of the About Page, aligning it with the overall design and branding of the website.

5. NIYOMUKIZA Benjamin: took the responsibility of coming up with the trademark name and logo for the website. They brainstormed and devised a unique and distinctive name representing the brand and its purpose. Additionally, they created a logo that visually captures the essence of the website, possibly using design software or engaging graphic design skills. Their contribution in establishing the trademark name and logo played a significant role in creating a recognizable and memorable identity for the website.

THE CHALLENGES WE FACED

As a beginner, creating a responsive website with HTML and CSS was difficult for us due to obstacles such as CSS understanding, responsive design concepts, cross-browser compatibility, mobile-first design, media queries, accessibility, performance optimization, CSS Flexbox and Grid, and compatibility with older browsers. Furthermore, maintaining content hierarchy and addressing content organization difficulties while keeping up with the current web development trends and browser compatibility was difficult for us.
Working as a team also wasn't also easy because using master version control systems like Git required everyone to know their responsibilities and project progress to avoid conflicts and manage tasks efficiently of merging and solving those conflicts was daunting, but this was also not a big challenge because we had strong teamwork, collaboration tools, and established guidelines to ensure a successful and well-coordinated web development for our alumni connect+ website.

Technical recommendations to improve our website.

To overcome these obstacles, We will continually learn and practice, use online resources, test our website on multiple devices and browsers, get feedback, and consider learning other CSS frameworks such as Bootstrap.

To enhance the responsiveness of our website, we also have to consider implementing techniques like responsive design, optimizing page speed, ensuring mobile-friendliness, improving navigation, updating, and maintaining content.

Image Optimization: Compress images to improve page loading speed and overall performance.

Conclusion

As conclusion, this group work has boosted our knowledge of making a website and also making it to make it more responsive. We also were able to make this website more readable and also more creative.

This project also increased our curiosity in the Tech industry and we also worked together as a team to complete all this work.

Resources for this project Images
1. https://unsplash.com/