REPORT

1. Introduction

We were tasked with developing and designing a website showcasing the basic skills we have learned in HTML and CSS so far. We were given three scenarios and settled on scenario 1. With scenario 1, we aim to create a user-friendly website that enables locals, ex-pats, and tourists to access various services in Nigeria. By providing services under the categories of Travel and Entertainment, the website seeks to simplify the process of finding and engaging with different service providers.

The website's primary objective is to reduce the time and energy users take to search for services by providing a comprehensive services directory in one place. The website will serve as a one-stop destination for users to explore and compare accommodations, transportation, tourist destinations, cultural events/places, restaurants, and clubs.

By leveraging the expertise and knowledge of the team, the website will provide valuable information about each service that would help users make informed decisions. The website's overall design and functionality will prioritize simplicity, ease of use, and responsiveness across different devices.

2. Project Overview

Name/trademark of the website: ***SightCity Travel***

Target country: ***Nigeria***

Target audience: ***locals, ex-pats, and tourists***

Aim of the project: ***Enable locals, ex-pats, and tourists to look for different services available in Nigeria***

Constituents of the website

Home/Landing page

We aim to make tours and travel a seamless experience by providing details on the best services in travel and entertainment in Nigeria.

Services

Travel-Transport, accommodation, restaurants

Entertainment-Tourist attractions, cultural events/places, bars/ clubs

About

Profile of each group12 member and their roles/technical expertise

Contact us

A form where users can ask anything about the information provided on our website

3. Our thought process

- Meeting 1-Friday(8 pm-9 pm): Brainstorming on the different scenarios and choosing to settle on scenario 1
  Dividing tasks among individuals

- Meeting 2-Saturday(10 am-12 pm): Working on the HTML skeleton
  (6 pm-8 pm): Css Basics

- Meeting 3-Sunday(2 pm-4 pm): Css Advanced, making the website responsive, finalizing the report
  (7 pm-8 pm): Reflecting on the highs and lows

4. The use and implementation of CSS

CSS played a crucial role in styling and making our website visually appealing by controlling various aspects of the website's appearance, including colors, fonts, layouts, and responsiveness.

The following CSS skills were utilized in styling our website:

- CSS Selectors: We used simple CSS selectors, i.e., CSS Element Selector, CSS Id Selector, CSS Class Selector, CSS Universal Selector, and CSS Group Selector, to target specific HTML elements we want to style. This enabled us to define the look and feel of different elements on the website.

- CSS properties: We used several properties such as color, font size, height, font weight, margin, font family, typeface, background attachment, letter spacing, border width, border spacing, word spacing, font-stretch, border-left width,border-right-width,font-size-adjust,border-bottom-style,border-left-style, border-right-style,flex-shrink,border-bottom-left-radius, and opacity. These properties enabled control over the visuals of each element.

- Layout and Positioning: CSS enabled us to define the layout of the website, including the placement of headers, footers, navigation menus, and content sections. The Flexbox model enabled us to design and build responsive web pages without having to use tricky hacks and a lot of float and position properties in our CSS code. The grid technique was used mainly for the layout of the website, while flexbox was used mainly for alignment.

- Styling Text and Typography: CSS allowed us to control the appearance of text, such as font styles, sizes, colors, and alignments. By selecting appropriate fonts and adjusting typography settings, we enhanced the website's readability and visual appeal to improve ease of use and navigation.

- Responsive Design: CSS media queries enable us to define specific styles for different viewport widths, allowing the website to dynamically adapt its layout and appearance. By applying responsive design principles, we aim to provide an optimal user experience on various devices, from mobile phones to desktop computers.

5. Markup Development

Markup development helped structure and organize the website's content. Here are some key skills used in developing our website's markup:

- Semantic HTML: Semantic elements helped to provide meaning and structure to the content. By using elements like `<header>,` `<nav>,` `<section>,` `<article>,` and `<footer>,` we enhanced accessibility and search engine optimization. Semantic HTML ensured the website's structure was well-defined, allowing assistive technologies and search engines to understand and navigate the content more effectively.

- HTML Forms: HTML forms enabled user interaction, such as submitting queries or requests on the information provided on our website. By utilizing form elements like `<input>,` `<textarea>,` and `<button>,` we were able to create a user-friendly form that captures necessary information accurately. Attributes such as required, max length, and pattern were employed to enforce input validation and improve data integrity.

- Hyperlinks and Navigation: The HTML anchor tag (`<a>`) was used to create hyperlinks, allowing users to navigate within the website or to external resources. By specifying appropriate href attributes, we were able to link different sections of the website and provide a seamless navigation experience.

6. Responsive Website Design

Achieving a responsive website design involved implementing techniques and best practices to ensure that the website adapts and responds effectively to different screen sizes and devices. We used the following strategies:

- Media Queries: CSS media queries allowed us to define different styles based on the characteristics of the device or viewport width. By specifying different CSS rules for different screen sizes, we tailored the layout, font sizes, and other visual properties to ensure optimal viewing experiences across devices. We used the `@media` rule along with the desired breakpoints to target specific screen widths.

- Fluid Layouts: we added the attribute class="works_on_smartphone" on the <body> tag in our index.html file, which made the layout degrade nicely as we resize the window. Instead of using fixed pixel-based widths for elements, relative units like percentages or viewport-based units (such as vw and vh) were employed. This allows the website's layout to adjust fluidly based on the available screen space, ensuring that content is displayed optimally on various devices.

- Responsive Images: We Implemented responsive images using CSS techniques, such as setting `max-width: 100%` and `height: auto,` to ensure that images scale proportionally and fit within their container. Additionally, we employed the `srcset` attribute to provide multiple image sources at different resolutions, allowing the browser to choose the most appropriate image based on the device's capabilities and screen size.

- Testing and Debugging: We tested our design on various devices, browsers, and screen sizes to ensure consistent and optimal performance. In the future, we will consider using device emulators, browser developer tools, and real device testing to validate the website's responsiveness.

7. Challenges and Lessons Learned

Effective collaboration: We are in different time zones, so it was hard deciding on the time to meet. Also, we have different schedules, but adaptability helped us counter this challenge. We have different mastery of HTML and CSS, but we were able to complement each other. We were able to leverage the use of collaboration tools like Trello to ease and ensure flow in our project work.

Optimizing the performance of the website: we had to constantly make changes to our code, like changing the image size, Css styling, and use of minimal code to make our website lightweight, browser compatible, and easy to navigate so that our users can have an enjoyable experience.

UI/UX design-Due to time constraints, we were unable to collect data on the user experience of different groups of people so that we could improve the user experience. Also, we are less skilled in UI/UX design.

8. Technical Recommendations for improvement

Include a security feature to ensure our users are not scammed while on our site and that the data they fill in the form is secure.

Implementing a Content Management System (CMS) to simplify content updates and management, enabling team members to add or modify services easily. This reduces the reliance on technical expertise for routine content changes.

Translating the content of the website to different languages, both international and local, will ensure we reach a larger audience.

Use of recommendation engines to enable personalized/customized suggestions according to user data and preferences.

Ensuring accessibility compliance to make the website inclusive for users with disabilities by adhering to WCAG (Web Content Accessibility Guidelines) standards and providing alternative text for images, keyboard navigation options, and semantic HTML structures to enhance accessibility.

Including the social media pages of the different services under travel and entertainment to improve user experience and also add a social sharing button to improve engagement on our website.

Regular review of website analytics, monitoring user feedback, and tracking industry trends to help identify areas for improvement. Having a feedback mechanism in place to allow users to provide suggestions and report any issues they encounter.

7. Conclusion

In conclusion, we employed the use of CSS styling, HTML markup, and responsive design techniques to create a user-friendly website that enables locals, ex-pats, and tourists to access services for travel and entertainment in Nigeria. Using CSS enhanced the website's visual presentation, and various styling aspects were controlled, including layout, typography, and responsiveness. HTML markup provided structure and organization to the content, ensuring semantic and accessible representation. Responsive web design enabled our website to adapt and respond effectively to different screen sizes and devices. We were able to overcome the challenges we faced to make our project a success thanks to our complementary skills and teamwork spirit. However, we will be able to develop the website further as we continue to learn more.