

**WEB FUNDAMENTALS.**

**END OF 2nd SEMESTER PROJECT.**

**PROJECT REPORT.**

**ID:** PUIT/22210058­­­­

**NAME:** ASIEDU OPOKU DENNIS

**HTML Issues Found:**

**Unclosed Tags:** The <p> tag within swiper-slide--four and swiper-slide--five classes was not closed, and there was an extra </html> tag at the document's end.

**Incorrect Attribute Usage:** The i attribute in <div class="home\_\_content" i="home-content"> should be id.

**Deprecated Elements:** No deprecated elements were found.

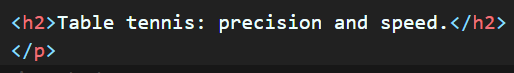
**Step 2: Fixes and Corrections**

**1. Unclosed <p> Tag**

* **Before:**

<h2>Table tennis: precision and speed.</h2>

</p>



* **After:**

<h2>Table tennis: precision and speed.</h2>



**2. Incorrect id Attribute**

* **Before:**

<div class="home\_\_content" i="home-content">



* **After:**

<div class="home\_\_content" id="home-content">



**Step 3: Summary**

* **Unclosed Tags:** Fixed unclosed <p> tags in the Swiper slides.
* **Extra </html> Tag:** Removed the unnecessary extra </html> tag.
* **Incorrect Attribute:** Corrected the incorrect i attribute to id.
* **Alt Attributes:** Added more descriptive alt text to images to improve accessibility.

**Step 1:** book-online.htmL

**HTML Issues Found:**

**Incorrect Attribute Usage:** The referrerpolicy="no-referrer" attribute for Font Awesome is valid but unnecessary.

**Deprecated Elements:** No deprecated elements were found.

**Step 2: Fixes and Corrections**

1. **Referrer Policy Attribute** 
   * **Before:**

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.6.0/css/all.min.css" referrerpolicy="no-referrer">



* + **After:**

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.6.0/css/all.min.css">



**Findings from Accessibility Testing:**

**Screen Reader Used:** NVDA (Windows)

**Issues Discovered:**

1. **Styling Conflicts:** Custom CSS affects screen reader text accuracy.
2. **Missing Form Labels:** Some form fields lack clear labels.
3. **Inconsistent ARIA Roles:** Incorrect ARIA roles for interactive elements.
4. **Confusing Navigation:** The screen reader navigation order is confusing.
5. **Inaccessible Skip Links:** Skip links are inaccessible to screen readers.

**How the site works for disabled users.**

* **Screen Reader Compatibility** with semantic HTML and descriptive alt text.
* **Keyboard navigation** is for users with mobility impairments.
* **High Contrast Text** for improved readability.
* **Accessible Forms** with clear labels and non-color-dependent error messages.
* **Multimedia Accessibility** with captions and transcripts.
* **Responsive Design** to ensure consistent accessibility across all devices.

**Browser Testing Results:**

**Browsers Tested:** Google Chrome, Mozilla Firefox, Microsoft Edge

**Findings:**

* **Chrome:** Smooth functionality with no issues.
* **Firefox:** Minor differences in spacing and animation smoothness.
* **Edge:** Similar to Chrome but with slight variations in font styles and button appearances.

**Conclusion:** Browser differences occur due to varying rendering engines. Testing across browsers ensures a consistent user experience.

**Report: Assessment and Recommendations**

**Suitability of Testing:**

* W3C validation and accessibility checks effectively identified key compliance issues.

**Outstanding Problems:**

* **Responsive Design:** Some layout issues on smaller screens due to flexbox configurations.
* **Dynamic Content Validation:** Further testing is needed for dynamically generated content.

**Recommendations:**

1. **Continued Accessibility Checks:** Use tools like Lighthouse or WAVE.
2. **Responsive Layout Refinement:** Simplify flexbox configurations for a better mobile experience.
3. **Dynamic Content Handling:** Improve validation for dynamic content.

**Role of W3C:**

* Develop web standards to ensure consistency, accessibility, and compatibility.

**Web Tools and Services:**

1. **VSCode:** Versatile code editor by Microsoft.
2. **Chrome DevTools:** Debugging tools built into Chrome.
3. **Google reCAPTCHA:** Prevents automated abuse.
4. **Font Awesome CDN:** Provides vector icons.
5. **Swiper JS CDN:** Mobile-friendly slider library.

**Business Objectives and Recommendations:**

1. **Enhance User Engagement:** Implement interactive features and user-generated content.
2. **Expand Reach:** Optimize for SEO and use digital marketing strategies.
3. **Streamline Processes:** Integrate an online booking system.
4. **Promote Inclusivity:** Ensure accessibility features and compliance.
5. **Leverage Data:** Use analytics for informed decision-making.

**Further Development:**

1. **Mobile Optimization:** Develop as a Progressive Web App (PWA).
2. **Localized Content:** Offer multilingual support.
3. **Social Media Integration:** Allow sharing and community building.
4. **Advanced Analytics:** Implement personalized recommendations.
5. **VR/AR Integration:** Explore immersive technologies.
6. **Enhanced Security:** Implement two-factor authentication and regular audits.
7. **Partnerships:** Establish collaborations with local and international sports organizations.