Context: You are an accessibility expert reviewing HTML for accessibility issues. Analyze the following code in the context of WCAG (Web Content Accessibility Guidelines) 2.2, listing any issues that may violate these guidelines. You will only be analyzing the HTML, ignoring any included or missing styles and scripts. Code: ```<!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <meta name="viewport" content="width=device-width, initial-scale=1.0"> <style> body { margin: 0; padding: 0; font-family: 'Arial', sans-serif; background: url('background.jpg') no-repeat center center fixed; background-size: cover; color: #fff; } header { background: #333; padding: 10px; text-align: center; } nav { display: flex; justify-content: center; background: #444; padding: 10px; } nav a { color: #fff; text-decoration: none; margin: 0 20px; font-size: 18px; } section { padding: 20px; } h2 { color: #fff; /\* Text color: white \*/ background-color: rgba(0, 0, 0, 0.7); /\* Semi-transparent black background for better contrast \*/ padding: 10px; /\* Add padding for better appearance \*/ } form { display: flex; flex-direction: column; max-width: 300px; margin: auto; } label { margin-bottom: 8px; color: #fff; /\* Set label text color to white for better contrast \*/ background-color: rgba(0, 0, 0, 0.7); /\* Semi-transparent black background for better contrast \*/ padding: 8px; /\* Add padding for better appearance \*/ } input, select { padding: 10px; margin-bottom: 15px; } button { padding: 10px; background: #4CAF50; color: #fff; border: none; cursor: pointer; } button:hover { background: #45a049; } </style> </head> <body> <header> <marquee>Ticket Booking System</marquee> </header> <nav> <a href="#">Home</a> <a href="#">Movies</a> <a href="#">Events</a> <a href="#">Contact</a> </nav> <section> <h2>Book Your Tickets</h2> <form id="bookingForm"> <label for="event"></label> <select id="event" name="event"> <option value="movie">Movie</option> <option value="concert">Concert</option> <!-- Add more options as needed --> </select> <label for="quantity"> Number of Tickets: </label> <input type="number" alt="quantity" id="quantity" name="quantity" min="1" required> <label for="name" style="color: #fff; background-color: rgba(0, 0, 0, 0.7);"> Your Name: </label> <input type="text" id="name" name="name" required> <button type="button" onclick="submitForm()" style="background-color: #45a049;"> <!-- Adjusted background color for better contrast --> Book Now </button> </form> <div id="confirmation" style="display:none;"> <p id="confirmationText">Your tickets have been booked. Thank you!</p> </div> </section> <script> function submitForm() { // Perform any additional processing here (e.g., sending data to a server) // For now, just show a confirmation message document.getElementById('bookingForm').style.display = 'none'; document.getElementById('confirmation').style.display = 'block'; } </script> </body> </html> ``` Response format: Snippet with error: … Location of error: … WCAG Guideline violated: … Detection Algorithm: … Explanation of Error: …

<marquee>Ticket Booking System</marquee>

**Location of error:** Header section of the HTML.

**WCAG Guideline violated:** 2.2.2 Pause, Stop, Hide

**Detection Algorithm:** Identify the use of <marquee> tags or auto-scrolling text elements.

**Explanation of Error:** Moving, blinking, or auto-scrolling text should be avoidable by the user, as it can be distracting or cause issues for users with cognitive disabilities.

<label for="event"></label>

**Location of error:** Inside the form, preceding the event selection dropdown.

**WCAG Guideline violated:** 1.1.1 Non-text Content

**Detection Algorithm:** Check for <label> elements without text content.

**Explanation of Error:** Form labels should include descriptive text to aid users, especially those using screen readers.

<input type="number" alt="quantity" id="quantity" name="quantity" min="1" required>

**Location of error:** Inside the form, quantity input field.

**WCAG Guideline violated:** 4.1.2 Name, Role, Value

**Detection Algorithm:** Look for input elements with the alt attribute used incorrectly.

**Explanation of Error:** The alt attribute is not appropriate for input fields; instead, the label should describe the input.

<button type="button" onclick="submitForm()" style="background-color: #45a049;">

**Location of error:** Inside the form, Book Now button.

**WCAG Guideline violated:** 4.1.1 Parsing

**Detection Algorithm:** Ensure all interactive elements are accessible via keyboard and do not rely solely on mouse events.

**Explanation of Error:** Interactive elements should also provide keyboard event handling to ensure accessibility for users who cannot use a mouse.

Are there any more issues? List all that you find.

<header>

**Location of error:** Entire header section.

**WCAG Guideline violated:** 1.3.1 Info and Relationships

**Detection Algorithm:** Look for the <header> element without landmarks or explicit roles for assistive technologies.

**Explanation of Error:** Providing landmarks like role="banner" helps assistive technologies identify the purpose of the header.

<section>

**Location of error:** Entire section element.

**WCAG Guideline violated:** 1.3.1 Info and Relationships

**Detection Algorithm:** Look for the <section> element without landmarks or explicit roles.

**Explanation of Error:** Adding role="region" and aria-labelledby attributes can improve the identification of different content sections for screen readers.

<header> <marquee>Ticket Booking System</marquee> </header>

**Location of error:** Header section.

**WCAG Guideline violated:** 3.2.1 On Focus

**Detection Algorithm:** Identify auto-scrolling elements that can't be paused.

**Explanation of Error:** Moving content that starts automatically should be avoidable for users, which is not possible with a <marquee> tag.

<h2>Book Your Tickets</h2>

**Location of error:** Inside the section element.

**WCAG Guideline violated:** 1.3.1 Info and Relationships

**Detection Algorithm:** Check heading structure for skipped levels.

**Explanation of Error:** Ensure the heading structure is logical and hierarchical (e.g., don't skip from <h1> directly to <h2>).

<label for="event"></label>

**Location of error:** Form, before the event dropdown.

**WCAG Guideline violated:** 1.3.1 Info and Relationships

**Detection Algorithm:** Look for form elements without descriptive labels or associated instructions.

**Explanation of Error:** Labels should be descriptive to inform the user of the purpose of form controls.

<nav> <a href="#">Home</a> <a href="#">Movies</a> <a href="#">Events</a> <a href="#">Contact</a> </nav>

**Location of error:** Navigation links.

**WCAG Guideline violated:** 2.4.4 Link Purpose (In Context)

**Detection Algorithm:** Check for meaningful link text that provides information on the destination or action.

**Explanation of Error:** Links with text like # are ambiguous and must be descriptive to tell users where they will navigate.

<nav> <a href="#">Home</a> <a href="#">Movies</a> <a href="#">Events</a> <a href="#">Contact</a> </nav>

**Location of error:** Nav element.

**WCAG Guideline violated:** 4.1.2 Name, Role, Value

**Detection Algorithm:** Check for the nav element without appropriate ARIA roles or landmarks.

**Explanation of Error:** Adding role="navigation" helps assistive technologies better interpret the structure.

Are there any more issues? List all that you find.

<body>

**Location of error:** Body tag.

**WCAG Guideline violated:** 1.4.3 Contrast (Minimum)

**Detection Algorithm:** Check for sufficient color contrast between the text color and background color.

**Explanation of Error:** The white text #fff on potentially light parts of the background.jpg image might not meet the minimum contrast ratio of 4.5:1.

<button type="button" onclick="submitForm()" style="background-color: #45a049;">

**Location of error:** Inside the form, Book Now button.

**WCAG Guideline violated:** 4.1.2 Name, Role, Value

**Detection Algorithm:** Test for interactive elements requiring JavaScript for their function without providing a semantic HTML alternative.

**Explanation of Error:** The function submitForm() should be triggered using a submit button instead to ensure proper form submission even without JavaScript.

<div id="confirmation" style="display:none;">

**Location of error:** Confirmation message container.

**WCAG Guideline violated:** 2.2.1 Timing Adjustable

**Detection Algorithm:** Check for displayed content changes not notified to screen readers.

**Explanation of Error:** Displaying the confirmation message dynamically without ensuring it's announced to screen readers can prevent some users from knowing the action's result.

<input type="number" alt="quantity" id="quantity" name="quantity" min="1" required>

**Location of error:** Inside the form, quantity input field.

**WCAG Guideline violated:** 1.3.1 Info and Relationships

**Detection Algorithm:** Search for inappropriate use of attributes like alt on form inputs.

**Explanation of Error:** Use the aria-label or appropriate label to associate descriptive text instead of the alt attribute for inputs.

These are some additional issues that might violate the WCAG 2.2 guidelines and can hinder the accessibility of the web page.

New Chat (Alt-J)