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="tx"> <head> <meta charset="UTF-8"> <meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>Your Hospital Name</title> <style> body { margin: 0; padding: 0; font-family: Arial, sans-serif; } header h1 { color: #333; /\* Set a darker text color for better contrast \*/ } header p { color: #333; /\* Set a darker text color for better contrast with the light background \*/ } header { background-image: url('hospital-banner.jpg'); background-size: cover; color: #fff; text-align: center; padding: 80px 0; } nav { background-color: #333; color: #fff; padding: 10px; text-align: center; } nav a { color: #fff; text-decoration: none; padding: 10px 20px; margin: 0 10px; font-weight: bold; } section { padding: 50px 20px; } video { width: 100%; height: auto; } .container { max-width: 1200px; margin: 0 auto; } /\* Adjusted button styles for better contrast \*/ button { background-color: #007BFF; color: #fff; padding: 10px 20px; font-size: 18px; /\* Larger font size for better readability \*/ border: none; cursor: pointer; } /\* Adjusted button styles for better contrast with type="submit" \*/ button[type="submit"] { background-color: #007BFF; color: #fff; padding: 10px 20px; font-size: 18px; /\* Larger font size for better readability \*/ border: none; cursor: pointer; } /\* Additional style for better contrast on hover or focus \*/ button:hover, button:focus, button[type="submit"]:hover, button[type="submit"]:focus { background-color: #0056b3; /\* Darker shade on hover or focus for better visual feedback \*/ } footer { background-color: #333; color: #fff; text-align: center; padding: 20px 0; } </style> </head> <body> <header> <h1>Your Hospital Name</h1> <p>Welcome to our state-of-the-art healthcare facility</p> </header> <nav> <a href="#home">Home</a> <a href="#services">Services</a> <a href="#departments">Departments</a> <a href="#contact">Contact</a> </nav> <section id="home"> <div id="container"> <h2>Welcome to Our Hospital</h2> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. ...</p> <button>Learn More </div> </section> <section id="services"> <div id="container"> <h2>Our Services</h2> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. ...</p> </div> </section> <section id="video"> <div class="container"> <h2>Take a Virtual Tour</h2> <video controls> <source src="hospital-tour.mp4" type="video/mp4"> Your browser does not support the video tag. </video> </div> </section> <section id="contact"> <div class="container"> <h2>Contact Us</h2> <form> <label for="username">Username:</label><br> <input type="text" id="username" name="username"><br> <label for="password"></label><br> <input type="password" id="pwd" name="pwd"> <input type="radio" id="1" name="fav\_number" value="1"> <input type="radio" id="2" name="fav\_number" value="2"> <label for="2">2</label><br> <input type="radio" id="3" name="fav\_number" value="3"> <label for="3">3</label> <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike"> <label for="vehicle1"> I have a bike</label><br> <input type="checkbox" id="vehicle2" name="vehicle2" value="Car"> <label for="vehicle2"> I have a car</label><br> <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat"> <label for="vehicle3"> I have a boat</label> <label for="myfile">Select a file:</label> <input type="file" id="myfile" name="myfile"> <button type="submit">Submit</button> </form> </div> </section> <footer> <p>&copy; 2023 Your Hospital Name. All rights reserved.</p> </footer> </body> </html> ``` Response format: Snippet with error: … Location of error: … WCAG Guideline violated: … Detection Algorithm: … Explanation of Error: …

<label for="password"></label><br>

**Location of error:** Section with id="contact".

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

**Detection Algorithm:** Check if all <label> elements have visible text for assistive technologies.

**Explanation of Error:** The label for the password input field is empty, which means screen readers will not read any description for the associated input field, making it inaccessible for users relying on such technologies.

<a href="#home">Home</a>

<a href="#services">Services</a>

<a href="#departments">Departments</a>

<a href="#contact">Contact</a>

**Location of error:** Navigation section.

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

**Detection Algorithm:** Verify if links provide sufficient context about their destination.

**Explanation of Error:** The same link text is repeated in different contexts and may not be sufficiently descriptive, which could confuse users of assistive technologies.

<!DOCTYPE html>

<html lang="tx">

**Location of error:** HTML <html> tag.

**WCAG Guideline violated:** 3.1.1 Language of Page.

**Detection Algorithm:** Verify the lang attribute specifies a valid language code.

**Explanation of Error:** The lang="tx" is not a recognized language code which could affect text-to-speech and other linguistic-dependent tools used by assistive technologies.

<input type="password" id="pwd" name="pwd">

**Location of error:** Section with id="contact".

**WCAG Guideline violated:** 3.3.2 Labels or Instructions.

**Detection Algorithm:** Ensure form input elements have associated labels or instructions.

**Explanation of Error:** The password field lacks a visible label or description, making it difficult for users to understand the purpose of the field.

<header>

<h1>Your Hospital Name</h1>

<p>Welcome to our state-of-the-art healthcare facility</p>

</header>

**Location of error:** header section.

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

**Detection Algorithm:** Assess color contrast between background images and foreground text.

**Explanation of Error:** Text in header may not maintain sufficient contrast against background image, which affects readability for users with visual impairments.

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

<button>Learn More </div>

**Location of error:** Section with id="home".

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

**Detection Algorithm:** Ensure all HTML elements have properly nested and closed tags.

**Explanation of Error:** The closing div tag is misplaced, leading to potential parsing issues and incorrect rendering on assistive technologies.

<input type="radio" id="1" name="fav\\_number" value="1">

<input type="radio" id="2" name="fav\\_number" value="2">

<label for="2">2</label><br>

<input type="radio" id="3" name="fav\\_number" value="3">

<label for="3">3</label>

**Location of error:** Section with id="contact".

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

**Detection Algorithm:** Verify that labels are properly associated with their corresponding input elements.

**Explanation of Error:** The radio buttons id="1" and id="3" are missing associated labels, creating a gap in information for assistive technology users.

<section id="home"> <div id="container">

**Location of error:** id="home" and other sections.

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

**Detection Algorithm:** Check consistency of id attributes.

**Explanation of Error:** The multiple instances of the id="container" within different sections can cause conflicts since IDs must be unique within a page.

<header> <h1>Your Hospital Name</h1> <p>Welcome to our state-of-the-art healthcare facility</p> </header>

<video controls> <source src="hospital-tour.mp4" type="video/mp4"> Your browser does not support the video tag. </video>

**Location of error:** Video section.

**WCAG Guideline violated:** 1.2.2 Captions (Prerecorded).

**Detection Algorithm:** Ensure videos include captions.

**Explanation of Error:** The video lacks captions, making it inaccessible to users with hearing impairments.

<a href="#home">Home</a>

<a href="#services">Services</a>

**Location of error:** Navigation section.

**WCAG Guideline violated:** 2.4.7 Focus Visible.

**Detection Algorithm:** Check if links provide visual feedback when focused.

**Explanation of Error:** The a tags have no CSS for focus state, making keyboard navigation difficult without visible indicators.

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

<meta charset="UTF-8">

**Location of error:** <head> section.

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

**Detection Algorithm:** Ensure the correct declaration of character encoding early in the document.

**Explanation of Error:** Character encoding declaration is correct; no issue here.

<section id="contact"> <div class="container">

**Location of error:** #container ID.

**WCAG Guideline violated:** 2.4.10 Section Headings.

**Detection Algorithm:** Verify sufficient use of section headings for all sections of the document.

**Explanation of Error:** The contact section lacks meaningful structure; section headings are needed for better navigation and orientation.

<button>Learn More </div>

**Location of error:** Section with id="home".

**WCAG Guideline violated:** 4.1.1 Parsing.

**Detection Algorithm:** Check for properly nested elements.

**Explanation of Error:** The misplaced closing div tag indicates a parsing error which could result in a failure to properly render and interpret content.

<a href="#home">Home</a> <a href="#services">Services</a> <a href="#departments">Departments</a> <a href="#contact">Contact</a>

**Location of error:** Navigation section.

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

**Detection Algorithm:** Ensure that links are descriptive enough to understand their purpose.

**Explanation of Error:** While not inherently incorrect, better descriptive navigation links would further enhance accessibility.

<input type="radio" id="1" name="fav\\_number" value="1"> <input type="radio" id="2" name="fav\\_number" value="2"> <label for="2">2</label><br> <input type="radio" id="3" name="fav\\_number" value="3"> <label for="3">3</label>

**Location of error:** Section with id="contact".

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

**Detection Algorithm:** Ensure that visible text is associated with form controls.

**Explanation of Error:** Several radio buttons are missing labels, hindering users' capacity to understand their purpose.

<button type="submit">Submit</button>

**Location of error:** Section with id="contact" form.

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

**Detection Algorithm:** Ensure form elements have explicit roles and value descriptions.

**Explanation of Error:** The button lacks additional content or ARIA attributes to describe its function further.

<input type="password" id="pwd" name="pwd">

**Location of error:** Section with id="contact" form.

**WCAG Guideline violated:** 3.3.2 Labels or Instructions.

**Detection Algorithm:** Validate form input fields have clear labels/instructions.

**Explanation of Error:** The password input element lacks a visible or descriptive label, making it hard to identify its function.

In summary, the accessibility issues identified include improper labeling of input fields, missing captions for video content, non-unique IDs, and insufficient structural headings, all of which fail various WCAG 2.2 guidelines.

New Chat (Alt-J)