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: …

Here is my analysis of the provided HTML code based on WCAG 2.2 guidelines:

Snippet with error:  
<label for="password"></label><br>  
<input type="password" id="pwd" name="pwd">

Location of error:  
Section with id="contact", within the form

WCAG Guideline violated:  
1.3.1 Info and Relationships - The purpose of each form control must be programmatically determinable. In this case, the <label> is empty so the purpose of the password field is not clear.

Detection Algorithm: Manual inspection

Explanation of Error: The label for the password field is empty, so screen readers and other assistive technologies will not be able to announce the purpose of that form control to users. Each form control should have an associated <label> element to provide its purpose.

Snippet with error:  
<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", within the form

WCAG Guideline violated:  
1.3.1 Info and Relationships - The first radio button is not associated with a label.

Detection Algorithm: Manual inspection

Explanation of Error: The first radio button is not associated with a label, so its purpose will not be clear to assistive technologies. Each radio button should have an associated <label> element.

Let me know if you have any other questions!