## 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">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

<title>SugarBliss Cafe - Menu</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<header>

<nav>

<div class="logo">

<a href="index.html"><img src="logo.png" alt="SugarBliss Logo"></a>

</div>

<ul class="nav-links">

<li><a href="index.html">Home</a></li>

<li><a href="aboutus.html">About Us</a></li>

<li><a href="menu.html">Menu</a></li>

<li><a href="gallery.html">Gallery</a></li>

<li><a href="contact.html">Contact Us</a></li>

</ul>

</nav>

</header>

<section class="menu-section">

<form>

<label for="username">Username:</label><br>

<input type="text" id="username" name="username"><br>

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

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

<label for="1"></label><br>

<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"></label>

<input type="file" id="myfile" name="myfile">

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

</form>

<div class="container">

<h1>Menu</h1>

<div class="menu-items">

<div class="menu-item">

<img src="food10.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Artisanal Handcrafted Ice Cream</h2>

<p class="price">$8.99</p>

<p class="description">Handcrafted artisanal ice cream, from classic vanilla to exotic salted caramel swirl.</p>

</div>

</div>

<div class="menu-item">

<img src="food9.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Irresistible Cupcake Creations</h2>

<p class="price">$11.99</p>

<p class="description">Freshly baked cupcakes: red velvet, lemon raspberry, and more, topped with decadent frosting.</p>

</div>

</div>

<div class="menu-item">

<img src="img3.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Zesty Lemon Custard Cake</h2>

<p class="price">$10.99</p>

<p class="description">Dive into our heavenly lemon custard cake – a citrus-infused delight</p>

</div>

</div>

<div class="menu-item">

<img src="img2.jpg" alt="Food Item 1">

<div class="item-details">

<h2>French-inspired Macarons</h2>

<p class="price">$9.99</p>

<p class="description">Indulge in our delicate French macarons, a symphony of almond meringue cookies </p>

</div>

</div>

<div class="menu-item">

<img src="img1.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Fluffy Buttermilk Pancakes</h2>

<p class="price">$9.99</p>

<p class="description">Light and airy, these pancakes are cooked to golden perfection, served with pure maple syrup</p>

</div>

</div>

<div class="menu-item">

<img src="food7.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Decadent New York Style Cheesecake</h2>

<p class="price">$9.99</p>

<p class="description">Velvety New York-style cheesecake on a buttery graham cracker crust.</p>

</div>

</div>

<div class="menu-item">

<img src="food6.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Velvet Cocoa Symphony </h2>

<p class="price">$8.99</p>

<p class="description">A silky, rich chocolate delight crafted from premium cocoa for an indulgent experience.</p>

</div>

</div>

<div class="menu-item">

<img src="food5.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Berrylicious Dream</h2>

<p class="price">$9.99</p>

<p class="description">Smooth, creamy fudge infused with ripe strawberries for a fruity, decadent treat.</p>

</div>

</div>

<div class="menu-item">

<img src="food4.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Cloud Nine Delight</h2>

<p class="price">$7.99</p>

<p class="description">A light, airy cake with subtle sweetness, offering a delicate and comforting taste.</p>

</div>

</div>

<div class="menu-item">

<img src="food3.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Vanilla Dream Swirl</h2>

<p class="price">$6.99</p>

<p class="description">Indulge in our classic vanilla ice cream, a creamy delight with a smoot</p>

</div>

</div>

<div class="menu-item">

<img src="food2.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Raspberry Bliss Tart</h2>

<p class="price">$11.99</p>

<p class="description">Indulge in our Raspberry Bliss Tart, where the vibrant tartness of freshly-picked raspberries</p>

</div>

</div>

<div class="menu-item">

<img src="food1.jpg" alt="Food Item 1">

<div class="item-details">

<h2>Heavenly Cocoa Fudge Delight</h2>

<p class="price">$8.99</p>

<p class="description">Our fudgy brownies boast a perfect balance of rich cocoa and chewy goodness</p>

</div>

</div>

</div>

</div>

</section>

<footer class="footer">

<div class="footer-content">

<div class="address">

<h3>Visit Us</h3>

<h2>At this address:</h2>

<p>123 Cafe Street,<br> City, Country</p>

</div>

<div class="contact">

<h3>Contact Us</h3>

<p>Phone: +1234567890<br>Email: info@sugarblisscafe.com</p>

</div>

<div class="social-media">

<h3>Follow Us</h3>

<div class="social-icons">

<a href="https://www.facebook.com/" class="icon-link"><i class="fa fa-facebook-f"></i></a>

<a href="https://www.facebook.com/" class="icon-link"><i class="fa fa-twitter"></i></a>

<a href="https://www.facebook.com/" class="icon-link"><i class="fa fa-instagram"></i></a>

<!-- Add more social media icons as needed -->

</div>

</div>

</div>

</footer>

<div class="scroll-to-top">

<a href="#" id="scrollToTopBtn">&uarr;</a>

</div>

<script src="script.js"></script>

</body>

</html>

```

Response format:

Snippet with error: …

Location of error: …

WCAG Guideline violated: …

Detection Algorithm: …

Explanation of Error: …

Snippet with error:

```html

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

<label for="1"></label><br>

```

Location of error:

In the `<body>` section, within the form element.

WCAG Guideline violated:

2.4.6 Headings and Labels (Level AA)

Detection Algorithm:

The algorithm checks for proper association between input elements and their labels using the `for` attribute in `<label>` tags. It also verifies that the text content inside `<label>` tags associated with form controls is meaningful and descriptive.

Explanation of Error:

The radio button labeled "1" lacks a visible label text. The `<label>` tag associated with this radio button is empty (`<label for="1"></label>`), which means users navigating through the page with assistive technologies like screen readers won't understand what this option represents. This violates WCAG 2.4.6 because it makes the form less accessible to people who rely on screen readers or other assistive technologies.

To fix this issue, add descriptive text inside the `<label>` tag that matches the `id` of the radio button:

```html

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

<label for="1">One</label><br>

```

Citations:

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

Based on the provided code and the WCAG 2.2 AA guidelines, here are additional issues identified:

### Issue 1: Missing Alt Text for Icons

\*\*Snippet with error:\*\*

```html

<a href="https://www.facebook.com/" class="icon-link"><i class="fa fa-facebook-f"></i></a>

<a href="https://www.twitter.com/" class="icon-link"><i class="fa fa-twitter"></i></a>

<a href="https://www.instagram.com/" class="icon-link"><i class="fa fa-instagram"></i></a>

```

\*\*Location of error:\*\* Within the `<footer>` section, under the social media links.

\*\*WCAG Guideline violated:\*\* 1.1.1 Non-text Content (Level A)

\*\*Detection Algorithm:\*\* Checks for the presence of alternative text (`alt` attribute) for non-text content, including images and icons.

\*\*Explanation of Error:\*\* The social media icons lack alternative text descriptions, making it difficult for screen reader users to understand what each icon represents. This violates WCAG 1.1.1 because it fails to provide text alternatives for non-text content.

\*\*Solution:\*\*

Add descriptive `alt` attributes to each icon:

```html

<a href="https://www.facebook.com/" class="icon-link"><i class="fa fa-facebook-f" aria-label="Facebook"></i></a>

<a href="https://www.twitter.com/" class="icon-link"><i class="fa fa-twitter" aria-label="Twitter"></i></a>

<a href="https://www.instagram.com/" class="icon-link"><i class="fa fa-instagram" aria-label="Instagram"></i></a>

```

### Issue 2: Empty Label for File Input

\*\*Snippet with error:\*\*

```html

<label for="myfile"></label>

<input type="file" id="myfile" name="myfile">

```

\*\*Location of error:\*\* Within the `<form>` section, near the file upload input.

\*\*WCAG Guideline violated:\*\* 2.4.6 Headings and Labels (Level AA)

\*\*Detection Algorithm:\*\* Looks for properly associated labels with form inputs, ensuring that the text content of `<label>` elements is meaningful and descriptive.

\*\*Explanation of Error:\*\* The file input lacks a descriptive label, making it unclear to users what action the input field is intended for. This violates WCAG 2.4.6 because it does not provide a clear description of the purpose of the file input field.

\*\*Solution:\*\*

Add a descriptive label for the file input:

```html

<label for="myfile">Upload Your File</label>

<input type="file" id="myfile" name="myfile">

```

These corrections address the identified accessibility issues based on the WCAG 2.2 AA guidelines, enhancing the overall accessibility of the webpage.

Citations:

[1] https://adabook.medium.com/wcag-2-2-aa-guide-checklist-for-2021-web-accessibility-66c6fdaea034

[2] https://www.levelaccess.com/blog/wcag-2-2-aa-summary-and-checklist-for-website-owners/

[3] https://www.wuhcag.com/wcag-checklist/

[4] https://www.w3.org/TR/WCAG22/

[5] https://www.digitala11y.com/wcag-checklist/

[6] https://webaim.org/standards/wcag/checklist

[7] https://wcag.com/blog/wcag-2-2-aa-summary-and-checklist-for-website-owners/

[8] https://adasitecompliance.com/wcag-2-2-checklist/

[9] https://www.boia.org/wcag-2.2aa-checklist

[10] https://media.dequeuniversity.com/en/docs/web-accessibility-checklist-wcag-2.2.pdf

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

Given the additional insights from WCAG 2.2 AA, let's analyze the provided HTML code again to identify further potential accessibility issues:

### Issue 3: Redundant Entry

\*\*Snippet with error:\*\*

```html

<form>

<label for="username">Username:</label><br>

<input type="text" id="username" name="username"><br>

...

</form>

```

\*\*Location of error:\*\* Within the `<form>` section, at the username input field.

\*\*WCAG Guideline violated:\*\* Redundant Entry

\*\*Detection Algorithm:\*\* Identifies forms that require users to enter the same information multiple times unnecessarily.

\*\*Explanation of Error:\*\* The form requires users to enter their username, but there's no mechanism in place to remember or auto-populate this information for subsequent visits or actions within the same session. This could lead to frustration for users who have to repeatedly enter the same information.

\*\*Solution:\*\* Implement functionality to remember or auto-populate previously entered information, reducing redundancy. This could involve cookies or local storage solutions to save user input for later retrieval.

### Issue 4: Dragging Movements

\*\*Snippet with error:\*\* None found in the provided code.

\*\*WCAG Guideline violated:\*\* Dragging Movements

\*\*Detection Algorithm:\*\* Looks for interactive elements that require precise dragging movements, ensuring there's an alternative interaction method available for users who might struggle with precision dragging.

\*\*Explanation of Error:\*\* The provided code does not contain elements that typically require precise dragging movements, such as draggable items or resizable components. Therefore, no direct violation of this guideline is observed in the given snippet.

### Issue 5: Accessible Authentication

\*\*Snippet with error:\*\* None found in the provided code.

\*\*WCAG Guideline violated:\*\* Accessible Authentication

\*\*Detection Algorithm:\*\* Searches for login or authentication processes that might impose unnecessary cognitive burdens on users, such as complex puzzles or reliance on memorizing passwords.

\*\*Explanation of Error:\*\* The provided code does not include a login or authentication process, so there's no direct observation of this guideline being violated.

### Issue 6: Minimum Target Size

\*\*Snippet with error:\*\* None found in the provided code.

\*\*WCAG Guideline violated:\*\* Minimum Target Size

\*\*Detection Algorithm:\*\* Identifies clickable elements (links, buttons) to ensure they have sufficient size and contrast to be easily activated by users with motor control difficulties.

\*\*Explanation of Error:\*\* All clickable elements in the provided code appear to be sufficiently large and distinguishable against their backgrounds, adhering to the guideline.

### Issue 7: Focus Not Obscured

\*\*Snippet with error:\*\* None found in the provided code.

\*\*WCAG Guideline violated:\*\* Focus Not Obscured

\*\*Detection Algorithm:\*\* Checks for elements that might obscure the focus indicator, such as overlapping menus or modals, ensuring that focused elements remain clearly visible and accessible.

\*\*Explanation of Error:\*\* The provided code does not exhibit elements that would obscure the focus indicator, such as sticky headers or footers, thus avoiding this potential violation.

### Issue 8: Consistent Help

\*\*Snippet with error:\*\* None found in the provided code.

\*\*WCAG Guideline violated:\*\* Consistent Help

\*\*Detection Algorithm:\*\* Looks for help mechanisms (e.g., FAQs, contact details) across different pages of a website to ensure they are consistently located and accessible.

\*\*Explanation of Error:\*\* The provided code snippet does not include help mechanisms or contact details, so there's no direct observation of this guideline being violated.

In summary, the provided HTML code does not exhibit violations of the newly introduced WCAG 2.2 AA guidelines beyond the initially identified issues regarding redundant entry and missing alt text for icons. However, it's crucial to review the entire website, including dynamic content and interactions not covered in the static code snippet, to ensure full compliance with WCAG 2.2 AA standards.

Citations:

[1] https://www.w3.org/TR/WCAG22/

[2] https://www.accessibility.works/blog/wcag-2-2-guide/

[3] https://www.w3.org/WAI/standards-guidelines/wcag/new-in-22/

[4] https://abilitynet.org.uk/news-blogs/wcag-22-what-you-need-know

[5] https://devblogs.microsoft.com/engineering-at-microsoft/accessibility-insights-now-supports-wcag-2-2-aa/

[6] https://www.audioeye.com/compliance/wcag/

[7] https://tetralogical.com/blog/2023/10/05/whats-new-wcag-2.2/

[8] https://www.deque.com/blog/wcag-2-2-is-at-the-proposed-recommendation-stage/

[9] https://adasitecompliance.com/wcag-2-2-decoding-latest-web-accessibility-guidelines/

[10] https://www.boia.org/blog/wcag-2.2-is-here