Question: What is web accessibility (a11y) and how do you implement it in your projects?

Answer:

Web accessibility (a11y) refers to designing and developing websites that can be used by everyone, including people with disabilities. It ensures equal access to information and functionality for all users.

Key Implementation Techniques:

1. Semantic HTML: Using appropriate elements that convey meaning

```
<!-- Poor accessibility -->
<div class="button" onclick="submit()">Send</div>
<!-- Good accessibility -->
<button type="submit">Send</button>
```

2. ARIA attributes: When HTML semantics aren't enough

```
<div role="alert" aria-live="assertive">
  Form submitted successfully!
</div>
```

3. Keyboard Navigation: Ensuring all features can be accessed with a keyboard

```
// Ensure custom components handle key events
document.querySelector('.custom-dropdown').addEventListener('keydown', (e)
=> {
   if (e.key === 'Enter' || e.key === ' ') {
      // Toggle dropdown
      toggleDropdown();
      e.preventDefault();
   }
});
```

- 4. Focus Management: Maintaining a logical tab order and visible focus states
- **5. Color Contrast**: Meeting WCAG contrast requirements (at least 4.5:1 for normal text)
- 6. Alternative Text: Adding descriptive alt text to images

<img src="chart.png" alt="Bar chart showing sales increasing 25% in Q2</pre>

7. Testing with Assistive Technologies: Screen readers, keyboard-only navigation

By integrating these practices from the start of a project, you create more inclusive experiences that benefit all users, not just those with disabilities.

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Sumedh Patil