**W09 Prepare – Q/A AI**

**CSS Flexbox**

Q1. What are the benefits of using CSS Flexbox?

A1. Flexbox offers responsive layouts, easy alignment of elements, and overall flexibility in arranging webpage content.

Q2. How does Flexbox compare to CSS Grid?

A2. Flexbox excels in one-dimensional layouts (rows or columns) and is content-driven, adjusting to item sizes. Grid offers two-dimensional layouts with precise control and is layout-driven.

Q3. What's a bad example of using Flexbox for text and image alignment?

A3. Missing alignment properties in Flexbox can lead to inconsistent text positioning next to an image.

Q4. Can Flexbox properties override each other?

A4. Yes, order of declaration, shorthand properties, and specific properties like align-self can cause overrides.

Q5. How can I use Flexbox to create a two-line grid of equally spaced images?

A5. Use Flexbox with flex-wrap: wrap; and justify-content: space-between; to distribute images evenly on multiple lines within a container.

**Lighthouse**

Q1. What is lighthouse?

A1. Lighthouse is a free, open-source auditing tool developed by Google specifically for webpages. It analyzes various aspects of a webpage to identify areas for improvement in terms of performance, accessibility, SEO, best practices, and PWA.

Q2. What are some ways to improve Lighthouse performance scores?

A2. Reduce image sizes, minimize render-blocking resources, leverage browser caching, and optimize JavaScript execution time.

Q3. How does Lighthouse assess accessibility?

A3. Lighthouse checks for alt text on images, proper keyboard navigation, and sufficient color contrast.

Q4. How does Lighthouse evaluate adherence to best practices?

A4. It looks for minified CSS and Javascript, efficient cache policies for static assets, and overall reduction in network payloads.

Q5. Does Lighthouse directly check if a website is cached?

A5. No, Lighthouse analyzes server headers to see if the server sends proper cache instructions (e.g., Cache-Control) for the browser to handle caching effectively.

**Social Media Meta**

Q1. Why are social media tags important in HTML?

A1. Social media tags give you control over how your content appears when shared (title, description, image), leading to better click-through rates and brand consistency.

Q2. What social media tags can I use for a stir-fry recipe blog?

A2. Use Open Graph tags (og:title, og:description, og:image) and relevant hashtags to create informative and visually appealing previews for your blog posts.

Q3. What's wrong with this Facebook post using HTML tags?

A3. It lacks Open Graph tags, uses generic descriptions, and doesn't include an image URL, making the post uninformative on Facebook.

Q4. What are common social media meta tags for videos?

A4. Use Open Graph (og:type, og:title, og:description, og:url, **crucially** og:video) and Twitter Card tags (twitter:card, twitter:title, twitter:description, optionally twitter:player with dimensions) for video previews.

Q5. Can you summarize the key points about social media meta tags?

A5. Social media meta tags (Open Graph, Twitter Cards) provide control over how your content is presented on social media platforms, allowing for informative and visually appealing previews that can increase engagement and clicks. Remember to check platform-specific guidelines for optimal results.