PROMINEO TECH

Career Services Assignment 9 – API Flash Cards

Instructions: Research common interview questions online revolving around HTML, CSS, and AJAX and create 20 flash cards from the information you find. Study your flash cards regularly to better prepare for interviews. Fill out the table below with the information you put on each of your flash cards.

Front of Card	Back of Card
What is HTML?	HTML is a markup language used for creating and structuring web pages and applications. It consists of tags and attributes that define the structure and content of a web page. It is the backbone of the web and is used with other technologies like CSS and JavaScript to create interactive and engaging web experiences.
What is a Tag in HTML?	In HTML, a tag is a code snippet used to define an element within a web page, enclosed in angle brackets. They usually come in pairs, with an opening tag and a closing tag, that surround the content to be displayed. Tags are used to define the structure and content of a web page.
Can you define HTML attributes?	In HTML, attributes provide additional information about an element, such as its properties or behavior. Attributes are included within an opening tag and consist of a name and a value separated by an equal sign. For example, the "src" attribute in an "img" tag specifies the URL of the image to be displayed. Attributes are an important part of HTML and are used to enhance the functionality and appearance of web pages.
What is the key difference between HTML Elements and Tags?	HTML elements and tags are related but not the same. An HTML element refers to a complete set of opening and closing tags, including any content between them. An HTML tag, on the other hand, refers to the opening or closing tag that identifies the

	element and is enclosed in angle brackets. In short, an HTML tag is a snippet of code that defines an element, while an HTML element is the complete structure that includes the opening and closing tags and any content between them.
If you want to display some HTML data in a table in tabular format, which HTML tags will you use?	To display HTML data in a table, use the <table> tag to define the table, the <tr> tag to define table rows, and the <th> and <td> tags to define table header and data cells, respectively. Additional tags like <thead>, <tbody>, and <tfoot> can be used to structure the table and add header and footer sections.
Define HTML Layout.	HTML layout refers to the structure and organization of elements within a web page. It involves using HTML tags to define different sections of a web page, such as headers, footers, navigation bars, and content areas. HTML layout is important for creating visually appealing and easy-to-navigate web pages that provide a good user experience.
What is Semantic HTML?	Semantic HTML is the practice of using HTML tags that have meaning beyond their visual representation. It improves accessibility, SEO, and the overall structure and clarity of a web page's code. By using descriptive and meaningful tags, semantic HTML helps web developers and browsers to better understand the purpose and content of a web page.
What is CSS?	CSS is a style sheet language used to control the visual appearance of HTML or XML documents. It allows web developers to apply rules to HTML elements, including layout, colors, fonts, and other design elements. CSS is essential for creating modern and visually appealing websites.
What are the advantages of CSS?	CSS provides several advantages for web developers, including:

Career Services Assignment 9 – API Flash Cards

	1. Separation of presentation and content, which makes it easier to maintain and update the appearance of a website without modifying the underlying HTML code. 2. Greater control and flexibility over the visual appearance of a website, allowing for more complex and sophisticated designs. 3. Improved web page loading times and performance, as CSS files can be cached and reused across multiple pages, reducing the need for repetitive HTML code.
What are the benefits of CSS sprites?	CSS sprites offer several benefits for web developers, including: 1. Reduced HTTP requests, as multiple images can be combined into a single sprite, reducing the number of requests needed to load a web page. 2. Faster web page loading times and improved performance, as the combined image file can be cached and reused across multiple pages. 3. Improved user experience, as the web page can be loaded more quickly and with fewer visual artifacts, resulting in a smoother and more seamless experience for users.
What is the use of ruleset?	In CSS, a ruleset is a set of instructions that define how an HTML element should be styled. It consists of a selector and one or more declarations, which specify the style properties and values to be applied to the element. Rulesets allow web developers to control the visual appearance of a web page and create a consistent design across multiple pages.

Career Services Assignment 9 – API Flash Cards

What is the difference between class selectors and id selectors?	In CSS, class selectors and id selectors are both used to target specific HTML elements for styling, but they have some key differences: 1. Class selectors can be used to target multiple elements that share a common class name, while id selectors are used to target a single element with a unique ID attribute. 2. Class names can be reused on multiple elements, while ID attributes should be unique to a single element. 3. Class selectors are defined using a period (.), while id selectors are defined using a pound sign (#). In summary, class selectors are more flexible and can be applied to multiple elements, while id selectors are more specific and should only be used for unique elements.
Explain universal selector.	In CSS, the universal selector is represented by an asterisk (*) and matches any HTML element. It can be used to apply styles to all elements on a web page or to reset the default styles of HTML elements. The universal selector is a powerful tool but should be used with caution, as it can potentially slow down the performance of a web page if overused.
What is the float property of CSS?	The float property in CSS is used to control the position of an HTML element within its parent container. It allows the element to be moved to the left or right and allows other elements to wrap around it. The float property is often used in conjunction with other layout techniques to create complex and responsive web page designs.
What is the purpose of the z-index and how is it used?	The z-index property is used in CSS to control the stacking order of positioned elements on a web page. It specifies which elements should appear in front of or behind

Career Services Assignment 9 – API Flash Cards

	other elements when they overlap. The z-index value can be a positive or negative integer, with higher values appearing on top of lower values. It is commonly used in situations where elements have been positioned using CSS's position property to rearrange the default stacking order and achieve a more visually appealing layout
What is AJAX?	AJAX is a technique used in web development to create asynchronous web applications that allow the web page to update content without requiring a page reload. It uses a combination of technologies including HTML, CSS, JavaScript, and XML/JSON to send and receive data asynchronously between the client-side and server-side of an application, providing a more seamless and interactive user experience. AJAX is commonly used to implement dynamic user interfaces and to load data in real-time without having to refresh the entire page.
What are the disadvantages of AJAX?	1. It can make debugging and error handling more difficult due to the asynchronous nature of the requests. 2. It can cause issues with browser history and bookmarks, as it doesn't update the URL when content changes dynamically. 3. It may not be accessible to users who have JavaScript disabled or who are using assistive technologies such as screen readers.
What is the difference between synchronous and asynchronous requests?	Synchronous requests are blocking, meaning that the code execution is halted until the request is completed, which can cause the page to freeze or become unresponsive. Asynchronous requests, on the other hand, allow the code to continue executing while the request is being processed, which provides

Career Services Assignment 9 – API Flash Cards

	a more seamless user experience. Asynchronous requests are often used in AJAX applications to avoid page reloads and provide dynamic content updates.
What are the properties of XMLHttpRequest?	The XMLHttpRequest (XHR) object is a key component in making AJAX requests in JavaScript. Some of its properties include the ability to send HTTP requests to a server, track the progress of those requests, and receive and manipulate the response data. It also allows for the use of callbacks and event listeners to handle the response data asynchronously.
What is JSON in AJAX?	In AJAX, JSON (JavaScript Object Notation) is a lightweight data format used for exchanging data between the client and server. It is based on JavaScript syntax and can be easily parsed and generated by JavaScript code. JSON has become a popular alternative to XML for AJAX applications due to its simplicity, smaller size, and faster parsing speeds.