Short Syntax and Answers

- Q: How to explain yourself during an interview?
- A: Describe your background, skills, experiences, and why you are suitable for the job. Highlight key achievements and how they relate to the position.
- Q: What is HTML?
- A: HTML (HyperText Markup Language) is the standard language for creating web pages and web applications.
- Q: What is DOCTYPE?
- A: DOCTYPE is an instruction to the web browser about the version of HTML the page is written in.
- Q: HTML 4 and HTML5 differences?
- A: HTML5 includes new elements (e.g., <article>, <section>), audio and video support, and improved form controls compared to HTML4.
- Q: div and span difference?
- A: <div> is a block-level element, while is an inline element.
- Q: Semantic tags in HTML5?
- A: Examples include <article>, <section>, <nav>, <header>, and <footer>.
- Q: Form elements tags in HTML5?
- A: New form elements include <datalist>, <output>, <progress>, <meter>, <keygen>, and <input type='date>.
- Q: meta tag in HTML5?
- A: Provides metadata about the HTML document, such as charset, viewport settings, and keywords.
- Q: title tag in HTML?
- A: Defines the title of the document, shown in the browser's title bar or tab.
- Q: Head and body content?
- A: The <head> contains metadata, links to stylesheets, and scripts; the <body> contains the actual content of the webpage.
- Q: Favicon?
- A: A small icon displayed in the browser tab, usually linked in the <head> with <link rel='icon'>.

Q: Structured HTML? A: Organized and well-nested HTML that improves readability and maintainability. Q: alt attribute in image? A: Provides alternative text for an image if it cannot be displayed. Q: h1 to h6 font sizes? A: Font sizes typically decrease from <h1> (largest) to <h6> (smallest), with default sizes being browser-dependent. Q: What is CSS? A: CSS (Cascading Style Sheets) is a style sheet language used to describe the presentation of HTML documents. Q: Difference between HTML & CSS? A: HTML structures content, while CSS styles it. Q: CSS properties: absolute, relative, fixed? A: Absolute: positioned relative to the nearest positioned ancestor. Relative: positioned relative to its normal position. Fixed: positioned relative to the viewport. Q: display: inline-block, display: block? A: Inline-block: elements are inline but respect width and height. Block: elements take up the full width available. Q: Overlay in CSS? A: A layer that sits on top of another element, often created using position: absolute or position: fixed with appropriate z-index. Q: !important in CSS? A: Overrides other styles regardless of specificity. Q: Internal CSS and external CSS? A: Internal CSS is within a <style> tag in the HTML file; external CSS is in a separate .css file linked with key. Q: Bootstrap and its version? A: Bootstrap is a front-end framework for developing responsive websites. The latest version as of now is Bootstrap 5. Q: Grid in Bootstrap?

A: A system for creating layouts using rows and columns, responsive across different screen sizes.

Q: What is JS? A: JavaScript (JS) is a programming language used to create interactive effects within web browsers. Q: What is DOM? A: The Document Object Model (DOM) is a programming interface for web documents, representing the structure as a tree of objects. Q: Virtual DOM? A: A lightweight copy of the DOM used to optimize updates and improve performance in frameworks like React. Q: Browser Object Model? A: Represents browser window components and allows interaction with the browser (e.g., window, navigator). Q: HTML element to JS access? A: Use methods like getElementById, querySelector, or getElementsByClassName. Q: Event in JS? A: An action or occurrence detected by JavaScript, such as clicks or key presses, that can trigger a response. Q: Array in JS? A: A collection of elements stored in a single variable, accessible by index. Q: Object in JS? A: A collection of key-value pairs, where keys are strings and values can be any data type. Q: Map in JS? A: A collection of key-value pairs, where keys can be any data type and values are mapped to these keys. Q: Loop in JS? A: Structures for repeated execution of code, such as for, while, and do...while loops. Q: for, for...in, forEach in JS? A: for loops iterate over indices, for...in loops over object properties, forEach iterates over array elements. Q: Promise in JS?

A: An object representing the eventual completion (or failure) of an asynchronous operation and its resulting value.

Q: Blocking and unblocking in JS?

A: Blocking operations stop further execution until complete; non-blocking (asynchronous) operations allow other tasks to run concurrently.

Q: Async & Await in JS?

A: Keywords for handling asynchronous operations more easily, allowing asynchronous code to be written like synchronous code.

Q: What is TypeScript?

A: A superset of JavaScript that adds static types and other features to enhance development.

Q: let, var & const in JS?

A: let and const are block-scoped, while var is function-scoped. const defines constants.

Q: Callback function in JS?

A: A function passed as an argument to another function, to be executed after the first function completes.

Q: Palindrome string in JS?

A: A string that reads the same forwards and backwards. Check using string reversal and comparison.

A: Reverse a string by splitting it into an array, reversing the array, and joining it back into a string.

A: Use the split method with a period (or other sentence-ending punctuation) as the delimiter.

A: Split the paragraph into words, then use a frequency count to find the word with the maximum occurrences.

A: Find the maximum value in an array using Math.max with the spread operator.

A: Combine using the concat method or the spread operator.

Q: String reverse in JS?

Q: Array max in JS?

Q: Combine two arrays in JS?

Q: Split paragraph into sentences in JS?

Q: Maximum word in paragraph in JS?