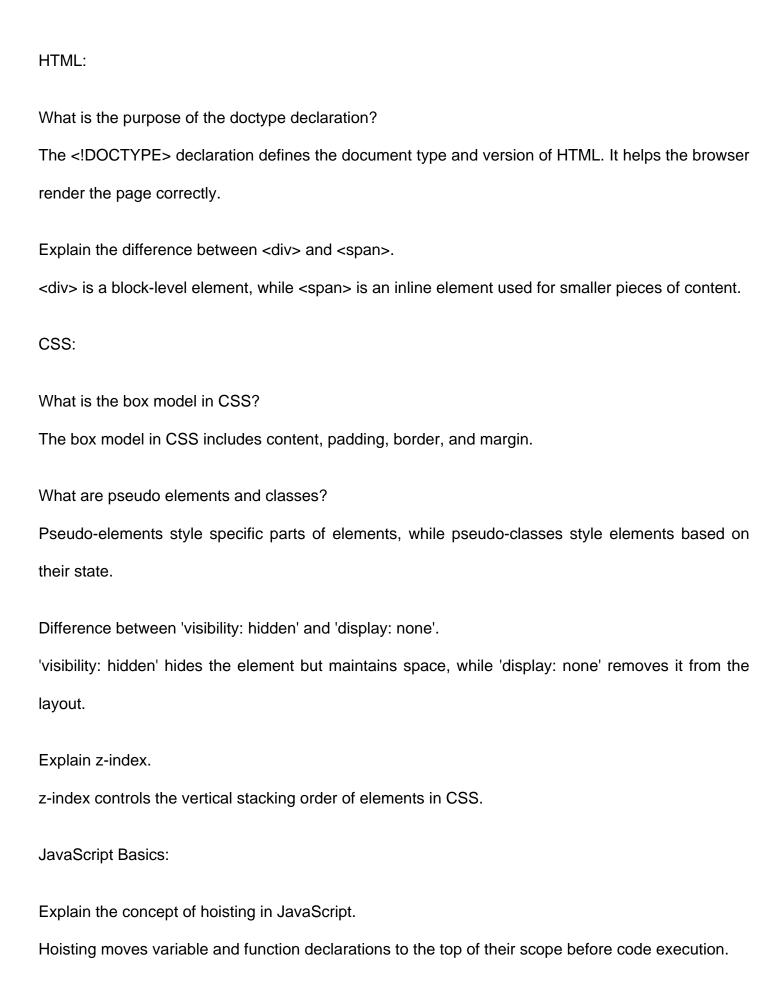
Top Frontend Interview Questions & Answers



What is the difference between let, const, and var?
let and const are block-scoped, while var is function-scoped.
Difference between == and ===?
== compares values with type conversion, while === compares both value and type.
Explain Event loop.
The event loop allows JavaScript to handle asynchronous operations like callbacks and promises.
JavaScript Functions:
What is a closure in JavaScript?
A closure is a function that has access to its outer scope, even after the outer function has returned.
Explain the differences between arrow functions and regular functions.
Arrow functions have lexical scoping for this and cannot be used as constructors.
Explain currying.
Currying transforms a function into a series of functions that each take one argument.
Explain Promises.
Promises represent asynchronous operations, allowing chaining with .then() and .catch().
Responsive Design:
What is the importance of media queries in responsive design?
Media queries allow you to apply styles based on screen size, improving responsiveness.
Describe the difference between em and rem units in CSS.
em is relative to the parent element?s font size, while rem is relative to the root element?s font size.

What is the flexbox model, and how does it work? Flexbox is a layout system that organizes items along one axis, allowing flexible item sizing. Explain the purpose of justify-content and align-items in flexbox. justify-content aligns items along the main axis, while align-items aligns them along the cross axis. CSS Grid: How does CSS Grid differ from Flexbox? CSS Grid is two-dimensional, handling both rows and columns, while Flexbox is one-dimensional. Explain the use of the grid-template-columns property. grid-template-columns defines the number and width of columns in a grid. React Basics: What is JSX in React? JSX is a syntax extension that allows writing HTML-like structures in JavaScript. Explain the purpose of state in React components. State holds dynamic data that changes over time and re-renders the component when updated. How to pass data from Parent to Child component and vice-versa? Parent to child via props, child to parent via callback functions. Explain the virtual Dom concept. The virtual DOM is a lightweight copy of the actual DOM that allows efficient updates. React Components:

Functional components are stateless, while class components can hold state and have lifecycle

Differentiate between functional and class components in React.

Describe the lifecycle methods in a React class component.
Common methods include componentDidMount, componentDidUpdate, and
componentWillUnmount.
How can we achieve lifecycle methods in functional component?
Use the useEffect hook in functional components.
Difference between controlled and uncontrolled components.
Controlled components have their input values controlled by React state, while uncontrolled
components rely on DOM.
What are pure components?
Pure components only re-render when their props or state change, improving performance.
React Hooks:
Explain the use of the useState hook in React.
useState allows functional components to manage state and trigger re-renders.
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What is the useEffect hook, and why is it used?
useEffect handles side effects like data fetching in functional components.
What is the difference between useCallback and useMemo book?
What is the difference between useCallback and useMemo hook?
useCallback memoizes functions, while useMemo memoizes values or computations.
Explain useContext hook.
useContext allows components to access context values without prop drilling.
Redux:

methods.

What problem does Redux solve in a React application?

Redux manages state across a large application, allowing state to be accessed globally.

Explain the roles of actions, reducers, and the store in Redux.

Actions describe changes, reducers update the state, and the store holds the application?s state.

Explain useReducer.

useReducer is a React hook that manages state using a reducer function, similar to Redux?s reducers.