**What is doctype? Why do you need it?**

The doctype is an instruction to the browser to inform about the version of the html document and how browser should render it.

| <!DOCTYPE html> |
| --- |

**How can you highlight text in html?**

We can use the mark HTML element.

| <p>Some part of this paragraph is <mark>highlighted</mark> by using mark element.</p> |
| --- |

**What is the difference between span and div?**

The div is a block element and span is an inline element.

**What is semantic HTML?**

Semantic HTML, or "semantically-correct HTML", is HTML where the tags used to structure content are selected and applied appropriately to the meaning of the content.

**What are the properties related to the box model?**

Everything in a web page is a box where you can control size, position, background, etc. Each box/ content area is optionally surrounded by padding, border and margin. When you set height and width of an element, you set content height and width.

**What are the differences between visibility hidden and display none?**

display: none removes the element from the normal layout flow and allows other elements to fill in. visibility: hidden tag is rendered, it takes space in the normal flow but doesn't show it.

**Do css properties are case sensitive?**

No

**Does margin-top or margin-bottom have an effect on inline elements?**

No

**Does overflow: hidden create a new block formatting context?**

Yes

**How could you apply css rules specific to a media?**

@media (max-width: 700px){...} means you want to apply rules to those media whose max-width is 700 px. this means every smaller device will have this rule.

@media (max-width: 700px) and (orientation: landscape){...} will apply rules for media smaller than 700px and in landscape orientation.

**How do you align a p center-center inside a div?**

text-align: centerwill do the horizontal alignment but vertical-align: middle will not work here. there are couple of different ways to solve this problem and one of them are positioning. You make the parent as relative position and child as absolute positioning.

**What are the differences between null and undefined?**

undefined means, value of the variable is not defined. null means empty or non-existent value which is used by programmers to indicate “no value”.

**What are the differences between == and ===?**

The simplest way of saying that, == will not check types and === will check whether both sides are of same type. So, == is tolerant. But under the hood it converts to its convenient type to have both in same type and then do the comparison.

### **What is Hoisting**

Hoisting is a JavaScript mechanism where variables and function declarations are moved to the top of their scope before code execution.

### **What is the purpose of the array splice method**

The splice() method is used either adds/removes items to/from an array, and then returns the removed item.

### **What is a promise**

A promise is an object that may produce a single value some time in the future with either a resolved value or a reason that it’s not resolved(for example, network error). It will be in one of the 3 possible states: fulfilled, rejected, or pending.

### **What is scope in javascript**

Scope is the accessibility of variables, functions, and objects in some particular part of your code during runtime. In other words, scope determines the visibility of variables and other resources in areas of your code.

### **What is a strict mode in javascript**

Strict Mode is a new feature in ECMAScript 5 that allows you to place a program, or a function, in a “strict” operating context. This way it prevents certain actions from being taken and throws more exceptions. The literal expression "use strict"; instructs the browser to use the javascript code in the Strict mode.

### **What is a Cookie**

A cookie is a piece of data that is stored on your computer to be accessed by your browser. Cookies are saved as key/value pairs.

### **What is event bubbling**

Event bubbling is a type of event propagation where the event first triggers on the innermost target element, and then successively triggers on the ancestors (parents) of the target element in the same nesting hierarchy till it reaches the outermost DOM element.

### **What is event capturing**

Event capturing is a type of event propagation where the event is first captured by the outermost element, and then successively triggers on the descendants (children) of the target element in the same nesting hierarchy till it reaches the innermost DOM element.

### **What are events**

Events are "things" that happen to HTML elements. When JavaScript is used in HTML pages, JavaScript can react on these events. Some of the examples of HTML events are,

1. Web page has finished loading
2. Input field was changed
3. Button was clicked

### **What is JSON**

JSON (JavaScript Object Notation) is a lightweight format that is used for data interchanging. It is based on a subset of JavaScript language in the way objects are built in JavaScript.

### **What are the major features of React?**

The major features of React are:

* It uses VirtualDOM instead of RealDOM considering that RealDOM manipulations are expensive.
* Supports server-side rendering.
* Follows Unidirectional data flow or data binding.
* Uses reusable/composable UI components to develop the view.

### **What is JSX?**

JSX is a XML-like syntax extension to ECMAScript (the acronym stands for JavaScript XML).

### **What is state in React?**

State of a component is an object that holds some information that may change over the lifetime of the component. We should always try to make our state as simple as possible and minimize the number of stateful components.

### **What are props in React?**

Props are inputs to components. They are single values or objects containing a set of values that are passed to components on creation using a naming convention similar to HTML-tag attributes. They are data passed down from a parent component to a child component.

**What is the difference between state and props?**Both props and state are plain JavaScript objects. While both of them hold information that influences the output of render, they are different in their functionality with respect to component. Props get passed to the component similar to function parameters whereas state is managed within the component similar to variables declared within a function.

**What is Virtual DOM?**The Virtual DOM (VDOM) is an in-memory representation of Real DOM. The representation of a UI is kept in memory and synced with the "real" DOM. It's a step that happens between the render function being called and the displaying of elements on the screen. This entire process is called reconciliation.

## **What is Node.js?**

Node.js is an open-source server side runtime environment built on Chrome's V8 JavaScript engine. It provides an event driven, non-blocking (asynchronous) I/O and cross-platform runtime environment for building highly scalable server-side applications using JavaScript.