

Virtual DOM	Real DOM
It is a <u>?</u> of the original DOM	It is a <u>?</u> representation of HTML elements
It is maintained by <u>?</u> Libraries.	It is maintained by the <u>?</u> after parsing HTML elements
After manipulation it only re-renders <u>?</u> .	After manipulation, it re-render the <u>?</u> .
Updates are lightweight	Updates are heavyweight
Performance is <u>?</u> and UX is optimised	Performance is <u>?</u> and the UX quality is low
Highly efficient as it performs <u>?</u> .	Less efficient due to re-rendering of DOM after <u>?</u> .

Answer:

Virtual DOM

It is a lightweight copy of the original DOM.

It is maintained by React Libraries.

After manipulation, it only re-renders changed elements.

Updates are lightweight.

Performance is fast and UX is optimized.

Highly efficient as it performs updates faster.

Real DOM

It is a tree-like representation of HTML elements.

It is maintained by the browser engine after parsing HTML elements.

After manipulation, it re-renders the entire DOM.

Updates are heavyweight.

Performance is slow and the UX quality is low.

Less efficient due to re-rendering of DOM after every update.

DOM stand for?

DOM stand for Document Object model.

Server side & client side rendering?

Client-Side Rendering (CSR): Browser renders content using JavaScript.

JSX stand for?

JSX stand for Java Script Syntax Extension.

- **Heading (Hello Counter) , Div containing button element**

- Span only update count variable by click the button
- Hello static message dynamic

What is the difference between state and props?

In React, both **state** and **props** are **plain JavaScript objects** and used to manage the data of a component, but they are used in different ways and have different characteristics.

Props	State
<p>props (short for "properties") are passed to a component by its parent component and are <u> ?</u> meaning that they cannot be modified by the own component itself.</p> <p>props acts as an <u> ?</u> for a function. Also, props can be used to <u> ?</u> the behavior of a component and to <u> ?</u> data between components. The components become <u> ?</u> with the usage of props.</p>	<p>The state entity is managed by the component itself and can be <u> ?</u> using the setter(setState() for class components) function. Unlike props, state can be modified by the component and is used to manage the internal state of the component, i.e. state acts as a component's memory. Moreover, changes in the state trigger a re-render of <u> ?</u>. The components <u> ?</u> with the usage of state alone.</p>

Answer:

Props

immutable
input
customize
share
reusable

State

updated
component's memory
the component
do not share data