



DON'T MISS IT

WHAT IS VIRTUAL DOM ?



VIRTUAL DOM

- The Virtual DOM is a lightweight, in-memory representation of the actual DOM (Document Object Model). In React, instead of directly manipulating the browser's DOM to update the UI, changes are first made to the Virtual DOM.
- When changes occur in a React component, such as state or props updates, React constructs a new Virtual DOM tree by comparing it with the previous one. It then calculates the minimal set of changes needed to update the actual DOM.



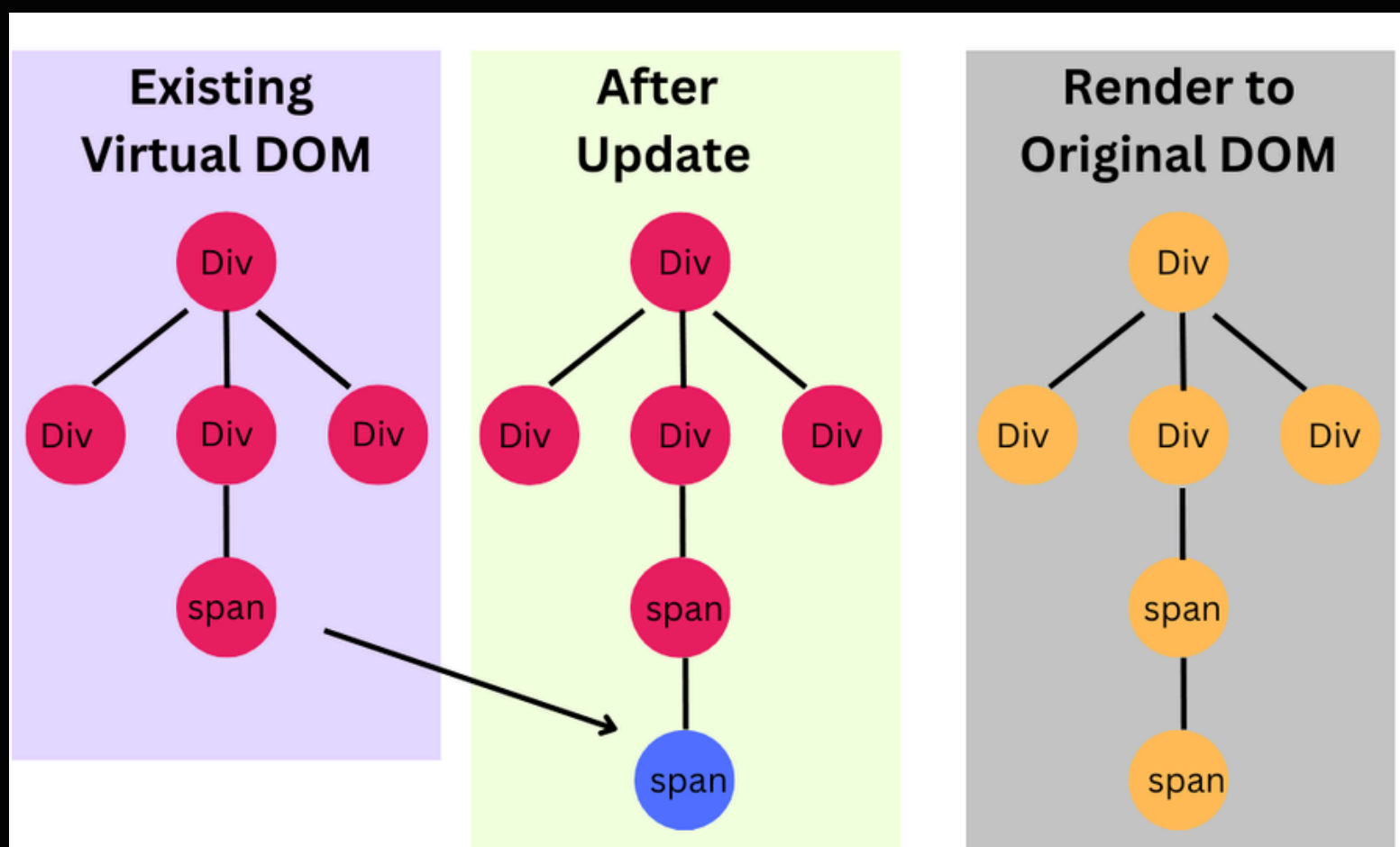
VIRTUAL DOM

- The Virtual DOM allows React to perform efficient updates to the UI by batching and minimizing DOM manipulations. Instead of re-rendering the entire UI, React only updates the parts of the DOM that have changed, resulting in improved performance and responsiveness.
- This minimizes the number of updates needed, resulting in better performance.



RECONCILIATION PROCESS

- React's reconciliation process is responsible for comparing the Virtual DOM with the previous Virtual DOM and determining the optimal way to update the actual DOM.
- This process ensures that the UI remains consistent with the application's state.



BENEFITS OF THE VIRTUAL DOM

1

**HIGH
PERFORMANCE**

2

**CROSS-PLATFORM
COMPATIBILITY**

3

**RICH DEVELOPER
EXPERIENCE**