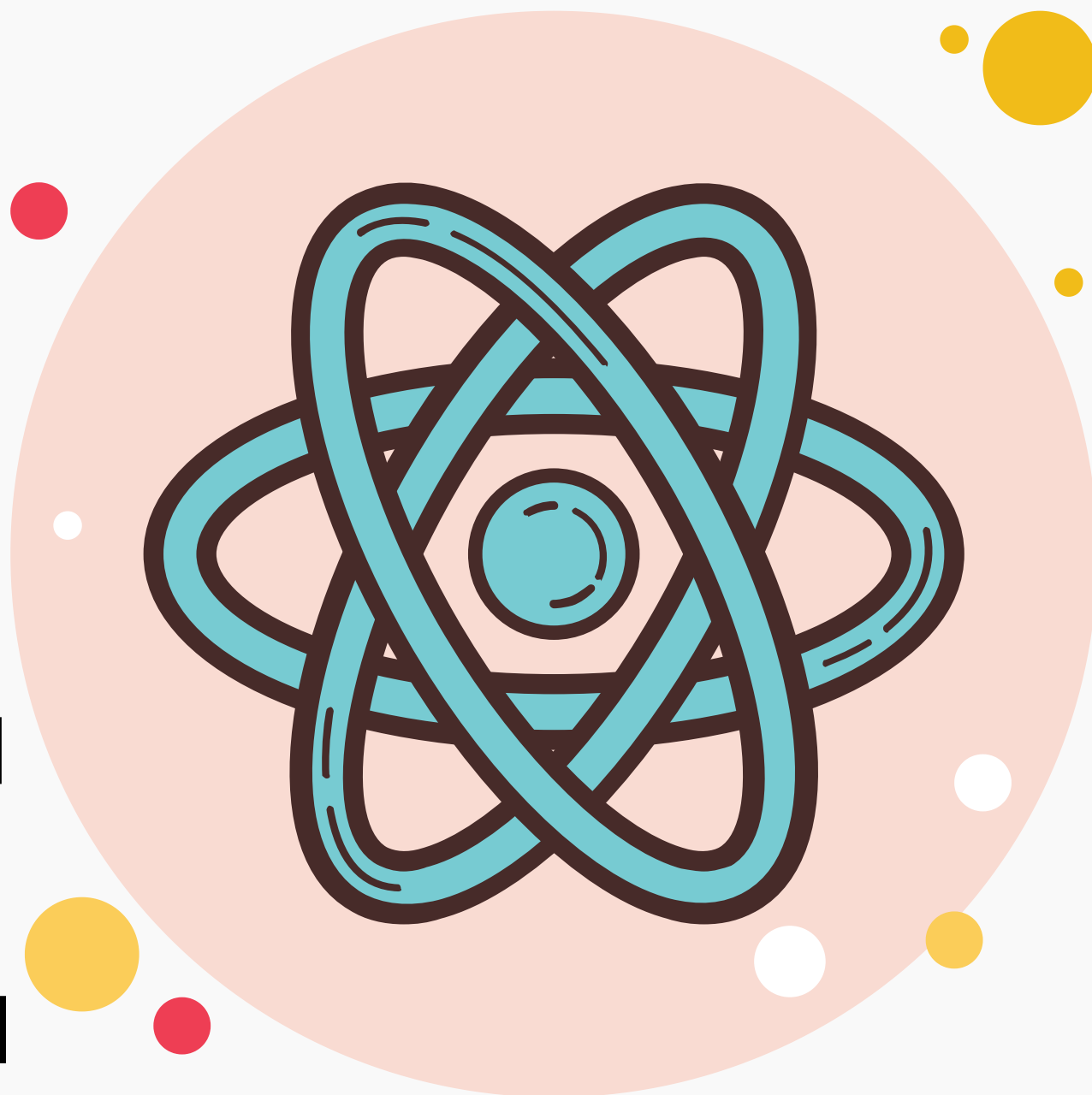


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SOME REACTJS CONCEPTS



REACT VIRTUAL DOM

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WHY?

DOM manipulation is the heart of the modern, interactive web. Unfortunately, it is also a lot slower than most JavaScript operations.

This slowness is made worse by the fact that most JavaScript frameworks update the DOM much more than they have to.

To address this problem, the people at React popularized something called the **virtual DOM.**

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VIRTUAL DOM

That's where the concept of virtual DOM comes in and performs significantly better than the real DOM.

The virtual DOM is only a virtual representation of the DOM.

Every time the state of our application changes, the virtual DOM gets updated instead of the real DOM.

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Isn't the virtual DOM doing the same thing as the real DOM, this sounds like double work? How can this be faster than just updating the real DOM?

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HOW IS VIRTUAL DOM FASTER?

A virtual DOM, which is a tree-shaped representation of the UI, is created by adding elements to it.

Each element is a node on this tree. Every time one of these elements changes, a new virtual DOM tree is created.

In the next step, the virtual DOM tree is compared with the previous virtual DOM tree.

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HOW IS VIRTUAL DOM FASTER?

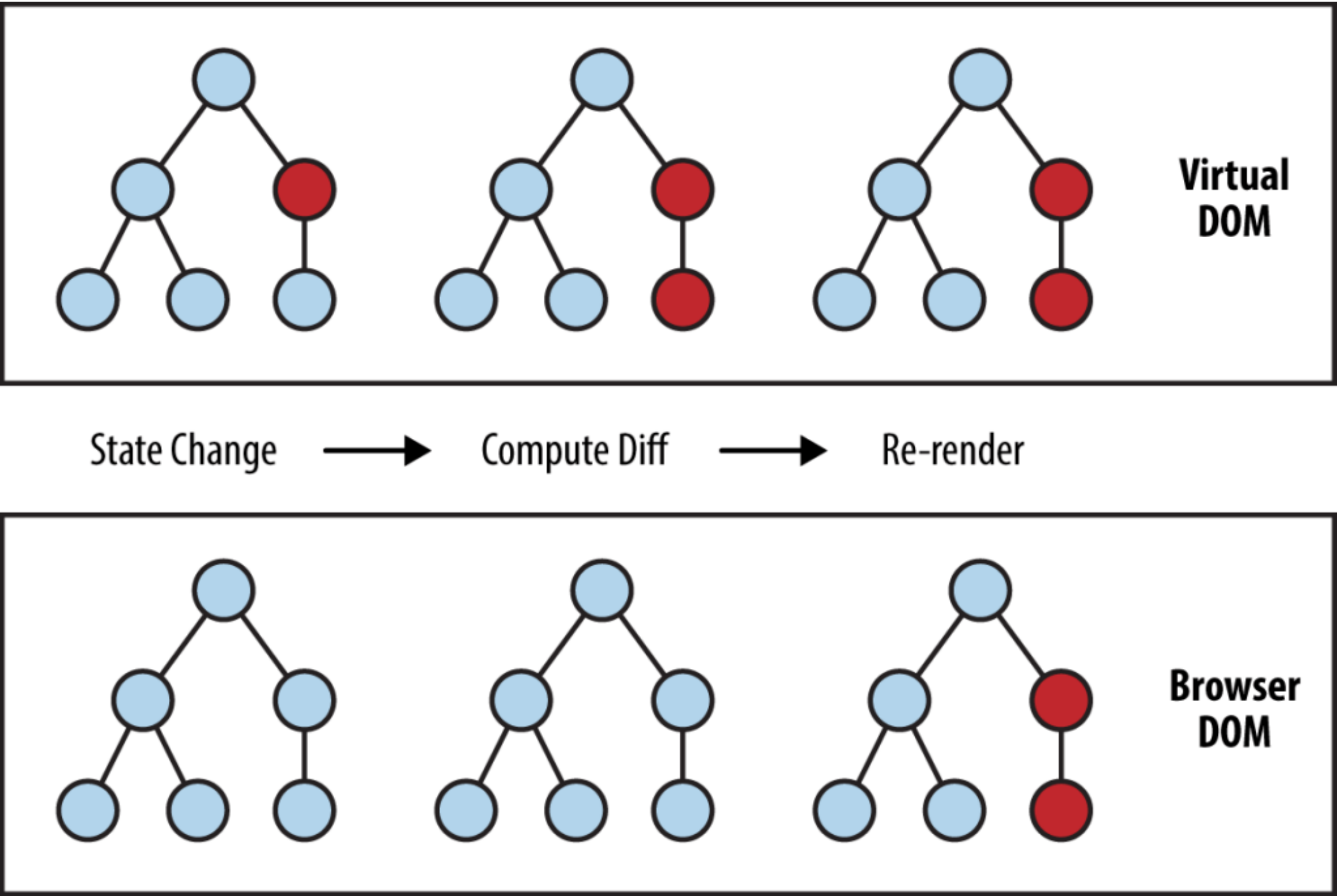
Once this is done, the virtual DOM calculates the best possible method to make these changes to the real DOM.

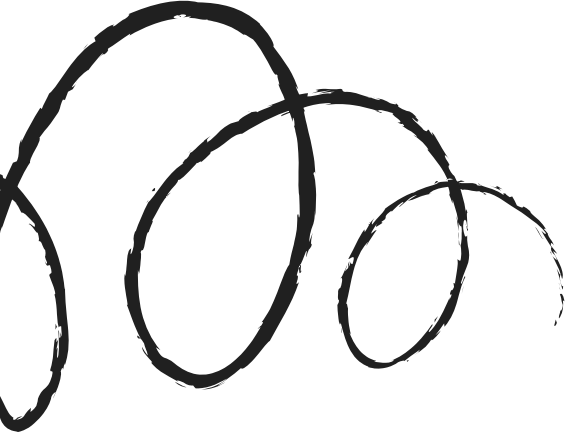
This ensures that there are minimal operations on the real DOM. Hence, reducing the performance cost of updating the real DOM.

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The image below shows the virtual DOM tree and the diffing process.





THANKYOU



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