

# React Virtual DOM

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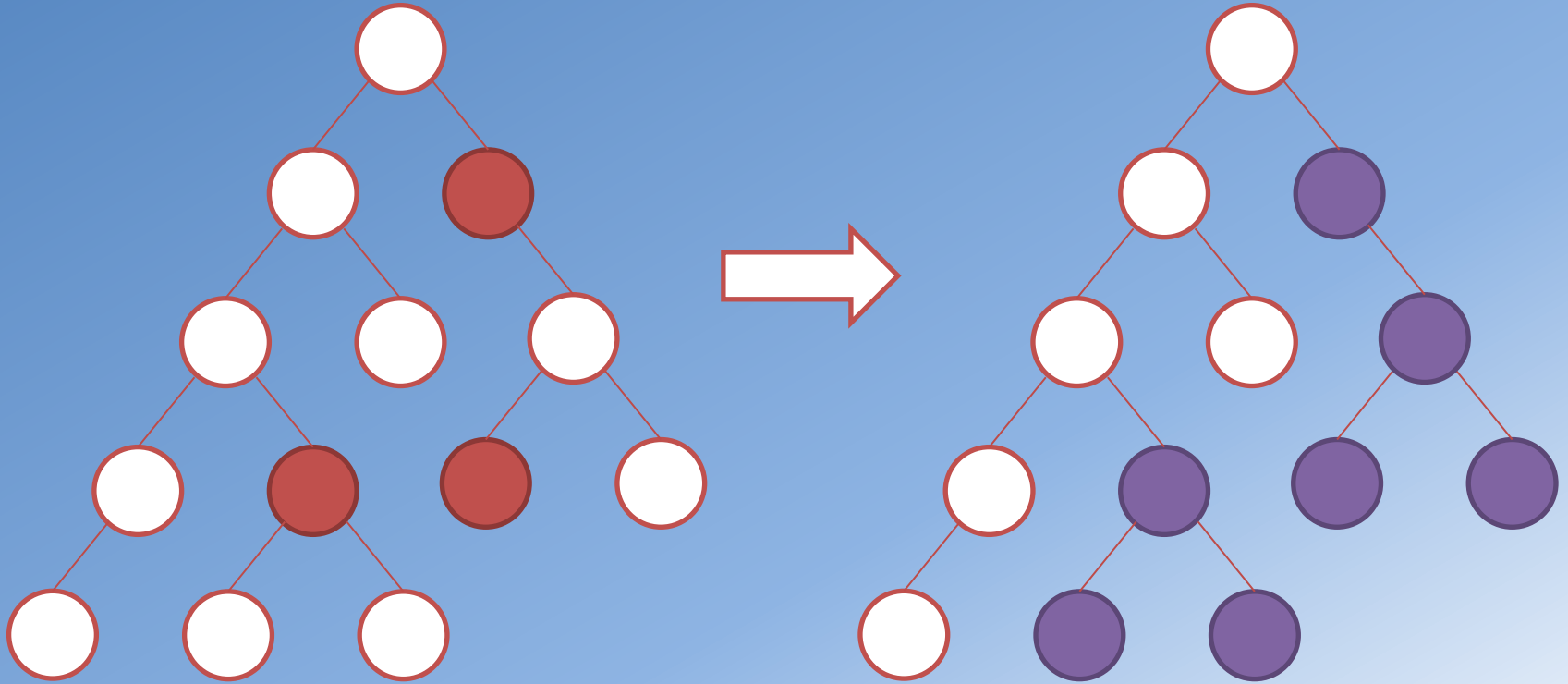


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# Virtual DOM

- Browser DOM is a browser object
- Virtual DOM is a React object
  - A lightweight representation of the Browser DOM
  - In-memory tree data structure of plain JS objects
  - Manipulations extremely fast compared to modifying the browser DOM
  - Created completely from scratch on every setState

# Virtual DOM Diffing and Re-rendering



# Updating the DOM

- Diffing algorithm will detect those nodes that are changed
  - Updates the entire sub-tree if diffing detects that two elements are of different types
  - Using “key” you can hint child elements as stable
    - No need to re-render where keys do not change
- React Fiber: new reconciliation algorithm in React 16
  - Incremental rendering