

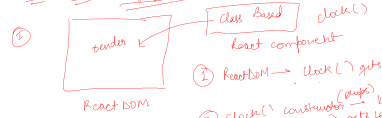
# Counting & Incrementing → State / Lifecycle Methods -

## Example of clock (tick)

→ Real World  
 12:48:53 → update every second  
 ↳ React DOM sends  $\text{() } \times n$  → calling multiple  
 ↳ multiple react elements instantiated

- ① Clock → reusable → functional component  
 ↳ class based component
- ② Clock → state add → lifecycle methods

## State and Lifecycle Methods



- ① React DOM → clock() gets called
- ② clock() constructor (maybe) base constructor (props get called + this state values get initialized)
- ③ clock() → sender() gets called which re-render react component with initial state
- ④ clock() → re-render this react component and gets rendered in React DOM
- ⑤ componentDidMount() method called as soon as the page loads. clock() gets rendered at the first time. React DOM → state the first time and re-render the first time.
- ⑥ every second, the tick() method is called which updates the state. It is called → which updates a change in the state → a new date.
- ⑦ Then the sender() will be called again to re-render the changed UI.
- ⑧ Whenever the React component is destroyed, which destroys the component.

\* this.state and initialState() are used to record initial state of React component and notify and the initial state of the component and change re-render() are UI.

- \* Lifecycle Methods →
- ① componentDidMount() → In gets called when the component is rendered on the first time.
  - ② componentWillUnmount() → In gets called when the component gets destroyed from DOM.

→ Lifecycle methods are special methods available in React component which determines the life of the component. It is used to mount and unmount the component.

→ Idea is to delete resources when component is destroyed so that may can be reused.

\* Three things to remember while using React :-

- ① Do not change the state directly.
- ② The state changes may be asynchronous. ↳
- ③ React shallow merges the changes with multiple state variables.

★ Three things to Remember while using React :-

- ① Do not change the state directly.
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- ③ React shallow merges the changes with multiple `setState` calls for multiple state variables.

★ Data flows down the parent to the children  $\rightarrow$   
either parent or children does not know whether it is  
parent or it is children is `Stateful` or `Stateless`.

★ Each component is the owner of its own state & props  
but can transfer its state / props data downwards  
to the children,