JS

Advance React Topics

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1. Lazy Loading

React puts all components in bundle.js. As the app grows, the bundle.js file grows.

So you should split your codebase.

The **React.lazy** function lets you lazy load a component. So the component only loads in the bundle when it is required. This decreases the bundle size.

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1. Lazy loading (Continued)

The lazy-loaded component should be inside React **Suspense** component, as it allows showing a fallback when the component is loading.

You can find the code example link in bio.

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2. HoC

Sometimes, different components require the same logic. We can do this with Higher Order Components (HoC).

HoC has separate states and functionality but only one code. It is a function that takes a component and returns a new component.

Naming convention: with
E.g., withHover

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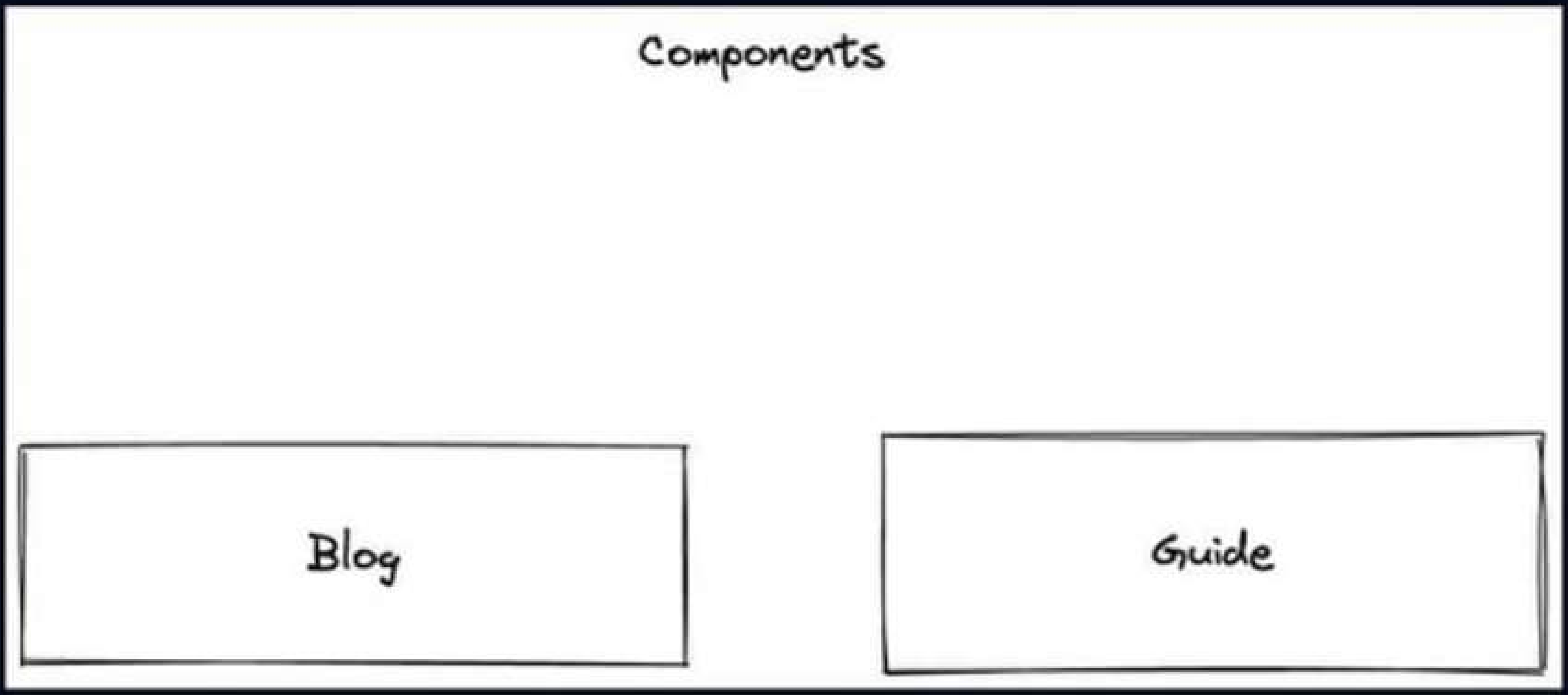
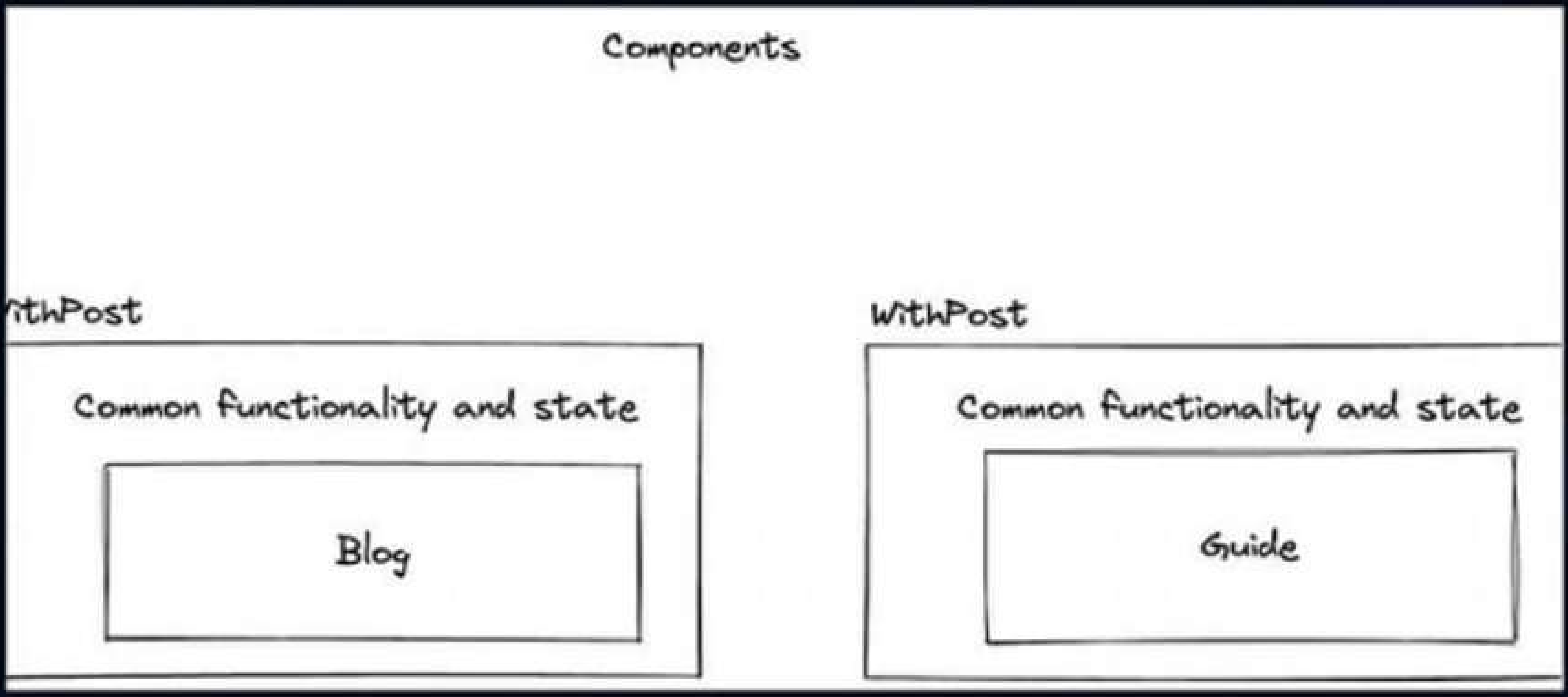
2. HoC (Continued)

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3. Optimization

React renders a component and its sub-components (including all the functions) every time the parent component's state or props change.

If a child component calls an API, it will make the API call every time the parent component renders.

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3. Optimization (Continued)

useMemo is a React hook. A function inside useMemo will only execute if the value/s inside the dependency array changes.

This optimization helps to avoid expensive calculations on every render.

useMemo returns a **value**.

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3. Optimization (Continued)

useCallback is another React hook. It also takes a function that executes if the value/s inside the dependency array changes.

The difference between useMemo and useCallback is useMemo returns a **value**, whereas useCallback returns a **memoized** version of the provided **callback function**.

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