

Global State Sharing and React Context



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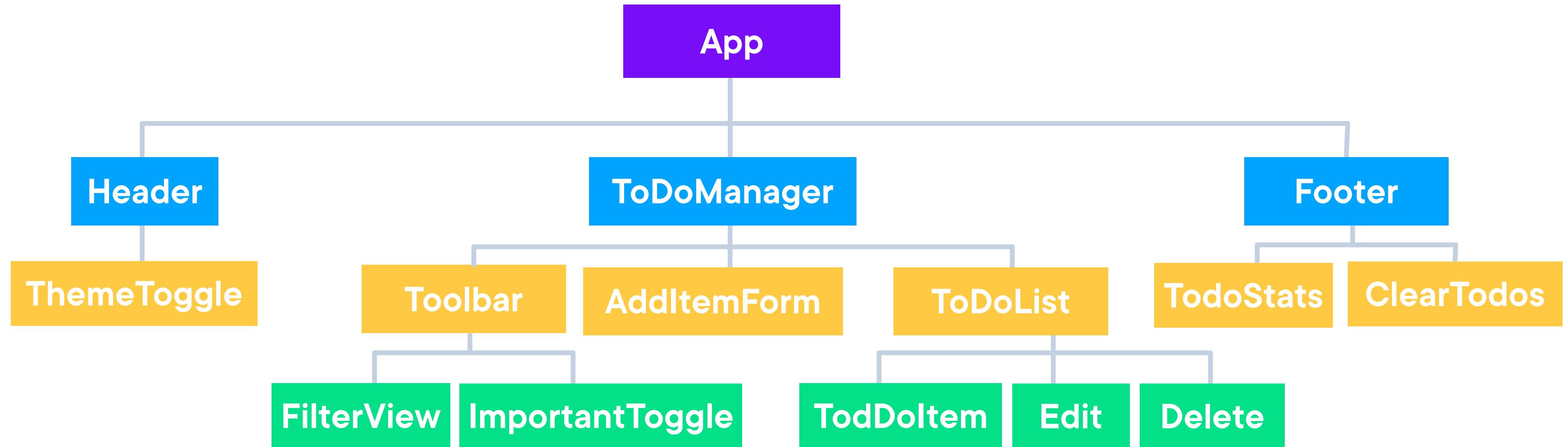
A big part of building
in React is **Sharing**
State between
components

Component State in React

All React components can store their own local component state

State updates drive our apps to render on actions

React Component Hierarchy



Passing State between Components

Pass as props

Pass data and functions as props is mostly how our to-do app works

Using React Context

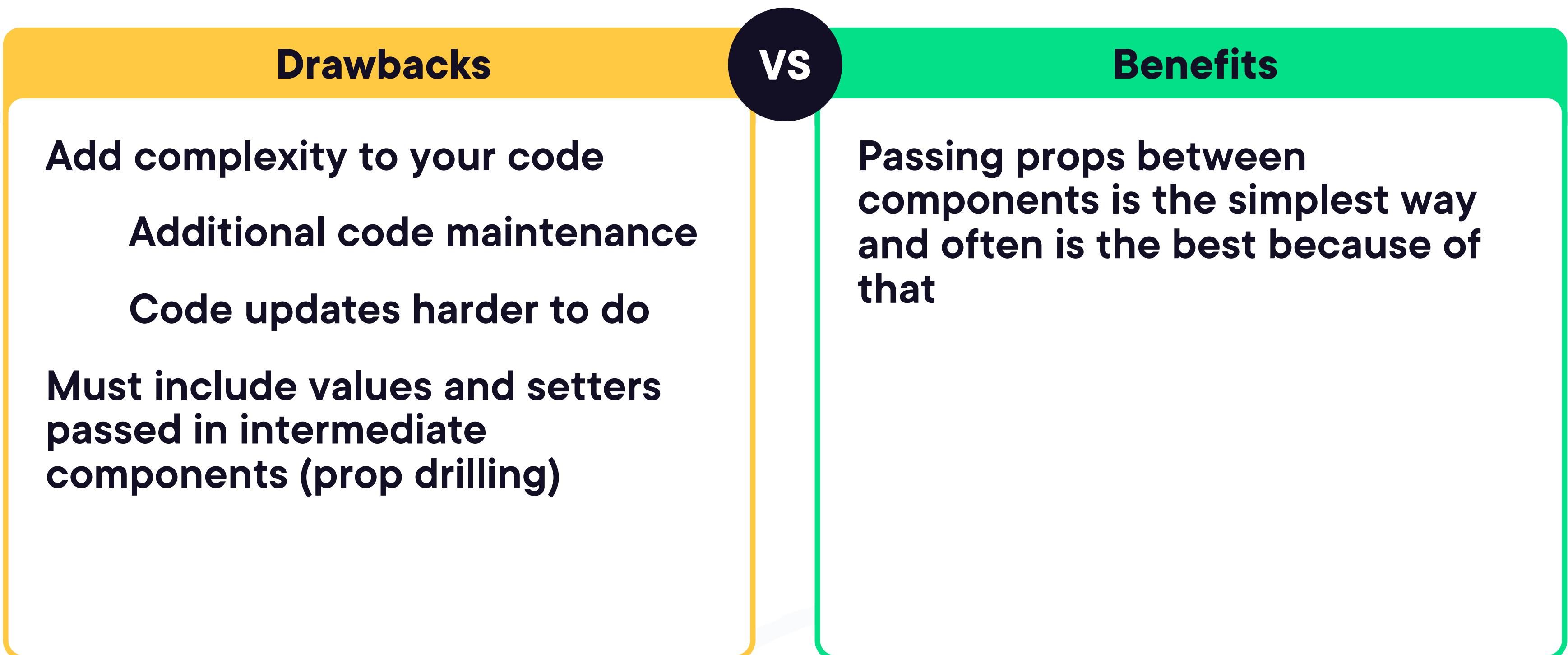
Straight forward way to access data anywhere in a component hierarchy

Higher Order Components

Also known as HOCs. Works by creating a new component to share data with

Passing Data and Functions between Components as props

Passing State with props



Using React Context to Share Data and Functions between Components

**React Context main
benefit is it allows for
sharing between
components without
passing props**

**React Context acts
like global data you
can share from any
level of your
component hierarchy**

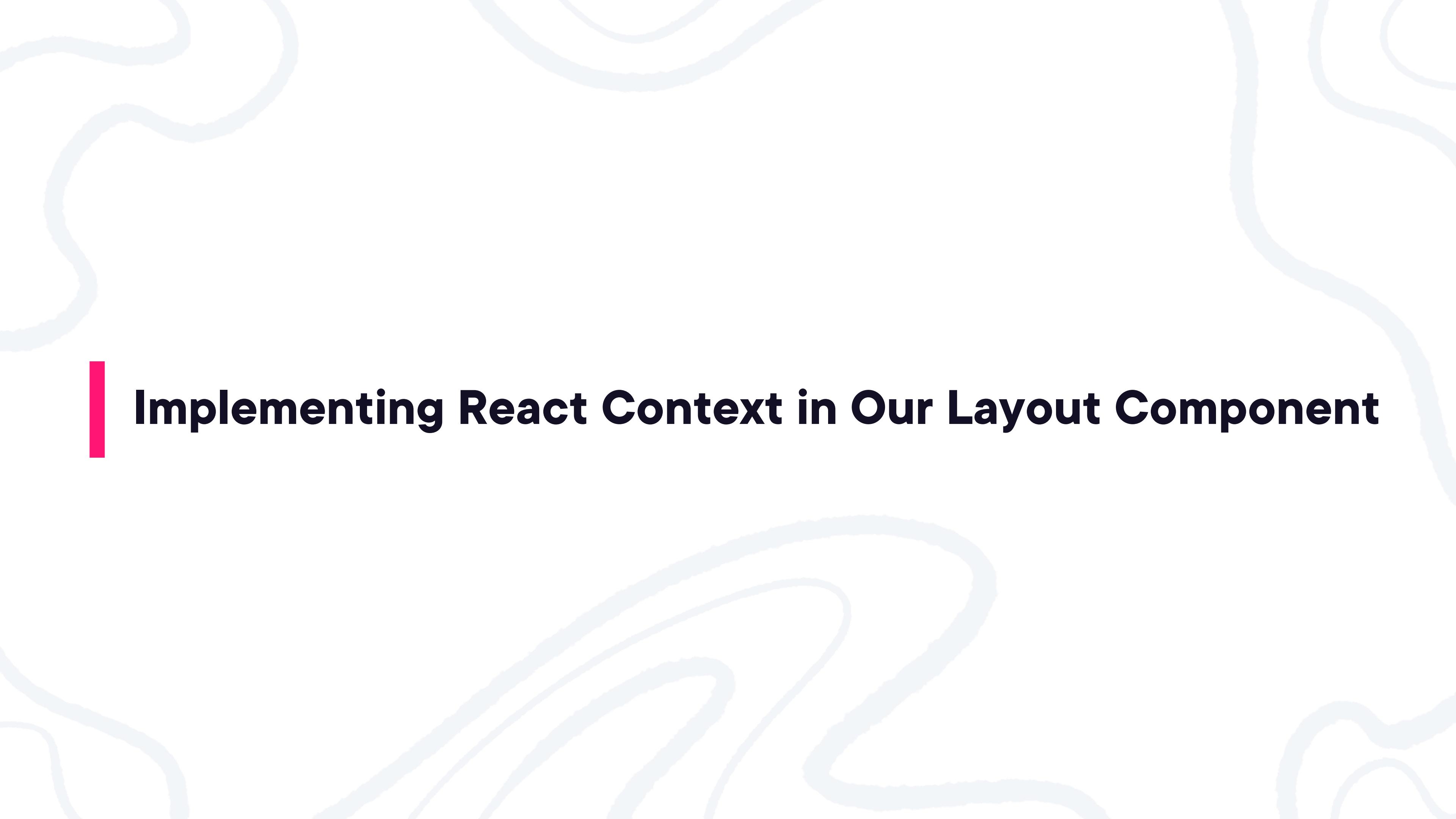
Many React
Contexts can exist
in an app, and can
overlap each other
in a component
hierarchy

**React Context helps
reduce complexity
by avoiding passing
props between
components**

React Context Drawbacks

Promotes information hiding

Unexpected component re-renders

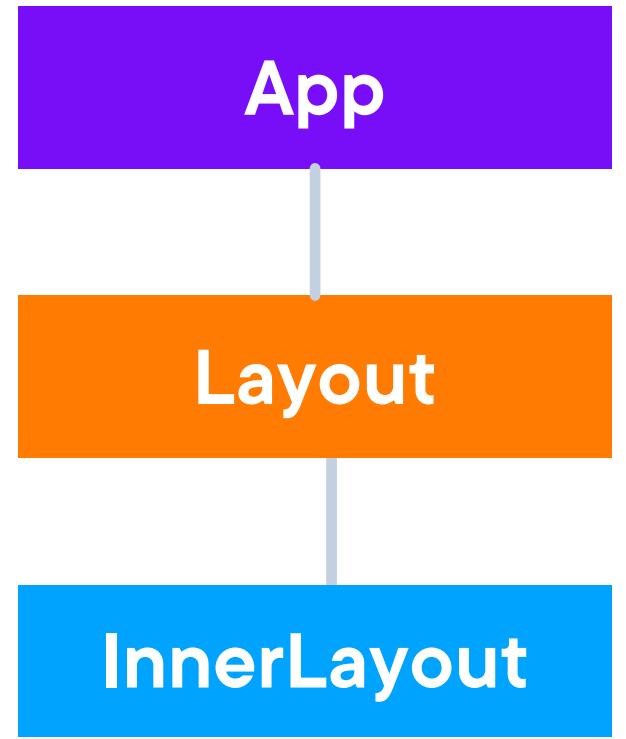


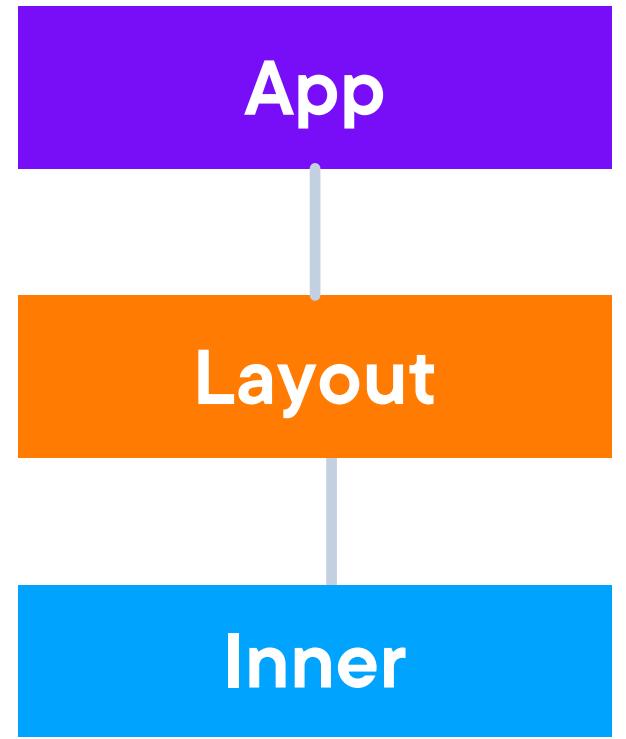
Implementing React Context in Our Layout Component

Move React Context into a Dedicated Component



Promote Context Creation to Where It Is Used







Enhance Components with Higher Order Components (HOC's)

Higher Order Component (HOC)

Higher Order Components (HOC's) **ARE** React components that instead of taking in a props object, take in another component and after enhancing it, return a copy of the passed in component.

HOW HOC's work is that they add invisible properties to the passed in props object received into an enhanced component.

Code a Higher Order Component (HOC)

Integrate withTheme HOC into to-do React App to Persist Our Current Theme

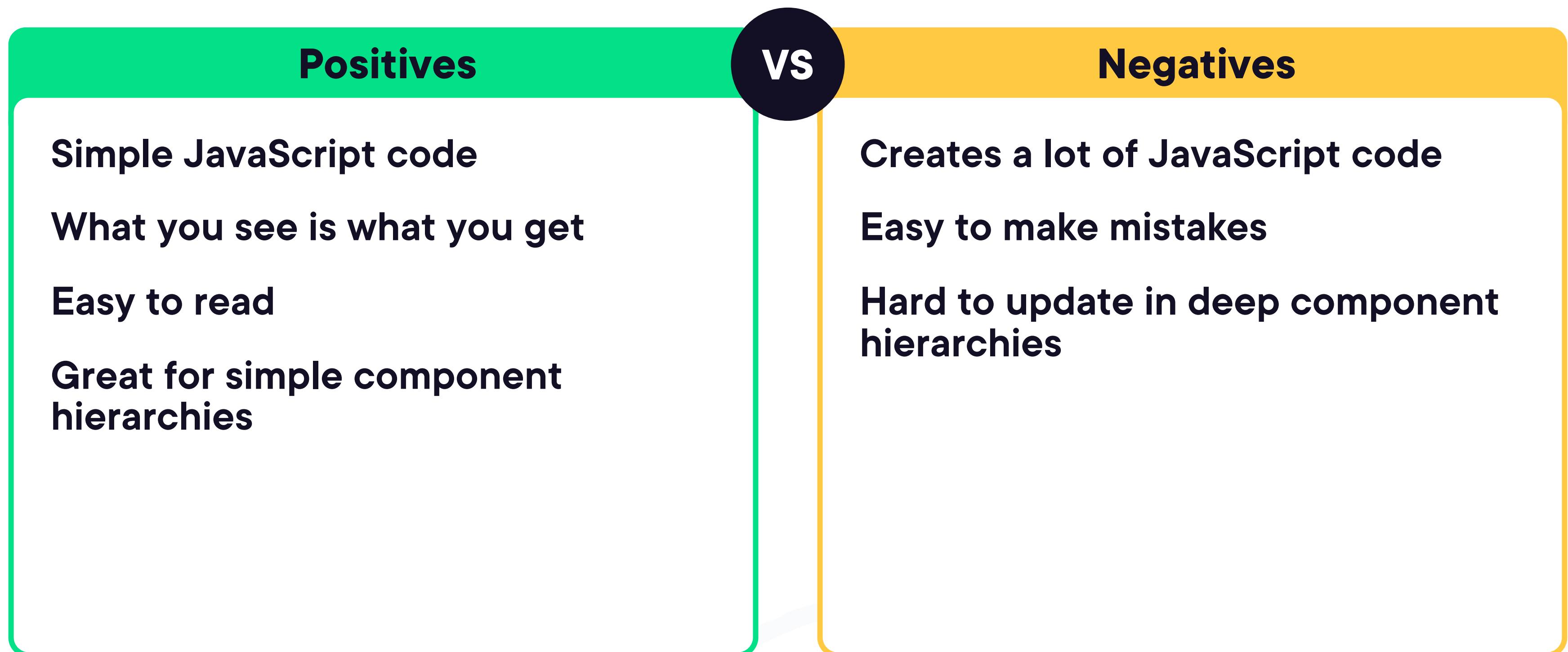
Summarizing

Three ways to share between components

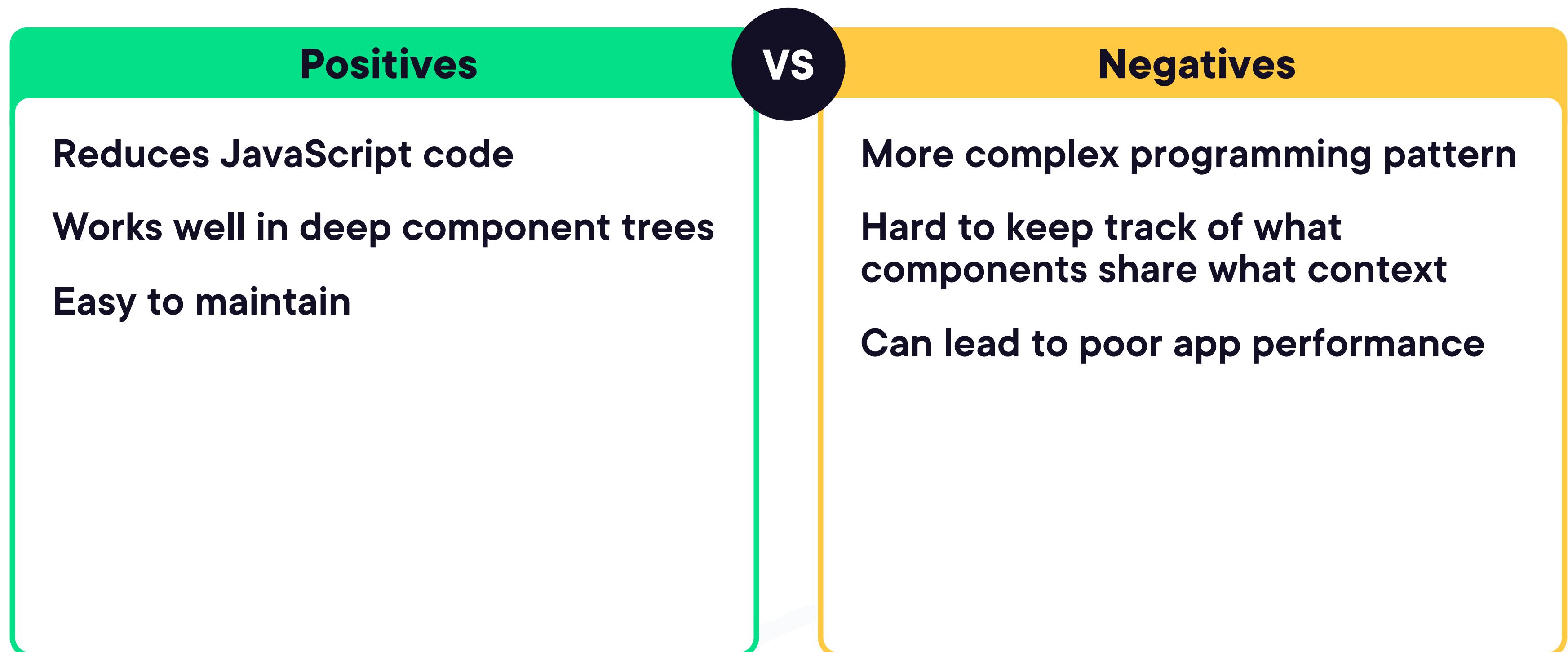
- Pass props
- Use React context
- Use Higher Order Components

All programming involves tradeoffs

Passing Data and State by Props



Passing Data and State Using React Context



Passing Data and State Using Higher Order Components

