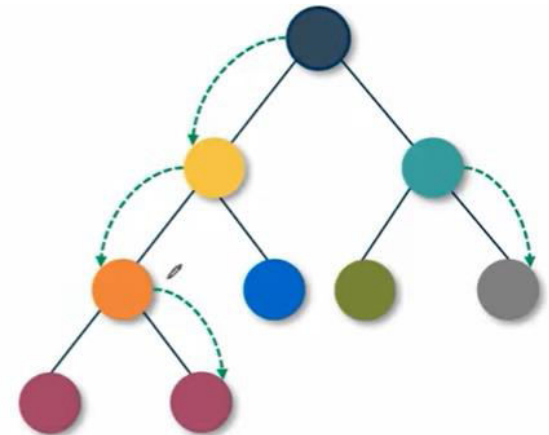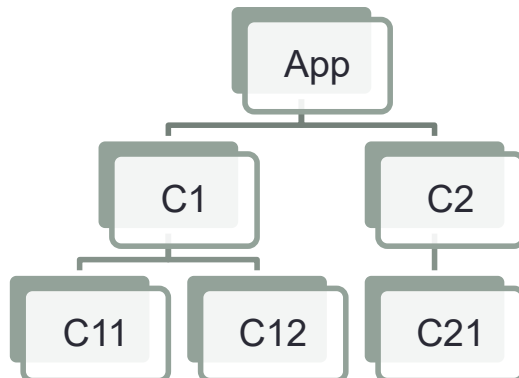# LIFTING STATE UP

Lifting state up in React.js

- In a typical application, you pass a lot of state down to child components as props.
  - These props are often passed down multiple component levels.
  - That's how state is shared vertically in your application.
- Often there will be a need to share state between different components.
  - The common approach to share state between two components is to move the state to common parent of the two components.
  - This approach is called as lifting state up in React.js
  - React components can manage their own state
  - Often components need to communicate state to others
  - Siblings do not pass state to each other directly
  - State should pass through a parent, then trickle down
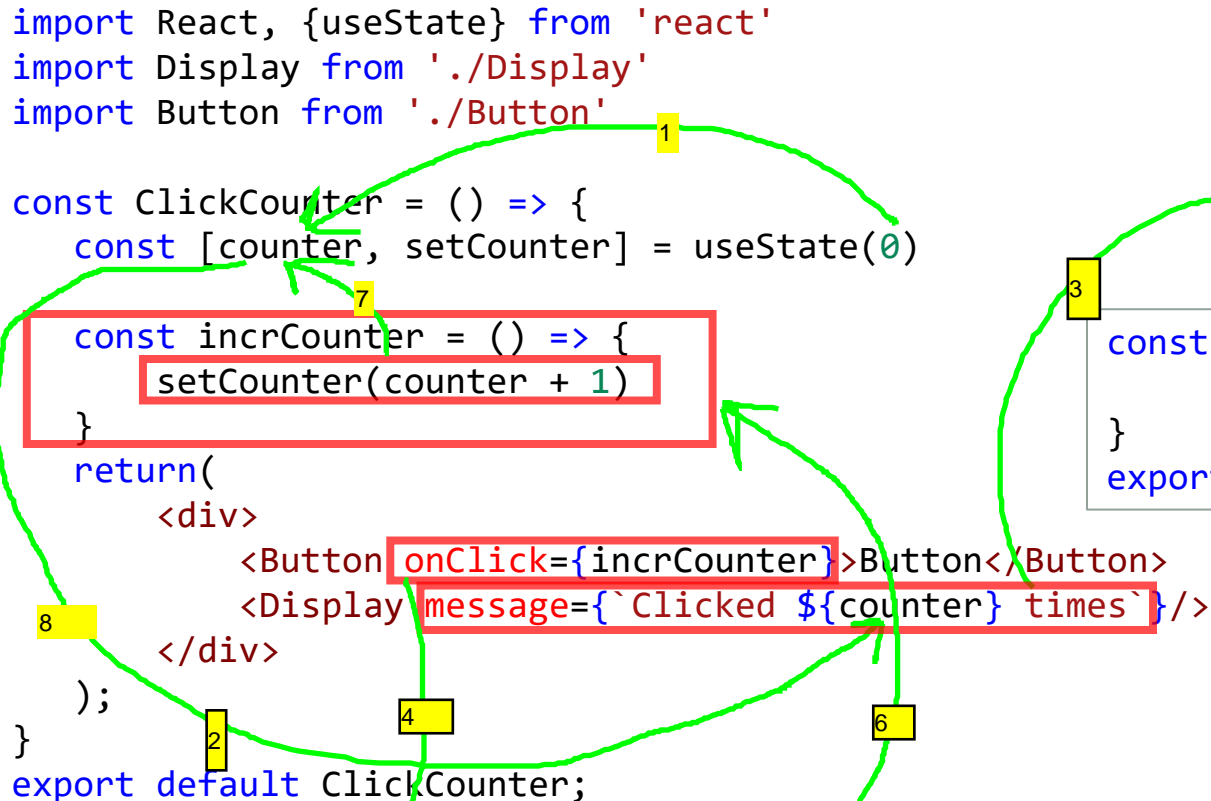
Lifting state up – simple example

```
import React, {useState} from 'react'
import Display from './Display'
import Button from './Button'

const ClickCounter = () => {
    const [counter, setCounter] = useState(0)

    const incrCounter = () => {
        setCounter(counter + 1)
    }
    return(
        <div>
            <Button onClick={incrCounter}>Button</Button>
            <Display message={`Clicked ${counter} times`}/>
        </div>
    );
}
export default ClickCounter;
```
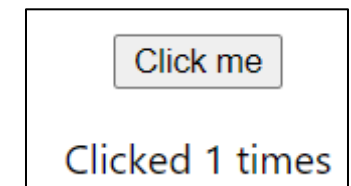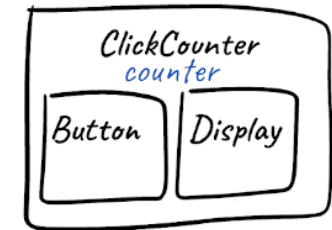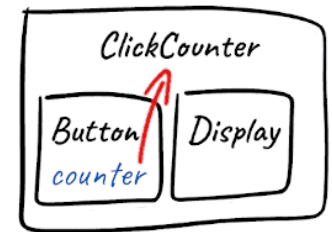
```
const Display = (props) => {
        return <p>{props.message}</p>;
}
export default Display;
```

```
const Button = (props) => {
    return <button onClick={props.onClick}>Click me</button>;
}
export default Button;
```

A small aside – add filter to date

```
const ExpensesFilter = (props) => {

    const selectChangeHandler = (event) => {
        console.log(event.target.value)
        props.onSelectYear(event.target.value)
    }
    return (
        <div className='expenses-filter'>
            <div className='expenses-filter__control'>
                <label>Filter by year</label>
                <select onChange={selectChangeHandler}>
                    <option value='2022'>2022</option>
                    <option value='2021'>2021</option>
                    <option value='2020'>2020</option>
                    <option value='2019'>2019</option>
                </select>
            </div>
        </div>
    );
};
export default ExpensesFilter;
```
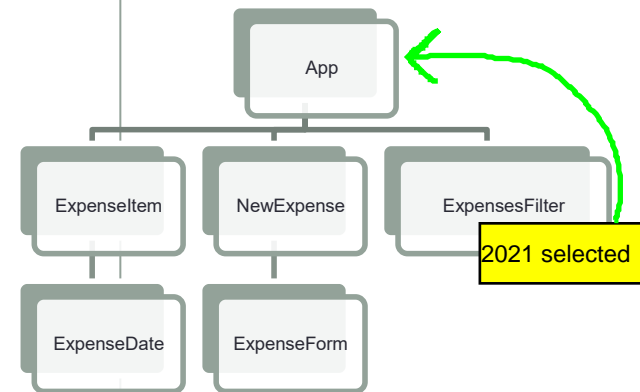

Welcome to React!

[HMR] Waiting
src\components
tateEg\Parent(
    Line 5:18:
used no-unuse
    Line 6:18:
used no-unuse

2021
2020

App

ExpenseItem   NewExpense   ExpensesFilter

ExpenseDate   ExpenseForm

```
function App() {
    const [filteredYear, setFilteredYear] = useState(2020);

    const selectYearHandler = (filteredValue) => {
        setFilteredYear(filteredValue)
    }
    return (
        <div className="App">
            <h2>Welcome to React!</h2>
            <ExpensesFilter onSelectYear={selectYearHandler}/>
```