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import React, { Component } from 'react';

class AddTodo extends Component {
  constructor(props) {
    super(props);

    this.state = {
      text: ''
    }

    this.onTextChange = this.onTextChange.bind(this);
    this.onAdd = this.onAdd.bind(this);
  }

  render() {
    return (
      <section className="AddTodo">
        <input type="text" value={this.state.text} onChange={this.onTextChange} />
        <button onClick={this.onAdd}>Add</button>
      </section>
    )
  }

  onTextChange(e) {
    this.setState({text: e.target.value});
  }

  onAdd() {
    this.props.store.dispatch({ type: 'ADD_TODO', text: this.state.text, id: Date.now() });
  }
}

export default AddTodo;

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import React, { Component } from 'react';
import './Todo.css';

class Todo extends Component {
  constructor(props) {
    super(props);

    this.toggle = this.toggle.bind(this);
    this.remove = this.remove.bind(this);
  }

  render() {
    const { todo } = this.props;
    return (
      <section className="Todo">
        <p>{todo.text}</p>
        <p className={todo.done ? 'Todo-completed' : 'Todo-uncompleted'} onClick={this.toggle}>
          {todo.done ? 'Completed' : 'Uncompleted'}
        </p>
        <button onClick={this.remove}>remove</button>
      </section>
    );
  }

  toggle() {

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    this.props.store.dispatch({ type: 'TOGGLE_TODO', id: this.props.todo.id });
  }

  remove() {
    this.props.store.dispatch({ type: 'REMOVE_TODO', id: this.props.todo.id });
  }
}

export default Todo;

import React, { Component } from 'react';
import Todo from './Todo';

class TodoList extends Component {
  constructor(props) {
    super(props);

    props.store.subscribe(() => this.forceUpdate());
  }

  render() {
    const list = this.props.store.getState()
      .map(todo =>
        <Todo
          store={this.props.store}
          key={todo.id}
          todo={todo}
        />
      );
    return (
      <section className="TodoList">
        {list}
      </section>
    );
  }
}

export default TodoList;

const todos = (state = [], action) => {
  switch(action.type) {
    case 'ADD_TODO':
      return [...state, { id: action.id, text: action.text, done: false }];
    case 'TOGGLE_TODO':
      return state.map(todo => {
        if (todo.id !== action.id) {
          return todo;
        }
        return { ...todo, done: !todo.done };
      });
    case 'REMOVE_TODO':
      const index = state.findIndex(todo => todo.id === action.id);
      return index >= 0
        ? [...state.slice(0, index), ...state.slice(index + 1)]
        : state;
    default:
      return state;
  }
}

export { todos };

```

```
import React, { Component } from 'react';
import AddTodo from './components/AddTodo';
import TodoList from './components/TodoList';

class App extends Component {
  render() {
    return (
      <section className="App">
        <AddTodo store={this.props.store} />
        <TodoList store={this.props.store} />
      </section>
    )
  }
}

export default App;
```