

```
<ActionButton text="Book flight" onAction={someFunc} />
```

```
var ActionButton = React.createClass({  
  render: function() {  
  
  }  
});
```

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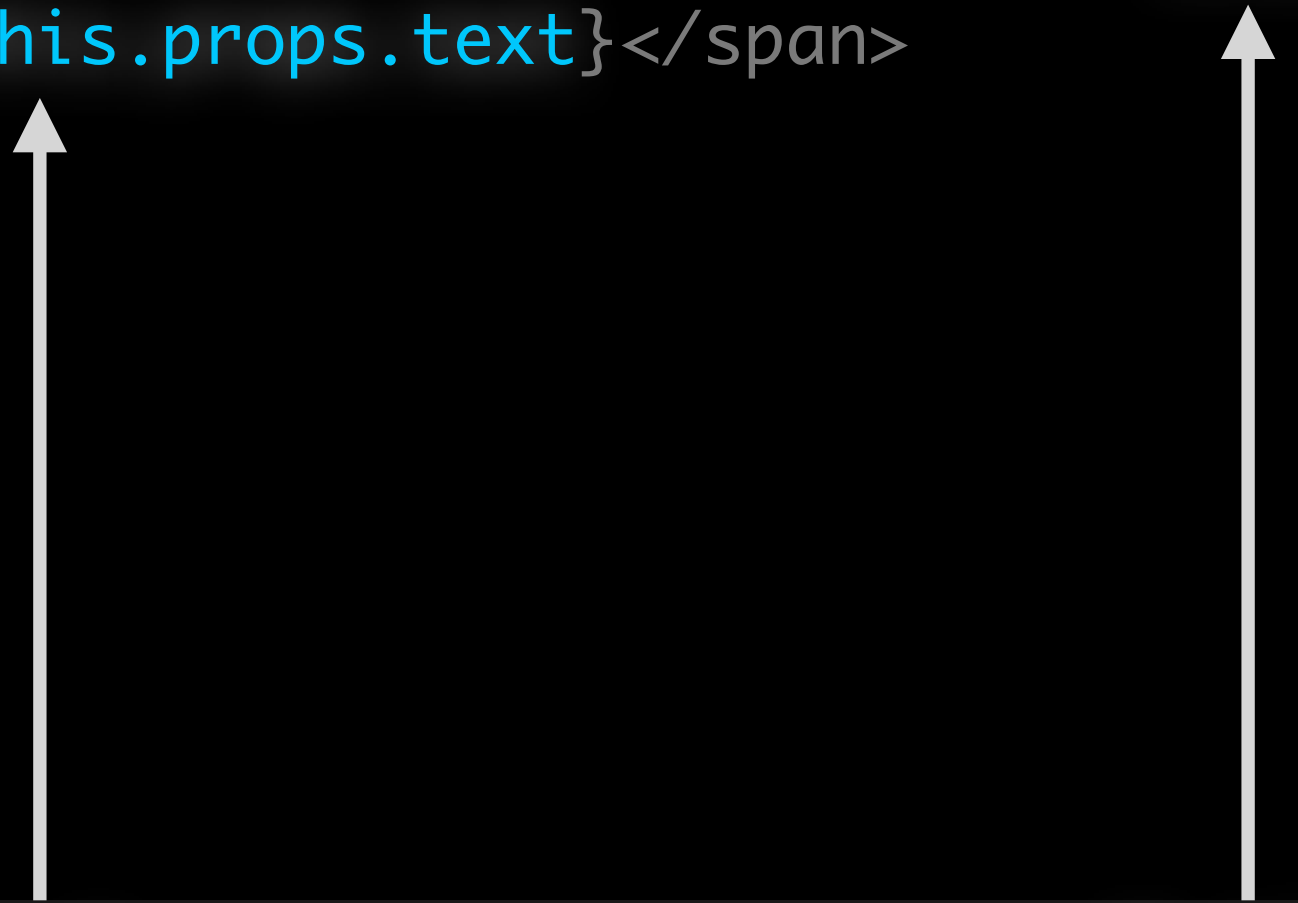
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<ActionButton text="Book flight" onAction={someFunc} />
```

```
var ActionButton = React.createClass({  
  render: function() {  
    return (  
      <button class="ActionButton">  
        <span>button text</span>  
      </button>  
    );  
  }  
});
```

```
<ActionButton text="Book flight" onAction={someFunc} />
```

```
var ActionButton = React.createClass({
  render: function() {
    return (
      <button class="ActionButton" onClick={this.props.onAction}>
        <span>{this.props.text}</span>
      </button>
    );
  }
});
```



The diagram consists of two vertical white arrows pointing upwards. The left arrow originates from the `text` prop in the JSX element below and points to the `{this.props.text}` interpolation inside the `<span>` tag in the `render` method. The right arrow originates from the `onAction` prop in the JSX element and points to the `{this.props.onAction}` prop in the `<button>` tag.

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```
var ActionButton = React.createClass({
  render: function() {
    return (
      <button class="ActionButton" onClick={this.props.onAction}>
        <span>{this.props.text.toUpperCase()}</span>
      </button>
    );
  }
});
```

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```
var ActionButton = React.createClass({  
  render: function() {  
    return (  
      <button class="ActionButton" onClick={this.props.onAction}>  
        <span>{this.props.text}</span>  
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```
<ActionButton text="Book flight" onAction={someFunc} />
```

```
<Counter initialCount={4} />
```



```
var Counter = React.createClass({
  getInitialState: function() {
    return {count: this.props.initialCount};
  },
  addToCount: function(delta) {
    this.setState({count: this.state.count + delta})
  },
  render: function() {
    return (
      <div>
        <h3>Count: {this.state.count}</h3>
        <ActionButton text="+1" onAction={this.addToCount.bind(this, 1)} />
        <ActionButton text="-1" onAction={this.addToCount.bind(this, -1)} />
      </div>
    );
  }
});
```

```
<Counter initialCount={4} />
```

```
var Counter = React.createClass({
  getInitialState: function() {
    return {count: this.props.initialCount};
  },
  addToCount: function(delta) {
    this.setState({count: this.state.count + delta})
  },
  render: function() {
    return (
      <div>
        <h3>Count: {this.state.count}</h3>
        <ActionButton text="+1" onAction={this.addToCount.bind(this, 1)} />
        <ActionButton text="-1" onAction={this.addToCount.bind(this, -1)} />
      </div>
    );
  }
});
```

```
<Counter initialCount={4} />
```

```
var Counter = React.createClass({
  getInitialState: function() {
    return {count: this.props.initialCount};
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  addToCount: function(delta) {
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  render: function() {
    return (
      <div>
        <h3>Count: {this.state.count}</h3>
        <ActionButton text="+1" onAction={this.addToCount.bind(this, 1)} />
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      </div>
    );
  }
});
```

```
<Counter initialCount={4} />
```

1. Components, not templates
2. Re-render on update
3. Virtual DOM (and events)

1. Components, not templates

```
var Counter = React.createClass({
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      </div>
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  }
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```

```
<Counter initialCount={4} />
```

# On every update...

- React builds a new virtual DOM subtree
- ...diffs it with the old one
- ...computes the minimal set of DOM mutations and puts them in a queue
- ...and batch executes all updates