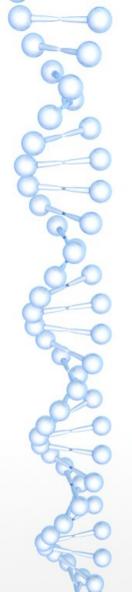


React Props are like function arguments in JavaScript and attributes in HTML.

React Props are read only.

React props can't be modified.



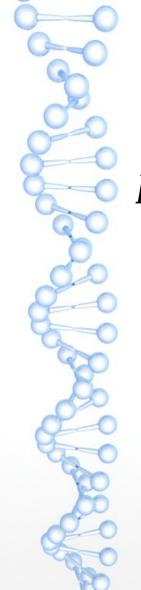
React Props?

To send props into a component, use the same syntax as HTML attributes:

Example

Add a "brand" attribute to the Car element:

const myelement = <Car brand="Ford" />;



React Props?

The component receives the argument as a props object:

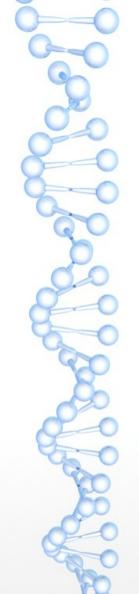
```
Example
Use the brand attribute in the component:
   class Car extends React.Component {
    Render() {
            return <h2>I am a {this.props.brand}!</h2>;
```



React components has a built-in state object.

The state object is where you store property values that belongs to the component.

When the state object changes, the component re-renders.

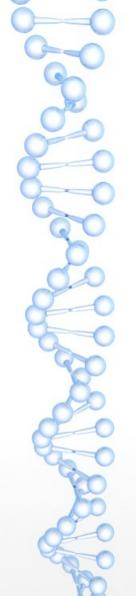


React State?

Creating the state Object

The state object is initialized in the constructor:

```
Example
Specify the state object in the constructor method:
   class Car extends React.Component {
       constructor(props) {
                 super(props);
                this.state = {brand: "Ford"};
       render() {
             return (
                     <div> <h1>My Car</h1></div>
      ) }}
```



React State?

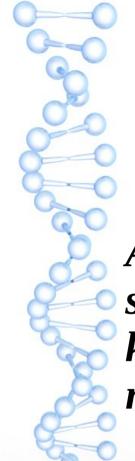
The state object can contain as many properties as you like:

```
Example
Specify all the properties your component need:
   class Car extends React.Component {
        constructor(props) {
                 super(props);
                 this.state = {
                          brand: "Ford",
                          model: "Mustang",
                          color: "red",
                          year: 1964
```



To change a value in the state object, use the this.setState() method.

When a value in the state object changes, the component will re-render, meaning that the output will change according to the new value(s).



Changing the state Object?

Always use the setState() method to change the state object, it will ensure that the component knows its been updated and calls the render() method (and all the other lifecycle methods).



Props VS State?

Props vs. State

- ★ Immutable
- ★ Has better performance
- Can be passed to child components

- {}
- _

- ★ Owned by its component
- ★ Locally scoped
- ★ Writeable / Mutable
- Has setState() method to modify properties
- ★ Changes to state can be asynchronous
- ★ Can only be passed as props