

What is an event in React?

Event is a user interaction that occurs within a component such as a keyboard input or mouse click, form submission.

Give 3 examples for event attributes/properties/methods

preventDefault(): Stops the browser from executing its default action when a specific event occurs

target: Represents the DOM element that triggered the event.

type: It is a property that represents the type /name of the event that has occurred.

What is a state?

In React, state is a built-in object used to contain data about the component. When the state of a component changes, React will automatically re-render the component and the component will have the new updated state object.

How do you implement state?

In a class component, if you have a constructor, inside the constructor, we define **this.state** :

```
3  class Login extends React.Component {  
4      constructor(props) {  
5          super(props);  
6          this.state = {  
7              email: "",  
8              username: "",  
9          };  
10     }  
11 }
```

If you don't use a constructor in a class, we can implement the state like this:

```
3  class Login extends React.Component {  
4    state = {  
5      email: "",  
6      username: "",  
7    };  
8  }
```

In a functional component, we define state like this:

```
3  function Login() {  
4    const [username, setUsername] = useState("");  
5    const [email, setEmail] = useState("");  
6  }
```

How do you update the state of a component?

In class components, we use the **setState** method to update the state.

In functional components, we use the updater function returned by the **useState** hook.

How do you pass props between components?

```
function Parent() {  
  const ids = [122, 43, 124];  
  
  return (  
    <div>  
      <Child ids={ids} />  
    </div>  
  );  
}
```

Props are read-only. This means that once a component receives a bunch of props, we cannot change it, but we can only use and consume it and cannot modify the properties passed down to the component. If we want to modify that, we'll have to introduce what we call state in React.

```
function Child(props) {  
  return <div>{JSON.stringify(props)}</div>;  
}
```



← → ↻ ⓘ localhost:3000
{"ids":[122,43,124]}

Explain some of the lifecycle methods for a class component

componentDidMount: Available in class components. It runs when the component gets rendered and placed on the DOM.

componentDidUpdate: It is called after a component re-renders.

componentWillUnmount: It is called right before a component is removed from the DOM.

shouldComponentUpdate: From this method we return true if we want the component to re-render, or false to prevent re-rendering. By default, React re-renders a component whenever its state or props change. However, there may be cases when you want to conditionally render the component.

What are the components of redux?

store: Holds the entire state of your application. We create a store using the **createStore** function from the Redux library. The store is typically created at the root level of your application.

reducer: Functions that change the state. They take the current state and action as parameters and change the state based on the payloads provided.

action: Describe the type of action to be performed. Actions are dispatched using the dispatch function provided by Redux.

What is React Router?

React Router enables "client side routing". It enables the single-page web app to navigate without refreshing the page.

Client side routing allows your app to update the URL from a link click without making another request for another document from the server. Instead, your app can immediately render some new UI and make data requests with fetch to update the page with new information.

This enables faster user experiences because the browser doesn't need to request an entirely new document or re-evaluate CSS and JavaScript assets for the next page.

What are the differences between state and props?

Props	State
Immutable(we can't change them)	Mutable
Child components can access. The Data is passed from one component to another.	Child components can not access. The Data is passed within the component only.