Skills Network

Working with React Class Components-Props and Event Handling

IBM

Working with React Class Components-Props and Event Handling

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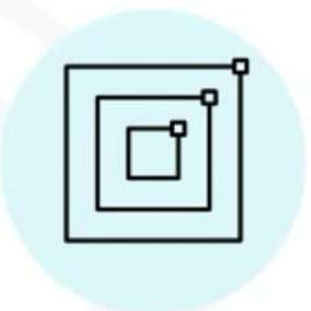
What you will learn

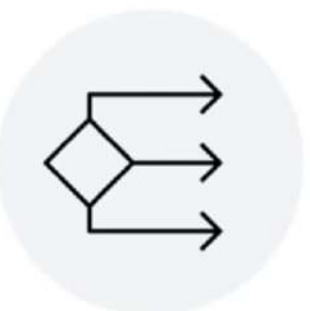
Define a class component

Describe how a class component works

Describe how to manage the state in the React class component

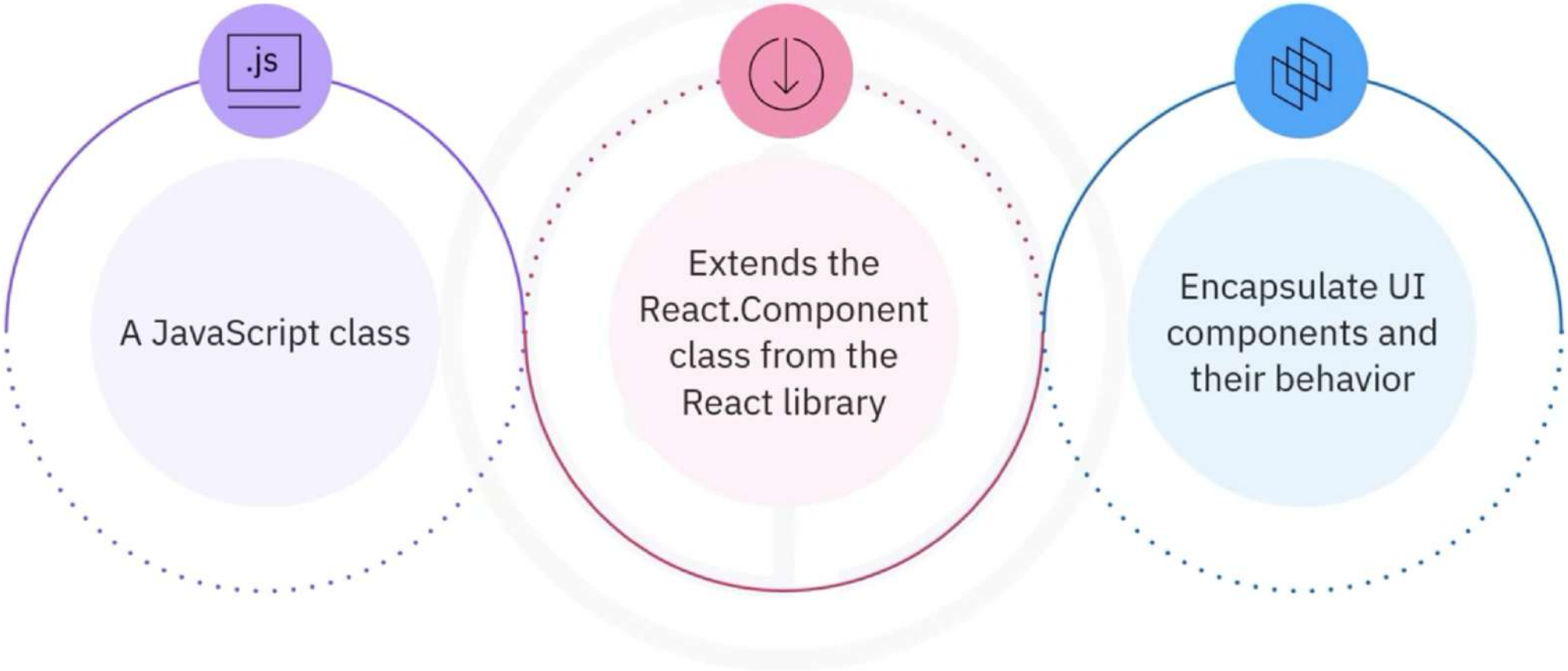


Describe how to use props in a class component in React



Describe how to handle events in class components

What is a class component?



What is a class component?

Class component example

```
import React, { Component } from 'react';
class MyComponent extends Component {
  render() {
    return (
      <div>
        <h1>Hello, world!</h1>
      </div>
    );
  }
}
export default MyComponent;
```

Managing state

```
import React, { Component } from 'react';
class EmployeeDetails extends Component {
  constructor(props) {
    super(props);
    this.state = { emp_id: '', emp_email: '' };
  }
  handleInputChange = event => {
    const { name, value } = event.target;
    this.setState({ [name]: value });
  };
  //render() method next slide
```

Managing state

```
//EmployeeDetails component con't from previous slide
render() {
    const { emp_id, emp_email } = this.state;
      return (
        <div className="EmployeeDetails">
          <input type="text" name="emp_id" value={emp_id}
            onChange={ this.handleInputChange } placeholder='Enter Employee Id'/>
          <input type="email" name="emp_email" value={emp_email}
            onChange={ this.handleInputChange }
            placeholder='Enter Employee Email'/>
          <button onClick={ () => alert(`Employee ID: ${emp_id},
            Email: ${ emp_email }`) }>Show Details</button>
        </div>
      );
    }
  } export default EmployeeDetails;
```

Props in-class component

Send data from parent component to a child component

Cannot be changed

Can pass methods and functions

Props in parent class component

```
import React from 'react'
import EmployeeDetails from './EmployeeDetails'

function OrganizationDetails () {
  let employee_designation = 'Project Manager';
    return (
      <>
        <EmployeeDetails employee_designation = { employee_designation }/>
      </>
    )
  }
export default OrganizationDetails
```

Passing of props to the child class

```
class EmployeeDetails extends Component {
//Constructor() and handleInput() methods here
render() {
    const { emp_id, emp_email } = this.state;
    const { employee_designation } = this.props;
    return (
      <div className="EmployeeDetails">
        <input type="text" name="emp_id" value={ emp_id }
          onChange={ this.handleInputChange } placeholder='Enter Employee Id'/>
        <input type="email" name="emp_email"
          value={ emp_email } onChange={ this.handleInputChange }
          placeholder='Enter Employee Email'/>
        <button onClick={() =>
          alert(`Employee ID: ${ emp_id }, Email: ${ emp_email },
          Designation: ${ employee_designation }`)}>Show Details
        </button>
      </div>
    ); } } export default EmployeeDetails;
```

Event Handling

<button> from **EmployeeDetails** component

```
<button onClick={ () =>
  alert(
  `Employee ID: $ {emp_id },
  Email: ${ emp_email },
  Designation: ${ employee_designation }`
  )}>
  Show Details
</button>
```

Recap

In this video, you learned that:

- A class component in React is a JavaScript class that extends the React.Component class from the React library
- Class components encapsulate UI components and their behavior into reusable building blocks
- Class components manage state, handle lifecycle events, and define component methods
- State represents the data that the component needs to render and respond to user interactions
- In React, props or properties send data from parent to child components
- Event handling in React is the process of responding to user interactions, such as clicks, mouseover, mouseout, form submissions, and so on, within a React application