

10.React-HOL

1. Define JSX

JSX (JavaScript XML) is a syntax extension for JavaScript used in React. It allows writing HTML-like code in JavaScript files, which gets transformed into React elements.

2. Explain about ECMA Script

ECMAScript (ES) is a scripting language specification standardized by ECMA International. JavaScript is based on ECMAScript. ES6 introduced key features like let, const, arrow functions, classes, promises, destructuring, etc.

3. Explain React.createElement()

React.createElement() is a method used to create React elements manually.

Example:

```
React.createElement('h1', null, 'Hello React');
```

This is how JSX gets compiled behind the scenes.

4. Explain how to create React nodes with JSX

You can write elements using JSX like this:

```
const element = <h1>Hello React</h1>;
```

JSX lets you embed variables, expressions, and components in a natural syntax.

5. Define how to render JSX to DOM

Use ReactDOM.render() to render JSX into a real DOM node:

```
ReactDOM.render(<App />, document.getElementById('root'));
```

6. Explain how to use JavaScript expressions in JSX

You can embed JavaScript expressions inside JSX using {}:

```
const name = "React";
```

```
const element = <h1>Welcome to {name}</h1>;
```

7. Explain how to use inline CSS in JSX

Inline styles in JSX are written as an object:

```
const style = { color: 'blue', fontSize: '20px' };
```

```
<h1 style={style}>Styled Text</h1>
```

HANDS ON

App.js

```
import React from 'react';
```

```
import officeImage from './assests/office.jpeg';
```

```
function App() {
```

```
  const office = {
```

```
    name: "DBS",
```

```
    rent: 50000,
```

```
    address: "Chennai"
```

```
  };
```

```
  const rentStyle = {
```

```
    color: office.rent < 60000 ? "red" : "green",
```

```
    fontWeight: "bold"
```

```
  };
```

```
  return (
```

```
    <div style={{ textAlign: "center", fontFamily: "Arial" }}>
```

```
      <h1>Office Space , at Affordable Range</h1>
```

```
      <img src={officeImage} alt="Office" style={{ width: "400px", height: "250px" }} />
```

```
      <h2>Name: {office.name}</h2>
```

```
      <p style={rentStyle}>Rent: Rs. {office.rent}</p>
```

```
      <p><strong>Address:</strong> {office.address}</p>
```

```
    </div>
```

```
  );
```

```
}
```

```
export default App;
```

Office Space , at Affordable Range



Name: DBS

Rent: Rs. 50000

Address: Chennai