**11.React-HOL**

**1. Explain React events**

React events are triggered responses to user actions, like clicks, form submissions, etc. They are similar to DOM events but follow React’s syntax and use a cross-browser wrapper known as SyntheticEvent.

**2. Explain about event handlers**

Event handlers are functions in React that are executed in response to user interactions:

<button onClick={handleClick}>Click Me</button>

**3. Define Synthetic Event**

A synthetic event is a wrapper around the browser's native event system that normalizes the events across all browsers. It combines the best of native events and cross-browser compatibility.

**4. Identify React event naming convention**

React uses **camelCase** for event names (e.g., onClick, onChange, onSubmit) unlike HTML which uses lowercase (onclick, onchange).

**HANDS-ON**

**App.js**

import React, { Component } from 'react';

class App extends Component {

constructor(props) {

super(props);

this.state = {

count: 0,

amount: '',

currency: ''

};

}

increment = () => {

this.setState({ count: this.state.count + 1 });

alert("Hello! Member1");

};

decrement = () => {

this.setState({ count: this.state.count - 1 });

};

sayWelcome = () => {

alert("welcome");

};

handleClick = () => {

alert("I was clicked");

};

handleAmountChange = (e) => {

this.setState({ amount: e.target.value });

};

handleCurrencyChange = (e) => {

this.setState({ currency: e.target.value });

};

convertCurrency = () => {

const euro = (this.state.amount / 90).toFixed(2);

alert(`Converted: € ${euro}`);

this.setState({ currency: euro });

};

render() {

return (

<div style={{ margin: "30px", fontFamily: "Arial" }}>

{/\* Counter Section \*/}

<div style={{ marginBottom: "20px" }}>

<h2>{this.state.count}</h2>

<button onClick={this.increment}>Increment</button>

<br /><br />

<button onClick={this.decrement}>Decrement</button>

<br /><br />

<button onClick={this.sayWelcome}>Say welcome</button>

<br /><br />

<button onClick={this.handleClick}>Click on me</button>

</div>

<hr />

{/\* Currency Converter Section \*/}

<h2 style={{ color: "green" }}>Currency Convertor!!!</h2>

<div>

<label>Amount: </label>

<input

type="number"

value={this.state.amount}

onChange={this.handleAmountChange}

style={{ marginBottom: "10px" }}

/><br />

<label>Currency: </label>

<input

type="text"

value={this.state.currency}

onChange={this.handleCurrencyChange}

readOnly

/><br /><br />

<button onClick={this.convertCurrency}>Submit</button>

</div>

</div>

);

}

}

export default App;

**OUTPUT**

