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");
  };
```

```jsx
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
```

```jsx
          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;
```
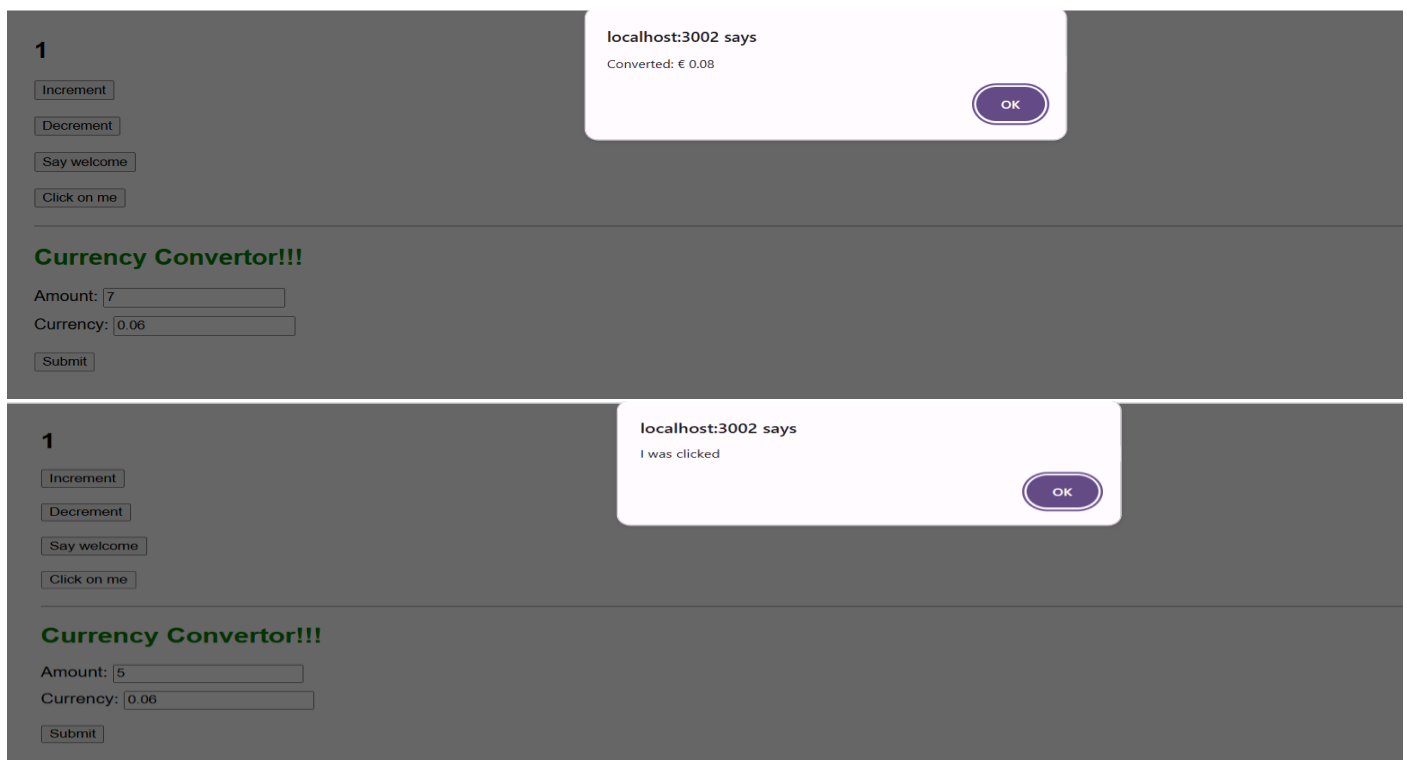
OUTPUT

1

Increment

Decrement

Say welcome

Click on me

Currency Convertor!!!

Amount: 5

Currency: 0.06

Submit

---

localhost:3002

2

Increment

Decrement

Say welcome

Click on me

Currency Convertor!!!

Amount: 5

Currency: 0.06

Submit

---

localhost:3002

1

Increment

Decrement

Say welcome

Click on me

Currency Convertor!!!

Amount: 7

Currency: 0.08

Submit