**React**

**Handson 11**

**1.Explain React events:**

React events are JavaScript events that act almost the same as native DOM events, such as click and change. However, they are wrapped in React’s own event system to improve performance and ensure consistency across all browsers.

**Example:**

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

Here, onClick is a React event.

**2.Explain about event handlers:**

React events are JavaScript events that act almost the same as native DOM events, such as click and change. However, they are wrapped in React’s own event system to improve performance and ensure consistency across all browsers.

**Example:**

function handleClick() {

alert('Button clicked!');

}

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

You can also define inline handlers:

<button onClick={() => alert('Clicked!')}>Click Me</button>

**3.Define Synthetic event:**

React wraps the browser's native events with its own SyntheticEvent wrapper, which works across different browsers. This wrapper offers the same interface as the native event and behaves consistently in all browsers.

**Example:**

function handleChange(event) {

console.log(event.target.value);

}

<input type="text" onChange={handleChange} />

Why it's useful:

* Better performance through event delegation.
* Uniform behavior across all browsers.

**4.Identify React event naming convention:**

React follows a camelCase naming convention for all event handlers.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Native HTML Event** | **React Event Attribute** | | onclick | onClick | | onchange | onChange | | onmouseover | onMouseOver | | onsubmit | onSubmit | | |  |
|  |

**Example:**

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

<input onChange={handleInputChange} />

**Mandatory exercise:**

**Welcome.js:**

import React from 'react';

function Welcome() {

  const sayWelcome = (msg) => {

    alert(msg);

  };

  return (

    <div>

      <button onClick={() => sayWelcome("Welcome!")}>Say Welcome</button>

    </div>

  );

}

export default Welcome;

**SyntheticEventExample.js**

import React from 'react';

function SyntheticEventExample() {

  const handleClick = (event) => {

    alert("I was clicked");

    console.log(event); // SyntheticEvent

  };

  return (

    <div>

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

    </div>

  );

}

export default SyntheticEventExample;

**Counter.js:**

import React, { useState } from 'react';

function Counter() {

  const [count, setCount] = useState(0);

  const increment = () => {

    setCount(count + 1);

    sayHello();

  };

  const decrement = () => setCount(count - 1);

  const sayHello = () => {

    alert("Hello! Value incremented.");

  };

  return (

    <div>

      <h2>Counter: {count}</h2>

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

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

    </div>

  );

}

export default Counter;

**CurrencyConvertor.js:**

import React, { useState } from 'react';

function CurrencyConvertor() {

  const [rupees, setRupees] = useState('');

  const [euro, setEuro] = useState(null);

  const handleSubmit = (e) => {

    e.preventDefault();

    const rate = 0.011;

    setEuro((rupees \* rate).toFixed(2));

  };

  return (

    <div>

      <h3>Currency Convertor</h3>

      <form onSubmit={handleSubmit}>

        <input

          type="number"

          placeholder="Enter INR"

          value={rupees}

          onChange={(e) => setRupees(e.target.value)}

        />

        <button type="submit">Convert</button>

      </form>

      {euro && <p>Euro: €{euro}</p>}

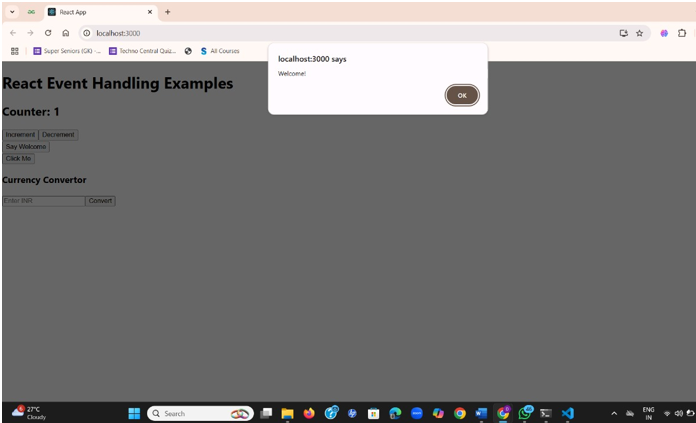
    </div>

  );

}

export default CurrencyConvertor;

**Output:**

****

**A screenshot of a computer

AI-generated content may be incorrect.**

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