## **Objectives**

* Explain React events
* Explain about event handlers
* Define Synthetic event
* Identify React event naming convention

In this hands-on lab, you will learn how to:

* Implement Event handling concept in React applications
* Use this keyword
* Use synthetic event

## **Prerequisites**

The following is required to complete this hands-on lab:

* Node.js
* NPM
* Visual Studio Code

## **Notes**

Estimated time to complete this lab: **90 minutes.**

Create a React Application “eventexamplesapp” to handle various events of the form elements in HTML.

1. Create “Increment” button to increase the value of the counter and “Decrement” button to decrease the value of the counter. The “Increase” button should invoke multiple methods.
   1. To increment the value
   2. Say Hello followed by a static message.



1. Create a button “Say Welcome” which invokes the function which takes “welcome” as an argument.



1. Create a button which invokes synthetic event “OnPress” which display “I was clicked”



Create a “CurrencyConvertor” component which will convert the Indian Rupees to Euro when the Convert button is clicked.

Handle the Click event of the button to invoke the handleSubmit event and handle the conversion of the euro to rupees.



**App.js**

import React, { useState } from 'react';

function App() {

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

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

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

  // Multiple functions on Increment

  const increment = () => {

    sayHello();

    setCount(prev => prev + 1);

  };

  const sayHello = () => {

    alert("Hello! This is a static message.");

  };

  const decrement = () => {

    setCount(prev => prev - 1);

  };

  // Welcome function with argument

  const sayWelcome = (msg) => {

    alert(msg);

  };

  // Synthetic event handler

  const onPressHandler = (event) => {

    alert("I was clicked");

    console.log("Synthetic Event:", event);

  };

  // Currency Convertor

  const handleSubmit = (e) => {

    e.preventDefault();

    const converted = parseFloat(rupees) \* 0.011; // example rate

    setEuro(converted.toFixed(2));

  };

  return (

    <div style={{ padding: '20px' }}>

      <h1>Event Handling Example</h1>

      {/\* Counter \*/}

      <h2>Counter: {count}</h2>

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

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

      <br /><br />

      {/\* Say Welcome \*/}

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

      <br /><br />

      {/\* Synthetic Event \*/}

      <button onClick={onPressHandler}>Click Me (Synthetic Event)</button>

      <br /><br />

      {/\* Currency Convertor \*/}

      <h2>Currency Convertor</h2>

      <form onSubmit={handleSubmit}>

        <label>Enter amount in INR:</label><br />

        <input

          type="number"

          value={rupees}

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

        />

        <br /><br />

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

      </form>

      {euro && <p>Equivalent Euro: €{euro}</p>}

    </div>

  );

}

export default App;

**OUTPUT**:



