**11.ReactJs\_HOL**

**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.

CODE:

import React, { Component } from 'react';

class CurrencyConvertor extends Component {

  constructor(props) {

    super(props);

    this.state = {

      amount: '',

      currency: '',

    };

  }

  handleAmountChange = (event) => {

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

  };

  handleCurrencyChange = (event) => {

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

  };

  handleSubmit = (event) => {

    event.preventDefault();

    const { amount, currency } = this.state;

    if (currency.toLowerCase() === 'euro') {

      const converted = amount \* 80;

      alert(`Converting to Euro. Amount is ${converted}`);

    } else {

      alert('Unsupported currency!');

    }

  };

  render() {

    return (

      <div>

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

        <form onSubmit={this.handleSubmit}>

          <div>

            Amount:

            <input

              type="number"

              value={this.state.amount}

              onChange={this.handleAmountChange}

            />

          </div>

          <br />

          <div>

            Currency:

            <input

              type="text"

              value={this.state.currency}

              onChange={this.handleCurrencyChange}

            />

          </div>

          <br />

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

        </form>

      </div>

    );

  }

}

export default CurrencyConvertor;

import React from 'react';

import ReactDOM from 'react-dom/client';

import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(<App />);

import React, { Component } from 'react';

import CurrencyConvertor from './CurrencyConvertor';

class App extends Component {

  constructor(props) {

    super(props);

    this.state = {

      count: 5,

    };

  }

  increment = () => {

    this.setState(prevState => ({ count: prevState.count + 1 }));

    this.sayHello();

  };

  decrement = () => {

    this.setState(prevState => ({ count: prevState.count - 1 }));

  };

  sayHello = () => {

    alert('Hello Member1');

  };

  sayWelcome = (message) => {

    alert(message);

  };

  handleClick = (event) => {

    alert('I was clicked');

  };

  render() {

    return (

      <div style={{ padding: '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('welcome')}>Say welcome</button><br /><br />

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

        <CurrencyConvertor />

      </div>

    );

  }

}

export default App;

