Hands-on 11

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.
   a. To increment the value
   b. Say Hello followed by a static message.

2. Create a button "Say Welcome" which invokes the function which takes "welcome" as an argument.

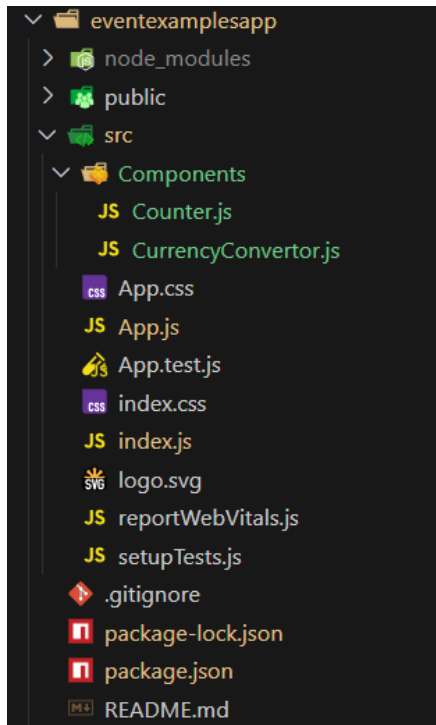3. Create a button which invokes synthetic event "OnPress" which display "I was clicked"

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.

Implementation

App.js

```
import React from 'react';
import Counter from '../../eventexamplesapp/src/Components/Counter';
import CurrencyConvertor from '../../eventexamplesapp/src/Components/CurrencyConvertor';

function App() {
  return (
    <div className="App">
      <h1>Event Examples App</h1>
      <Counter />
      <hr />
      <CurrencyConvertor />
    </div>
  );
}

export default App;
```

Index.js

```
ReactDOM.render(<App />, document.getElementById('root'));
```

CurrencyConverter.js

```js
import React, { Component } from 'react';

class CurrencyConvertor extends Component {
  constructor(props) {
    super(props);
    this.state = {
      rupees: '',
      euro: '',
    };
  }

  handleChange = (e) => {
    this.setState({ rupees: e.target.value });
  };

  handleSubmit = () => {
    const conversionRate = 0.011; // 1 INR = 0.011 EUR
    const euroValue = (parseFloat(this.state.rupees) * conversionRate).toFixed(2);

    this.setState({ euro: euroValue }, () => {
      alert(`Converting to Euro. Amount is €${this.state.euro}`);
    });
  };

  render() {
    return (
      <div>
        <h2>Currency Converter</h2>
        <input
          type="number"
          placeholder="Enter amount in INR"
          value={this.state.rupees}
          onChange={this.handleChange}
        />
        <button onClick={this.handleSubmit}>Convert</button>
        <p>Equivalent in Euro: € {this.state.euro}</p>
      </div>
    );
  }
}

export default CurrencyConvertor;
```

Output: