**WEEK – 7 Assignments**

**React**

**Mandatory hands-on :-**

**11. ReactJS-HOL :**

**Objective :**

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

· Implement Event handling concept in React applications

· Use this keyword

· Use synthetic event

**Code :**

[**App.js**](http://app.js) **:**

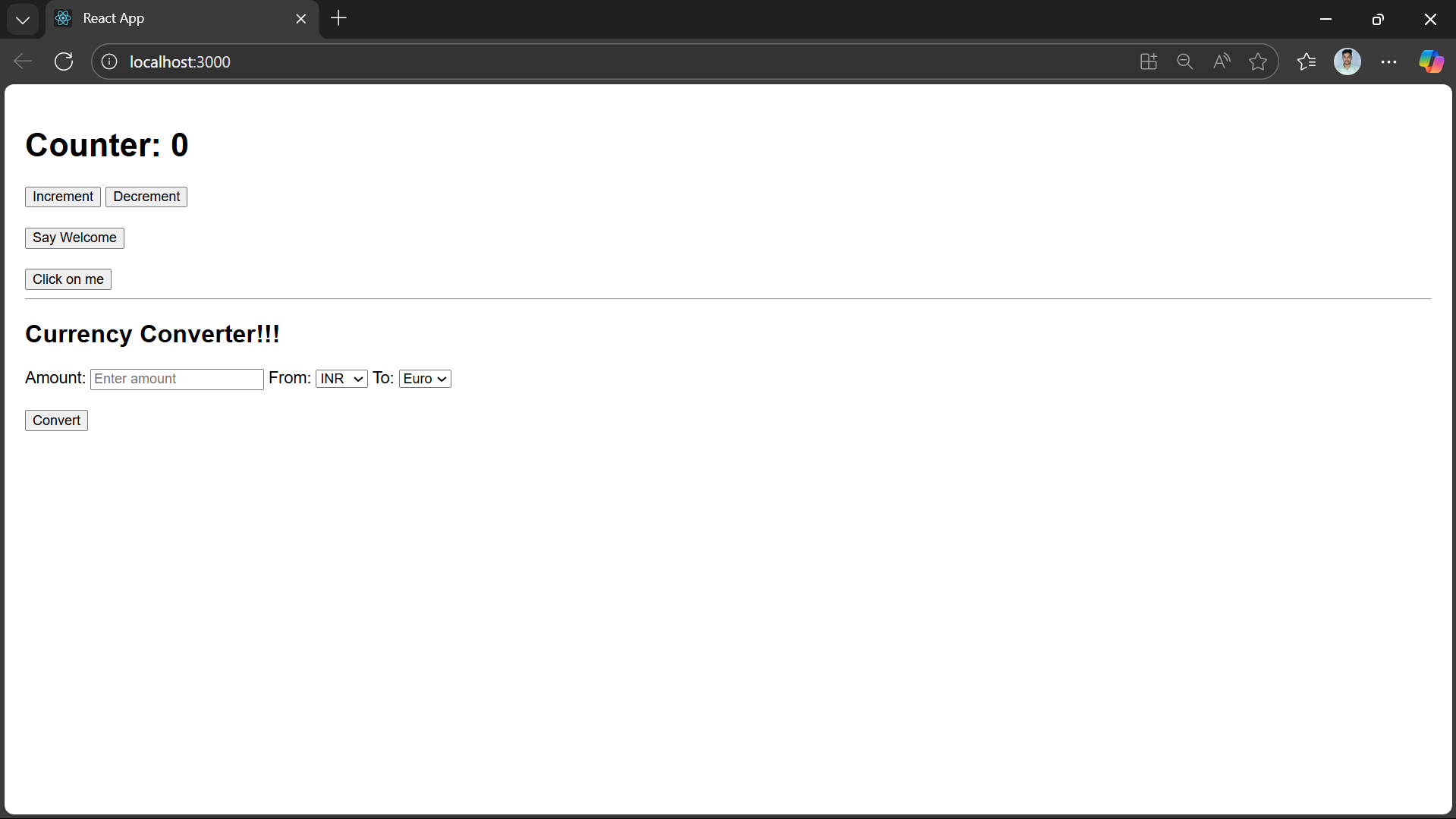
| **import React from "react";  class App extends React.Component {  constructor(props) {  super(props);  this.state = {  counter: 0,  amount: "",  fromCurrency: "INR",  toCurrency: "Euro",  };  }   increment = () => {  this.setState(  (prevState) => ({ counter: prevState.counter + 1 }),  () => {  alert("Hello Member!");  }  );  };   decrement = () => {  this.setState((prevState) => ({ counter: prevState.counter - 1 }));  };   sayWelcome = () => {  alert("Welcome!");  };   handleClickOnMe = () => {  alert("I was clicked");  };   handleAmountChange = (event) => {  this.setState({ amount: event.target.value });  };   handleFromCurrencyChange = (event) => {  this.setState({ fromCurrency: event.target.value });  };   handleToCurrencyChange = (event) => {  this.setState({ toCurrency: event.target.value });  };   handleConvertSubmit = (event) => {  event.preventDefault();  const { amount, fromCurrency, toCurrency } = this.state;   if (!amount) {  alert("Please enter an amount");  return;  }   // Exchange rates relative to INR  const rates = {  INR: 1,  Euro: 0.011,  USD: 0.012,  GBP: 0.0095,  };   // Convert from 'fromCurrency' to INR  const amountInINR = parseFloat(amount) / rates[fromCurrency];  // Convert INR to 'toCurrency'  const convertedAmount = amountInINR \* rates[toCurrency];  const roundedAmount = convertedAmount.toFixed(2);   alert(  `Converting from '${fromCurrency}' to '${toCurrency}', Amount is ${amount}. Converted Amount: ${roundedAmount} ${toCurrency}`  );  };   render() {  const { counter, amount, fromCurrency, toCurrency } = this.state;   return (  <div style={{ padding: "20px", fontFamily: "Arial, sans-serif" }}>  <h1>Counter: {counter}</h1>  <button onClick={this.increment}>Increment</button>{" "}  <button onClick={this.decrement}>Decrement</button>  <br />  <br />  <button onClick={this.sayWelcome}>Say Welcome</button>  <br />  <br />  <button onClick={this.handleClickOnMe}>Click on me</button>  <hr />  <h2>Currency Converter!!!</h2>  <form onSubmit={this.handleConvertSubmit}>  <label>  Amount:{" "}  <input  type="number"  value={amount}  onChange={this.handleAmountChange}  placeholder="Enter amount"  />  </label>{" "}  <label>  From:{" "}  <select  value={fromCurrency}  onChange={this.handleFromCurrencyChange}  >  <option value="INR">INR</option>  <option value="Euro">Euro</option>  <option value="USD">USD</option>  <option value="GBP">GBP</option>  </select>  </label>{" "}  <label>  To:{" "}  <select value={toCurrency} onChange={this.handleToCurrencyChange}>  <option value="Euro">Euro</option>  <option value="INR">INR</option>  <option value="USD">USD</option>  <option value="GBP">GBP</option>  </select>  </label>  <br />  <br />  <button type="submit">Convert</button>  </form>  </div>  );  } }  export default App;** |
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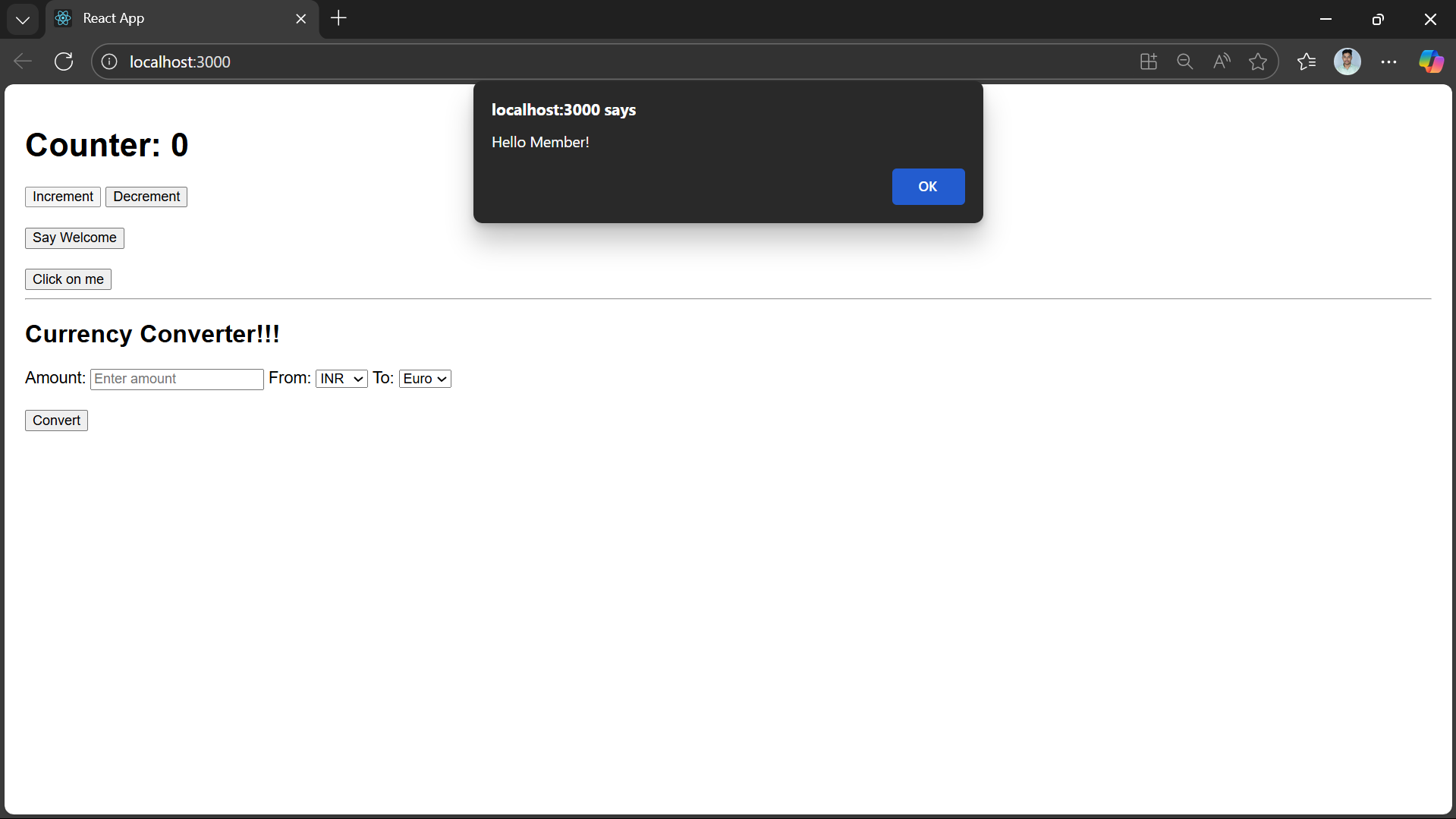
[**CurrencyConverter.js**](http://currencyconverter.js) **:**

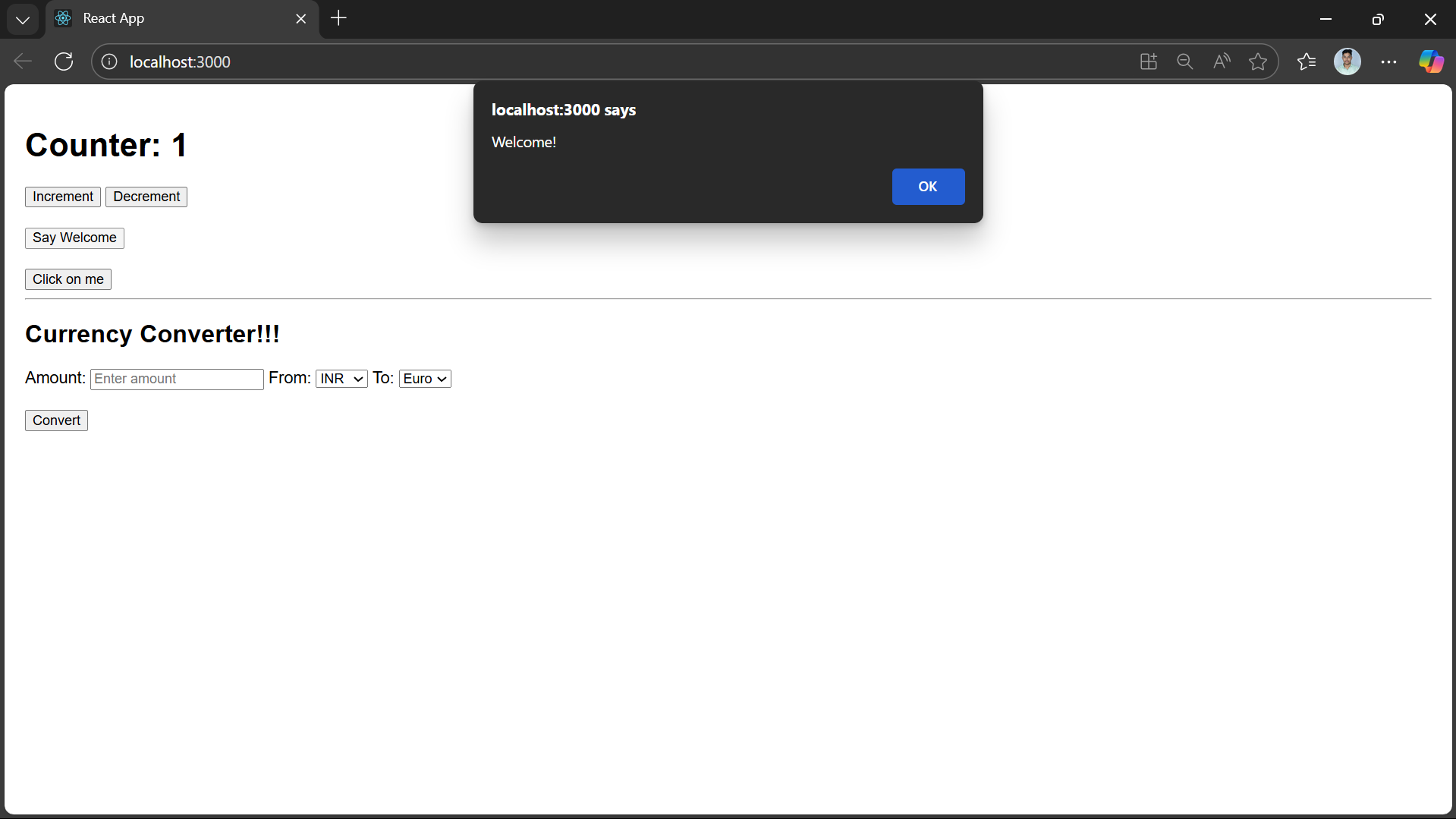
| import React from "react";  class CurrencyConvertor extends React.Component {  constructor(props) {  super(props);  this.state = {  rupees: "",  euro: "",  rate: 90, // 1 Euro = 90 INR   };  }   handleChange = (e) => {  this.setState({ rupees: e.target.value });  };   handleSubmit = (e) => {  e.preventDefault();   const { rupees, rate } = this.state;  if (!rupees) {  this.setState({ euro: "Please enter amount" });  return;  }  let euro = (parseFloat(rupees) / rate).toFixed(2);  this.setState({ euro });  };   render() {  return (  <**div**>  <**form** onSubmit={this.handleSubmit}>  <**label**>  Rupees:  <**input**  type="number"  value={this.state.rupees}  onChange={this.handleChange}  />  </**label**>  <**button** type="submit">Convert</**button**>  </**form**>  <**p**>Euro: {this.state.euro}</**p**>  </**div**>  );  } }  export default CurrencyConvertor; |
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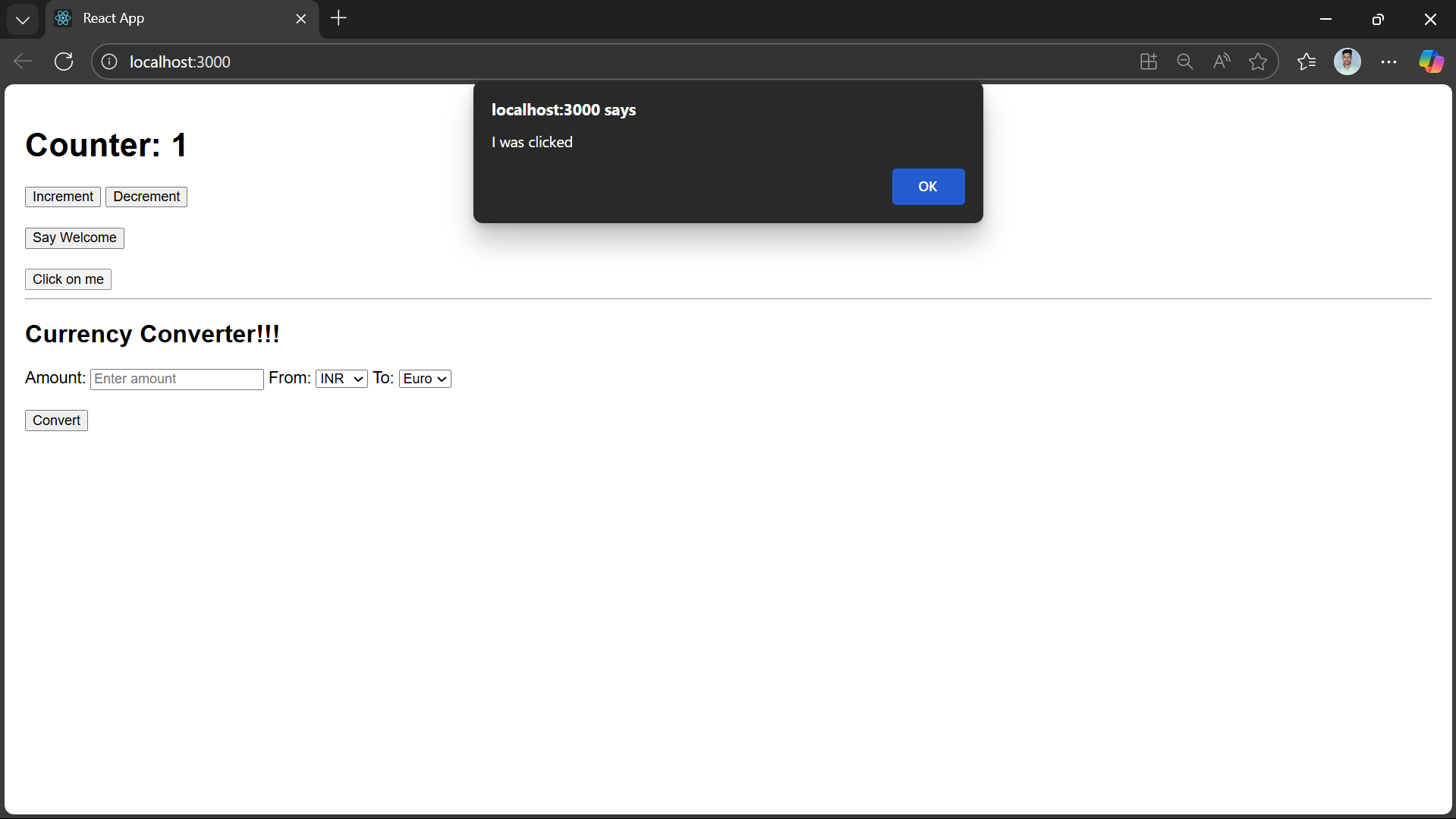
**OUTPUT :**

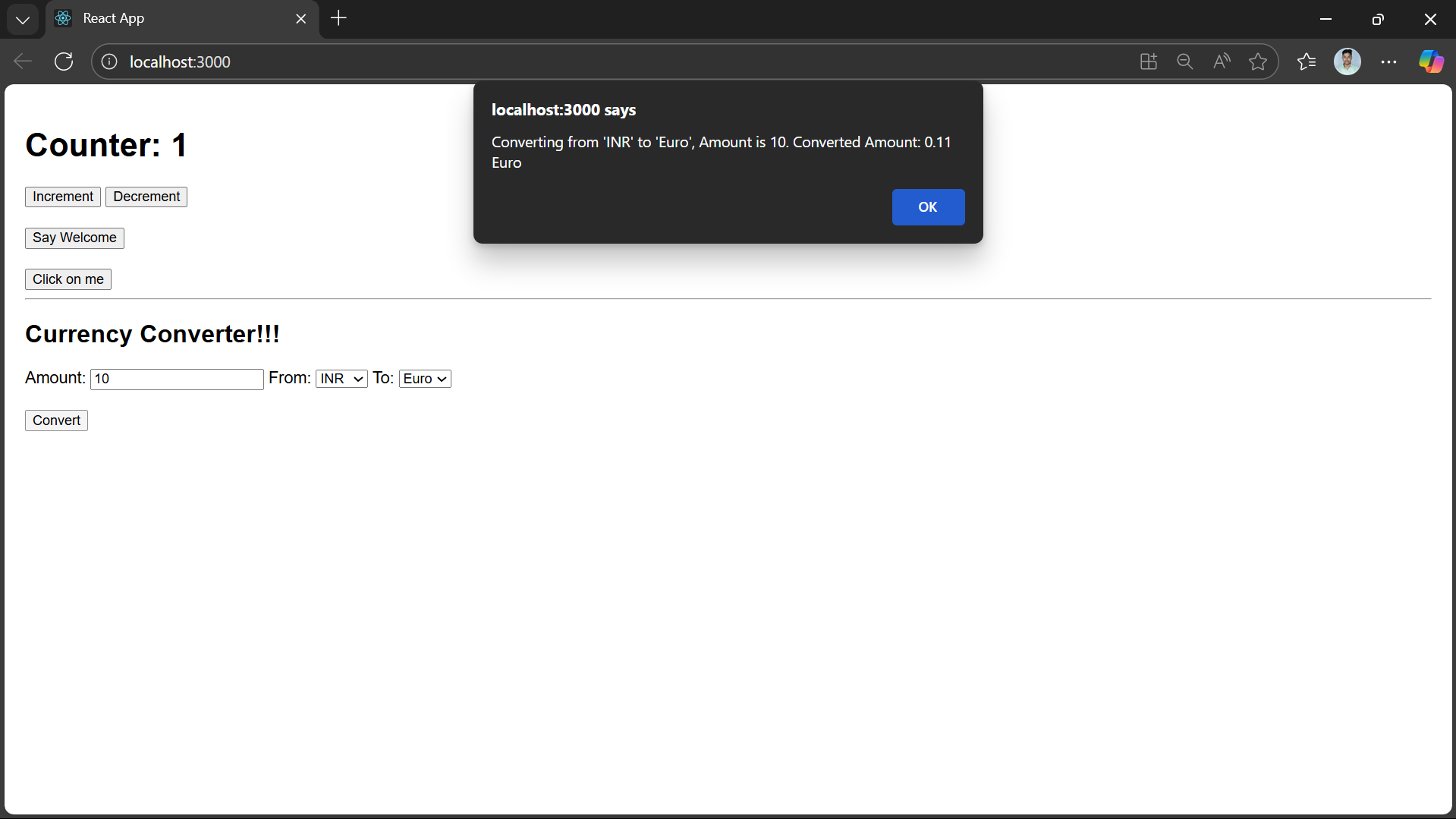
**Localhost:3000 :**

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