**16.ReactJS-HOL**

**Code:**

register.js

// src/components/register.js

import React, { useState } from 'react';

function Register() {

const [formData, setFormData] = useState({

name: '',

email: '',

password: ''

});

const [errors, setErrors] = useState({});

const handleChange = (e) => {

const { name, value } = e.target;

setFormData({ ...formData, [name]: value });

// Live validation

validateField(name, value);

};

const validateField = (name, value) => {

let newErrors = { ...errors };

if (name === 'name') {

newErrors.name = value.length >= 5 ? '' : 'Name must be at least 5 characters.';

}

if (name === 'email') {

newErrors.email = value.includes('@') && value.includes('.')

? ''

: 'Invalid email format.';

}

if (name === 'password') {

newErrors.password = value.length >= 8 ? '' : 'Password must be at least 8 characters.';

}

setErrors(newErrors);

};

const handleSubmit = (e) => {

e.preventDefault();

const validationErrors = {};

if (formData.name.length < 5) {

validationErrors.name = 'Name must be at least 5 characters.';

}

if (!formData.email.includes('@') || !formData.email.includes('.')) {

validationErrors.email = 'Invalid email format.';

}

if (formData.password.length < 8) {

validationErrors.password = 'Password must be at least 8 characters.';

}

setErrors(validationErrors);

if (Object.keys(validationErrors).length === 0) {

alert('Form submitted successfully!');

// Optionally reset form

setFormData({ name: '', email: '', password: '' });

}

};

return (

<div style={{ width: '400px', margin: 'auto', marginTop: '50px' }}>

<h2>Register</h2>

<form onSubmit={handleSubmit}>

<div>

<label>Name:</label><br />

<input

type="text"

name="name"

value={formData.name}

onChange={handleChange}

required

style={{ width: '100%', padding: '8px' }}

/>

<div style={{ color: 'red' }}>{errors.name}</div>

</div>

<div>

<label>Email:</label><br />

<input

type="email"

name="email"

value={formData.email}

onChange={handleChange}

required

style={{ width: '100%', padding: '8px' }}

/>

<div style={{ color: 'red' }}>{errors.email}</div>

</div>

<div>

<label>Password:</label><br />

<input

type="password"

name="password"

value={formData.password}

onChange={handleChange}

required

style={{ width: '100%', padding: '8px' }}

/>

<div style={{ color: 'red' }}>{errors.password}</div>

</div>

<button type="submit" style={{ marginTop: '15px', padding: '10px 20px' }}>

Register

</button>

</form>

</div>

);

}

export default Register;

App.js

import React from 'react';

import Register from './components/register';

function App() {

return (

<div className="App">

<Register />

</div>

);

}

export default App;

**OUTPUT:**

