**16.ReactJs HOL**

Create a React App named “mailregisterapp” which will have a component named “register.js”. Create a form which accepts the name, email and password and validate the fields as per the following:

1. Name should have atleast 5 characters
2. Email should have @ and .
3. Password should have atleast 8 characters.

**React App : mailregisterapp**

**Register.js**

import React, { useState } from 'react';

function Register() {

  const [formData, setFormData] = useState({

    name: '',

    email: '',

    password: ''

  });

  const [errors, setErrors] = useState({

    name: '',

    email: '',

    password: ''

  });

  const handleChange = (e) => {

    const { name, value } = e.target;

    setFormData({

      ...formData,

      [name]: value

    });

    validateField(name, value);

  };

  const validateField = (name, value) => {

    let error = '';

    if (name === 'name' && value.length < 5) {

      error = 'Full name must be 5 characters';

    }

    if (name === 'email' && (!value.includes('@') || !value.includes('.'))) {

      error = 'Email is not valid';

    }

    if (name === 'password' && value.length < 8) {

      error = 'Password must be 8 characters long';

    }

    setErrors({

      ...errors,

      [name]: error

    });

  };

  const handleSubmit = (e) => {

    e.preventDefault();

    const { name, email, password } = formData;

    let valid = true;

    if (name.length < 5) {

      errors.name = 'Full name must be 5 characters';

      valid = false;

    }

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

      errors.email = 'Email is not valid';

      valid = false;

    }

    if (password.length < 8) {

      errors.password = 'Password must be 8 characters long';

      valid = false;

    }

    setErrors({ ...errors });

    if (valid) {

      alert('Form submitted successfully!');

    }

  };

  return (

    <div style={{ maxWidth: '400px', margin: 'auto' }}>

      <h2>Register Form</h2>

      <form onSubmit={handleSubmit}>

        <div>

          <label>Name:</label><br />

          <input

            type="text"

            name="name"

            value={formData.name}

            onChange={handleChange}

          />

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

        </div>

        <div>

          <label>Email:</label><br />

          <input

            type="email"

            name="email"

            value={formData.email}

            onChange={handleChange}

          />

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

        </div>

        <div>

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

          <input

            type="password"

            name="password"

            value={formData.password}

            onChange={handleChange}

          />

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

        </div>

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

      </form>

    </div>

  );

}

export default Register;

**App.js**

import React from 'react';

import Register from './Register';

function App() {

  return (

    <div>

      <Register />

    </div>

  );

}

export default App;

**Final Output:**

