CODE :

Client :

App

import React from 'react';

import { BrowserRouter as Router, Routes, Route } from 'react-router-dom';

import Register from './Register';

import Login from './Login'; // Make sure this component exists

function App() {

return (

<Router>

<Routes>

<Route path="/register" element={<Register />} />

<Route path="/login" element={<Login />} />

<Route path="\*" element={<Register />} /> {/\* Optional: default route \*/}

</Routes>

</Router>

);

}

export default App;

**Login**

import React, { useState } from 'react';

import axios from 'axios';

import { Link } from 'react-router-dom';

import './Login.css';

function Login() {

const [form, setForm] = useState({ email: '', password: '' });

const [message, setMessage] = useState('');

const handleChange = e => setForm({ ...form, [e.target.name]: e.target.value });

const handleSubmit = async e => {

e.preventDefault();

try {

const res = await axios.post('http://localhost:5000/api/auth/login', form);

setMessage(res.data.message);

alert(res.data.message); // ✅ Show alert for valid login

} catch (err) {

const errorMsg = err.response?.data?.message || 'Something went wrong';

setMessage(errorMsg);

alert(errorMsg); // ❌ Show alert for invalid login

}

};

return (

<div className="login-container">

<h3>Login</h3>

<form onSubmit={handleSubmit}>

<input name="email" placeholder="Email" onChange={handleChange} />

<input name="password" placeholder="Password" type="password" onChange={handleChange} />

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

</form>

<p>{message}</p>

<p className="switch-link">

Don’t have an account? <Link to="/register">Register</Link>

</p>

</div>

);

}

export default Login;

**Register**

import React, { useState } from 'react';

import { Link } from 'react-router-dom';

import axios from 'axios';

import './Register.css';

function Register() {

const [form, setForm] = useState({ name: '', email: '', password: '' });

const [message, setMessage] = useState('');

const handleChange = e => setForm({ ...form, [e.target.name]: e.target.value });

const handleSubmit = async e => {

e.preventDefault();

try {

const res = await axios.post('http://localhost:5000/api/auth/register', form);

setMessage(res.data.message);

alert(res.data.message); // ✅ Show alert for valid login

} catch (err) {

setMessage(err.response?.data?.message || 'Something went wrong');

alert(errorMsg); // ❌ Show alert for invalid login

}

};

return (

<div className="register-container">

<h3>Register</h3>

<form onSubmit={handleSubmit}>

<input name="name" placeholder="Name" onChange={handleChange} />

<input name="email" placeholder="Email" onChange={handleChange} />

<input name="password" placeholder="Password" type="password" onChange={handleChange} />

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

</form>

<p>{message}</p>

<p className="switch-link">

Already have an account? <Link to="/login">Login</Link>

</p>

</div>

);

}

export default Register;

**SERVER :**

**Index.js**

const express = require('express');

const cors = require('cors');

const authRoutes = require('./routes/auth');

const app = express();

app.use(cors());

app.use(express.json());

app.use('/api/auth', authRoutes);

app.listen(5000, () => console.log('Server running on port 5000'));

**Auth.js**

const express = require('express');

const router = express.Router();

const bcrypt = require('bcrypt');

const db = require('../db');

// Register

router.post('/register', async (req, res) => {

const { name, email, password } = req.body;

if (!name || !email || !password) return res.status(400).json({ message: 'All fields are required' });

const hashedPassword = await bcrypt.hash(password, 10);

db.query('SELECT \* FROM user WHERE email = ?', [email], (err, results) => {

if (results.length > 0) {

return res.status(409).json({ message: 'Email already registered' });

}

db.query('INSERT INTO user (name, email, password) VALUES (?, ?, ?)', [name, email, hashedPassword], (err, result) => {

if (err) return res.status(500).json({ message: 'Database error' });

res.status(201).json({ message: 'User registered successfully' });

});

});

});

// Login

router.post('/login', (req, res) => {

const { email, password } = req.body;

if (!email || !password) return res.status(400).json({ message: 'Email and password are required' });

db.query('SELECT \* FROM user WHERE email = ?', [email], async (err, results) => {

if (err) return res.status(500).json({ message: 'Database error' });

if (results.length === 0) return res.status(401).json({ message: 'User not found' });

const user = results[0];

const match = await bcrypt.compare(password, user.password);

if (!match) return res.status(401).json({ message: 'Invalid credentials' });

res.status(200).json({ message: 'Login successful', user: { id: user.id, name: user.name, email: user.email } });

});

});

module.exports = router;

**Db.js**

const mysql = require('mysql2');

const connection = mysql.createConnection({

host: 'localhost',

user: 'root',

password: '',

database: 'mu\_2425\_test',

});

connection.connect((err) => {

if (err) throw err;

console.log('Connected to MySQL');

});

module.exports = connection;

**OUTPUT**

