**Step 1: Install Node.js**

Make sure you have **Node.js** installed. You can download it from [Node.js Official Site](https://nodejs.org/).

To check if you have Node.js installed, run:

**node –v**

And for npm (Node Package Manager):

**npm -v**

**Step 2: Create a React Project with Lite Mode**

Run the following command to create a React app with **React Lite Mode** enabled:

**npx create-react-app my-app --experimental-lite**

he --experimental-lite flag enables the **React Lite Mode**, which optimizes performance by reducing unnecessary re-renders.

📌 **Alternative:** If you don’t want to use Lite Mode, simply run:

**npx create-react-app my-app**

**Step 3: Navigate to the Project Folder**

**cd my-app**

**Step 4: Start the React App**

**npm start**

This will launch the development server at http://localhost:3000/

**Recommended Project Structure**

my-app/

│── node\_modules/ # Installed dependencies

│── public/ # Static assets (favicon, index.html)

│── src/ # Source code

│ │── components/ # Reusable React components

│ │── pages/ # Page-level components (optional)

│ │── assets/ # Images, CSS files

│ │── App.js # Main app component

│ │── index.js # Entry point

│── .gitignore # Git ignore file

│── package.json # Project configuration and dependencies

│── README.md # Project documentation

**Step 5: Install Additional Dependencies (Optional)**

If you need additional packages, install them with:

**npm install axios react-router-dom**

### **1. Create a Vite React App**

Run the following commands in your terminal:

**npm create vite@latest eshwar-college-app --template react**

**cd eshwar-college-app**

**npm install**

**npm install react-router-dom**

2. Project Structure

**my-auth-app/**

**│── src/**

**│ ├── components/**

**│ │ ├── InputField.jsx**

**│ │ ├── Button.jsx**

**│ ├── pages/**

**│ │ ├── Login.jsx**

**│ │ ├── Register.jsx**

**│ │ ├── ForgotPassword.jsx**

**│ ├── routes/**

**│ │ ├── AppRoutes.jsx**

**│ ├── App.jsx**

**│ ├── main.jsx**

**│── public/**

**│── index.html**

**│── package.json**

**│── vite.config.js**

3. Install Dependencies

**npm install react-hook-form**

### **4. Create Components**

#### **📌 InputField.jsx**

**const InputField = ({ label, type, name, register, errors }) => {**

**return (**

**<div>**

**<label>{label}</label>**

**<input type={type} {...register(name, { required: `${label} is required` })} />**

**{errors[name] && <p className="error">{errors[name].message}</p>}**

**</div>**

**);**

**};**

**export default InputField;**

📌 Button.jsx

**const Button = ({ text, onClick }) => {**

**return <button onClick={onClick}>{text}</button>;**

**};**

**export default Button;**

### **5. Create Pages**

#### **📌 Login.jsx**

**import { useForm } from "react-hook-form";**

**import { Link } from "react-router-dom";**

**import InputField from "../components/InputField";**

**import Button from "../components/Button";**

**const Login = () => {**

**const { register, handleSubmit, formState: { errors } } = useForm();**

**const onSubmit = (data) => console.log(data);**

**return (**

**<div>**

**<h2>Login</h2>**

**<form onSubmit={handleSubmit(onSubmit)}>**

**<InputField label="Email" type="email" name="email" register={register} errors={errors} />**

**<InputField label="Password" type="password" name="password" register={register} errors={errors} />**

**<Button text="Login" />**

**</form>**

**<p><Link to="/forgot-password">Forgot Password?</Link></p>**

**<p>Don't have an account? <Link to="/register">Register</Link></p>**

**</div>**

**);**

**};**

**export default Login;**

📌 Register.jsx

**import { useForm } from "react-hook-form";**

**import { Link } from "react-router-dom";**

**import InputField from "../components/InputField";**

**import Button from "../components/Button";**

**const Register = () => {**

**const { register, handleSubmit, formState: { errors } } = useForm();**

**const onSubmit = (data) => console.log(data);**

**return (**

**<div>**

**<h2>Register</h2>**

**<form onSubmit={handleSubmit(onSubmit)}>**

**<InputField label="Name" type="text" name="name" register={register} errors={errors} />**

**<InputField label="Email" type="email" name="email" register={register} errors={errors} />**

**<InputField label="Password" type="password" name="password" register={register} errors={errors} />**

**<Button text="Register" />**

**</form>**

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

**</div>**

**);**

**};**

**export default Register;**

📌 ForgotPassword.jsx

**import { useForm } from "react-hook-form";**

**import { Link } from "react-router-dom";**

**import InputField from "../components/InputField";**

**import Button from "../components/Button";**

**const ForgotPassword = () => {**

**const { register, handleSubmit, formState: { errors } } = useForm();**

**const onSubmit = (data) => console.log(data);**

**return (**

**<div>**

**<h2>Forgot Password</h2>**

**<form onSubmit={handleSubmit(onSubmit)}>**

**<InputField label="Email" type="email" name="email" register={register} errors={errors} />**

**<Button text="Submit" />**

**</form>**

**<p><Link to="/">Back to Login</Link></p>**

**</div>**

**);**

**};**

**export default ForgotPassword;**

### **6. Set Up Routing**

#### **📌 AppRoutes.jsx**

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

**import Login from "../pages/Login";**

**import Register from "../pages/Register";**

**import ForgotPassword from "../pages/ForgotPassword";**

**const AppRoutes = () => {**

**return (**

**<Router>**

**<Routes>**

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

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

**<Route path="/forgot-password" element={<ForgotPassword />} />**

**</Routes>**

**</Router>**

**);**

**};**

**export default AppRoutes;**

### **7. Update App.jsx**

#### **📌 App.jsx**

**import AppRoutes from "./routes/AppRoutes";**

**const App = () => {**

**return <AppRoutes />;**

**};**

**export default App;**

### **8. Update main.jsx**

#### **📌 main.jsx**

**import React from "react";**

**import ReactDOM from "react-dom/client";**

**import App from "./App";**

**import "./index.css";**

**ReactDOM.createRoot(document.getElementById("root")).render(**

**<React.StrictMode>**

**<App />**

**</React.StrictMode>**

**);**

9. Start the Development Server

**npm run dev**