

# Job Search Portal

## Project Overview

### 1. Technology Stack

#### Frontend:

- React.js: For building dynamic and responsive user interfaces.
- React Router: For navigating between components/pages.
- Axios / Fetch API: For making HTTP requests to the backend.

#### Backend:

- Node.js: JavaScript runtime for server-side development.
- Express.js: Web framework to build RESTful APIs.

#### Database:

- MongoDB: NoSQL database used for storing job listings, user profiles, and application data.
- Mongoose: ODM (Object Data Modeling) library for MongoDB and Node.js.

### 2. Key Features

#### For Job Seekers:

- User Registration and Login.
- Profile creation with resume uploads and skill listing.
- Browse and search for job listings.
- Apply to jobs directly from the portal.
- Track application status.

#### For Recruiters:

- Employer Registration and Login.
- Post job openings with detailed job descriptions.
- View and manage applications received.
- Search through applicant profiles.

#### Admin Panel (optional feature):

- Manage users (job seekers and employers).
- Review job postings and control spam.
- Analytics dashboard showing platform usage.

### 3. System Architecture

- Frontend (React) communicates with
- Backend (Node.js + Express) via RESTful APIs, which then interacts with
- MongoDB Database to store/retrieve data.
- All components are hosted on local or cloud environments (like Heroku, Vercel, MongoDB Atlas).

#### 4. Development Workflow

- Planning and Requirements Gathering
- Frontend Design with React Components
- Backend API Development
- Database Schema Design
- Integration of Frontend with Backend
- Authentication & Authorization (JWT/Bcrypt)
- Testing and Debugging
- Deployment

#### 5. Challenges Faced

- Implementing secure user authentication.
- Handling form validations and error management.
- Ensuring smooth integration between the frontend and backend.
- Managing asynchronous data fetching and state updates.

#### Conclusion

The Job Search Portal project successfully demonstrates the use of the MERN stack in building a fully functional, real-world web application. It offers an efficient solution for connecting job seekers with potential employers and serves as a solid base for further enhancements in the domain of recruitment platforms.

