JobSnap Project - Skill Requirements & Learning Resources

AI-Powered Job Tracker (JobSnap) Required Skills & Learning Resources

1. MERN Stack

MongoDB:

- NoSQL database to store user/job data

- Learn: https://university.mongodb.com/

Express.js:

- Backend web framework for building REST APIs

- Learn: https://expressjs.com/en/starter/installing.html

React.js:

- Frontend JavaScript library for UI

- Learn: https://reactjs.org/tutorial/tutorial.html

Node.js:

- Server-side runtime for JS

- Learn: https://nodejs.org/en/docs

2. Authentication & Security

JWT (JSON Web Token):

- Used for user authentication

- Learn: https://jwt.io/introduction

bcrypt:

- Secure password hashing

- Learn: https://github.com/kelektiv/node.bcrypt.js

3. API Integration

Axios:

- HTTP client for API calls

- Learn: https://axios-http.com/

REST API Design:

- Architecture for client-server communication

- Learn: https://restfulapi.net/

4. File Handling & Resume Parsing

Multer:

- Middleware to handle file uploads in Node.js

- Learn: https://github.com/expressjs/multer

pdf-parse:

- Library to extract text from PDF files

- Learn: https://www.npmjs.com/package/pdf-parse

5. AI Integration

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Hugging Face Transformers:

- Extract skills and key terms from resumes

- Learn: https://huggingface.co/learn/nlp-course/

OpenAI API (Optional):

- GPT-based skill extractor

- Learn: https://platform.openai.com/docs

6. Data Visualization

Chart.js / Recharts:

- Create charts and graphs for dashboard

- Learn: https://www.chartjs.org/docs/ and https://recharts.org/en-US/

7. Deployment

Frontend Hosting (React):

- Vercel: https://vercel.com/docs

- Netlify: https://docs.netlify.com/

Backend Hosting (Express):

- Render: https://render.com/docs

- Railway: https://docs.railway.app/

MongoDB Atlas:

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- Cloud-hosted MongoDB

- Learn: https://www.mongodb.com/atlas/database

Bonus Resources

- MERN Stack Full Tutorial (freeCodeCamp): https://www.youtube.com/watch?v=7CqJlxBYj-M

- REST API in Node & Express: https://www.youtube.com/watch?v=l8WPWK9mS5M

- React Dashboard with Chart.js: https://www.youtube.com/watch?v=s-PRLIA1pHk

- Resume Parser in Node.js: https://www.youtube.com/watch?v=kIcibqnb3a4