**DOCUMENTATION**

**🔍 JobFinder API**

A FastAPI application that helps users discover job listings tailored to their preferences. It integrates live job scraping from Rozee.pk and mock data, with optional intelligent filtering using OpenAI's GPT model.

**🚀 Features**

* 🔧 **Input Customization**: Search by position, experience, salary, job nature, location, and skills.
* 🧠 **AI Relevance Filtering**: Uses OpenAI GPT to determine relevance of job listings (optional).
* 🌐 **Live Scraping**: Retrieves job postings from Rozee.pk.
* 📄 **Mock Listings**: Simulated LinkedIn data for demo/interview purposes.
* 📤 **Unified API Endpoint**: Returns job listings from both sources.

**📦 Requirements**

* Python 3.7+
* FastAPI
* Uvicorn
* Requests
* BeautifulSoup4
* OpenAI (optional)

**Install dependencies:**

bash

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pip install fastapi uvicorn requests beautifulsoup4 openai

**🛠️ File Structure**

bash

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├── main.py # FastAPI app

├── README.md # Project documentation

**🧪 How It Works**

**Input (JobRequest)**

json

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{

"position": "Software Engineer",

"experience": "2 years",

"salary": "100,000 PKR",

"jobNature": "onsite",

"location": "Karachi",

"skills": "Python, React"

}

**Output (JobResponse)**

json

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{

"relevant\_jobs": [

{

"job\_title": "React Developer",

"company": "LinkedIn Partner",

"experience": "2 years",

"jobNature": "onsite",

"location": "Lahore, Pakistan",

"salary": "95,000 PKR",

"apply\_link": "https://linkedin.com/job456",

"source": "LinkedIn"

}

]

}

**🔓 Optional: OpenAI Filtering**

To enable GPT-based job filtering:

* Uncomment the openai.api\_key line in main.py.
* Set your API key like this:

python

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openai.api\_key = "your-key-here"

If left disabled, a mock relevance check always returns True.

**🧪 Run the API**

Start the FastAPI server using:

bash

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uvicorn main:app --reload

Then open in your browser:

arduino

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http://127.0.0.1:8000/docs

Use the Swagger UI to test /find-jobs.

**✅ Sample Request**

json

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{

"position": "Backend Developer",

"experience": "3 years",

"salary": "120,000 PKR",

"jobNature": "remote",

"location": "Lahore",

"skills": "Django, PostgreSQL"

}

**📌 Notes**

* Rozee.pk scraping is limited to 5 listings for demonstration.
* LinkedIn listings are mock data.
* This is built for educational/demo purposes.

**🧠 Credits**

Built with ❤️ using:

* FastAPI
* OpenAI
* BeautifulSoup