

Career Quest

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Github:

<https://github.com/dawoodTanvir/Career-Quest>

Overview

Career Quest is a Fast API based job searcher that takes a json with keys Position, Experience, Salary, Job Nature, Location and Skills as an input and returns all the relevant jobs with their links.

Sites used for collecting job data

1. LinkedIn
2. Indeed
3. Glassdoor

Workflow

Based on user's input the relevant job data is scraped from linkedin, indeed and glassdoor. First the links of jobs are collected then the complete details are collected following the links. Following are the screenshots of data extraction:

```
2025-04-22 20:06:57,739 - _main - INFO - Starting job processing...
2025-04-22 20:06:57,740 - _main - INFO - Starting job scraping...
2025-04-22 20:06:57,742 - LinkedIn - INFO - Starting LinkedIn job search for Full Stack Developer in Islamabad, Pakistan
2025-04-22 20:06:57,744 - LinkedIn - INFO - Fetching page 1 from LinkedIn...
2025-04-22 20:06:58,875 - LinkedIn - INFO - Fetching description for job: Associate Software Engineer - Java Full Stack Developer
2025-04-22 20:07:01,943 - LinkedIn - INFO - Fetching description for job: Business Developer
2025-04-22 20:07:04,927 - LinkedIn - INFO - LinkedIn search completed. Found 2 jobs.
2025-04-22 20:07:04,929 - _main - INFO - LinkedIn scraper returned 2 jobs.
2025-04-22 20:07:05,920 - Indeed - INFO - Built Indeed search URL: https://pk.indeed.com/jobs?q=Full+Stack+Developer&l=Islamabad,+Pakistan&sc=0kfx3Ajt\(fulltime\)%3B
2025-04-22 20:07:05,921 - Indeed - INFO - Starting Indeed job search at URL: https://pk.indeed.com/jobs?q=Full+Stack+Developer&l=Islamabad,+Pakistan&sc=0kfx3Ajt\(fulltime\)%3B
2025-04-22 20:07:09,351 - Indeed - INFO - Scraping Indeed page 1...
2025-04-22 20:07:17,206 - Indeed - INFO - Found Indeed job: Full Stack Developer at Octalooop Technologies
2025-04-22 20:07:19,026 - Indeed - INFO - Found Indeed job: Full Stack Developer at Webrange Solutions
2025-04-22 20:07:20,766 - Indeed - INFO - Found Indeed job: Full Stack Developer at Webtronix
2025-04-22 20:07:22,361 - Indeed - INFO - Found Indeed job: Full Stack Developer at Proto IT Consultants
2025-04-22 20:07:23,980 - Indeed - INFO - Found Indeed job: Full Stack Developer at serpistan
2025-04-22 20:07:25,178 - Indeed - INFO - Found Indeed job: Full Stack Developer at Hire My Tech
2025-04-22 20:07:26,372 - Indeed - INFO - Found Indeed job: Full Stack MERN Developer at Webtronix
2025-04-22 20:07:27,957 - Indeed - INFO - Found Indeed job: Full Stack Developer at Markloops
2025-04-22 20:07:29,139 - Indeed - INFO - Found Indeed job: Senior Full Stack PHP Developer at Zepto Systems Limited
2025-04-22 20:07:30,686 - Indeed - INFO - Found Indeed job: Junior Software Engineer at Applivity Private Limited
2025-04-22 20:07:32,050 - Indeed - INFO - Found Indeed job: Full Stack Developer at DMP Group
2025-04-22 20:07:33,792 - Indeed - INFO - Found Indeed job: NodeJS developer at S Ventures
2025-04-22 20:07:35,491 - Indeed - INFO - Found Indeed job: Fullstack Developer at ZIEL Global Private Limited
2025-04-22 20:07:37,282 - Indeed - INFO - Found Indeed job: Senior Full Stack Developer (Next.js / JavaScript) [100% remote] at AZKY Tech Labs
2025-04-22 20:07:38,837 - Indeed - INFO - Found Indeed job: Full-Stack Intern (React, Next.js, Node.js) - Full-Time at Mehdi Technologies
2025-04-22 20:07:41,703 - Indeed - INFO - Indeed search completed. Found 15 jobs.
2025-04-22 20:07:41,703 - _main - INFO - Indeed scraper returned 15 jobs.
2025-04-22 20:07:42,466 - Glassdoor - INFO - Phase 1: Collecting Glassdoor job links...

2025-04-22 20:07:42,466 - Glassdoor - INFO - Phase 1: Collecting Glassdoor job links...
2025-04-22 20:07:42,467 - Glassdoor - INFO - Opening Glassdoor Jobs...
2025-04-22 20:07:51,812 - Glassdoor - INFO - Entering position: Full Stack Developer
2025-04-22 20:07:53,994 - Glassdoor - INFO - Entering location: Islamabad, Pakistan
2025-04-22 20:08:04,529 - Glassdoor - INFO - Found 30 Glassdoor job listings
2025-04-22 20:08:04,705 - Glassdoor - INFO - Collected Glassdoor link for: Business developer (bidding) at Machineintelligence6
2025-04-22 20:08:04,802 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Proto IT Consultants
2025-04-22 20:08:04,876 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Octalooop Technologies
2025-04-22 20:08:04,973 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack MERN Developer at Webtronix
2025-04-22 20:08:05,058 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Webtronix
2025-04-22 20:08:05,150 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack - Web Developer (MERN Stack) at Decimal Solution
2025-04-22 20:08:05,242 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at serpistan
2025-04-22 20:08:05,378 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Web Developer (React js / Next js) at Invovision
2025-04-22 20:08:05,466 - Glassdoor - INFO - Collected Glassdoor link for: Internship Opportunity: Full Stack Web Developer (Exclusive to Bahria Town & Surroundings) at SoftwareForge
2025-04-22 20:08:05,551 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at DMP Group
2025-04-22 20:08:05,633 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Webrange Solutions
2025-04-22 20:08:05,725 - Glassdoor - INFO - Collected Glassdoor link for: Senior Full Stack Developer (Next.js / JavaScript) [100% remote] at AZKY Tech Labs
2025-04-22 20:08:05,810 - Glassdoor - INFO - Collected Glassdoor link for: MERN Stack Developer at Comtanix
2025-04-22 20:08:05,892 - Glassdoor - INFO - Collected Glassdoor link for: Full-Stack Intern (React, Next.js, Node.js) - Full-Time at Mehdi Technologies
2025-04-22 20:08:05,974 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Z Media Technologies
2025-04-22 20:08:06,057 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Word press Developer- Expert at DEVCUBIX (PRIVATE) LIMITED
2025-04-22 20:08:06,145 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Hire My Tech
2025-04-22 20:08:06,227 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Volpea Solutions
2025-04-22 20:08:06,313 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Dynamics 360 (PVT) LTD
2025-04-22 20:08:06,401 - Glassdoor - INFO - Collected Glassdoor link for: MERN Stack Developer at NESL-IT (SMV PVT) LTD
2025-04-22 20:08:06,488 - Glassdoor - INFO - Collected Glassdoor link for: Full Stack Developer at Savanna Digital Pte ltd
2025-04-22 20:08:06,595 - Glassdoor - INFO - Collected Glassdoor link for: Senior MERN Stack Developer at Syslab Technologies
2025-04-22 20:08:06,681 - Glassdoor - INFO - Collected Glassdoor link for: Dot Net, Angular (full-stack) Developer at SAUFIK
2025-04-22 20:08:06,785 - Glassdoor - INFO - Collected Glassdoor link for: Senior Full Stack PHP Developer at Zepto Systems Limited

2025-04-22 20:08:07,273 - Glassdoor - INFO - Phase 2: Getting detailed information for each Glassdoor job...
2025-04-22 20:08:07,274 - Glassdoor - INFO - Getting Glassdoor details for: Business developer (bidding) at Machineintelligence6
2025-04-22 20:08:19,842 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Proto IT Consultants
2025-04-22 20:08:31,735 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Octalooop Technologies
2025-04-22 20:08:42,771 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack MERN Developer at Webtronix
2025-04-22 20:08:53,920 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Webtronix
2025-04-22 20:09:05,432 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack - Web Developer (MERN Stack) at Decimal Solution
2025-04-22 20:09:16,660 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at serpistan
2025-04-22 20:09:28,005 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Web Developer (React js / Next js) at Invovision
2025-04-22 20:09:39,346 - Glassdoor - INFO - Getting Glassdoor details for: Internship Opportunity: Full Stack Web Developer (Exclusive to Bahria Town & Surroundings) at SoftwareForge
2025-04-22 20:09:50,343 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at DMP Group
2025-04-22 20:10:02,938 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Webrange Solutions
2025-04-22 20:10:13,716 - Glassdoor - INFO - Getting Glassdoor details for: Senior Full Stack Developer (Next.js / JavaScript) [100% remote] at AZKY Tech Labs
2025-04-22 20:10:24,589 - Glassdoor - INFO - Getting Glassdoor details for: MERN Stack Developer at Comtanix
2025-04-22 20:10:35,344 - Glassdoor - INFO - Getting Glassdoor details for: Full-Stack Intern (React, Next.js, Node.js) - Full-Time at Mehdi Technologies
2025-04-22 20:10:46,126 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Z Media Technologies
2025-04-22 20:10:56,986 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Word press Developer- Expert at DEVCUBIX (PRIVATE) LIMITED
2025-04-22 20:11:08,321 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Hire My Tech
2025-04-22 20:11:19,430 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Volpea Solutions
2025-04-22 20:11:31,452 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Dynamics 360 (PVT) LTD
2025-04-22 20:11:42,625 - Glassdoor - INFO - Getting Glassdoor details for: MERN Stack Developer at NESL-IT (SMV PVT) LTD
2025-04-22 20:11:54,047 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Savanna Digital Pte ltd
2025-04-22 20:12:06,374 - Glassdoor - INFO - Getting Glassdoor details for: Senior MERN Stack Developer at Syslab Technologies
2025-04-22 20:12:18,151 - Glassdoor - INFO - Getting Glassdoor details for: Dot Net, Angular (full-stack) Developer at SAUFIK
2025-04-22 20:12:30,050 - Glassdoor - INFO - Getting Glassdoor details for: Senior Full Stack PHP Developer at Zepto Systems Limited
2025-04-22 20:12:43,789 - Glassdoor - INFO - Getting Glassdoor details for: Laravel Full Stack Developer at Hybrid Mediaworks
2025-04-22 20:12:55,699 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Software Engineer at NorthBay Solutions
2025-04-22 20:13:07,202 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Vue.js Developer at Phebsoft
2025-04-22 20:13:18,146 - Glassdoor - INFO - Getting Glassdoor details for: Full Stack Developer at Woltrio
```

The data is saved in a json file which will be used as a context to LLM.

The LLM used for this purpose is deepseek-r1-distill llama 70b imported using api from Groq. The json data is passed to LLM in a batch of 3 as big batches cause “Request too large for

LLM” error. The LLM filters out relevant jobs according to the input given by the user such as “skills”. The final result is sent to Fast API localhost. Following are the screenshots of Fast API request and response:

Request

The screenshot shows the Swagger UI for a FastAPI endpoint. The browser address bar indicates the URL is `localhost:8000/docs#/default/process_jobs_process_jobs_post`. The endpoint is a POST request to `/process_jobs` (labeled "Process Jobs"). The "Parameters" section shows "No parameters". The "Request body" section is marked as "required" and has a dropdown menu set to "application/json". The request body is a JSON object with the following fields: `position` ("Full Stack Developer"), `experience` ("2 years"), `salary` ("100,000 PKR to 300,000 PKR"), `jobNature` ("onsite"), `location` ("Islamabad, Pakistan"), and `skills` ("full stack, MERN, Node.js, Express.js, React.js, Next.js, Firebase, TailwindCSS, CSS Frameworks, Tokens handling"). At the bottom, there are "Execute" and "Clear" buttons. An "Activate Windows" watermark is visible in the bottom right corner.

```
{
  "position": "Full Stack Developer",
  "experience": "2 years",
  "salary": "100,000 PKR to 300,000 PKR",
  "jobNature": "onsite",
  "location": "Islamabad, Pakistan",
  "skills": "full stack, MERN, Node.js, Express.js, React.js, Next.js, Firebase, TailwindCSS, CSS Frameworks, Tokens handling"
}
```

Response

}'

Request URL

http://localhost:8000/process_jobs

Server response

Code Details

200

Response body

```
{
  "job_title": "Full Stack Developer",
  "company": "Proto IT Consultants",
  "experience": "2 years",
  "jobNature": "In person",
  "location": "Islamabad, Pakistan",
  "salary": "PKR 100K - PKR 150K",
  "apply_link": "https://www.glassdoor.com/job-listing/full-stack-developer-proto-it-consultants-JV_IC3139539_K00_20_KE21_41.htm?jl=1009714834968"
},
{
  "job_title": "Full Stack MERN Developer",
  "company": "Webtronix",
  "experience": "2-3 years",
  "jobNature": "In person",
  "location": "Islamabad, Pakistan",
  "salary": "PKR 120K - PKR 300K",
  "apply_link": "https://www.glassdoor.com/job-listing/full-stack-mern-developer-webtronix-JV_IC3139539_K00_25_KE26_35.htm?jl=1009584515999"
},
{
  "job_title": "Full Stack Developer",
  "company": "Webtronix",
  "experience": "4-5 years",
  "jobNature": "onsite",
  "location": "Islamabad, Pakistan",
  "salary": "PKR 80K - PKR 250K",
  "apply_link": "https://www.glassdoor.com/job-listing/full-stack-developer-webtronix-JV_IC3139539_K00_20_KE21_30.htm?jl=1009704082479"
}
```

Response headers

```
content-length: 4399
content-type: application/json
```

Download

Activate Windows
Go to Settings to activate Windows

The localhost is <http://localhost:8000/docs>.

Thank you !