Assessment Task: AI-Powered Job-Candidate Matching API

Project Overview

Build a backend-only web application using Django REST Framework that allows:

- HR/Admins to post job listings and view AI-powered candidate recommendations based on each job

- Candidates to register and submit their profiles

- The system should analyze profiles and job requirements to recommend top-matching candidates using AI logic (skills, experience, etc.)

Use JWT authentication and test all APIs using Postman.

Core Functionalities

Authentication

- Use JWT-based authentication

- Two types of users:
  - **Admin (HR)** – Can post jobs and fetch top candidate matches

  - **Candidate** – Can register and submit/update their own profiles

Job Management (Admin)

- Admins can:
  - Create new job listings

  - Retrieve a list of jobs

  - Request AI-driven top candidate recommendations for any job

Candidate Profiles

- Candidates should be able to register, log in, and submit profile data

- Profile data will later be matched against job listings to assess fit

Important: You are free to decide what candidate fields (like skills, location, etc.) are relevant and how they should be structured. Think from an AI-matching perspective.

AI Matching Logic

- When an admin requests recommendations for a job:
  - The system should evaluate candidate profiles using basic AI logic (e.g., skill overlap, experience comparison)

  - Return a ranked list of candidates with a fit score or reason for recommendation

Deliverables

- Django project (in GitHub or as a zipped folder)
- README with setup and usage instructions
- Postman collection (optional, but preferred)
- Clearly implemented matching logic and clean code structure