Data Scientist Task – Candidate Pool Management

Project Overview

Project Title: Candidate Pool Management
Role: Data Scientist
Objective: Explore how data can optimize recruitment processes, reduce inefficiencies, and improve hiring outcomes.

Business Problem

Recruitment processes often rely on manual CV screening and interview coordination. This creates:

- Delays in hiring decisions.
- Inconsistencies in candidate evaluation.
- Risk of losing top candidates, especially under high applicant volumes.

ROI & Expected Impact

- Faster screening and reduced time-to-hire.
- Improved quality-of-hire by supporting data-driven decision making.
- Lower hiring errors and cost-per-hire.
- Scalable hiring practices to support business growth.

Data Used

- Applicant resumes and submitted profiles.
- Job Descriptions

Task Assignment

Your Challenge as a Data Scientist:

- Work with the available datasets to analyze, structure, and extract meaningful insights.
- Develop a method to represent candidate information in a way that enables effective comparison to job requirements.
- Propose a framework for ranking or prioritizing candidates.
- Document your approach, highlighting assumptions, methodology, and evaluation considerations.

Deliverables

1. Technical Report – Detailing the data analysis, methodology, and reasoning.
2. Proposed Framework – For candidate-job comparison and ranking.
3. Sample Output – Demonstrating how the framework would prioritize candidates for a given job description.

Bonus Points

- Dockerization – Packaging your solution for easy reproducibility.
- User Interface – A simple interface (CLI, web, or dashboard) to demonstrate candidate-job matching and ranking.

Timeline

- Estimated Effort: 3-6 hours of focused work.
- Submission: Github Repo & Provide a written report (PDF/Word) along with any optional code or interface.