Gloat Backend Home Assignment - Basic Matcher

Overview

Implement a basic web server with MySQL called "matcher".

The services models must include these basic 3 main models (feel free to add additional ones):

- Skill
- Candidate
- Job

In addition, the service's main purpose is to find the best candidates for a given job.

Details

1.1. A **Skill** is an entity that has a name.

For example: "Java", "C++", "PowerPoint".

- 1.2. A **Candidate** is an entity that has:
 - 1.2.1. A title
 - 1.2.2. Zero or more Skills

For example: "Software Developer" with "C++ and Java".

- 1.3. A **Job** is an entity that has:
 - 2.3.1. A title
 - 2.3.2. Zero or more Skills

1.4. Write an endpoint that, given a Job, pulls matching Candidates from the DB, and returns the best ones for the Job.

Considerations:

1.4.1. Full title match.

For example, a "software developer" candidate is good for a "software developer" job

- 1.4.2. Having as many skill matches as possible
- 1.4.3. **Bonus** Partial title match.

For example - a "software developer" candidate is good for a "software developer" job **and** for a "software engineer" job as well.

- Please consider **performance** in your suggested solution
- Please assume many candidates and many jobs are already in the DB

Submission

- We should be able to run your application and play with it. You can send over the .py files.
- Please submit your work to <u>assignment-backend@gloat.com</u> with clear instructions on how to install/run.
- You may submit your work as a repository (make sure to give the right permissions).

Please feel free to contact us if some information is missing, or something is counter-intuitive, please use your creative freedom and comment on it.