ER Diagram Justification:

Entity:

- 1.) Company entity stores details about the company specific information. This is kept as a single entity so that it can be used for multiple job openings.
- 2.) Job Openings entity stores information that is specific to a certain job and its requirements.
- 3.) Recruiters can work for one or more companies. Recruiter entity stores information about the recruiter. Recruiters are the ones who are responsible for posting a job opening too.
- 4.) Applicants entity stores data about the applicant so that they can apply to job openings.

Relationship:

- 1.) Each company offers 0 or more job openings (thus there is a 1 to many relationship).
- 2.) 0 or more job openings are posted by a recruiter (this there is a many to 1 relationship).
- 3.) 1 or more recruiters work for 1 or more companies (thus there is a many-to-many relationship).
- 4.) An applicant can apply to 0 or more openings and similarly, each job openings has 0 or more applicants (thus there is a many-to-many relationship).

Attributes:

- 1.) Attributes such as job_id, company_id, recuriter_id, applicant_id are kept as key attribute (an underline) as they are going to be unique.
- 2.) Attributes such as location, skills_required, etc: are kept as multi-valued attributes (oval with the border).
- 3.) Other attributes are kept as single valued attributes which need not be unique (simply oval with no underline).