

Assignment - 3

ER Diagram for Online Library Management System

Requirements

Design an Entity-Relationship (ER) Diagram for an Online Library Management System that includes:

1. Entities & Attributes

1. Candidate

- Candidate ID (Primary key)
- First name
- Email
- Phone
- Resume
- Qualification

2. Job

- Job ID (Primary key)
- Job Title
- Department
- Location
- Job Description
- Post Date
- Deadline

3. Application

- Application ID (Primary key)
- Application Date
- Status (e.g. Applied, Shortlisted, Rejected, Hired)

4. Recruiter

- Recruiter ID (Primary key)
- Name
- Email
- Department
- Role

5. Interview

- Interview ID (Primary Key)
- Interview Date
- Interview Type (e.g., HR, Technical)
- Feedback
- Result (Pass/Fail)

2. Relationships and cardinalities:

Candidate applies for Job

Relationship: Applies

Cardinality:

- One Candidate can apply to many Jobs.
- One Job can receive Applications from Many Candidates

Type: Many to many

Resolved via: Application entity (Acts as associative entity)

Recruiter Posts Job

Relationship: Posts

Cardinality:

- One Recruiter can post many Jobs
- One Job is posted by One Recruiter.

Type: One to many.

Candidate Attends Interview

Relationship: Attends

Cardinality:

- One Candidate can attend Many Interviews
- One Interview is for One Candidate

Type: One to Many

Interview is for a Job

Relationship: scheduled for
Cardinality:

- One Job can have many Interviews
- Each Interview is associated with One Job.

Type: One to Many.

