Assumptions for database design:

1. The employer could be a person or a company, then the name of employer could not be a primary key in the Employer schema.

ER Diagram to Relational Database Schema

Entity:

- **User** (<u>UserID,</u> Email, Address, Phone_number, Password, Username)

- **Employer** (<u>Employer_ID</u>, Description, Name, Balance, Membership_StartTime *UserId, GenreEm*)

  Foreign key: UserID referring to User, GenreEm referring to EmployerMembership

- **Candidate** (<u>Candidate_ID</u>, FirstName, LastName, Balance, Membership_StartTime, *UserId, GenreCan*)

  Foreign key: UserID referring to User, GenreCan referring to CandidateMembership

- **Admin** (<u>Admin_ID</u>, FirstName, LastName, *UserId*)

  Foreign key: UserID referring to User

- **Job** (<u>Job_ID</u>, Vacancies, JobStatus, Title, Description, Post_Date, Location, *Employer_ID, GenreJob*)

  Foreign key: Employer_ID referring to Employer, GenreJob referring to JobCategory

- **Payment** (**Payment_ID,** Amount, PaymentCreateDate, *UserId*)

  Foreign key: UserID referring to User

- **PayMenthod** (<u>**PayMethod_ID,**</u> Card_Number, CVV_Number, ExpireDate, DefaultCard, AutoManual, *UserId, Payment_ID*)

  Foreign key: Payment_ID referring to Payment, UserID referring to User

- **EmployerMembership** (<u>Genre</u>, MonthlyFee, MaxJobPost)

- **CandidateMembership** (<u>Genre</u>, MonthlyFee, MaxJobApply)

- **PadInformation** (AccountNumber, BranchNumber, InstituteNumber, ***<u>PayMethod_ID</u>)***

Foreign key: PayMethod_ID referring to Payment

- **JobCategory** (**<u>Genre</u>**, Name)

Relationship:

- **Application** (ApplicationStatus, ApplicationDate, Job_ID, Candidate_ID)

  *Primary key: (**<u>Job_ID, Candidate_ID</u>**)*

  Foreign key: Job_ID referring to Job, Candidate_ID referring to Candidate