CS5200
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Project 1: Application Manager
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Company Application Management
I.   Project Requirements
        This is an application management for a single company called JobHunt. JobHunt could
        post more than one position. Each posting should have a brief description, minimum
        qualification, and annual salary. Each posting could receive more than one application.
        Each applicant could apply to more than one position. Although each applicant could
        apply to multiple position, he/she cannot apply to same posting multiple times. Each
        application contains the submission date, applicant's contact information, applicant's
        qualification, and decision. There are only two possible decisions for each application,
        which is either hired or rejected.

        Requirements:
        • There are multiple job postings
        • Each posting can only be for one position
        • Each posting could receive more than one application
        • Applicant should have at least one application
        • Applicant cannot apply to the same posting multiple times
        • Applicant could apply to multiple postings
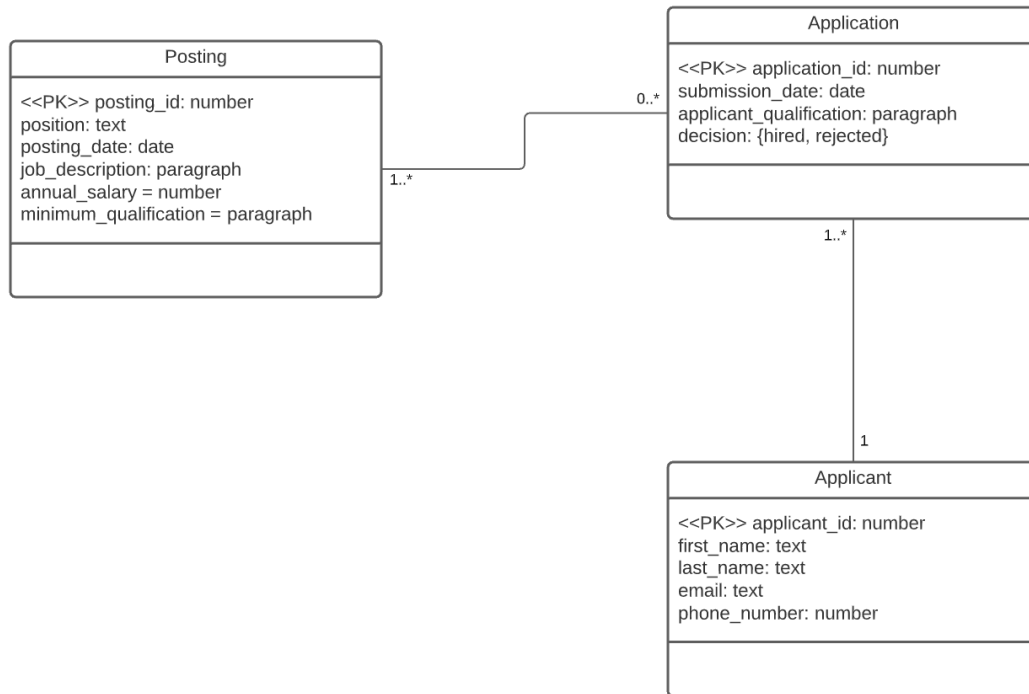   • Applicant will put his/her qualification in each application

        Nouns:
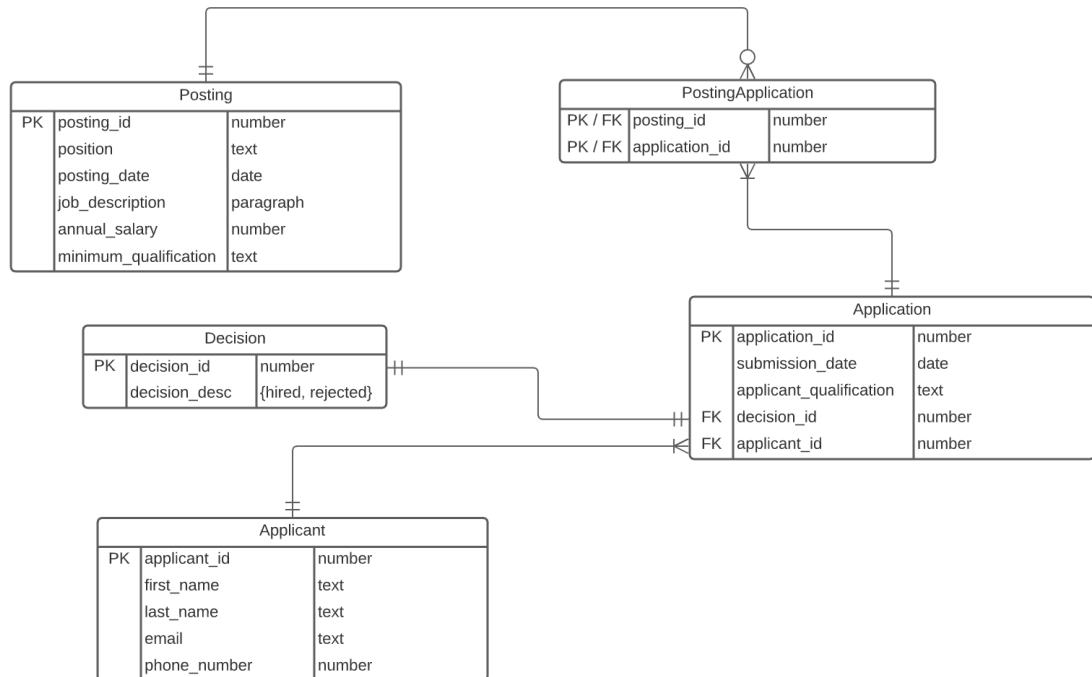   • Job posting
        • Application
        • Applicants

        Verbs:
        • Apply

II. Conceptual Model

Posting

<<PK>> posting_id: number
position: text
posting_date: date
job_description: paragraph
annual_salary = number
minimum_qualification = paragraph

Application

<<PK>> application_id: number
submission_date: date
applicant_qualification: paragraph
decision: {hired, rejected}

1..*   0..*

1..*

1

Applicant

<<PK>> applicant_id: number
first_name: text
last_name: text
email: text
phone_number: number

III.   Relational Model

Relational Schema
- Posting (<u>posting_id</u>, position, posting_date, job_description, annual_salary, minimum_qualification)
- PositionApplication (<u>posting_id, application_id</u>)
- Application (<u>application_id</u>, submission_date, applicant_qualification, decision_id, applicant_id)
- Decision(<u>decision_id</u>, decision_desc)
- Applicant (<u>applicant_id</u>, first_name, last_name, email, phone_number)