DATA MANAGEMENT AND DATABASE DESIGN

GROUP 1
TOPIC: Campus Recruitment Management System

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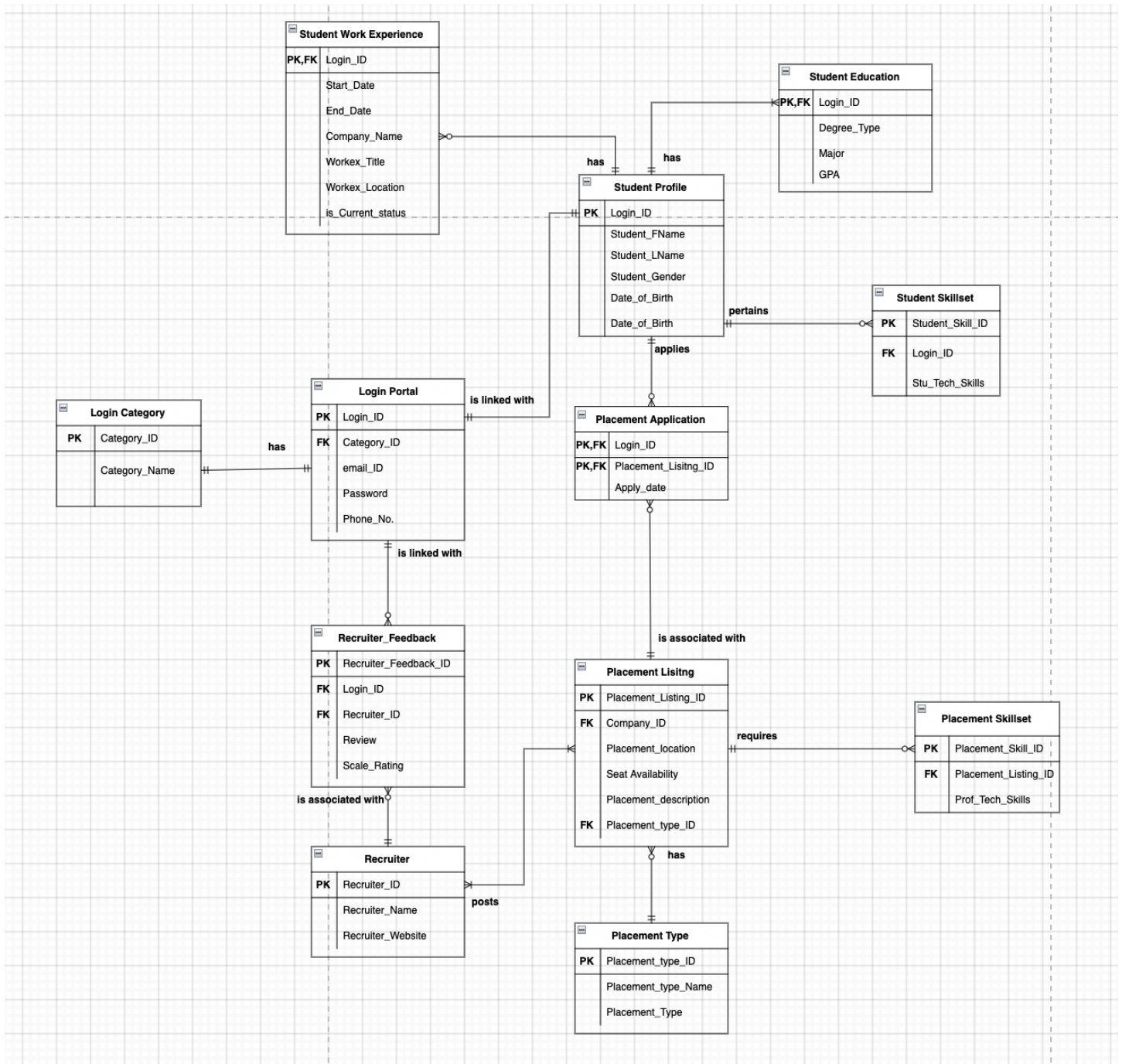**2)** Kumar Mehul
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Business Problem Statement:

Around 20,000 students attend a university that has both graduate and undergraduate programs. Managing on and off-campus employment is a time-consuming process for the institution. Due to the lack of a centralized infrastructure for the students skills and employers who are interested in them, they have a difficult time connecting with one another. To keep track of all parties, including employers posting co-op/full time opportunities, professors looking for TAs/RAs, and the university offering on-campus clerical and service employment, a comprehensive centralized database is required**.**

Proposed Solution:

Even though there are various platforms for numerous types of student employment, there is no single, centralized system where all job listings are posted. We propose a Campus Recruitment Management System, which is a database system for managing a large set of data for both on-campus and off-campus recruitment. This database system improves the university's current placement process by providing students with information on various employment skills required by the company. While the job search process is made more convenient and secure, the student can focus entirely on learning the necessary skills and fulfilling all prerequisites.

Proposed ER Diagram:

Student Work Experience

PK,FK	Login_ID
	Start_Date
	End_Date
	Company_Name
	Workex_Title
	Workex_Location
	is_Current_status

Student Education

PK,FK	Login_ID
	Degree_Type
	Major
	GPA

Student Profile

PK	Login_ID
	Student_FName
	Student_LName
	Student_Gender
	Date_of_Birth
	Date_of_Birth

Student Skillset

PK	Student_Skill_ID
FK	Login_ID
	Stu_Tech_Skills

Login Category

PK	Category_ID
	Category_Name

Login Portal

PK	Login_ID
FK	Category_ID
	email_ID
	Password
	Phone_No.

Placement Application

PK,FK	Login_ID
PK,FK	Placement_Lisitng_ID
	Apply_date

Recruiter_Feedback

PK	Recruiter_Feedback_ID
FK	Login_ID
FK	Recruiter_ID
	Review
	Scale_Rating

Placement Lisitng

PK	Placement_Listing_ID
FK	Company_ID
	Placement_location
	Seat Availability
	Placement_description
FK	Placement_type_ID

Placement Skillset

PK	Placement_Skill_ID
FK	Placement_Listing_ID
	Prof_Tech_Skills

Recruiter

PK	Recruiter_ID
	Recruiter_Name
	Recruiter_Website

Placement Type

PK	Placement_type_ID
	Placement_type_Name
	Placement_Type

Relationships:
- has
- has
- pertains
- applies
- is linked with
- has
- is linked with
- is associated with
- requires
- is associated with
- posts
- has

Key Database Design Decisions:

1) Entity: Login Portal
   Entity Description: Login Portal used here contains information pertaining to users (Students and Hiring Manager)
   Entities Relation: Entity is related to Login Category, Recruiter Feedback and Student Profile so that information can be collected for use.

2) Entity: Login Category
   Entity Description: This entity is used to store the TYPE of users.
   Entity Relation: Entity is related to Login Portal which provides information about the logged in user.

3) Entity: Student Profile
   Entity Description: This entity provides demographic information related to students.
   Entity Relation: Entity is related to Placement Application, Student Education, Student Experience, Student Skill, and Login Portal to collect information via Login ID as foreign key.

4) Entity: Placement Application
   Entity Description: This entity provides information about job posting for which the student has applied.
   Entity Relation: Entity is related to Student Profile and Placement Listings to gather details about the company student has applied to.

5) Entity: Placement Listing
   Entity Description: This entity contains information about the recruiter's listings.
   Entity Relation: This entity is related to Placement Skill, Placement Type, Placement Application, Recruiter to fetch data about type of placement, skills required and placement from the recruiter.

6) Entity: Placement Type
   Entity Description: This entity contains information about the type of placement i.e. on/off campus and job title.
   Entity Relation: This entity is associated with Placement Listing, which provides information about the type of placement for each job listing.

7) Entity: Recruiter
   Entity Description: This entity holds information about hiring committee.
   Entity Relation: This entity is related to Recruiter Feedback and Placement Listing.
   This entity provides placement listings as well as recruiter information to obtain student feedback.

8) Entity: Recruiter Feedback
   Entity Description: This entity holds the feedback of the recruiter from the students.
   Entity Relation: This entity is connected to Recruiter and Student Profile via Login Portal.

9) Entity: Placement Skillset
   Entity Description: This entity defines the skill requirements for the placement listing.
   Entity Relation: To provide skillset, this entity is linked to Placement Listing.

10) Entity: Student Skillset
   Entity Description: This entity defines the student's skills.
   Entity Relation: To provide skillset, this entity is linked to Student Profile.

11) Entity: Student Work Experience
   Entity Description: This entity provides information about student's employment details.
   Entity Relation: It is linked to Student Profile and shows employment information for a specific student.

12) Entity: Student Education
   Entity Description: This entity provides information about student's education.
   Entity Relation: It is linked to the Student Profile and provides educational data for a specific student.