# \* Database Management System Lab (CS3120)

## PROJECT REPORT

## **Topic**

Career Development Cell (CDC)
Portal

### **Team**

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### CONTRIBUTION

#### Devansh Singh Rathore (111701011)

• User Requirements, ER Diagram, Schema Creation, insert data, created views and authorization, functions and procedures

#### Himanshu Jain (111701013)

• User Requirements, Database Schema, Schema Creation, insert data, created views and authorization, functions and procedures

#### Sakshi Rathore (111701026)

• User Requirements, Schema Diagram, Schema Creation, insert data, created views and authorization, functions and procedures

### **USER REQUIREMENTS**

#### USERS →

- 1. Student
- 2. CDC Administrator
  - a. Student Administrators
  - b. Training and Placement Officer (TPO)
- 3. Companies / Professors seeking research interns
- 4. Database Administrator (DBA)

#### **FUNCTIONALITIES** →

#### 1. STUDENT

- a. Login / Register
- b. Change Password
- c. Reset Password
- d. Update profile
- e. If logged in for the first time then ask to fill the details for resume creation
- f. View Resume
- q. Ask for access to edit resume
- h. And if accessed then option to edit the resume
- i. Send Resume for verification
- i. Get notification if verified
- k. View Internship profiles
- I. Apply for an (Internship / Placement) application

- m. View applied (Internship / Placement) applications
- n. Send / Receive notifications to / from students representatives
- Receive notifications from TPO

#### 2. CDC ADMINISTRATOR

- a. STUDENT/STAFF ADMINISTRATORS
  - i. Login
  - ii. Change Password
  - iii. Reset Password
  - iv. Update profile
  - v. View the details of all the students in cdc
  - vi. Verify the resume and send notification if completed
  - vii. Give access to edit the resume
  - viii. Mail after giving access to respective student
  - ix. Block / Unblock a student
  - x. Send notifications to all the students eligible for applying for placement / internship to a company along with the details of the company.
  - xi. Send notifications to the students selected for their next round of internship / placement along with the necessary details.
  - xii. Send / Receive notifications to / from students
  - xiii. Send / Receive notifications to / from TPO

#### b. TPO

- i. Login
- ii. Change Password
- iii. Reset Password
- iv. Update the student details
- v. Update company records

- vi. Make student representative accounts
- vii. Block / Unblock any of the other type of user
- viii. Accept company's invitation
- ix. Send / Receive notifications to / from student representatives
- x. Send company(internship / placement) offer details to students
- xi. Send notifications to selected students(or student representatives) about the next round / interview details
- xii. Send final details of selected students to companies
- xiii. Add a company for internship/placement
- xiv. Add user representatives and create an account for them

#### 3. COMPANIES / PROFESSORS SEEKING RESEARCH INTERNS

- a. Register or Login (once registration is accepted by TPO)
- b. Update profile
- c. Change Password
- d. Reset Password
- e. Send and Update types of internship / placement that the company is willing to offer to TPO
- f. Receive and View the details of received resume for internship / placement
- g. Send the details of selected students (for next round / interview) to TPO along with the necessary details (for conducting next round).
- h. Send the offer letter for the selected student to TPO.

#### 4. DATABASE ADMINISTRATOR (DBA)

- a. Add column to any table in the database
- b. Add or give access to TPO
- c. Manages the whole database and its relations

### **DATABASE DESIGN**

#### DATABASE SCHEMA →

- student(<u>student\_id</u>,name,mail\_id,passapplicability,admission\_year,verifie d,tenth\_percen,tenth\_school,tenth\_board,twelth\_percen, twelth\_school,twelth\_board,admission\_cat,branch,jee\_rank,dob, nationality,contact,address,stream)
- grades(<u>student\_id</u>,sem1,sem2,sem3,sem4,sem5,sem6,sem7,sem8,cgpa)
- project(<u>student\_id,title</u>,description,start\_date,end\_date)
- electives(<u>student\_id,course\_id,title</u>)
- technical\_skills(<u>student\_id,title</u>,description)
- extracurricular(<u>student\_id,title</u>,description)
- por(<u>student\_id,description.</u>start\_date,end\_date)
- student\_rep(student\_rep\_id,student\_id,pass)
- tpo(tpo\_id,pass,name)
- company\_id,name,pass,location,about)
- company\_req(applicaton\_id,company\_id,required\_skills,eligibility, eligible\_disciplines,vacancies,stipend,start\_date,end\_date,deadline)
- applied(<u>student\_id,company\_id</u>,type,status,semester,core)
- selected(<u>student\_id,company\_id,semester,type,core</u>)
- notifications(<u>message\_id</u>,not\_from,not\_to)
- staff\_rep (staff\_id, pass)

#### SCHEMA DIAGRAM→

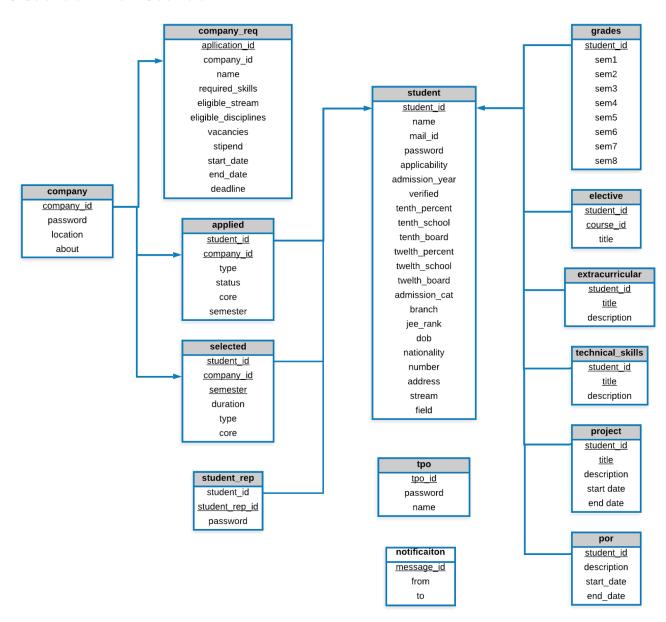


Fig4.0: Schema Diagram

#### ER DIAGRAM →

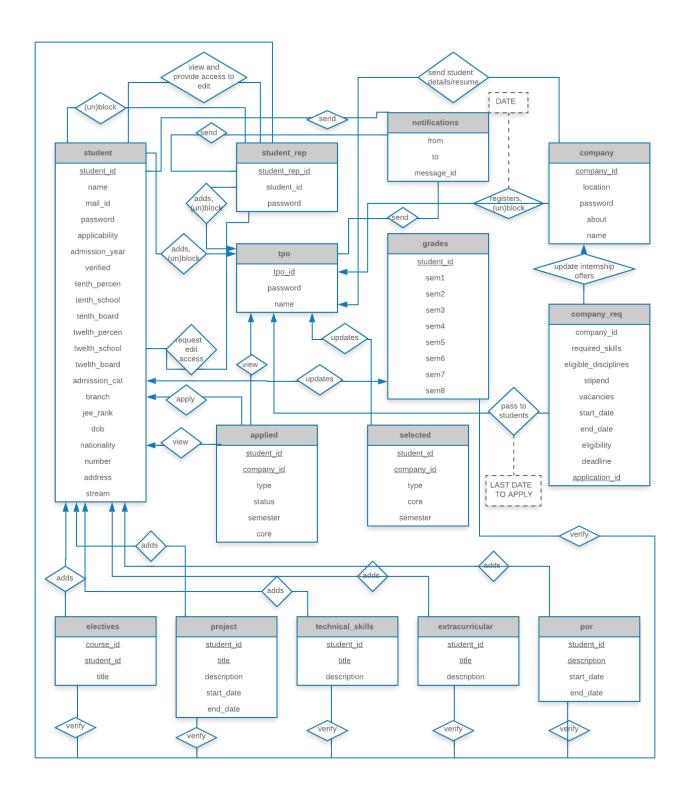


Fig4.1: Entity Relation Diagram