Database Management System Lab (CS3120)

PROJECT REPORT

Topic

Career Development Cell (CDC)
Portal

Team

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- User Requirements, ER Diagram, Schema Creation, insert data

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- User Requirements, Database Schema, Schema Creation, insert data

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- User Requirements, Schema Diagram, Schema Creation, insert data

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
   g. Ask for access to edit resume
   h. And if accessed then option to edit the resume
   i. Send Resume for verification
   j. Get notification if verified
   k. View Internship profiles
   l. Apply for an (Internship / Placement) application

m. View applied (Internship / Placement) applications

n. Send / Receive notifications to / from students representatives

o. 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,verified,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</u>,<u>title</u>,description,start_date,end_date)
- electives(<u>student_id</u>,<u>course_id</u>,title)
- technical_skills(<u>student_id</u>,<u>title</u>,description)
- extracurricular(<u>student_id</u>,<u>title</u>,description)
- por(<u>student_id</u>,<u>description</u>,start_date,end_date)
- student_rep(<u>student_rep_id</u>,student_id,pass)
- tpo(<u>tpo_id</u>,pass,name)
- company(<u>company_id</u>,name,pass,location,about)
- company_req(<u>applicaton_id</u>,company_id,required_skills,eligibility, eligible_disciplines,vacancies,stipend,start_date,end_date,deadline)
- applied(<u>student_id</u>,<u>company_id</u>,type,status,semester,core)
- selected(<u>student_id</u>,<u>company_id</u>,<u>semester</u>,type,core)
- notifications(<u>message_id</u>,not_from,not_to)
- staff_rep (<u>staff_id,</u> pass)

SCHEMA DIAGRAM→

company_req
- apllication_id
- company_id
- name
- required_skills
- eligible_stream
- eligible_disciplines
- vacancies
- stipend
- start_date
- end_date
- deadline

company
- company_id
- password
- location
- about

applied
- student_id
- company_id
- type
- status
- core
- semester

selected
- student_id
- company_id
- semester
- duration
- type
- core

student_rep
- student_id
- student_rep_id
- password

student
- student_id
- name
- mail_id
- password
- applicability
- admission_year
- verified
- tenth_percent
- tenth_school
- tenth_board
- twelth_percent
- twelth_school
- twelth_board
- admission_cat
- branch
- jee_rank
- dob
- nationality
- number
- address
- stream
- field

tpo
- tpo_id
- password
- name

notificaiton
- message_id
- from
- to

grades
- student_id
- sem1
- sem2
- sem3
- sem4
- sem5
- sem6
- sem7
- sem8

elective
- student_id
- course_id
- title

extracurricular
- student_id
- title
- description

technical_skills
- student_id
- title
- description

project
- student_id
- title
- description
- start date
- end date

por
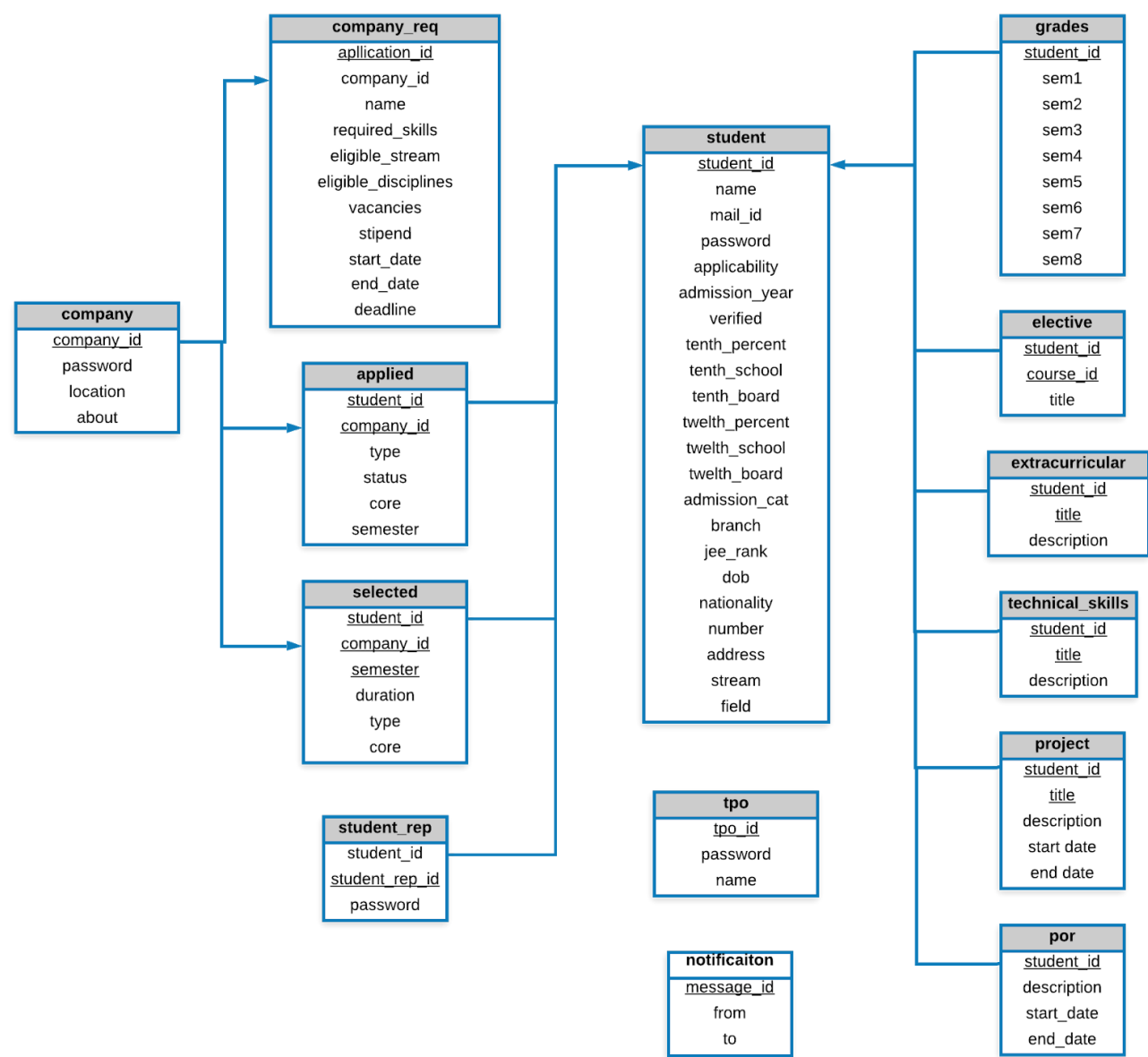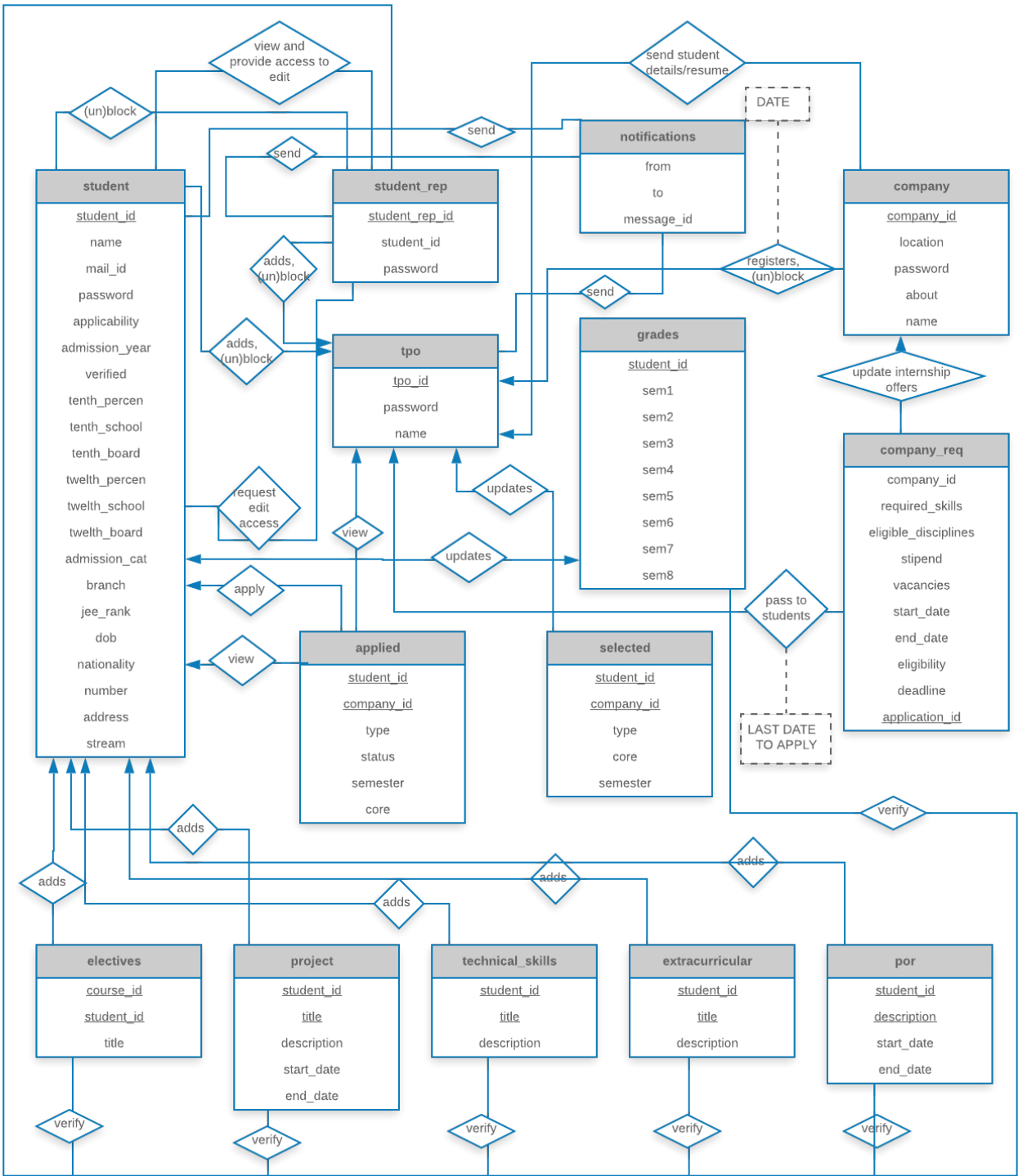- student_id
- description
- start_date
- end_date

Fig4.0: Schema Diagram

ER DIAGRAM →

Fig4.1: Entity Relation Diagram