

CRUD Tasks for PG Students

This document provides real-time university-based CRUD tasks for Postgraduate (PG) students. Each task involves developing frontend (React) and backend (Laravel) features for specific modules in a university system.

1. Student Management

Purpose: Manage student profiles, update records, and list/filter/search students.

Table: *Students*

Fields:

- id
- name
- roll_no
- email
- phone
- department_id
- photo
- address

2. Course Management

Purpose: Add and manage academic courses.

Table: *Courses*

Fields:

- id
- department_id
- course_code
- title
- description
- credits

3. Faculty Management

Purpose: Track faculty members and assign them to courses.

Table: *Faculty*

Fields:

- id
- name
- email
- phone
- qualification
- department_id
- designation

4. Department Management

Purpose: Organize and maintain departmental structure.

Table: *Departments*

Fields:

- id
- name
- head_of_department
- description

5. Class Scheduling

Purpose: Schedule classes with details like time, room, and faculty.

Table: *ClassSchedules*

Fields:

- id
- course_id
- faculty_id
- day
- time_start
- time_end
- room_no
- batch

6. Student Enrollment

Purpose: Allow students to register/enroll in available courses.

Table: *Enrollments*

Fields:

- id
- student_id
- course_id
- semester
- status

7. Grades & Result

Purpose: Record and view academic performance.

Table: *Grades*

Fields:

- id
- student_id
- course_id
- grade
- semester
- remarks

8. Attendance Management

Purpose: Track student attendance on a daily basis.

Table: *Attendance*

Fields:

- id
- student_id
- course_id
- date
- status (Present/Absent)

9. Notice Board

Purpose: Post and manage university-wide or department-level announcements.

Table: *Notices*

Fields:

- id
- title
- description
- posted_by (admin_id/faculty_id)
- visible_to (all/students/faculty)

Authentication & Roles

Purpose: Handle secure login/logout and role-based access control.

Table: *Users*

Fields:

- id
- username
- email
- password
- role (admin/faculty/student)