DS205C Database and Distributed Systems
E-Learning Platform Database System
Queries Specification Document
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User Registration

When registering a new user, an ID, user's personal information, username (generated using first and last names), and the hash of the password are added as a new row to the User table.

User Account Management

An administrator will manage user accounts by creating new users, assigning roles, and setting permissions. They can deactivate and reactivate accounts, as well as deleting user accounts.

Enrolled Courses

To obtain the list of courses a student is currently enrolled in, we need to use the users, courses, and their connecting table. Filtering will be required to ensure courses from previous semesters are not included in the result.

Student Timetable

For timetable generation, we need to get the courses a student is enrolled in (as described earlier) and then join it with the timeslots table through their connecting table. This method can also be implemented in the course registration process, in order to disallow registering for multiple courses that take place at the same time.

Course Page

To construct the course page information, we'll need to filter the sections belonging to a certain course and subsequently join with section items.

Assignment Submission

MISSING

List of Students per Class

To obtain a list of students enrolled in a specific course and section, we'll perform several inner joins.

Submission Comments

When a user posts a new comment to a submission, the system will insert a new row into the Comments table, linking the comment to the specific submission through the appropriate relational entity.

Quiz Questions

When a user wants to take a quiz, the quiz questions should be loaded. When grading a quiz, the answers should be loaded.

Student Progress

All the section items marked done for a specific semester are returned.