

School Management System with SQL Server

You are responsible for transforming the data footprint of a school, tasked with building a school management system database. It will test your skills, in creating and setting up a database, altering tables, manipulating data, and data retrieval and aggregation.

Your manager asked you answer these questions and put your source codes on GitHub:

1. Write T-SQL scripts to create a database named SchoolManagementSystem.
2. Design and create tables to store student information (Students), course details (Courses), and student enrolment data (Enrolments: EnrollmentID, StudentID, CourseID). Establish relationships between these tables using foreign keys.

Hint: use the "Foreign Key references ..." syntax or use Database Diagram Features

3. Populate the tables with sample data 10 students, 4 courses, and enrol them on courses.
4. Simulate updates by modifying student information (e.g., name change) and course removal.
5. List all students.
6. Filter students based on grade level.
7. List courses along with the number of enrolled students per course (use aggregate functions like COUNT and GROUP BY).
8. Find students enrolled in a specific course.

Evaluation:

Your performance will be assessed based on the following criteria:

- Correctness and efficiency of your T-SQL scripts.
- Skill in crafting queries to retrieve and analyse data effectively.
- Creativity and problem-solving skills demonstrated and tidiness.