School Management System Project

Main Operation Algorithm:

1. Prompt the user to choose an operation:

   - 'a' to add a student

   - 'd' to delete a student

   - 'u' to update a student's information

   - 's' to show a student's information

2. Based on the user's choice, execute the appropriate operation:

   - If 'a': execute Add Student algorithm

   - If 'd': execute Delete Student algorithm

   - If 'u': execute Update Student algorithm

   - If 's': execute Show Student algorithm

3. Repeat until the user chooses to exit the program.

Add Student Algorithm:

1. Prompt the user for student data (ID, name, last name, age, grade, registration date).

2. Check if the student exists using student_id.

3. Insert the student's data into the 'students' table.

4. Prompt the user for the lessons the student is enrolled in.

5. For each lesson:

   - If the lesson does not exist, add it to the 'lessons' table.

6. Add the student's enrollment in lessons in 'student_lessons'.

7. Display a success message.

Delete Student Algorithm:

1. Prompt the user for student_id.

2. Check if the student exists.

3. If the student exists:

   - Delete the student's records from 'student_lessons' and 'students' tables.

4. Display a success message.

Update Student Algorithm:

1. Prompt the user for student_id.

2. Check if the student exists.

3. If the student exists:

   - Prompt the user for new information and update the student in 'students' table.

4. Display a success message.

Show Student Algorithm:

1. Prompt the user for student_id.

2. Check if the student exists.

3. If the student exists:

   - Display student data from 'students' and enrolled lessons from 'student_lessons'.

4. If the student is not found, display a message.

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2. Pseudo Code:

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MAIN:

   Prompt user for operation (a, d, u, s)

IF a THEN CALL add_student()

IF d THEN CALL delete_student()

IF u THEN CALL update_student()

IF s THEN CALL show_student()

Repeat until user exits

ADD_STUDENT:

Input student data

IF student does not exist THEN

Insert into students table

Input enrolled lessons

FOR each lesson

IF lesson not in lessons THEN add to lessons

Insert student and lesson in student_lessons

Show success message

DELETE_STUDENT:

Input student_id

IF student exists THEN

Delete from student_lessons and students

Show success message

UPDATE_STUDENT:

Input student_id

IF student exists THEN

Input new student info

Update student in students table

Show success message

SHOW_STUDENT:

Input student_id

IF student exists THEN

Display student info and enrolled lessons

ELSE Show 'not found' message