



BI8 STUDENT MANAGEMENT

Basic Database

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Problem statement

- Student's information
- Performance on examination

Requirements

- Student attributes
- Classes
- Examination information
- Absences
- Scores

Table: Student

- Student ID
- Student name
- Email address
- Date of birth
- Sex
- ...

first_name	last_name	email	street	city	phone	birth_date	sex	date_entered	student_id
Duc Anh	Ta	anhthd.b8009@st.usth.edu.vn	123 Doi Can St	Ha Noi	792- 223- 8901	1999-02-22	M	2019-06-08 12:15:00	1

student	
💡	student_id INT
🔹	first_name VARCHAR(30)
🔹	last_name VARCHAR(30)
🔹	email VARCHAR(60)
🔹	street VARCHAR(50)
🔹	city VARCHAR(40)
🔹	phone VARCHAR(20)
🔹	birth_date DATE
🔹	sex ENUM('M', 'F')
🔹	date_entered TIMESTAMP
🔹	score_student_id INT
🔴	test_test_id INT
🔴	class_dass_id INT
Indexes ▶	

Table: Test

- Date
- Type (midterm, final)
- Test ID
- Class ID

date	type	maxscore	class_id	test_id
2019-06-10	midterm	20	1	1
2019-06-15	final	20	1	2

test
test_id INT
date DATE
type ENUM(...)
class_id INT
test_id INT
score_student_id INT
score_test_id INT
absence_student_id INT
absence_test_id INT
Indexes

Table: Class & Score

class
class_id INT
class_name VARCHAR(30)
Indexes

name	class_id
English	1
Basic Database	2
Mobile Wireless	3

score
student_id INT
test_id INT
score INT
Indexes

student_id	test_id	score
1	1	15
2	1	5
3	1	14

Table: Absence

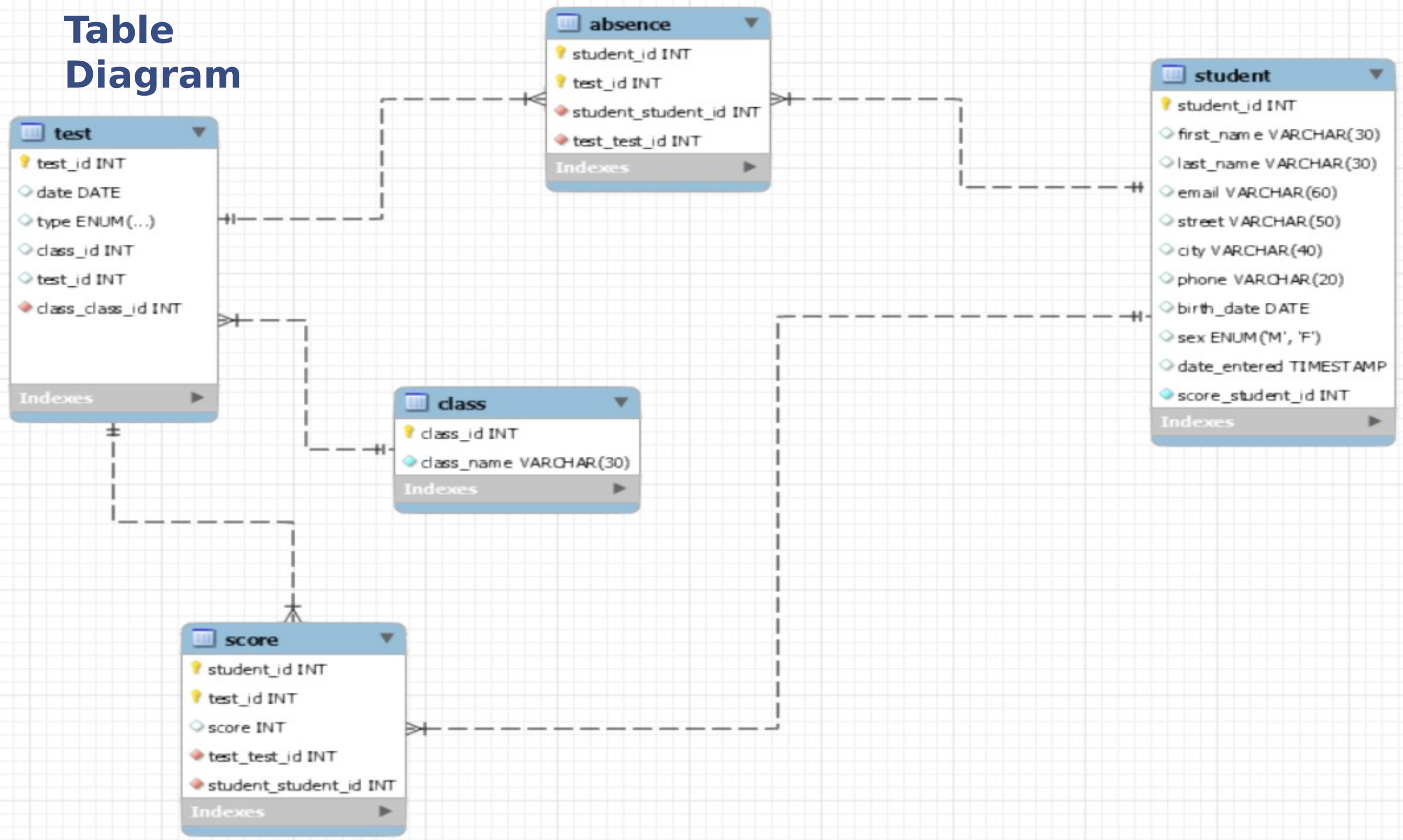
Record the absence of students in certain examinations

A screenshot of a database table structure for a table named 'absence'. The table has three columns: 'student_id' of type INT, 'test_id' of type INT, and 'student_student_id' of type INT. The 'student_student_id' column is marked with a red diamond icon, indicating it is a primary key. Below the column list is a section labeled 'Indexes' with a right-pointing arrow.

absence	
student_id	INT
test_id	INT
student_student_id	INT
Indexes ▶	

student_id	test_id
6	2
7	2
8	3

Table Diagram



Demo

- List all attributes of students were born in 1999
- List all students come from Hanoi
- List full name and test score of Moblie Wireless Communication examination, order by score descendingly
- List all tests and calculations on scores
- List absent students on certain tests
- Count number of class
- Count number of absences for tests
- Count how many people absent for each individual test
- Count number of tests students have already taken
- Illustrate the performance of Le Nhu Chu Hiep

Thank you for
listening!

Any question???

