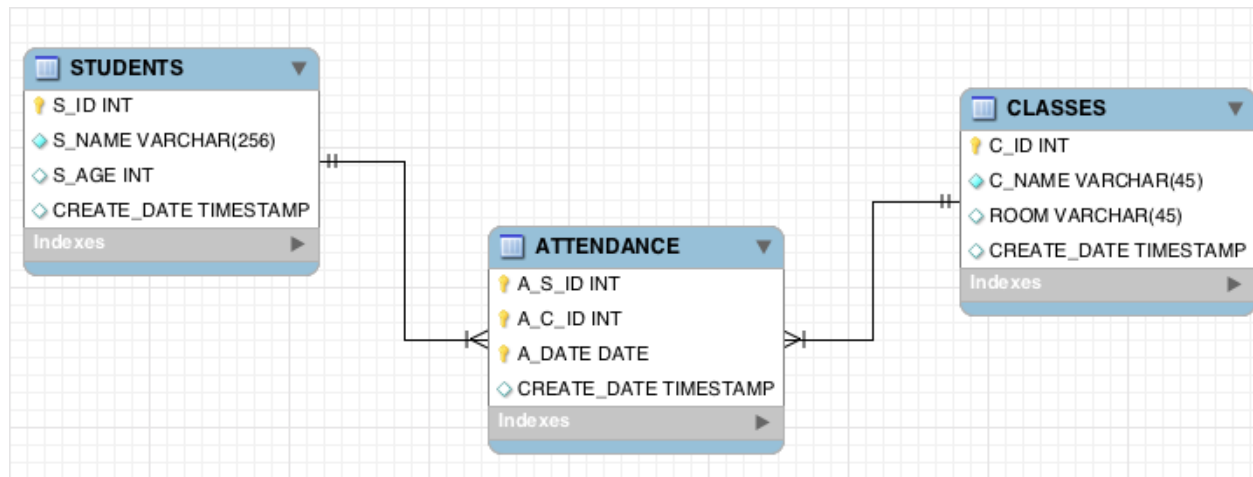# IT102

SQL Select Statement

Basic SQL Query

SELECT target list

FROM relation list

WHERE qualification

- **Relation list**: A list of relation names (tables, views)
- **Target list**: A list of attributes of relations in relation-list (table column names)
- **Qualification**: Comparisons ($<,>,=,\leq,\geq,\neq$) combined using AND, OR and NOT.

http://dev.mysql.com/doc/refman/5.0/en/select.html

Examples and Exercises

SELECT * FROM STUDENTS;

SELECT DISTINCT S_NAME, S_AGE, C_NAME, ROOM
  FROM STUDENTS, CLASSES, ATTENDANCE
  WHERE S_ID = A_S_ID AND
    C_ID = A_C_ID;

SELECT S_ID, S_NAME, S_AGE
  FROM STUDENTS
  WHERE S_ID NOT IN (SELECT A_S_ID FROM ATTENDANCE);

SELECT COUNT(*) FROM STUDENTS, ATTENDANCE WHERE
S_ID = A_S_ID AND A_DATE = '2014-10-05';

SELECT * FROM STUDENTS WHERE S_NAME LIKE 'L%';

- Download the following files and run them in your MySQL Workbench:

http://www.schoolnova.org/student_area/IT102/Attendance.ddl

http://www.schoolnova.org/student_area/IT102/Attendance.sql

- List student's name and age of those students who attended the IT102a class on Oct. 5, 2014
- List all students who are 14 years old;
- List all students who are less than 14 years old and attended at least one class. Include the class name alongside the student name.
- List all student's who's name starts with 'V';

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Homework

- Using the Attendance database we created in class, find the following:

  - List all classes;

  - List all students whose name starts with 'B';

  - List all students who missed the Oct. 5 class;

- How should the data model be changed to account for the fact that the first 6 weeks the classes were held in the Harriman 102 room, and only the last two weeks the classes were held in the MLS room?