Week Eight: Research

1. Besides the creation and dropping of tables and columns (Data Definition Requests or DDL), what other types of requests can you make to a MySQL database? How is data retrieved from a MySQL database? What clauses exist for restricting the data that is returned to the user? Please include the syntax for this type of request, and examples.

Another kind of query or request you can make to a MySQL database is known as DML or Data Manipulation Language. DML is used to manipulate the data entries within a table or database we have already created. Some of the specific functions we can use that are DML would be INSERT, DELETE, UPDATE, and MERGE. An example for the INSERT query would be written like this:

INSERT into student

Values(3.5,'John');

This would insert the value of 3.5 and the string John into the table named student. When building your query, there are other clauses you can add to narrow down the query to look for more specific information. The WHERE clause is used to find data entries that correlate to specific column. Here's an example of how that would work:

SELECT * FROM student

WHERE name = 'John';

This will pull all columns from the student table that correspond to an entry in the name column being John.

2. Research different constructs that are available in MySQL when retrieving data. What types of constructs can be put into the WHERE clause? Please include the syntax for this type of request, and examples.

MySQL allows for several different constructs that you can add as basically parameters to hone in on more specific information. Say we wanted to find some specific information from a specific time period in our table, we would use the SELECT query taking data FROM our table WHERE the date is BETWEEN the beginning AND the ending. Here's an example of that written out:

SELECT * FROM student

WHERE enroll_date BETWEEN '2001-01-01' AND '2002-01-01';

This would pull all the columns and data from the table of student where the enroll date is between Jan 01, 2001 and Jan 01, 2002. There are other constructors like BETWEEN that you can use to restrict what data is returned to you in order to find something more specific, including AND, OR, IN, COUNT, etc.

What is your favorite thing you learned this week?

Week eight has been a rough one for me in my personal life as I have been dealing with some fraud on my bank account, but the rigidity and clearness that is involved when learning about databases and MySQL has provided some real structure for me to focus on.

Sources:

https://www.educba.com/mysql-queries/

https://www.tutorialandexample.com/mysql-clauses