Deleting items in your database

Welcome to this lab activity

In this lab activity, you will learn how to delete items in an existing database.

The method by which you access the MySQL shell will differ based on your setup. Please refer to the installation instructions earlier in this module for details.

Task 1: Start the MySQL interactive shell

Start the MySQL shell, logging in with the root user and password.

When you start the MySQL shell, you should see the MySQL prompt:

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 67
Server version: 8.1.0 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input
statement.

mysql>
```

Task 2: Check the existing data in myBookshop database

First of all, let's check the list of databases present in your MySQL server.

1. Run the following command in the MySQL shell:

```
SHOW DATABASES;
```

Check that `myBookshop` is there:

```
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| myBookshop         |
| myRestaurantMenu   |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.01 sec)
```

2. Go ahead and select the '`myBookshop`' database.

```
USE myBookshop;
```

If you have successfully selected the database, you will get the following confirmation:

```
mysql> USE myBookshop;
Database changed
mysql>
```

3. Run the following MySQL command to view the '`books`' table content:

```
SELECT * FROM books;
```

You should see a list of books in your books table, for example:

```
+----+--------------------+-------+
| id | name               | price |
+----+--------------------+-------+
|  1 | Don Quixote        | 25.50 |
|  2 | Atlas of the World | 25.00 |
|  3 | World History      | 31.99 |
+----+--------------------+-------+
3 rows in set (0.00 sec)
```

Remember that you will have two additional books in your database if you have completed all the activities so far.

Task 3: Deleting items in the myBookshop database

In order to delete data in a database with SQL, you need to use the `DELETE` statement.

The basic format of the `DELETE` statement looks like this below:

```
DELETE FROM TableName;
```

`TableName` is the name of the table where you want to delete data from.

The above statement will delete all of the items in your database table. However, you can combine your query with the `WHERE` statement to target a particular entry of a table.

4. Delete the ‘database book’, which has an id of 1.

Run the following command in the MySQL shell:

```
DELETE FROM books WHERE id = 1;
```

You should see a confirmation like this:

```
mysql> DELETE FROM books WHERE id = 1;
Query OK, 1 row affected (0.01 sec)
```

5. You can now verify that the ‘Don Quixote’ book has been deleted from the `books` table.

Run the following terminal command:

```
SELECT * FROM books;
```

You should not see the deleted book now:

```
mysql> SELECT * FROM books;
+----+--------------------+-------+
| id | name               | price |
+----+--------------------+-------+
|  2 | Atlas of the World | 25.00 |
|  3 | World History      | 31.99 |
+----+--------------------+-------+
2 rows in set (0.00 sec)
```

Remember that you will have two additional books in your database if you have completed all the activities so far.

Task 4: Deleting items in the myRestaurantMenu database

Let’s now switch database and delete some data in the `myRestaurantMenu` database to give you a chance to practise.

6. Switch to the `myRestaurantMenu` database using the `USE` command.
7. Check that the `myRestaurantMenu` database exists using the `SHOW DATABASES` command.
8. Retrieve all the existing data from the dishes table using the `SELECT` command to confirm what data you already have.
9. Delete the Margherita pizza dish using the `DELETE` command.
10. Verify that the dish has been deleted by querying the dishes table.

Remember that you will have one additional dish in your database if you have completed all the activities so far.

Task 5: Exit MySQL shell

11. Exit the MySQL shell.

Task 6: Explore further

When tackling these lab activities, it's always good to stretch yourself by doing some research and attempting some changes on your own.

Delete another book in your 'myBookshop' database.

Delete any dishes containing cheese in your 'myRestaurantMenu' database.

End of section

Congratulations on completing this section.

In this activity, you have learned how to delete items in your database tables.

In the next lab activity, you will integrate a database with your web application.