Full Stack Development Lab

Week 12: Write a Program on adding MySQL to Node.js

Description:

Node.js can be used in database applications.

One of the most popular databases is MySQL.

MySQL Database

To be able to experiment with the code examples, you should have MySQL installed on your computer.

You can download a free MySQL database at https://www.mysql.com/downloads/.

Install MySQL Driver

Once you have MySQL up and running on your computer, you can access it by using Node.js.

To access a MySQL database with Node.js, you need a MySQL driver. Here we will use the "mysql" module, downloaded from NPM.

To download and install the "mysql" module, open the Command Terminal and execute the following:

```
C:\Users\Your Name>npm install mysql
```

Now you have downloaded and installed a mysql database driver.

Node.js can use this module to manipulate the MySQL database:
```
var mysql = require('mysql');
```

12.a Create Connection to NodeJs

Start by creating a connection to the database.

Use the username and password from your MySQL database.

db_connection.js
```
var mysql = require('mysql');

var con = mysql.createConnection({
  host: "localhost",
  user: "root",
```

```
  password: ""
});

con.connect(function(err) {
  if (err) throw err;
  console.log("Connected!");
});
```

output:

Save the code above in a file called "demo_db_connection.js" and run the file:

Run "db_connection.js"

C:\Users\Your Name>node db_connection.js

Which will give you this result:

Connected!

Now you can start querying the database using SQL statements.

12.b Creating a Database(nodeJs+Mysql)

To create a database in MySQL, use the "CREATE DATABASE" statement:

Example

Create a database named "mydb1":

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: " "
});

con.connect(function(err) {
  if (err) throw err;
  console.log("Connected!");
  con.query("CREATE DATABASE mydb1", function (err, result) {
    if (err) throw err;
    console.log("Database created");
  });
});
```

output:

Save the code above in a file called "demo_create_db.js" and run the file:

Run "create_db.js"
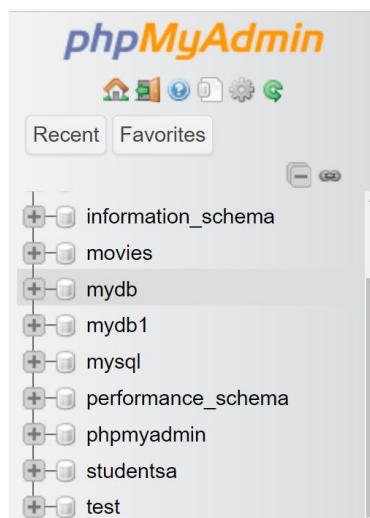C:\Users\Your Name>node create_db.js

Which will give you this result:
Connected!
Database created

Mysql Dashboard ouput:

Result: Thus, in the above programs successfully executed without errors

Using node.js with mysql